THE UNIVERSITY OF BRITISH COLUMBIA
Curriculum Vitae for Faculty Members

Date: January 1, 2025

1. SURNAME: Overall **FIRST NAME:** Christopher
MIDDLE NAME: Mark

ORCID ID: 0000-0001-5844-2731

2. DEPARTMENTS: Oral Biological and Medical Sciences, Faculty of Dentistry
Associate Member, Biochemistry & Molecular Biology, Faculty of Medicine
Associate Member, Bioinformatics Graduate Program, Faculty of Science
Associate Member, Obstetrics and Gynecology, Faculty of Medicine

AFFILIATIONS: U.B.C. Centre for Blood Research
Institute of Molecular Medicine and Cell Research, Albert-Ludwigs-Universität Freiburg im Breisgau, DE
Yonsei Frontier Lab, Yonsei University, Seoul, Republic of Korea
U.B.C. Life Sciences Institute
U.B.C. Centre for Drug Research and Development
U.B.C. Genome Science and Technology Graduate Program
U.B.C. Creative Destruction Lab – West (UBC Sauder Business School)
Fraser Health Authority Affiliated Researcher
Canadian National Proteomics Network
Australian Protease Network

CONTACT: Life Sciences Centre
#4.401 - 2350 Health Sciences Mall
Vancouver, BC V6T 1Z3, Canada
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3. FACULTY: Dentistry

4. PRESENT RANK:

Full Professor	**SINCE**: 01/07/2000
Distinguished University Scholar of UBC	**SINCE**: 01/04/2024
Yonsei Distinguished Scholar of Yonsei University	**SINCE**: 01/01/2023
Canada Research Chair Tier 1 Laureate in Protease Proteomics and Systems Biology	**SINCE**: 01/07/2023
Honorary Professor, Institute of Molecular Medicine and Cell Research, Albert-Ludwigs Universität Freiburg, DE	**SINCE**: 06/11/2014
Principal Investigator, Centre for Blood Research, UBC	**SINCE**: 01/01/2002

BIOSKETCH

Professor Christopher Overall is a Full Professor, Distinguished University Scholar and Canada Research Chair Laureate in Protease Proteomics and Systems Biology at the University of British Columbia; an Honorary Professor at Albert-Ludwigs-Universität Freiburg im Breisgau, Germany, and a Yonsei Distinguished Scholar of Yonsei University, Seoul, Republic of Korea. He was a Senior Fellow of the Freiburg Institute of Advanced Studies, Albert-Ludwigs Universität Freiburg, Germany (2010–2013) and a Tier 1 Canada Research Chair in Protease Proteomics and Systems Biology (2001–2022). Dr Overall was inducted as a fellow into the Royal Society of Canada (FRASC) Academy of Science in 2018 and the Canadian Academy of Health Sciences (FCAHS) in 2005.

Dr. Overall completed his B.D.S., Honours Science and Master's degrees at the University of Adelaide, South Australia; his Ph.D. in Biochemistry at the University of Toronto, Canada; and was an MRC Centennial

Fellow in his postdoctoral training with Dr. Michael Smith, Nobel Laureate, Biotechnology Laboratory, UBC. He launched his lab at UBC in 1993. On sabbatical in 1997 – 1998, he was a Senior Scientist at British Biotech Pharmaceuticals, Oxford, UK, and in 2004 and 2008, a Senior Scientist at the Expert Protease Platform, Centre for Proteomic Drug Discovery, Novartis Pharma, Basel, Switzerland. He is now a Creative Destruction Lab Scientist at the UBC Sauder School of Business and a consultant for Genentech, Novartis and several Biotechnology companies.

Chris is best known for developing proteomic methodology to discover protease substrates *in vivo*, thereby establishing the field of degradomics. He has used these techniques to reveal new biological roles for proteases in immunity and disease, most recently in the COVID-19 pandemic by SARS-CoV-2 proteases, developing two new molecular correctors to cure MALT1 protease deficiency in a primary immunodeficiency, and now in One Health Strategies for investigation of viral zoonosis. By generating clinically relevant insights into how proteases dampen disease-fighting defence systems involved in inflammation and immunodeficiency, degradomics has revealed an unexplored layer of complexity in the hierarchy of cell and immune regulation, greatly adding to our understanding of protease function and drug targeting.

He is a highly cited scientist with 316 publications, generating an *h-index* = 108 from > 41,850 citations—including 68 >100 – 199, 30 >200 – 499, 13 >500 – 999, 3 >1,200 – 1,500, and 1 >1,700, 36 high-impact papers in Nature (2), Science (2), Cell and their daughter journals (32), most as senior PI. He has disseminated his lab findings by > 297 keynote, plenary, and invited talks at international and national conferences, as well as 250 invited seminars at universities, research institutes, and companies. He has mentored 61 graduate students and post-doctoral trainees (40 PDF/14 Ph.D./7 M.Sc.) with great success: 9 of whom have remained in academics as Full Professors (including 2 Department Chairs), 5 are Associate Professors, and 6 are Assistant Professors. Indeed, Chris was awarded the UBC John McNeill Excellence in Health Research Mentorship Award in 2023.

His peers elected Dr. Overall to organize and chair the premier conferences in his field, including the 2003 Matrix Metalloproteinase and 2010 Protease Gordon Research Conferences, and in 2017, he co-chaired the International Proteolysis Society Biannual Meeting. He holds influential roles on the executive of >10 international committees, the most prominent of which was election to the Human Proteome Organization (HUPO) Executive Council and as Chair of the HUPO Chromosome-centric Human Proteome Project (C-HPP). In 2022, he was invited to represent UBC at the G7 Research Summit on One Health. He has received numerous recognitions, *e.g.,* election to the Royal Society of Canada, appointment as a Yonsei Distinguished Scholar (Yonsei University, 2023) and a Distinguished University Scholar of UBC in 2024. He received the UBC 2006 Killam Faculty Research Prize; the 2002 Canadian Institutes of Health Research (CIHR) Researcher of the Year; the Helmholtz Award (2008); International Proteolysis Society Lifetime Achievement Award (2011); Matrix Biology Society of Australia and New Zealand Barry Preston Award (2012); and the IADR Distinguished Scientist Award (2013). His advances in proteomics have been recognized by the Canadian National Proteomics Network Tony Pawson Award (2014); the Proteomass Scientific Society Award (2017); the 2018 Human Proteome Organization (HUPO) Discovery Award in Proteomics Sciences; and the 2022 Helmut Holzer Award. He is a Councilor of the π-Hub Global Proteomics Project, Guangzhou, China (2023 –).

5. POST-SECONDARY EDUCATION

University or Institution	Degree	Subject Area	Dates
University of British Columbia, B.C. Canada - *Biotechnology Laboratory* - *Department of Biochemistry and Molecular Biology* - *Protein Engineering Network of Centres of Excellence*	Supervisor: Dr. Michael Smith	Postdoctoral Scientist M.R.C. Centennial Fellow	1989 – 1992
The University of Toronto, Ontario, Canada	Ph.D.	Biochemistry	1989
The University of Adelaide, South Australia, Australia	M.D.S.	Oral Biology	1984
The University of Adelaide, South Australia, Australia	B.Sc. (Hons)	Immunology	1980
The University of Adelaide, South Australia, Australia	B.D.S.	Dental Surgery	1979

Special Academic Recognitions

Medical Research Council of Canada (MRC) Clinician Scientist I 1992-1995
MRC Clinician Scientist II 1995-1998
Canadian Institutes of Health Research (CIHR) Scientist 1999
Canada Research Chair (Tier I) in Protease Proteomics and Systems Biology 2001 – 2022
Inaugural Fellow, Canadian Academy of Health Sciences (FCAHS) 2005
External Senior Fellow, Freiburg Institute of Advanced Studies, Albert-Ludwigs Universität, Freiburg, DE 2010-2014
Honorary Professor, Albert-Ludwigs Universität Freiburg, DE 2014
Fellow, Royal Society of Canada (RSC) 2018
Visiting Scholar, University of Cape Town, Cape Town, South Africa 2018
Yonsei Distinguished Scholar of Yonsei University, College of Life Science & Biotechnology, Yonsei University, Seoul, Republic of Korea 2023
Canada Research Chair Laureate 2023
Distinguished University Scholar, University of British Columbia 2024
Councilor, 1st π-Hub Global Proteomics Project, Guangzhou, China 2023

6. EMPLOYMENT RECORD

(a) Before coming to UBC

University, Company or Organization	Rank or Title	Dates
The University of Adelaide, Department of Periodontics	Clinical Tutor	1979 – 1982
The University of Adelaide, Department of Periodontics	Lecturer in Periodontics	1983
University of Toronto, Faculty of Dentistry	Associate in Dentistry	1985 – 1989
University of Toronto, Faculty of Dentistry	Preclinical Instructor	1985, 1988 – 1989
University of Toronto, Faculty of Dentistry	Laboratory Instructor	1985 – 1988

(b) At UBC

Rank or Title	Dates
Distinguished University Scholar, UBC	2024 –
Yonsei Distinguished Scholar, College of Life Science & Biotechnology, Yonsei University, Seoul, Republic of Korea	2023 –
Canada Research Chair Laureate	2023 –
Associate Member, Department of Obstetrics and Gynecology, UBC	2018 –
Scientist, Creative Destruction Lab – West, UBC Sauder School of Business	2018 – 2020
Associate Member, Bioinformatics Graduate Program, UBC	2018 –
Honorary Professor, Albert-Ludwigs-Universität Freiburg, Freiburg, Germany	2014 –
Fraser Health Authority Affiliated Researcher, BC	2013 –
External Senior Fellow at the Freiburg Institute of Advanced Studies (FRIAS), School of Life Sciences – LifeNet, Albert-Ludwigs Universität Freiburg, Freiburg, Germany	2010 – 2014
Visiting Scientist, Center for Proteomic Chemistry, Novartis Pharma AG, Basel, Switzerland	2008
Director, Proteomics Hub, UBC Centre for Blood Research	2005 – 2008
Visiting Scientist, Expert Protease Platform, Novartis Pharma AG, Basel, Switzerland	2004
Canada Research Chair (Tier I) in Protease Proteomics and Systems Biology	2001 – 2022
Associate Member, UBC Prostate Centre	2001 –
C.I.H.R. Scientist	2000 – 2001
Full Professor	2000 –

Visiting Scientist, British Biotech Pharmaceuticals, Oxford, UK	1997 – 1998
M.R.C. Clinician Scientist, Phase II	1995 – 1998
Associate Member, Department of Biochemistry and Molecular Biology	1995 –
Associate Professor, Department of Oral Biological and Medical Sciences	1994 – 2000
M.R.C. Clinician Scientist, Phase I	1992 – 1995
Assistant Professor, Department of Clinical Dental Sciences	1992 – 1994

(c) Date of granting of tenure at U.B.C.: July 1, 1994

(d) Company Consultancies

Active
Scientific Advisory Board, Ness Therapeutics, Toronto, 2024 –
Scientific Advisory Board, CytomX Therapeutics, Inc. South San Francisco, USA, 2021 –
Consultant, Genentech, Proteases in Apoptosis Division, South San Francisco, USA, 2013 –

Former
Consultant, Ocugenix, Inc, Pittsburgh, PA, USA, 2018 – 2020
Genevant Sciences, Burnaby, BC, Canada 2019 – 2020
Consultant, AstraZeneca, Gaithersburg, Maryland 2020
Consultant, Akriveia Therapeutics, Thousand Oaks, CA, USA, 2016 – 2018
Consultant, Blade Therapeutics, South San Francisco, USA, 2016 – 2018
External Expert Consultant, Protease Platform, Novartis Pharma AG, Basel, Switzerland, 2003 – 2015 (5 d p.a.)
Consultant, Matrizyme Pharma, Toronto, ON, Canada 2015 – 2016
Consultant, British Biotech Pharmaceuticals, Oxford, UK, *ad hoc* 1997 – 2000
Scientific Advisory Board, TwinStrand Corporation, Burnaby BC, Canada, 2000 – 2008
Scientific Advisory Board, Biopharmacopae Design International Inc. Sainte Foy, QC, Canada, 2000 – 2005
Scientific Advisory Committee and Consultant, Biophage Pharma, Montreal, QC, 2002 – 2004
Consultant Procyon Biopharma, Dorval, QC, 2003 – 2004
Scientific Advisory Board, Compound Therapeutics, Waltham, MA, 2003 – 2007
Consultant ChemoCentryx, San Francisco, CA, 2004
Consultant, Larial Proteomics, Toronto, ON, Canada, 2005
Consultant Inimex Pharmaceuticals Inc. Vancouver, BC, 2005 – 2008
Research Advisory Network Member, Rimon Therapeutics, Toronto, ON, Canada, 2007 – 2012
Consultant, Direvo Biotech AG, Köln, Germany, 2008 – 2010
Consultant, Facet Biotech, Redwood City CA, USA, 2008 – 2012
Consultant, Cardiome Pharma Corporation, BC, 2011 – 2012
Consultant, Galápagos Pharma, Paris, France, 2013 – 2015
Consultant, Biogen Idec, Cambridge, MA, USA, 2014

(e) Company Director
Independent Director, Patient Home Monitoring Corporation, San Francisco, USA, 2011 – 2015.
While on the Board of Directors as one of four Directors, PHM went from a small start-up to a ~$370M company on the Venture 50 Index of the Toronto Stock Exchange.

7. LEAVES OF ABSENCE

University, Company or Organization at which Leave was taken	Type of Leave	Dates
British Biotech Pharmaceuticals Ltd., Oxford, U.K.	Sabbatical	1/7/97 – 30/06/98
Novartis Pharmaceuticals AG, Basel, Switzerland	Sabbatical	1/7/04 – 31/12/04
Novartis Pharmaceuticals AG, Basel, Switzerland	Sabbatical	1/7/08 – 31/12/08

8. TEACHING

(a) Areas of Special Interest and Accomplishments

Proteomics and Systems Biology
Viral Proteases
One Health
Proteases and Inhibitors
Matrix Metalloproteinases and Inhibitors
Protease Protein Engineering and Biotechnology
Connective Tissue Matrix

(b) Courses Taught at UBC

Session	Course Number	Scheduled Hours	Class Size	Hours Taught			
				Lectures	Tutorials	Labs	Other
1989 – 1997	CDSC 433		40	4 hr/yr	1 hr /wk		2.5 hr/wk Clinic Supervisor
1992 – 1997	DENT 443	13	10		0.5 hr/wk		
1989 – 1996	CDSC 433/443		80		0.5 hr/wk		
1993 – 1997	CDSC 461/462		6		1 hr/wk		
1989 – 1997	CDSC 502/503		6		1 hr/wk		
1993 – 1994	DENT 501/510		8	6 hr/yr			
1995 – 1997	ORBI 501/502		8	6 hr/yr			
1989 – 1997	CDSC 714/724		8		0.5 hr/wk		
1995 – 1997	BIOC 402		120	4 hr/yr			
1997 – 1997	ORB 411		40	2 hr/yr			
1998 – 2005	BIOC 514		18		12 h biyearly		
1998 – 2000	DENT 572/573 / OBMS 461		5		8 hr/yr		
1999	PBL		10		42 hr/yr		
1999 – 2001	BIOC 403		80	5 hr/yr			
1998 – 2000	DENT 541		10	3 Hr/yr			
1998 – 2000	DENT 542		10	3 hr/yr			
1999 –	DENT 410		10		6 hr/yr		
1999 –	DENT 430		42	32 hr/yr			
2003 – 2008	DENT 542		3		4 hr/yr		
2007 – 2008	BIOC 403		80	8 hr/yr			
2009 – 2016	Problem Based Learning Med 1		8 – 12		30 hr every 2nd yr		
2009 – current	DENT 420		42	2 hr/yr			
2018 – current	BIOCH 460		22	8 hr/yr			

(c) Graduate Students Supervised

Student Name	Program Type	Year		Principal Supervisor	Co-Supervisor(s)
		Start	Finish		
Björn Steffensen	Ph.D.	1992	1997	C.M. Overall	
Edwin Rydberg	Ph.D.	1995	2000	S. Withers	C.M. Overall
Angus McQuibban	Ph.D.	1996	2001	C.M. Overall	
Eric Tam	Ph.D.	1997	2004	C.M. Overall	
Shin Numao	Ph.D.	1997	2003	S. Withers	C.M. Overall
Gayle Pelman	M.Sc.	1998	2004	C.M. Overall	
Heidi Kai	M.Sc.	1998	2002	C.M. Overall	

Student Name	Program Type	Year		Principal Supervisor	Co-Supervisor(s)
		Start	Finish		
Todd Moore	M.Sc.	1999	2001	C.M. Overall	
Jennifer Cox	Ph.D.	2004	2008	C.M. Overall	
Amanda Starr	Ph.D.	2005	2010	C.M. Overall	
Patrick Beaudette	M.Sc.	2006	2009	C.M. Overall	
Claire Wilson	Ph.D.	2007	2008	C. Abbott	C.M. Overall
Nikolaus Fortelny	Ph.D.	2012	2016	C.M. Overall	P. Pavlidis
Grace Tharmarajah	Ph.D.	2009	2015	C. Van Raamsdonk	C.M. Overall
Julienne Jagdeo	Ph.D.	2012	2017	E. Jan	C.M. Overall
Natalie Marshall	Ph.D.	2013	2018	B.B. Finlay	C.M. Overall
Parker Jobin	M.D./Ph.D.	2013	2019	C.M. Overall	
Simon Abbey	M.Sc.	2014	2017	C.M. Overall	
Simran Rai	M.Sc. (Bioinformatics)	2018	2020	C.M. Overall	P. Pavlidis
Peter Grin	Ph.D.	2018	2024	C.M. Overall	
Cecily Costain	Ph.D.	2022	2023	G. Wasteneys	C.M. Overall
Kamryn Diehl	M.Sc.	2024		G. Wasteneys	C.M. Overall

Theses Completed – Ph.D. *(Career Total 14)*

B. Steffensen, D.D.S.
Department of Oral Biology, Faculty of Dentistry
"Characterization of the Human Gelatinase A Collagen Binding Domain" 1992 – 1997
M.R.C. Studentship 1992 – 1995
M.R.C. Fellowship 1995 – 1997
Present Position: Professor and Chair, Department of Periodontology,
Tufts University, School of Dental Medicine, Boston, MA, USA

E. Rydberg, B.Sc.
Department of Biochemistry and Molecular Biology, Faculty of Medicine
"Mechanistic Studies on Human Pancreatic Alpha-Amylase" 1995 – 2000
M.R.C. Studentship 1994 – 2000
Present Position: Writer, digital artist, and owner of Utility Fog Press, Harrogate, UK

A. McQuibban, B.Sc., M.Sc.
Department of Biochemistry and Molecular Biology, Faculty of Medicine
"Chemokine Inactivation by Matrix Metalloproteinases" 1996 – 2001
N.C.I.C. Studentship 1996 – 2001
Present Position: Associate Professor, Department of Biochemistry, University of Toronto, ON, Canada

S. Numao, B.Sc.
Department of Chemistry, Faculty of Science
"Mechanisms of Alpha-Amylase" 1997 – 2003
C.I.H.R. Studentship 1997 – 2003
Present Position: Senior Principal Scientist, Novartis Institutes for BioMedical Research (NIBR), Novartis Pharma AG, Basel, Switzerland

E. Tam, B.Sc.
Department of Biochemistry and Molecular Biology, Faculty of Medicine
"MMP Substrate Recognition, Characterization and Proteomic Discovery" 1997 – 2004
Roman M. Babicki Fellowship in Medical Research (Arthritis Research) 2000 – 2002

Canadian Arthritis Network of Centres of Excellence Fellowship 2001 – 2003
CIHR Strategic Training Grant in Cell Signals Fellow 2002 – 2003
Present Position: Director, Oncology R&D, Pfizer, New York, NY, USA

J. Cox, B.Sc.
Department of Biochemistry and Molecular Biology, Faculty of Medicine
"MMP Chemokine Processing in Mmp8 –/– Mice and Arthritis" 2004 – 2008
NSERC Fellowship 2004 – 2008
CIHR Strategic Training Grant in Cell Signals Fellow 2004 – 2008
Present Position: Senior Director of Biology at Chinook Therapeutics, Vancouver, BC, Canada

A. Starr, B.Sc., M.Sc.
Department of Biochemistry and Molecular Biology, Faculty of Medicine
"Matrix Metalloproteinase Regulation of Inflammatory Proteins and
Macrophage Chemokine Processing by MMPs" 2005 – 2010
NSERC National Fellowship 2005 – 2008
CIHR Strategic Training Grant in Cell Signals Fellow 2005 – 2008
Present Position: Assessment Officer, Health Canada, Ottawa, ON, Canada

C. Wilson, B.Sc.
Department of Biochemistry, Faculty of Medicine, Flinders University, S.A. Australia
"Proteomic Discovery of Dipeptidyl Peptidase 8 Substrates" 2007 – 2008
Present Position: Medical Manager – Vaccines, Sanofi Pasteur, Sydney, NSW, Australia

G. Tharmarajah, B.Sc.
Department of Medical Genetics, Faculty of Medicine, UBC
"The Role of Adamts9 in Melanoblast Migration and Modification of the Skin Proteome" 2009 – 2015
Co-Supervisor with Catherine Van Raamsdonk
BCPN Graduate Training Grant 2013
BCPN Graduate Training Grant 2014
Present Position: Director, Product Management, Synthego Corporation, Redwood City, CA, USA

N. Fortelny, B.Sc., M.Sc.
Department of Biochemistry and Molecular Biology, Faculty of Medicine
*"Bioinformatics Analysis of the Protease Web and Development of
Software Tools (TopFIND, PathFINDer, TopFINDer) to Map the Protease Web."* 2012 – 2016
UBC Four Year Doctoral Fellowship 2014
Present Position: Assistant Professor, University of Salzburg, Austria

J. Jagdeo, B.Sc.
Department of Biochemistry and Molecular Biology, Faculty of Medicine
*"Identification of Cytosolic and Nuclear Protein Substrates and the Biological Roles of Viral Proteases in
Intracellular Anti-Viral Immunity and Viral Virulence"* 2012 – 2017
Co-supervisor with Eric Jan
Present Position: Sector Manager – Health, Genome British Columbia, Vancouver, BC, Canada

N. Marshall, B.Sc.
Department of Microbiology and Immunology, Faculty of Medicine
*"TAILS Analysis of Cytosolic, Nuclear and Mitochondrial Protein in Enteropathic E. Coli
Infection to Elucidate New Mechanisms of Cellular Immunity."* 2013 – 2018
Co-supervisor with Brett Finlay
Present Position: Clinical Pathology Fellow, Department of Laboratory Medicine and Pathology, University of Alberta

Peter Grin, B.Sc., M.Sc. 2018 – 2024
Department of Biochemistry and Molecular Biology, Faculty of Medicine
"*Protease Regulation of Disease Pathogenesis.*"
Doctoral Award: Frederick Banting and Charles Best Canada Graduate Scholarships (ranked 9 of 418)

M.D./Ph.D.
P. Jobin, B.Sc., MD., Ph.D. 2013 – 2019
Department of Biochemistry and Molecular Biology, Faculty of Medicine
"tRNA Synthetases as Extracellular Moonlighting Protein Targets of Matrix Metalloproteinases in Regulating Inflammation."
UBC Aboriginal Graduate Fellowship 2013
UBC MD/PhD Studentship 2013
Frederick Banting and Charles Best Canada Graduate Scholarship-Master's 2014
CIHR Canada Graduate Scholarship – Master's Award (CGSM) 2014 – 2018
Vanier Canada Graduate Fellowship 2015
Present Position: Fellowship Training

M.Sc. *(Career Total 7)*
T. Moore, B.Sc.
Department of Oral Biological and Medical Sciences, Faculty of Dentistry
"Characterization of the Collagen Binding Domain of MMP2: Involvement of Specific Residues in the Fibronectin Type II Modules in Substrate Recognition" 1999 – 2001
Present Position: Orthodontist at Pediatric Dental Group, Vancouver, BC, Canada

H. Kai, B.Sc.
Department of Oral Biological and Medical Sciences, Faculty of Dentistry
"Tissue Inhibitor of Metalloproteinase-4 and MMP2 Activation: The Role of the C-terminal Tail in Mediating Activation" 1998 – 2002
Present Position: Pharmacist, Vancouver, BC, Canada

G. Pelman, B.Sc.
Department of Biochemistry and Molecular Biology, Faculty of Medicine
"Mutagenesis Investigation of the Molecular Determinants of Collagen Triple Helicase Activity in MMP-8" 1998 – 2004
Roman M. Babicki Fellowship in Medical Research (Arthritis Research) 1999 – 2000
K.M. Hunter/CIHR Doctoral Research Award 2000 – 2003
Present Position: Customer Analyst, WorkSafeBC, Vancouver, BC, Canada

P. Beaudette, B.Sc. 2006 – 2009
Department of Biochemistry and Molecular Biology, Faculty of Medicine
"Polymers-for-Proteomics: Development of Polyglycidol-based Soluble Ester-linked Aldehydes and their Peptide Binding Characteristics for TAILS N-Terminomics Analysis" 2006 – 2009
Michael Smith Research Foundation Student Fellowship 2007 – 2009
Present Position: Executive Specialist for Product Safety, BASF, Berlin, Germany

S. Abbey, B.Sc., D.M.D. 2014 – 2017
Department of Oral Biological and Medical Sciences, Faculty of Dentistry
"The Human Dental Pulp Proteome and N-terminome: Levering the Potential of Semitryptic Peptides Enriched by TAILS to Uncover Missing Proteins for the Human Proteome Project (HPP)"
Present Position: Endodontist, Ridge Meadows and Township Endodontics, Vancouver, BC, Canada

Simran Rai, B.Sc. 2018 – 2020
Bioinformatics, Faculty of Science
"*Correlation of Protease and Inhibitor Expression in Healthy Brain Regions and in Pathology*"

Present Position: Business Intelligence Analyst, Global Affairs Canada

Cecily Constain, B.Sc. 2022 – 2023
Department of Botany, Faculty of Science
"*Characterization of Aspartyl Plant Proteases*"

Postdoctoral Fellow Supervision *(Career Total 40)*

Margaretha Wallon, Ph.D. (1990, Lund, Sweden) 1993 – 1996
"Characterization of a Recombinant Hemopexin-like Domain of Human MMP2"
Present Position: Research Assistant Professor, Lankenau Institute for Medical Research, Philadelphia, PA, USA

Leo Tjäderhane, D.D.S., Ph.D. (1995, Oulu, Finland) 1995 – 1996
"*Regulation of MMP2 Expression by Odontoblasts in Organ Culture*"
Present Position: Professor and Chair, Department of Cariology, Restorative Dentistry and Endodontics, University of Oulu, Finland

Mitsuyoshi Matsuda, D.D.S. (Otsuka, Japan) 1995 – 1997
"*The Influence of Surface Topography on MMP Expression in Epithelial Cells*"
Present Position: Professor, Department of Oral and Maxillofacial Surgery, Asahikawa Medical University, Asahikawa, Japan

Heather Bigg, Ph.D. (1996, Cambridge, U.K.) 1996 – 2000
"*The Role of TIMP-4 in the Cellular Localization and Activation of Gelatinase A*"

Charlotte Morrison, Ph.D. (1997, UBC, Vancouver, BC, Canada) 1997 – 2000
"Microarray and Proteomic Analysis of Breast Cancer Cell and Osteoblast Co-cultures: The Role of Osteoblast MMP13 in Bone Metastasis ECM Degradation and Arthritis"
Present Position: Research Associate, Medical Genetics, UBC

Georgina Butler, Ph.D. (1997, University of Leicester, U.K.) 1999 – 2002
"Moonlighting Intracellular Proteins in the Extracellular Matrix and Their Altered Function Upon Cleavage by Inflammatory Proteinases"
Present Position: Research Associate, Overall Lab, UBC

Angus Tester, Ph.D. (2000, University of Melbourne, Australia) 2001 – 2004
"*CXC Chemokine Processing by MMP8*"
Present Position: Senior Manager Project and Programs, AdAlta Ltd, Melbourne, Australia

Reinhild Kappelhoff, Ph.D. (2003, University of Münster, Germany) 2003 – 2005
"Transcriptomic Analysis and Proteomic Substrate Discovery of Matriptase-2"
Deficient Mice Using the Overall Lab CLIP-CHIP Microarray and MS Techniques"
Present Position: Laboratory Manager & Research Associate, Overall Lab, UBC

Oded Kleifeld, Ph.D. (Weizmann Institute, Israel) 2003 – 2006
"*Protease Proteomics: CLIP-TAILS Terminal Amino Isotope Labelling of Substrates*"
Present Position: Professor, Nano Biotechnology and Nanomedicine, Technion, Israel Institute of Technology, Haifa, Israel

Richard Fahlman, Ph.D. (2001, Simon Fraser University, BC) 2004 – 2006
"Protease Proteomics: CLIP-STEP Signature Tags of Expressed Proteases"
Present Position: CEO Decipher Medtech Inc. and Professor, Department of Biochemistry, University of Alberta, Edmonton, AB, Canada

Richard Dean, Ph.D. (2002, Nottingham Trent, U.K.) 2003 – 2007
"*Protease Proteomics: Metalloelastase and MMP2 Substrate Discovery by ICAT and SILAC*"
Present Position: Principal Scientist at Xenon Pharmaceuticals Inc., Burnaby, BC, Canada

Magda Gioia, Ph.D. (Rome, Italy) 2005 – 2007
"*Protease Proteomics: CLIP-SWIPES System Wide Identification of Cleaved Substrates by SILAC*"
Present Position: Associate Professor, University of Roma 'Tor Vergata', Rome, Italy

Oliver Schilling, Ph.D. (EMBL, Heidelberg, Germany) 2005 – 2008
"*Protease Proteomics: CLIP-PICS Proteomic Identification of Cleavage Site Specificity*"
Present Position: Heisenberg Professor of Translational Proteomics, Institute of Surgical Pathology, University of Freiburg, Germany

David Rodriguez, Ph.D. (University of Oviedo, Spain) 2005 – 2008
"Proteomics: CLIP-ES-SPAIN Exosite Scanning for Substrates of Proteases and Interactors"
Present Position: Research Associate, University of Oviedo, Spain

David Marchant, Ph.D. (2005, University of London, London, UK) 2006 – 2012
"A New Transcriptional Role for Matrix Metalloproteinase-12 in Antiviral Immunity"
Co-supervised with Bruce McManus
Present Position: Associate Professor and Canada Research Chair (CRC) Tier 2 in Viral Pathogenesis, Medical Microbiology and Immunology, University of Alberta, Edmonton, AB, Canada

Ulrich auf dem Keller, Ph.D. (2005, ETH Zürich, Switzerland) 2006 – 2009
"Development of PET Imaging and Bioinformatics for Protease Substrate Quantification in Skin Inflammation. The Role of MMP2 In Activating Complement and Vessel Leakiness Through Bradykinin Regulation by MMP2 in vivo".
Present Position: Professor, Technical University of Denmark, Department of Biotechnology and Biomedicine, Copenhagen, Denmark

Alain Doucet, Ph.D. (2006, Laval University, QC, Canada) 2006 – 2010
"Substrate Discovery for MMP8 and MMP12 in Lung Inflammation by Positional Proteomics and Development of a New Sequencing Method for Proteins using Amino Terminal Orientated Mass-Spectrometry of Substrates (ATOMS) to Replace Edman Degradation"
Present Position: Scientist, Medicago, Laval, QC, Canada

Anna Prudova, Ph.D. (University of Lincoln, NE, USA) 2006 – 2014
"iTRAQ-TAILS Development of Skin Protease Proteomics and Platelet Proteomic Analysis for the Human Proteome Project (HPP)"
Present Position: Scientist, MolecularYou, Vancouver, BC, Canada

Verena Goebeler, Ph.D. (2005, University of Münster, Germany) 2006 – 2010
"Expression of MMP26 and MMP27 and the Characterization of their Inflammatory Protein Substrates using Proteomic and Degradomic Techniques."
Present Position: Research Manager, Rozmus Lab, BC Children's Research Institute, Vancouver, BC, Canada

Caroline Bellac, Ph.D. (2007, University of Berne, Switzerland) 2008 – 2010
"Macrophage MMP12 Degradomics and Roles in Arthritis Using Mmp12 –/– Mouse Models; A New Transcriptional Role for MMP12 in Antiviral Immunity through Processing of Interferon-alpha and the Development of New Antivirals"
Present Position: Scientific Officer, Swissmedic, Bern, Switzerland

Curtis Harwig, Ph.D. (1997, University of Ottawa, ON) 2008
"Metalloproteinase Activity Based Probes Synthesis for in vivo PET Imaging and MALDI TOF/TOF Tissue Imaging"
Present Position: CMC Consultant, Curtis Harwig Consulting, Vancouver, BC, Canada

Oliver Barré, Ph.D. (2008, University of Berne, Switzerland) 2008 – 2011
"Identification of Matriptase-2 Natural Substrates and Cleavage Specificity in Anemia by PICS and TAILS Proteomics Approaches"
Present Position: Registered Traditional Chinese Medicine Practitioner and Owner of OneHandAcupucturist, Vancouver, BC, Canada

Pitter Huesgen, Ph.D. (2007, University of Constance, Germany) 2008 – 2014
"Degradomic Technique Development for C-Terminomics and Characterization of LysargiNase for Biologically Important Phosphosite, Methylation Site and Protein C-Termini Analysis"
Present Position: Team Leader, Forschungszentrum Julich, and Professor at the University of Cologne, Germany

Philipp Lange, Ph.D. (2008, Free University Berlin, Germany) 2009 – 2015
"Bioinformatics of Proteolytic Signatures. TopFIND Knowledge Base, Terminal Orientated Proteomics-Human Amino Terminome in Tumor Associated Macrophages"
Present Position: Assistant Professor and Canada Research Chair (CRC) Tier 2, Department of Pathology, BC Children's Research Institute, UBC

Ricardo Carreira, Ph.D. (2010, University of Lisbon, Portugal) 2011 – 2012
"Novel Polymers-for-Proteomics: Targeted Proteomics of Nitrosylation and Proteomics of Nitrated Proteins in Inflammation and Arthritis"
Present Position: Associate Director - Proteomics, Immunocore Ltd., Abingdon, UK

Lindsay Rogers, Ph.D. (2010, University of British Columbia, BC, Canada) 2011 – 2015
"Proteomic Analysis of ADAM17 Knockout Cells, Proteolytic and Phosphorylation Post-Translational Modification of Proteins and Characterization of their Crosstalk in Regulated Precision Proteolysis"
Present Position: Assistant Professor of Teaching Biochemistry and Molecular Biology, Faculty of Medicine, University of British Columbia, Vancouver, BC, Canada

Antoine Dufour, Ph.D. (2010, Stony Brook University, NY, USA) 2011 – 2017
"Proteomic and Degradomic Analyses of Tumor-Associated Macrophages in Breast Cancer and the Role of Proteolytic Processing of Interferons in Macrophage Polarization"
Present Position: Associate Professor, Department of Pharmacological Sciences, University of Calgary, AB, Canada, July 2017

Theo Klein, Ph.D. (2008, University of Groningen, The Netherlands) 2011 – 2017
"10-plex TMT Proteomic Profiling of MALT1 Paracaspase Substrate Discovery in B Lymphocyte NF-κB Signalling"
Present Position: Scientist, Mass Spectrometry, Triskelion, Utrecht, The Netherlands

Ulrich Eckhard, Ph.D. (2011, University of Salzburg, Austria) 2012 – 2016
"Quantitative Proteomics of Human Tissues for the Human Proteome Project"
Present Position: Professor, Structural Biotechnology, IBMB, Barcelona, Spain

Giada Marino, Ph.D. (2009, University of Milano-Biocca, Italy) 2013 – 2015
"MMP Regulation of Complement Activation and its Role in Infection by Positional Proteomics to Unravel Protein Termini and their Modifications in Murine Models of

Arthritis and Lung Fibrosis"
Present Position: Postdoctoral Fellow, Department for Plant Molecular Biology, Ludwig-Maximillian-University, Munich, Germany

Nestor Solis, Ph.D. (2014, University of Sydney, NSW, Australia) 2014 – 2020
" Optimization of Polymers for Degradomics
Michael Smith Foundation for Health Research Postdoctoral Fellowship, C.J. Martin Fellowship (Australia)
Present Position: Scientist, Abcellera, Vancouver, BC, Canada

Laura Kuhlmann, Ph.D. (2014, University of Heidelberg, Germany) 2016
"TAILS Analysis of DNA Binding, Transcriptional Activity, and DNAseq of MMP12 in Interferon Responses in Viral Infection and Inflammation"
Present Position: Medical Writer, National Cancer Institute (NCI)

Tobias Pasqualon, Ph.D. (2015, University of Aachen, Germany) 2016
"Preterm Placenta Degradomics for Identification of Preterm Labor and Delivery"
Present Position: GRA CMC Scientist, CLS Behring, Marburg, Germany

Jacob Rozmus, M.D., Ph.D. (2016, University of British Columbia, Canada) 2016 – 2018
"Proteomics Analysis of MALT1 Deficiency in Macrophage Maturation, Differentiation and Senescence"
Present Position: Paediatric Hematologist/Oncologist and Assistant Professor, Department of Pediatrics, Faculty of Medicine, BC Children's Research Institute, UBC, Vancouver, BC

Pirjo Aström, Ph.D. (2017, University of Oulu, Finland) 2017 – 2018
"Moonlighting MMP12 in Oral Cancer"
Present Position: Professor, Biomedicine, University of Oulu, Finland

Yoan Machado, Ph.D. (2017, University of Salzburg, Austria) 2017 – 2021
"SARS-CoV-2 3CLpro Substrates Identified by TAILS"
Present Position: Protein Analytics, Amgen, Vancouver, BC

Marli Vlok, Ph.D. (2018, University of British Columbia) 2018 – 2022
"*Zika Virus Protease Control of Intracellular Anti-Viral Immunity*"
Present Position: Post-Doctoral Research Fellow

Isabel Pablos Ocampo, Ph.D. (2017, University of Salzburg, Austria) 2017 – 2022
"SARS-C0V-2 3CLpro Substrate Discovery by TAILS"
Present Position: Scientist, Abcellera, Vancouver, BC, Canada

Peter Bell, Ph.D. (2017, University of Newcastle, UK) 2017 – 2022
"Proteolytic Regulation of NFkB Pathway Activation in Macrophages by TAILS"
Present Position: Research Associate, Overall Lab, UBC

Hugo Cesar Ramos de Jesus, Ph.D. (2019, University of Campinas (Unicamp), Brazil) 2020 – 2023
"SARS-CoV-2 3CLpro Protease and Substrate Active Site Structural Interactions"
Present Position: Scientist, Abcellera, Vancouver, BC, Canada

Laboratory Technician Supervision

Ling Chen (T2)	1993 – 1994
Yili Wang (T4)	1994 – 2014
Xian Zhang (T3)	1994
John Edmeston (T3)	1995 – 1996
Angela King (T2 – T3)	1995 – 2000

Andrea Connor (T2 – T4)	2000 – 2005
Jennifer Mark (T1)	2014 – 2016

Biochem 449, 448/Biology 448/Microbiology Coop Thesis Students (Selected)

Aldrich Ong	1994 – 1995
Doug Sam	1996 – 1997
Eric Tam	1996 – 1997
Gayle Pelman	1996 – 1997
Heidi Kai	1997 – 1998
Shirley Hsueh-Yi Hu	1997 – 1998
Julie Atherstone	1997 – 1999
Jorge H. Frasca	1998 – 1999
John Vyselaar	1998 – 1999
Andrea Connor	1998 – 1999
Todd Moore	1998 – 1999
Lillian Yeung	1999 – 2000
Amy Mei-Hsuan Lai	1999 – 2000
Dennis Lee	1999 – 2000
Glen Kurokawa	2000 – 2001
Mike McCall	2000 – 2001
Lindsay Ho Chung	2001 – 2002
Hartanto Tjoa	2001 – 2002
Karsten Hammond	2002 – 2003
Mina Wessa	2003 – 2004
Pamela Miller	2003 – 2004
Nadezhda Dobrinskaia	2004 – 2005
Benjamin Lai	2005 – 2006
Wilson Wong	2009 – 2010
Parker Jobin	2012 – 2013
Janice Tsui	2015 – 2017
Laura Doenges	2016
Olivia Bulka	2017 – 2018
Lemlem Degefie	2018 – 2019
Christina Pan	2023 – 2024

Work Learn Student Supervision (Selected)

Robin S. Abbey	1993 – 1996
Tim Lau	1993 – 1995
Angela King	1994 – 1995
Doug Sam	1995 – 1997
Ringo Leung	1995 – 1996
Michelle Lecompte	1996 – 1997
Keri Landry	1996 – 1998
Kaliq Chaudhry	1997 – 1998
Jorge Frasca	1997 – 1999
Sarah Florizone	1998 – 1999
Andrea Conner	1998 – 1999
Mary De Vera	1999 – 2000
Isabella Mak	1999 – 2001
Jack Chen	2000 – 2001
Christine Lee	2001 – 2002
Irina Poustovoitto	2001 – 2002
Shaneel Sharma	2002 – 2003
Bryan Tennant	2002 – 2004

Anna Moore	2003 – 2004
Elaine Chow	2004 – 2005
Michelle Ly	2005 – 2006
Cheukei Ho	2005 – 2006
Minghui Yu	2005 – 2006
Nadezhda Dobrinskaia	2006 – 2008
MariaJose Gandolfo	2006 – 2010
Karen Nguyen	2008 – 2010
Jennifer Chu	2010 – 2011
Cameron Tough	2011 – 2013
Jennifer McLeod	2012 – 2014
Katheline Cao	2014 – 2015
Vinotheni Rajendran	2014 – 2015
Jade Varelle	2015 – 2016
Tianna Sihota	2016 – 2017
Janice Tsui	2016 – 2017
Ting-An Cheng	2017 – 2018
Leilani Ruffini	2017 – 2018
Lesley Miller	2018
Tina Liao	2018 – 2018
Lemlem Degefie	2019 – 2021
Janet Chiang	2019 – 2021
Kelly Chia	2021 – 2022
Christina Pan	2021 – 2024
Navreen Grewal	2022 – 2023
Houria Afshar Moghaddam	2023 – 2024

Co-op Student Supervision (Selected)

Janice Tsui	2015 – 2017
Nathan Naidu	2019 – 2020
Flora Chong	2020

***Visiting Scholar Supervision** (31)*

Daniel Lottaz (University of Berne, Switzerland)	January – July 2005
Misook Kim (The University of Queensland, St Lucia, Australia)	June 2006
Tom Rouwette (Radboud University Nijmegen, The Netherlands)	March – June 2006
Felicity Kerr (Monash University, Melbourne, Australia)	July – October 2006
Katerina Ajami (University of Sydney, Australia)	July – November 2006
Claire Wilson (Flinders University, Adelaide, Australia)	February 2007 – June 2008
Christoph Becker-Pauly (University of Mainz, Germany)	April – July 2008
Olivier Masson (INSERM, Centre de Recherche en Cancérologie de Montpellier, France)	July – Sept 2008
Scott Stansfield (Queensland University of Technology, Australia)	July – September 2008
Gavin Jones (University of East Anglia, UK)	January – March 2009
Urska Repnik (Josef Stefan Institute, Ljubljana, Slovenia)	March – May 2009
Tamara Jefferson (University of Mainz, Germany)	June – August 2010
Giada Marino (University Umea, Sweden)	February – March 2011
Satoshi Yoshimura (University of Kyoto, Japan)	March – July 2011
Corinna Kuenzer (University of Applied Science Mannheim, Germany)	August 2011 – March 2012
Andre Zelanis (Instituto Butantan, Sao Paulo, Brazil)	March – June 2012
Rui Cruz (Molecular Biotechnology Unit, Cantanhede, Portugal)	June – July 2012
Philipp Schultz (University of Münster, Germany)	September – December 2012
Antoine Cominelli (Université Catholique de Louvain, Belgium)	March – May 2014
Brendan Mallia – Milanes (Molecular Medicine, Queens Medical Centre, Nottingham, UK)	July – October 2014
Sarah Louise King-Smith (University of Copenhagen, Copenhagen, Denmark)	August 2014 – September 2014

Christoffer Knak Goth (University of Copenhagen, Copenhagen, Denmark) August 2014
Brandon Wadas (California Institute of Technology, Pasadena, CA, USA) September-October 2014, July 2015
Vivian Tam (University of Hong Kong, Hong Kong, China) March – April 2015
Chun-An Chen (Baylor College of Medicine, Houston, TX, USA) March – June 2015
Pirjo Aström (University of Oulu, Finland) July 2015
Xuan Zhang (University of Pennsylvania, Philadelphia, USA) July – August 2015
Maria Esparza (Universidad de Navarra, Pamplona, Spain) April – June 2016
Laura Dönges (Rhine-Waal University of Applied Sciences, Kleve, Germany) May – December 2016
Sophia Scheuermann (University of Tübingen, Tübingen, Germany) March – September 2019
Hugo Cesar Ramos de Jesus (University of Campinas, Campinas, Brazil) January – September 2019

Visiting Sabbatical Scientists (17)
Brendan O'Connor (Professor, School of Biotechnology, Dublin City University, Ireland) 2005
Sabrina Rüggeberg (Group Leader, EMBL, Heidelberg, Germany) 2006
Cathy Abbott (Senior Lecturer, Flinders University, Adelaide, Australia) 2007
Mayra Martínez (Professor, University of Havana, Cuba) 2007
Wolfgang Schröder (Professor, Umea University, Sweden) 2008 – 2009
Bjorn Steffensen (Professor, Associate Dean Dentistry, University of Texas Health Science Centre at San Antonio, TX, USA) 2009
Pao-Chi Liao (Professor, National Cheng Kung University College of Medicine, Taiwan) 2010
Catherine Moali (Professor, University of Lyon, France) June – August 2011
Frederic Delolme (Professor, University of Lyon, France) June – August 2011
Bryan Crawford (Department of Biology, New Brunswick University, Canada) August 2012, December 2013
Helena Ritchie (University of Michigan, MI, USA) October – November 2012
Qui Phung (Genentech, South San Francisco, CA, USA) March 2013
Jason White (Professor in Veterinary Biochemistry, University of Melbourne, Australia) Aug. – December 2016
Carolina Claudia (Professor, Qca Gral y Biológica, Ctes, Argentina) October 2016 – February 2017
Carolina Claudia (Professor, Qca Gral y Biológica, Ctes, Argentina) September – October 2018
Stuart Cordwell, (Professor, Director, Sydney Mass Spectrometry, The University of Sydney) 2020
Carlos A. Sorgi, Professor Associado, Universidade de São Paulo, Brazil August 2023 – July 2024

Highly qualified personnel successes and current positions
My research resulted in productive knowledge translation—*e.g.,* three patents, a company *interfeRx*, and launched careers of 61 trainees (40 PDF/13 Ph.D. /1 MD-PhD/7 MSc) with great success: 20 are now Professors: 9 are Full Professors including 2 Department Chairs, 5 are Associate Professors, and 6 are Assistant Professors, 16 are industry scientists, 7 are Research Associates and 6 health/science professionals. My trainees earned >445 authorships on >187 papers (average ~8 papers), held 50 salary awards, *e.g.,* 23 CIHR/MSFHR *incl.* 1 Vanier Scholarship, 7 EU, *e.g.,* 1 Humboldt/1 Marie Curie, and given >418 talks/posters (221 global) winning 15 best presentation prizes and 50 travel awards—*e.g.,* 4 EU, 2 AACR, 8 CCS/CIHR, 19 UBC/BCPN, and delivered 137 oral presentations.

9 Former Trainees who are Full Professors and Departmental Heads
Bjorn Steffensen, D.D.S. Ph.D.
Professor and Chair, Department of Periodontology, Tufts University, School of Dental Medicine, Boston, MA, USA

Leo Tjäderhane, D.D.S., Ph.D.
Professor and Chair, Department of Oral and Maxillofacial Diseases, Faculty of Medicine, University of Helsinki, Helsinki, Finland

Christoph Becker-Pauly Ph.D.
Professor, Department of Biochemistry, University of Kiel, Germany

Oliver Schilling Ph.D.
Heisenberg Professor for Translational Proteome Research at the Institute of Surgical Pathology, University of Freiburg, Albert-Ludwigs Universität Freiburg, Germany

Ulrich auf dem Keller Ph.D.
Professor, Department of Biotechnology and Biomedicine, Technical University of Denmark, Copenhagen, Denmark

Richard Fahlman, Ph.D.
Professor, Department of Biochemistry, University of Alberta, Edmonton, AB, Canada

Pitter Huesgen Ph.D.
Professor, Albert-Ludwigs Universität Freiburg, Germany

David Marchant Ph.D.
Professor, Department of Medical Microbiology and Immunology, University of Alberta, Edmonton, AB, Canada and Canada Research Chair in Viral Pathogenesis

Mitsuyoshi Matsuda, D.D.S. Ph.D.
Professor, Department of Oral and Maxillofacial Surgery, Asahikawa Medical University, Asahikawa, Japan

5 Former Trainees who are Associate Professors
Oded Kleifeld Ph.D.
Associate Professor, Technion, Israel Institute of Technology, Haifa, Israel

Antoine Dufour Ph.D.
Associate Professor, Department of Pharmacology, University of Calgary, AB, Canada

Angus McQuibban, B.Sc., M.Sc. Ph.D.
Associate Professor, Department of Biochemistry, University of Toronto, ON, Canada

Magda Gioia Ph.D.
Associate Professor, Department of Clinical Sciences and Translational Medicine, University of Roma Tor Vergata, Rome, Italy

Philipp F. Lange Ph.D.
Canada Research Chair and Associate Professor
Department of Pathology, University of British Columbia, Vancouver, BC, Canada

6 Former Trainees who are Assistant Professors
Margaretha Wallon Ph.D.
Assistant Professor, Lankenau Institute for Medical Research, Philadelphia, PA, USA

Jacob Rozmus M.D., Ph.D.
Assistant Professor, Division of Oncology, Hematology & BMT, Department of Pediatrics, University of British Columbia, Vancouver, BC, Canada

Nikolaus Fortelny Ph.D.
Assistant Professor, Computational Systems Biology, Department of Biosciences, University of Salzburg, Austria

Lindsay Rogers Ph.D.
Assistant Professor of Teaching, Department of Biochemistry and Molecular Biology, Faculty of Medicine, University of British Columbia, Vancouver, BC, Canada

Pirjo Aström, Ph.D.,
Adjunct Professor, Department of Biomedicine, University of Oulu, Finland

Ulrich Eckhard, Ph.D.
Group Leader, Department of Structural and Molecular Biology, IBMB-CSIC, Barcelona, Spain

Current lab personnel

Visiting Scientist:
Dr. Carlos Arterio Sorgi Ph.D.

Research Associates:
Dr. Reinhild Kappelhoff Ph.D. (University of Münster, Germany)
Dr. Peter Bell Ph.D. (Newcastle University, United Kingdom)

Graduate Students:
Peter Grin B.Sc., M.Sc.

Undergraduate Students:
Christina Pan
Houria Afshar Moghaddam

9. SCHOLARLY AND PROFESSIONAL ACTIVITIES

(a) Areas of Special Interest and Accomplishments

i) Titles of theses written for graduate degrees:

B.Sc. (Hons) — Immunofluorescent Studies of Collagen.
Supervisor: Prof. J.C. Thonard (Professor, Department of Oral Biology and the Department of Microbiology and Immunology, University of Adelaide).

M.D.S. — Demonstration of Tissue Collagenase Activity *in vivo* and its Relationship to Inflammation Severity in Human Gingiva.
Supervisor: Prof. J.C. Thonard (Professor, Department of Oral Biology and the Department of Microbiology and Immunology, University of Adelaide).

Ph.D. — Regulation of Matrix Metalloproteinase Expression in Connective Tissue Cells.
Supervisor: Dr. J. Sodek (Professor, Department of Biochemistry and the Department of Dentistry; Director, Medical Research Council Group in Periodontal Physiology, Faculty of Dentistry, University of Toronto).

ii) Ongoing research activities:

(b) Research or equivalent grants held (indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC))

Continuous CIHR salary awards at UBC ($4.8M) culminating with a Tier 1 CRC in 2001-2021.
Ongoing funding over 30 years includes 26 CIHR/CHRP/CCS Operating Grants as PI, 8 Operating Grants as Co-PI, and NIH, >$27.5M.
Co-PI on 8 Group/Team Grants (CIHR $16.6M, CBCRA $4.8M) and 11 other Team Grants >$1M.
Canadian Foundation for Innovation (6) and Michael Smith Fellowship Health Research Teams >$33.1M.

Granting Agency	Title	COMP	$ Per Year	Year	Principal Investigator	Co-Investigators
ACTIVE GRANTS						
University of British Columbia GR030359 (DUS Support Research Award PM001958 CC00343)	**Distinguished University Scholar (Salary)**	**C**	**$20,000**	**24 – 29**	**C.M. Overall**	

Granting Agency	Title	COMP	$ Per Year	Year	Principal Investigator	Co-Investigators
University of British Columbia (DUS Support Research Award PM001958 CC00343)	**MolCORx: One Health Accelerated Discovery of Novel Molecular Correctors for Prevention and Treatment of Zoonotic Viral Infections**	**C**	**$20,000**	**24**	**C.M. Overall**	
C.I.H.R. Priority Announcement PJT-185874	**Acute Human Gingivitis Systems Biology**	**C**	**$100,000**	**24**	**C.M. Overall**	
C.I.H.R. Bridge MOH-190391	**Acute Human Gingivitis Systems Biology**	**C**	**$100,000**	**23**	**C.M. Overall**	
CFI	**Transformative and Disruptive Systems Immunology**	**C**	**$4,983,308 ($2,070,00 to CMO**	**23**	**L. Foster**	**C.M. Overall**
BCKDF	**Transformative and Disruptive Systems Immunology**	**C**	**$2,491,655**	**23**	**L. Foster**	**C.M. Overall**
PAST GRANTS						
Saskatchewan Health Research Foundation (SHRF)	Development of a Lung Organoid Platform to Study TB and SARS-CoV-2 Co-infection and Therapies	C	$149,825 $149,825	22 23	A. Banerjee	C.M. Overall
C.I.H.R. Project Grant	Host Cell Protein Substrates of Enterovirus Proteases	C	$145,350 $145,350 $145,350 $145,350 $145,350	18 – 19 19 – 20 20 – 21 21 – 22 22 – 23	E. Jan	C.M. Overall L. Luo
C.I.H.R. Foundation Grant (FDN: 148408)	From Proteolytic Networks to Human Biology and Disease: Protease Regulation of Signal Transduction in Chronic Inflammatory Diseases. $5.55 M (*ranked 9th >1,400 grants*)	C	$748,297 $756,918 $842,931 $527,623 $803,247 $819,312 $835,698 $209,953	16 – 17 17 – 18 18 – 19 19 – 20 20 – 21 21 – 22 22 – 23 2023	C.M. Overall	
Support for Teams to Advance Interdisciplinary Research (STAIR) (Faculty of Science, UBC)	Protease Activity in the Plant Cell Wall	C	$20,000 (to CMO)	22 – 23	G. Wasteneys	C.M. Overall
2023/24 Research Facilities Support Grant	Maintenance of Shared Infrastructure - Centre for Blood Research and Faculty of Dentistry	C	$9,259.66 (to CMO)	23	H. Kim	C.M. Overall J. Kizhakkedathu
MITACS	Comprehensive Protease Expression Profiling and Substrate identification in Alveolar-like Macrophages During Mycobacterial Infection	C	$6,000	23	S. Baros-Steyl	J. Blackburn C.M. Overall

Granting Agency	Title	COMP	$ Per Year	Year	Principal Investigator	Co-Investigators
Canada Research Chair (Tier I) in Protease Proteomics and Systems Biology 950-01-126 2001-2022	Salary and Infrastructure Support	C	$200,000 $200,000 $200,000 $200,000 $200,000 $200,000 $200,000 $200,000 $200,000 $200,000 $200,000 $200,000 $200,000 $200,000 $200,000 $200,000 $200,000 $200,000 $200,000 $200,000	01-2001 –12-2007 01-2008 –12-2014 01-2014 –12-2021 01-2022 –12-2022	C.M. Overall	
Saskatchewan Health Research Foundation (SHRF)	Discovering the Molecular Drivers of Differential Pathogenicity on Infection with SARS-CoV-2 and MERS-CoV	C	$120,000	2022	A. Banerjee	C.M. Overall
C.I.H.R. COVID Variants Supplement: COVID-19 Rapid Research Funding	Host Cellular Protein Substrates of SARS-CoV-2 Proteases	C	$50,000	21 – 22	E. Jan	C.M. Overall
2021/22 Research Facilities Support Grant	Maintenance Grant	C	$8,014	21 – 22	J. Kizhakkedathu	C.M. Overall
Canada Research Continuity Emergency Fund	Stage 1 Stage 2 Stage 3 Stage 4	N	$6,937 $3,226 $11,769 $3,387	20 – 21	C.M. Overall	
C.I.H.R. Sex as a Biological Variable Supplement: COVID-19 Rapid Research Funding	Host Cellular Protein Substrates of SARS-CoV-2 Proteases	C	$50,000	20 – 21	E. Jan	C.M. Overall
C.I.H.R. Canadian 2019 Novel Coronavirus (COVID-19) Rapid Research Funding Opportunity (F20-01013)	Host Cellular Protein Substrates of SARS-CoV-2 Proteases	C	$331,212	20 – 21	E. Jan	C.M. Overall
Genentech, South San Francisco	Identification of Protease Substrates by Proteomic TAILS Methodology	N	$267,860	19 – 22	C.M. Overall	
2019 Research Facilities Support Grant	Thermoplus PSC 060 Refrigeration Unit for Proteomics Suite	C	$150,000	2019	C.M. Overall	
C.I.H.R. Project *(Awarded and declined in favour of Foundation Grant)*	Degradomics Analysis of Inflamed Placental Tissue in Prematurity	C	$978,560	16 – 21	C.M. Overall	F. Mohtashami

Granting Agency	Title	COMP	$ Per Year	Year	Principal Investigator	Co-Investigators
C.I.H.R. Project *(Awarded and declined in favour of Foundation Grant)*	Deciphering the Regulation of Extracellular High Mobility Group Box 1 (HMGB1) Activity by Matrix Metalloproteinases (MMPs) in Periodontal Inflammation	C	$978,560	16 – 21	C. M. Overall	G.S. Butler
C.I.H.R. MOP-133632	Inflammation Pathways in the Periodontium (ranked 1 of 55 grants) *Terminated July 1, 2016 and incorporated into Foundation Grant*	C	$180,692 $177,003 $184,132	14 – 15 15 – 16 16 – 17	C. M. Overall	
C.I.H.R. MOP-37937	Leukocyte Matrix Metalloproteinases (MMPs) in Arthritis (ranked 1 of 56 grants) *Terminated July 1, 2016 and incorporated into Foundation Grant*	C	$100,746 $203,190 $214,449 $217,610 $213,977 $108,372	13 – 14 14 – 15 15 – 16 16 – 17 17 – 18 18 – 19	C. M. Overall	
European Commission (SysVac) 603288	Systems Biology to Identify Molecular Targets for Vascular Disease Treatment	C	EUR 28,000	14 – 17	B. Pieske	C. M. Overall + 30 scientists from 16 partner institutes in 10 countries
C.I.H.R. TBO-122068, 493269	Identifying Novel Markers of Alveolar Bone loss: Developing New Diagnostic Approaches for the Most Prevalent Forms of Bone Loss	C	$415,510 $415,510 $415,510 $415,510 $415,510	12 – 13 13 – 14 14 – 15 15 – 16 16 – 17	M. Glogauer	C.M. Overall C.A.G. McCulloch S. Grinstein D. Matthews
Michael Smith Foundation for Health Research IN-NPG-00105-156	B.C. Proteomics Network (Establish and administer the BCPN) Phase 2	C	$1,600,000	12 – 17	L. Foster	C.M. Overall C. Borchers G. Morin
C.I.H.R. MOP-111055	Moonlighting Intracellular Proteins in the Extracellular Matrix	C	$35,104 $140,416 $175,520 $175,520 $175,520 $175,520	10 – 11 11 – 12 12 – 13 13 – 14 14 – 15 15 – 16	C.M. Overall	G.S. Butler
C.I.H.R. MOP-111058	Proteolytic Signatures in Breast Cancer (ranked 3rd of 36 grants)	C	$35,625 $142,499 $178,124 $178,124 $178,124 $178,124	10 – 11 11 – 12 12 – 13 13 – 14 14 – 15 15 – 16	C.M. Overall	S. Dedhar
C.I.H.R./NSERC CPG-127771 CHRP-446417-13	Polymers for Proteomic Enrichment of Early Cancer Biomarkers	C	$226,161 $226,161 $226,161	13 – 14 14 – 15 15 – 16	C.M. Overall J. Kizhakkedathu	M. Khan. C. Poh

Granting Agency	Title	COMP	$ Per Year	Year	Principal Investigator	Co-Investigators
Canadian Foundation for Innovation Number: 31059	Immune System Polymorphism and Host/Pathogen Interactions	C	$2,104,522	12 – 17	L. Foster	C.M. Overall B. Finlay R. Hancock J. Kast T. Major R. Brunham
B.C. Knowledge Fund (CFI Infrastructure Matching Fund)	Immune System Polymorphism and Host/Pathogen Interactions	C	$2,104,522	12 – 17	L. Foster	C.M. Overall B. Finlay R. Hancock J. Kast T. Major R. Brunham
C.I.H.R. Team Grant	Training Program in Health Applications of Cell Signalling in Mucosal Inflammation and Pain	C	$4,114,862	01 – 15	J. H. Brumell C.A.G. McCulloch	C.M. Overall, B. Finlay, M. Glogauer and 11 more
Galapagos SASU, Paris, France	Biomarker Discovery for Cartilage Degradation	NC	$160,186	14 – 15	C.M. Overall	
Canadian Cancer Society (Research Grant) 020483	Cancer Protease Proteomics: Metadegradomics	C	$110,400 $110,400 $110,400 $110,400 $110,400	09 – 10 10 – 11 11 – 12 12 – 13 13 – 14	C.M. Overall	
Canadian Foundation for Innovation (New Initiatives Fund)	Centre for High-Throughput Phenogenomics	C	$3,770,350	09 – 14	E. Putnins	C.M. Overall, D. Bromme, H. Burt, P. Cullies, H. Larjava, J. Richman, F. Rossi, C. Shuler, T.M. Underhill
B.C. Knowledge Fund (CFI Infrastructure Matching Fund)	Centre for High-Throughput Phenogenomics	C	$3,770,350	09 – 14	E. Putnins	C. M. Overall D. Bromme H. Burt P. Cullies H. Larjava J. Richman F. Rossi C. Shuler T. M. Underhill
Michael Smith Foundation for Health Research (British Columbia Proteomics Network)	Identification of Matrix Metalloproteinase-8 and -12 Substrates in Lung Inflammation Using Positional Proteomics	C	$15,000	09 – 10	C. M. Overall	A. Doucet
C.I.H.R. MOP-37937	Leukocyte Matrix Metalloproteinases (MMPs) in Arthritis (ranked 1st)	C	$130,426 $196,783 $196,783 $196,783 $196,783 $98,392	08 – 09 09 – 10 10 – 11 11 – 12 12 – 13 13 – 14	C. M. Overall	
Michael Smith Foundation for Health Research IN-NPG-00103-067	B.C. Proteomics Network (establish and administer the BCPN) Phase 1	C	$2,300,000	07 – 12	G. Morin	C. M. Overall C. Borchers L. Foster

Granting Agency	Title	COMP	$ Per Year	Year	Principal Investigator	Co-Investigators
C.I.H.R. MOP-11633	Metalloproteinase Degradomics: Systems Biology of the Protease Web (ranked 1st)	C	$196,251 $196,251 $196,251 $196,251 $196,251	07 – 08 08 – 09 09 – 10 10 – 11 11 – 12	C.M. Overall	
C.I.H.R. Team Grant CTP 82946	CIHR Team in Cardiovascular Disorders	C	$4,578,343 $25,000 p.a. to CMO	07 – 12	N.G. Seidah	A. Basak M. Chretien R. Day D. Figeys J. Genest C. Lazure M. Mbikay C.M. Overall A. Prat T.L. Reudehuber Z. Yao
C.B.C.R.A. 016508	Proteomic and Degradomic Analysis of Breast Cancer Metastases	C	$121,056 $120,959 $120,959 $120,959 $120,959	05 – 06 06 – 07 07 – 08 08 – 09 09 – 10	C.M. Overall	D. Perrin
C.B.C.R.A. Metastases Program Grant (ranked 1st)	Program Core: Models for the Identification of Novel Molecular Targets and Therapeutics for Organ-Specific Metastasis of Breast Cancer	C	$969,067 $969,067 $969,067 $969,067 $969,067	05 – 06 06 – 07 07 – 08 08 – 09 09 – 10	S. Dedhar	C.M. Overall C. Roskelly A. Seth
N.C.I.C. (Operating Grant) 015144	Functional Proteomics and Activation of Cancer MMPs (ranked 2nd)	C	$150,000 $150,000 $150,000 $150,000 $150,000	04 – 05 05 – 06 06 – 07 07 – 08 08 – 09	C.M. Overall	
C.I.H.R. (Group Program) MGC-48376	C.I.H.R. Group in Matrix Dynamics	C	$230,543 $228,810 $228,810 $228,810 $228,810 $228,810 $228,810 $228,810	01 – 02 02 – 03 03 – 04 04 – 05 05 – 06 06 – 07 07 – 08 08 – 09	C.A. McCulloch	J. Sodek C.M. Overall R.P. Ellen A.K. Seth M. Glogauer
C.I.H.R. (Operating Grant) MOP-37937	Neutrophil Collagenase (MMP-8) in Inflammation	C	$90,377 $161,188 $161,188 $161,188 $161,188 $80,594	03 – 04 04 – 05 05 – 06 06 – 07 07 – 08 08 – 09	C.M. Overall	C.A.G. McCulloch
N.I.H. MH075683-01A1	Neurotoxic Mechanisms Mediated by Lentivirus-Induced proteolysis	C	$61,776 $61,776 $61,776	06 07 08	C. Power	C.M. Overall
Canary Foundation Bioinformatics Platform Dissemination Awards	CPAS platform for integrated proteomic profiling of proteolysis in health and disease	C	US$10,000	2007	C. M. Overall	O. Schilling

Granting Agency	Title	COMP	$ Per Year	Year	Principal Investigator	Co-Investigators
Canadian Arthritis Networks of Centres of Excellence 03-CEL-03R	Anti-inflammatory Chemokine Antagonists for Treating Arthritis	C	$138,150 $138,150	03 – 04 04 – 05	C.M. Overall	C.A.G. McCulloch J. Schrader
C.I.H.R. Strategic Training Program Grant	Training Program in Transfusion Science	C	$1,659,357	03 – 09	R. McGillivray W.R. McMaster	C.M. Overall and 14 others
Canadian Foundation for Innovation (Innovation Fund 1999-2005)	UBC Centre for Blood Research	C	$6,066,500	02 – 09	R. McGillivray	C.M. Overall D. Brooks D. Devine C. Haynes A. Karsan G. Mauk E. Pryzdial C. Roberts N. Strynadka
B.C. Knowledge Fund (CFI Infrastructure Matching Fund)	UBC Centre for Blood Research	C	$6,066,500	02 – 09	R. McGillivray	C.M. Overall D. Brooks D. Devine C. Haynes A. Karsan G. Mauk E. Pryzdial C. Roberts N. Strynadka
UBC Blusson Fund, Canadian Blood Services and Bayer	UBC Centre for Blood Research	C	$2,933,500	02 – 09	R. McGillivray	C.M. Overall and 9 others
C.I.H.R. (Training Grant)	Network for Oral Research Training and Health	C	$1,835,345	02 – 08	G.K. Hunter	C.M. Overall P.J. Allison C. Dawes D. Grenier B.H.J. Juurlink J.M. Lee D. Locker A. Nanci P.G. Scott
C.I.H.R. (Operating Grant) MT-11633	Molecular Determinants of Human MMP-2 Substrate Specificity	C	$172,883 $176,429 $118,429 $195,762 $195,762 $107,548	02 – 03 03 – 04 04 – 05 05 – 06 06 – 07 07 – 08	C.M. Overall	
Varian Associates	Degradomics: Discovery of Novel Proteinase Substrates in the Proteome	C	$13,589	02 – 03	C.M. Overall	
BC Knowledge Development Fund	Degradomics: Discovery of Novel Proteinase Substrates in the Proteome	C	$125,000	02 – 03	C.M. Overall	
Canadian Foundation for Innovation	Degradomics: Discovery of Novel Proteinase Substrates in the Proteome	C	$125,000	02 – 03	C.M. Overall	

Granting Agency	Title	COMP	$ Per Year	Year	Principal Investigator	Co-Investigators
Canadian Arthritis Network of Centres of Excellence	Anti-inflammatory Chemokine Antagonists for Treating Arthritis	C	$43,920	02 – 03	C.M. Overall	C.A.G. McCulloch I. Clark-Lewis
Canadian International Development Agency (CIDA)	The Abnormal Expression of MMPs and TIMPs in the Prostatic Diseases (3x3 Canada-China Biotechnology Exchange)	C	$30,000	02 – 03	C.M. Overall	J. Zhang
C.I.H.R. (Operating Grant) MT-15171	Mechanisms and Consequences of Versican Degradation	C	$90,867 $90,867 $90,867	02 – 03 03 – 04 04 – 05	C.R. Roberts	C.M. Overall
C.I.H.R. (Operating Grant) MOP-13338	Structure-Function Studies and Mechanistic Inhibitor Design for Human Pancreatic Alpha-Amylase	C	$104,191 $104,191 $104,191	02 – 03 03 – 04 04 – 05	G.D. Brayer	C.M. Overall S. Withers
Protein Engineering Network of Centres of Excellence (PENCE)	Functionality-Based Protein Profiling for Proteomics	C	$23,500 $23,500 $23,500 $23,500	01 – 02 02 – 03 03 – 04 04 – 05	S. G. Withers	J. Mort N. Seidah C. M. Overall D. Perrin J. Karst
Canadian Arthritis Network of Centres of Excellence (CAN)	Anti-inflammatory Chemokine Antagonists for Treating Arthritis	C	$75,200	01 – 02	C.M. Overall	C.A.G. McCulloch I. Clark-Lewis
N.C.I.C. (Operating Grant) 012288	Cellular Activation of Human Gelatinase A	C	$222,086 $154,250 $154,250	01 – 02 02 – 03 03 – 04	C.M. Overall	
C.I.H.R. (Scientist Award) MSC-40344	Personnel Award, Salary	C	$77,000	98 – 01 Returned in favour of Tier 1 CRC	C.M. Overall	
C.I.H.R. (Operating Grant) MOP-37937	Neutrophil Collagenase (MMP-8) in Extracellular Matrix Degradation	C	$164,643 $109,175 $109,175	00 – 01 01 – 02 02 – 03	C.M. Overall	C.A.G. McCulloch
Canadian International Development Agency (CIDA)	Expression of MMPs and Tissue Inhibitors (TIMPs) in Human Prostate Tissue and Cancer (3x3 Canada-China Biotechnology Exchange)	C	$10,000	99 – 00	C.M. Overall	J. Zhang
C.I.H.R. (Operating Grant) MT-13338	Structure and Function Studies of Human Pancreatic Alpha-Amylase	C	$65,078 $65,078 $65,078	99 – 00 00 – 01 01 – 02	G.D. Brayer	C.M. Overall S. Withers
C.I.H.R. (Multi-User Equipment)	Maintenance for the Electron and Confocal Microscope Facility	C	$34,758 $40,378 $40,378 $40,378 $40,378	99 – 00 00 – 01 01 – 02 02 – 03 03 – 04	D.M. Brunette	C.M. Overall and 9 others
Canadian Arthritis Network of Centres of Excellence (CAN)	Generating the Neutrophil Collagenase (MMP-8) Knock Out Mouse	C	$27,000 $27,000	99 – 00 00 – 01	C.M. Overall	

Granting Agency	Title	COMP	$ Per Year	Year	Principal Investigator	Co-Investigators
Canadian Arthritis Network of Centres of Excellence (CAN)	Regulation of IL-1 Signalling by Adhesion Complexes	C	$36,000 $36,000 $36,000 $36,000	99 – 00 00 – 01 01 – 02 02 – 03	C.A. McCulloch	T. Cruz C.M. Overall J. Sodek
The Wellcome Trust, U.K.	Molecular Determinants of Gelatinase A Substrate Specificity and Inhibition	C	$2,803 $2,803	99 00	C.M. Overall	
M.R.C. (Operating Grant) MT-11633	Molecular Determinants of Gelatinase A Substrate Specificity	C	$70,750 $103,530 $103,530 $103,530 $51,765	98 – 99 99 – 00 00 – 01 01 – 02 02	C.M. Overall	
N.C.I.C. (Operating Grant) #009039	Cellular Activation of Gelatinase A	C	$130,397 $125,038 $125,038	98 – 99 99 – 00 00 – 01	C.M. Overall	
M.R.C. (Operating Grant) MT-13338	Structure and Function Studies of Human Pancreatic Alpha-Amylase	C	$47,851 $63,802 $80,762 $15,950	96 – 97 97 – 98 98 – 99 99	G.D. Brayer	C.M. Overall S. Withers
M.R.C. (Multi-User Equipment)	Maintenance for Electron and Confocal Laser Scanning Microscopy Laboratory	C	$16,861 $22,481 $22,481 $5,620	96 – 97 97 – 98 98 – 99 99 – 00	D.M. Brunette	C.M. Overall and 10 others
M.R.C. (Operating Grant)	Structure and Function Studies of Human Pancreatic Alpha-Amylase	C	$8,300	95	G.D. Brayer	C.M. Overall S. Withers
M.R.C. (Operating Grant) MT-11633	Analysis of the Collagen Binding Domain of 72-kDa Gelatinase	C	$65,114 $69,100 $34,550	95 – 96 96 – 97 97 – 98	C.M. Overall	
N.C.I.C. (Operating Grant) #006388	Structural and Functional Characterization of the C-Domain of Human Type IV Collagenase	C	$80,907 $73,975 $73,975	95 – 96 96 – 97 97 – 98	C.M. Overall	
M.R.C. (Clinician Scientist, Phase II)	Personnel Award, Salary	C	$71,042 $71,042 $71,042	95 – 96 96 – 97 97 – 98	C.M. Overall	
M.R.C. (Operating Grant, Phase I)	Rat Gelatinase and Collagenase Regulation in Bone	C	$97,256 $64,342 $64,342 $30,564	92 – 93 93 – 94 94 – 95 95 – 95	C.M. Overall	
M.R.C. (Clinician Scientist, Phase I)	Research Grant	C	$40,000 $40,000 $40,000	92 – 93 93 – 94 94 – 95	C.M. Overall	
M.R.C. (Clinician Scientist)	Personnel Award, Salary	C	$58,850 $60,720 $60,720	92 – 93 93 – 94 94 – 95	C.M. Overall	
M.R.C. (Centennial Fellowship)	Research Allowance	C	$3,350 $3,350 $3,350	89 – 90 90 – 91 91 – 92	C.M. Overall	

(d) Prestigious Invited Conference Presentations (297)

1989 – 1997

1. *Invited Program Speaker*, "Matrix Metalloproteinases in Periodontitis. Regulation by TGF-ß", **9th Annual West Coast IADR Section Meeting,** Vancouver, B.C., Canada, November 1989.
2. *Invited Program Speaker*, "Induction of Formative and Resorptive Cellular Phenotypes in Human Gingival Fibroblasts by TGF-ß1 and Lectins: Transcriptional and Post-Transcriptional Regulation of Matrix Metalloproteinases-TIMP and Matrix Protein Expression", **8th International Conference on Periodontal Research,** San Antonio, Texas, USA, November 1990.
3. *Invited Program Speaker*, "Properties of the 72-kDa and 92-kDa Gelatinases", **Gordon Research Conference on Periodontal Diseases,** Plymouth, NH, USA, June 1991.
4. *Invited Program Speaker*, "Regulation of TIMP Expression", New York Academy of Sciences Symposium, **Inhibition of Matrix Metalloproteinases: Therapeutic Potential,** Tampa, FL, USA, January 1994.
5. *Invited Program Speaker*, "TIMP and Substrate Interactions with Gelatinase A", **Inhibitors of Metalloproteinases in Development and Disease,** Banff, AB, Canada, September 1996.
6. *Invited Program Speaker*, "Mutational Analysis of the Hemopexin Domain of Gelatinase A", **Gordon Research Conference on Matrix Metalloproteinases,** Proctor, NH, USA, July 1997.
7. *Invited Program Speaker*, "Analysis of the Collagen Binding Domain of Gelatinase A", **Gordon Research Conference on Periodontal Diseases,** Plymouth, NH, USA, July 1997.

1998

8. *Invited Symposia Speaker*, "The Role of ECM Binding Domains of Matrix Metalloproteinases: A Protein Engineering Approach", **The Matrix Meets Cell Biology—An Update of Australian and New Zealand Research in Extracellular Matrix, Matrix Biology Society of Australia and New Zealand Annual Meeting,** Adelaide, SA, Australia, September 1998.
9. *Invited Symposia Speaker*, "Targeting MMPs in Disease: The British Biotech Experience", "Commercialization of the Matrix Symposia", **The Matrix Meets Cell Biology—An Update of Australian and New Zealand Research in Extracellular Matrix, Matrix Biology Society of Australia and New Zealand Annual Meeting,** Adelaide, SA, Australia, September 1998.
10. *Invited Symposia Speaker*, "Cell Surface Binding and Activation of Matrix Metalloproteinases", Joint Session of the **Matrix Biology Society of Australia and New Zealand, and the Australian and New Zealand Society of Cell and Developmental Biology 17th Annual Meeting**, Adelaide, SA, Australia, September 1998.
11. *Invited Symposia Speaker*, "Activation Mechanisms of Matrix Metalloproteinases", **Australian Society of Biochemistry and Molecular Biology Annual Meeting,** Adelaide, SA, Australia, September 1998.
12. *Invited Program Speaker*, "Identification of the TIMP-2 Binding Site on Progelatinase A by Mutagenesis", New York Academy of Sciences Symposium, **Inhibition of Matrix Metalloproteinases: Therapeutic Applications,** Tampa, FL, USA, October 1998.

1999

13. *Invited Symposia Speaker*, "Cell Surface Binding and Activation of Matrix Metalloproteinases", "Life at the Edge: Matrix Remodeling at Cell Adhesions". **77th General Session of the International Association for Dental Research,** Vancouver, Canada, March 1999.
14. *Invited Program Speaker,* "Modules and Domains of Matrix Metalloproteinases (MMPs). Modification of Proteinase Activity and Activation by Substrate Binding Exosites", **3x3 Canada-China Collaboration, First Annual Biotechnology Scientific Workshop**, Beijing, China, May 1999. (*One of three representatives selected to represent the University of British Columbia*).

15. *Invited Program Speaker*, "Yeast Two-Hybrid Cloning of an Extracellular Proteinase Substrate: Gelatinase A Cleaves and Inactivates Monocyte Chemoattractant Protein-3 (MCP-3)" **1st General Meeting of the International Proteolysis Society,** Mackinac Island, MI, USA, September 1999.
16. *Invited Program Speaker*, "Yeast Two-Hybrid Analysis Identifies Monocyte Chemoattractant Protein-3 (MCP-3) as a Novel Substrate for the MMP Gelatinase A", **Pan Pacific Connective Tissue Societies Symposia,** Queenstown, New Zealand, November 1999.
17. *Invited "International Speaker"*, "Yeast Two-Hybrid Analysis Identifies Monocyte Chemoattractant Protein-3 (MCP-3) as a Novel Substrate for the MMP Gelatinase A", **Inaugural Melbourne MMP Mini-Symposium**, Melbourne, Australia, November 24, 1999.

2000

18. *Invited Program Speaker,* "Yeast Two-Hybrid Analysis Identifies Monocyte Chemoattractant Protein 3 (MCP-3) as a Substrate for Gelatinase A", **3 x 3 Canada-China Collaboration, Second Annual Biotechnology Scientific Workshop**, Vancouver, BC, Canada, April 8, 2000. (*One of three representatives selected to represent the University of British Columbia*).
19. "*International Keynote Speaker*", "Complex Role of TIMP-4 in Gelatinase A Activation", **2nd Melbourne MMP Mini-Symposium,** Melbourne, Victoria, Australia, July 18, 2000.
20. "*International Keynote Speaker*", "Chemokine Gradient Inactivation by MMP Activity: Modulation of Tumorigenesis", **2000 Hanson Symposium, "Cancer: Biology and Novel Therapeutics"**. Adelaide, South Australia, Australia, November 13 – 16, 2000.

2001

21. *Invited Program Speaker*, "MMPs are Regulators of Inflammation", **Banff Inflammation Workshop 2001**, Banff, Alberta, Canada, February 1, 2001.
22. *Invited Program Speaker*, "Degradomics: MMP Modulation of Chemokine Networks", **The Third Proteolysis and Biological Control Cold Spring Harbor Meeting**, Cold Spring Harbor, NY, USA, May 2 – 6, 2001.
23. *Invited Program Speaker*, "Chemokines: New Substrates of the MMP Degradome", **MMP Gordon Research Conference**, Il Ciocco, Tuscany, Italy, May 2001.
24. *Invited Program Speaker*, "Complex Role of TIMP-4 in Gelatinase A Activation", **Membrane Bound Proteolytic Enzymes and Cancer**, Palermo, Italy, May 2001.
25. *Invited Program Speaker*, "Novel Cellular Activation Mechanism of MMP-2 by MT2-MMP", **Keio International Symposium: Frontiers in MMP and ADAM Research,** Tokyo, Japan, October 2001 (cancelled because of September 11, 2001 attack).
26. *Invited Program Speaker*, "CXC Chemokines: New Members of the MMP Degradome", **2nd General Meeting of the International Proteolysis Society,** Freising, Germany, November 2001.
27. *Invited Program Speaker*, "MMP Processing of Chemokines", **5th Symposium of Pan-Pacific Connective Tissue Society**, ACT City Hamamatsu, Japan, April 2002 (cancelled because of September 11, 2001 attack).

2002

28. *Invited Program Speaker*, "MMPs and the Development of Inflammation", **2002 Gordon Research Conference on the Biology of Spirochetes**, Ventura, CA, USA, January 2002.
29. *Keynote Speaker*, "The Role of MT-MMPs and TIMP-4 in the Cellular Activation of MMP-2", **5th Symposium of Pan-Pacific Connective Tissue Society,** ACT City Hamamatsu, Japan, April 2002 (cancelled because of September 11, 2001 attack).
30. *Invited Program Speaker*, "The Role of MT-MMPs and TIMP-4 in the Cellular Activation of MMP-2", **Tumor Invasion Workshop, The Finnish Medical Society,** Turku, Finland, September 2002.

31. *Invited Program Speaker*, "New Roles for MMPs: Chemokine Cleavage, HIV and Dementia", 5th Duodecim Symposium **Matrix Metalloproteinases in Human Pathology**, Saariselka, Finland, September 2002.

32. *Opening Plenary Speaker*, "Processing Functions of MMPs: Chemokine Cleavage Regulates HIV, Inflammatory and Immune Responses", **5th Pan Pacific Connective Tissue Societies Symposium,** Ube, Japan, June 2003.

33. *Invited Program Speaker*, "Processing Functions of MMPs: Chemokine Cleavage Regulates HIV, Inflammatory and Immune Responses", **1st Meeting of the American Society for Matrix Biology,** Houston, Texas, USA, November 2002.

34. *Invited Program Speaker*, **"**The UBC Mega Project on the Blood Proteome", **Pan Canadian Proteomics Meeting,** Toronto, Ontario, Canada, November 26 – 27, 2002.

2003

35. *Invited Program Speaker*, "Complex Interactions in the Cell Surface Activation of MMP-2", **Banff Inflammation Workshop 2003**, Banff, Alberta, Canada, February 2, 2003.

36. *Invited Program Speaker*, "The Blood Proteome", **Genomics Forum,** Genome BC, Vancouver, BC, Canada, March 27, 2003.

37. *Invited Program Speaker*, "Processing Functions of MMPs: Chemokine Cleavage Regulates Inflammatory Responses and Induces Neuronal Apoptosis in HIV Dementia", **VIIIth International Symposium on Proteinase Inhibitors and Biological Control,** Brdo, Slovenia, May 24 – 28, 2003.

38. *Plenary Speaker,* "New Roles for MMPs: Chemokine Processing Terminates Inflammation and Initiates Neuronal Apoptosis in HIV Dementia", **The Fifth Pan Pacific Connective Tissue Meeting,** Ube, Yamaguchi, Japan, June 3 – 7, 2003.

39. *Invited Session Speaker*, "Symbiotic Relationship of MT1-MMP and Cell Surface Collagens and TIMP-4", **The Fifth Pan Pacific Connective Tissue Meeting,** Ube, Yamaguchi, Japan, June 3 – 7, 2003.

40. *Invited Symposium Speaker*, "New Roles for MMPs: Chemokine Processing Terminates Inflammation and Initiates Neuronal Apoptosis in HIV Dementia", **6th World Congress on Inflammation,** Vancouver, BC, Canada, August 2 – 5, 2003.

41. *Invited Session Speaker*, **"**MMPs Signal Change", **2003 MMP Gordon Research Conference,** Big Sky, Montana, USA, August 17 – 22, 2003.

42. *Invited Symposium Speaker and Moderator*, "Searching for Protease Substrates", **Nature Horizon Symposia: Signalling Scissors: New Perspectives on Proteases**, Palazzo Arzaga, Lake Garda, Italy, Oct. 22–25, 2003.

43. *Invited Program Speaker,* "Degradomics: Protease Substrate Discovery by Isotope Coded Affinity Tag Tandem Mass Spectrometry". **3rd General Meeting of the International Proteolysis Society,** Nagoya, Japan, November 10 – 13, 2003.

2004

44. **Overall, C.M.** *Invited Program Speaker,* "Degradomics: The Human Protease CLIP-CHIP and Protease Substrate Discovery by Isotope Coded Affinity Tag Tandem Mass Spectrometry", **Plasminogen Activation and Extracellular Proteolysis Gordon Research Conference,** Ventura, CA, USA, February 8 – 13, 2004.

45. **Overall, C.M.** *Invited Program Speaker,* "Degradomics: The Human Protease CLIP-CHIP and Protease Substrate Discovery by Isotope Coded Affinity Tag Tandem Mass Spectrometry"*,* **The 21st Max-Planck Institute for Biochemistry Winter School,** Tiers, Italy, February 22 – 28, 2004.

46. **Overall, C.M.** *Invited Program Speaker,* "Degradomics: The Human Protease CLIP-CHIP and Protease Substrate Discovery in Breast Carcinoma by Isotope Coded Affinity Tag Tandem Mass Spectrometry"*,* **Second Chianti Meeting on Proteases: Cross-talk Between Proteinases and the Extracellular Environment,** Certosa di Pontignano, Siena, Italy, May 16 – 20, 2004.

47. **Overall, C.M.** *Invited Program Speaker,* "System Wide Analysis of the Human Protease Web: Genomic and Proteomic Approaches"*,* **Protease Gordon Research Conference,** Colby Sawyer, NH, USA, July 5 – 9, 2004.

48. *Invited Program Speaker,* "System Wide Analysis of the Human Protease Web: Genomic and Proteomic Approaches"*,* **Proprotein Processing, Trafficking, and Secretion Gordon Research Conference,** Colby Sawyer, NH, USA, July 11 – 16, 2004.

49. *Keynote Speaker,* "Degradomics" **VIII International Scleroderma Research Workshop,** Trinity College, Cambridge University, Cambridge, UK, July 31 – August 4, 2004.

50. *Plenary Speaker,* "MMPS Signal Change", **Annual Meeting of the Australian Society of Matrix Biology,** Perth, Rottenest Island, WA, Australia, September 23 – 26, 2004.

51. *Plenary Speaker,* "Degradomics: Genomics and Functional Proteomics of Human Proteases." **ComBio 2004,** Perth, WA, Australia, September 26 – 30, 2004.

52. *Invited Program Speaker,* "The Protease CLIP-CHIP: The First Dedicated and Complete Human Protease and Inhibitor Oligonucleotide Microarray", **The Fourth Australasian Microarray Meeting**, Fremantle, WA, Australia, October 1 – 2, 2004.

53. "*Keynote Speaker,* System Wide Analysis of the Human Protease Web: Genomic and Proteomic Approaches" **Eighth International Conference on the Chemistry and Biology of Mineralized Connective Tissues,** Banff, AB, Canada, October 2004.

54. *Opening Plenary Speaker,* "Proteomic and Genomic Analysis of MMPI Side Effects", **Matrix Metalloproteinase Inhibitors (MMPIs): Expanding the Horizon**, New York, NY, USA, October 23 – 25, 2004.

55. *Plenary Speaker,* "Degradomics: System Wide Analysis of the Human Protease Web", **Swiss Proteomics Society Annual Meeting,** Bern, Switzerland, December 6 – 8, 2004.

2005

56. **Overall, C.M.** *Invited Program Speaker,* "Degradomics: Systems Biology of the Human Protease Web", **Canadian Proteome Society Meeting,** Vancouver, BC, Canada, January 24, 2005.

57. **Overall, C.M.** *Invited Opening Speaker,* "Ripples in The Protease Web: Pharmacoproteomics and MMP Substrate Degradomics", **22nd Max-Planck Institute for Biochemistry Winter School,** Tiers, Italy, March 2, 2005.

58. **Overall, C.M.** *Invited Program Speaker,* "Degradomics: Systems Biology of the Protease Web", **Protein Engineering Network of Centres of Excellence Annual Meeting,** Toronto, ON, Canada, May 11, 2005.

59. **Overall, C.M.** *Invited Program Speaker,* "Degradomics: Systems Biology of the Protease Web", **IXth International Symposium on Protease Inhibitors and Biological Control,** Brdo, Slovenia, June 25 – 29, 2005.

60. **Overall, C.M.** *Invited Program Speaker,* "Degradomics: In Search of Substrates and Proteases"*,* **2005 FASEB Meeting on Proteases in Hemostasis and Vascular Biology,** Vermont Academy, Saxtons River, Vermont, USA, July 9 – 14, 2005.

61. **Overall, C.M.** *Invited Program Speaker declined,* "Pharmacoproteomics of the Protease Web: Quantitative Degradomics and Substrate Discovery"*,* **19th Annual Symposium of the Protein Society,** Boston, MA, USA, July 30 – August 3, 2005.

62. **Overall, C.M.** *Invited Program Speaker,* "Degradomics: Systems Biology of the Protease Web", **2005 MMP Gordon Research Conference,** Big Sky, Montana, USA, August 28 – September 2, 2005.

63. **Overall, C.M.** *Invited Program Speaker,* "Viral Protease Degradomics and Systems Biology", **International Consortium on Anti-Virals,** Trent University, Peterborough, Ontario, Canada, September 22 – 24, 2005.

64. **Overall, C.M.** *Invited Program Speaker,* "Degradomics: Systems Biology of the Protease Web", **4th General Meeting of the International Proteolysis Society,** Quebec City, Quebec QC, Canada, October 15 – 19, 2005.

65. **Overall, C.M.** *Invited Program Speaker,* "Degradomics: Systems Biology of the Protease Web", **Functional Genomics of Proteases,** Bern, Switzerland, November 20 – 22, 2005.

66. **Overall, C.M.** *Plenary Speaker*, "Degradomics: Systems Biology of the Protease Web", **Cancer Degradome,** Cambridge, UK, November 23 – 26, 2005.

67. **Overall, C.M.** *Invited Program Speaker,* "Cancer Degradomics and Pharmacoproteomics", **AACR Special Conference: Cancer, Proteases & the Microenvironment,** Bonita Springs, FL, USA, Nov. 30 – Dec. 4, 2005.

2006

68. **Overall, C.M.** *Invited Program Speaker,* "Dynamic Regulation of the Chemokine Web by MMPs", **2006 Keystone Symposia, Chemokines and Chemokine Receptors,** Snowbird Resort, UT, USA, January 15 – 20, 2006.

69. **Overall, C.M.** "Stepping on Protease Tails: Signature Tags of Expressed Proteases and Terminal Affinity Isotope Labelling of Substrates in the Proteome", **Association of Biomolecular Resource Facilities 2006,** Long Beach CA, USA, February 11 – 14, 2006.

70. **Overall, C.M.** *Invited Program Speaker,* "Proteomic and Degradomic Analysis of Breast Cancer Metastases", **Canadian Breast Cancer Research Alliances Reasons for Hope Scientific Conference,** Montreal, QC, Canada, May 5 – 8, 2006.

71. **Overall, C.M.** *Invited Program Speaker,* "Stepping on Protease Tails: Signature Tags of Expressed Proteases and Terminal Affinity Isotope Labelling of Substrates in the Proteome"*,* **Canadian Biochemistry and Molecular Biology Society Degradomics of Proteolysis Workshop,** Edmonton, AB, Canada, May 9, 2006.

72. **Overall, C.M.** *Invited Program Speaker,* "Stepping on Protease Tails: Signature Tags of Expressed Proteases and Terminal Affinity Isotope Labelling of Substrates in the Proteome"*,* **Gordon Research Conference on Periodontal Diseases,** Il Ciocco, Barga, Italy, June 4 – 9, 2006.

73. **Overall, C.M.** *Invited Program Speaker,* "Stepping on Protease Tails: Signature Tags of Expressed Proteases and Terminal Affinity Isotope Labelling of Substrates in the Proteome"*,* **Protease Gordon Research Conference,** Colby Sawyer, NH, USA, July 2 – 7, 2006.

74. **Overall, C.M.** *Invited Program Speaker,* "Stepping on Protease Tails: Signature Tags of Expressed Proteases and Terminal Affinity Isotope Labelling of Substrates in the Proteome"*,* **Proprotein Processing, Trafficking, and Secretion Gordon Research Conference,** Colby Sawyer, NH, USA, July 9 – 14, 2006.

75. **Overall, C.M.** *Invited Program Speaker,* "Stepping on Protease Tails: Signature Tags of Expressed Proteases and Terminal Affinity Isotope Labelling of Substrates in the Proteome"*,* **The International Society for Fibrinolysis and Proteolysis (ISFP) 18th International Congress on Fibrinolysis and Proteolysis: Proteolysis in the Postgenomic Era,** San Diego, California, CA, USA, August 27 – 31, 2006.

76. **Overall, C.M.** *Invited Program Speaker and Faculty Member,* "Advice to Young Scientists". **2nd Oliver Bird Conference on Rheumatoid Diseases,** Newcastle, UK, September 2 – 4th, 2006.

77. **Overall, C.M.** *Invited Program Speaker,* "Stepping on Protease Tails: Signature Tags of Expressed Proteases and Terminal Affinity Isotope Labelling of Substrates in the Proteome"*,* **"Multi-dimensional Matrix" The British Society for Matrix Biology,** Newcastle, UK, September 5 – 6, 2006.

78. **Overall, C.M.** *Invited Program Speaker,* "Protease Proteomics: Expression Profiling of MMPs and TIMPs by CLIP-STEP. Signature Tags of Expressed Proteases"*,* **Metzincin Metalloproteinases in Health and Disease Meeting,** Centro Stefano Franscini, Monte Vérità, Ascona, Switzerland, September 24 – 29, 2006.

79. **Overall, C.M.** *Conference Magistral Master Lecture,* "Recent Advances in Proteomic Profiling of Proteases and Substrates in Complex Proteomes" **XXVII Congreso Latinoamericano de Química/27th Latin American Congress on Chemistry/ 6th International Congress on Chemistry and Chemical Engineering**. Habana, Cuba, October 16 – 20, 2006.

80. **Overall, C.M.** *Invited Program Speaker,* "Stepping on Protease Tails: Signature Tags of Expressed Proteases and Terminal Affinity Isotope Labelling of Substrates in the Proteome"*,* **Regulated Intramembrane Proteolysis Meeting,** Ringberg Castle, Bavaria, Germany, November 27 – 30, 2006.

2007

81. **Overall, C.M.** *Invited Program Speaker,* "Protease Proteomics: Expression Profiling of MMPs and TIMPs by CLIP – STEP. Signature Tags of Expressed Proteases"*,* **32nd Annual Lorne Conference on Protein Structure and Function**, Lorne, Victoria, Australia, February 4 – 8, 2007.

82. **Overall, C.M.** *Invited Program Speaker,* "Protease Proteomics: Expression Profiling of MMPs and TIMPs by CLIP-STEP. Signature Tags of Expressed Proteases"*,* **24nd Protease Winter School,** Tiers, Italy, February 28 – March 3, 2007.

83. **Overall, C.M.** *Invited Program Speaker,* "Protease Proteomics: Expression Profiling of MMPs and TIMPs by CLIP-STEP. Signature Tags of Expressed Proteases", **Matrix Metalloproteinase Gordon Research Conference,** Il Ciocco, Barga, Italy, June 3 – 8, 2007.

84. **Overall, C.M.** *Keynote Speaker,* **"**Proteolytic Modification of the Proteome *in vivo*: Degradomics Cuts to the Answer" **7th Canadian Proteomics Initiative**, Ottawa, ON, Canada, June 17 – 18, 2007.

85. **Overall, C.M.** *Invited Program Speaker,* "Protease Proteomics: Degradomic Applications for Substrate Profiling and Protease Quantitation"*,* **Xth International Symposium on Protease Inhibitors and Biological Control.** Portorož, Slovenia, June 23 – 27, 2007.

86. **Overall, C.M.** *Invited Program Speaker*" *(withdrawn),* "Protease Proteomics: Degradomic Applications for Substrate Profiling and Protease Quantitation*,* **The 32nd FEBS Congress,** Vienna, Austria, July 7 – 12, 2007.

87. **Overall, C.M.** *Invited Program Speaker,* "Protease Proteomics: Degradomic Applications for Substrate Profiling and Protease Quantitation"*,* **Kallikrein Meeting 2nd International Symposium on Kallikreins and Kallikrein-Related Peptidases,** Santorini Island, Greece, October 16 – 18, 2007.

88. **Overall, C.M.** *Invited Program Speaker,* "Protease Proteomics: Methods and Analysis", **The 5th General Meeting of the International Proteolysis Society,** Patras, Greece, October 20 – 24, 2007.

89. **Overall, C.M.** *Invited Program Speaker,* "Protease Proteomics: Degradomic Applications for Substrate Profiling and Protease Quantitation"*,* **7th Pan Pacific Connective Tissue Societies Symposium,** Cairns, Queensland, Australia, October 28 – November 1, 2007.

2008

90. **Overall, C.M.** *Invited Program Speaker,* "Protease Degradomics: Advancing to Mouse TAILS", **25th Protease Winter School,** Tiers, Italy, February 27 – March 2, 2008.

91. **Overall, C.M.** *Keynote Speaker,* "Quantitative Determination of Proteolytic Post Translational Modifications of the Proteome *in vitro* and *in vivo*", **B.C. Proteomics Network Meeting,** Burnaby, BC Canada, May 3, 2008.

92. **Overall, C.M.** *Invited Program Speaker,* "N-Terminome Analysis of Cellular and Tissue Proteomes Identifies Site Specific Proteolytic Moulding of the Proteome in Inflammation", **8th Canadian Proteomics Initiative,** Burnaby, BC Canada, May 5, 2008.

93. **Overall, C.M.** *Invited Program Speaker,* "Protease Degradomics: Advancing to Mouse TAILS", **Protease Gordon Research Conference,** Colby Sawyer, NH, USA, July 6 – 10, 2008.

94. **Overall, C.M.** *Invited Program Speaker,* "MMP Degradomics: Proteolytic Moulding of the Extracellular Signalling Environment Revealed by Quantitative Proteomics"*,* **XXIst meeting of the Federation of European Connective Tissue Societies (FECTS),** Marseille, France July 9 – 13, 2008.

95. **Overall, C.M.** *Helmholtz Award Lecture,* "Dynamic Regulation of Innate Immunity and Autoimmunity by MMP Sculpting of the Chemokine Web", **11th Symposium on Proteases, Inhibitors and Biological Control,** Portorož, Slovenia, August 30 – Sept 3, 2008.

96. **Overall, C.M.** *Invited Program Speaker,* "Metadegradomics: Proteolytic Moulding of the Extracellular Signalling Environment Revealed by Quantitative Proteomics of the Secretome *in vivo*", **New Technologies,** Flemish Institute for Biotechnology Science Club, Ghent, Belgium, September 10, 2008.

97. **Overall, C.M.** *Invited Program Speaker,* "Proteolytic Moulding of the Inflammatory Proteome and Chemokine Signalling Networks: From Proteomics to Knockout Mice", **2008 GFST Symposium on Proteases in Cell Signalling,** Ames, Iowa, USA, September 18 – 21, 2008.

98. **Overall, C.M.** *Invited Program Speaker,* "Proteolytic Moulding of the Inflammatory Proteome and Chemokine Signalling Networks: From Proteomics to Knockout Mice", **Australia and New Zealand Matrix Society Meeting**, Sydney, NSW, Australia, October 13 – 16, 2008.

99. **Overall, C.M.** *Invited Program Speaker,* "Metadegradomics: Proteolytic Moulding of the Extracellular Signalling Environment Revealed by Quantitative Proteomics of the Secretome *in vivo*", **Bioinformatics in Biology,** Mainz, Germany, November 7 – 8, 2008.

100. **Overall, C.M.** *Invited Program Speaker,* "Metadegradomics: Proteolytic Moulding of the Extracellular Signalling Environment Revealed by Quantitative Proteomics of the Secretome *in vivo*", **The 4th Australian Health and Medical Research Congress**, Brisbane, Queensland, Australia, November 17 – 21, 2008.

101. **Overall, C.M.** *Keynote Speaker,* "Metadegradomics: Quantitative Global Proteolytic Processing on a System-Wide Basis in Tissues", **5th Workshop on Biomedical Genomics and Proteomics,** Barcelona, Spain, December 12, 2008.

2009

102. **Overall, C.M.** *Keynote Speaker,* "Proteolytic Control of the Chemokine Web: From Genetic Knock Outs to Proteomics". **Molecules Interactions in Health and Disease** and **Annual Meeting of the Marie Curie Transfer of Knowledge.** Zakopane, Poland, February 21 – 26, 2009.

103. **Overall, C.M.** *Invited Program Speaker,* "Proteolytic Control of the Chemokine Web: From Genetic Knock Outs to Proteomics". **26th Protease Winter School,** Tiers, Italy, February 25 – March 1, 2009.

104. **Overall, C.M.** *Invited Symposium Speaker,* "Metadegradomics: Protease Proteomics of MMPs *in vivo* Reveals Multiple Roles in Homeostasis Signalling", **87th General Session of the International Association for Dental Research,** Miami, FL, USA, April 1 – 4, 2009.

105. **Overall, C.M.** *Invited Program Speaker,* "Quantitative Proteomics of Connective Tissue Remodeling", **Yokosuka Science Fest 2009: The 8th Pan-Pacific Connective Tissue Societies Symposium and the Yokosuka International Conference on Cancer Microenvironments,** Yokosuka, Japan, June 4 – 7, 2009.

106. **Overall, C.M.** *Keynote Speaker,* "Metadegradomics: Towards Understanding the Impact of the Protease Web on the Proteome in Inflammation". **The First Frontier Research Initiative Symposium: Tissue Remodeling Health and Development,** Tokyo, Japan, June 8, 2009.

107. **Overall, C.M.** *Invited Program Speaker,* "N-Terminomics: High Confidence, Broad Dynamic Range Coverage Utilizing Novel Polymers for Proteomics Reveals the Functional State of the Proteome". **Mass Spectrometry in Health and Life Sciences,** San Francisco, CA, USA, August 23 – 27, 2009.

108. **Overall, C.M.** *Invited Program Speaker,* "Metadegradomics: Towards Quantitative Understanding the Impact of the Protease Web on the Proteome *in vivo*". **Matrix Metalloproteinase Gordon Research Conference,** Les Diablerets, Switzerland, August 30 – September 4, 2009.

109. **Overall, C.M.** *Invited Program Speaker,* "Metadegradomics: System-Wide Proteomic Identification of the N-Terminome and Protease Cleavage Products by Terminal Amine Isotopic Labelling of Substrates". **1st International Congress on Analytical Proteomics,** Caparica, Portugal, September 30 – October 3, 2009.

110. **Overall, C.M.** *Invited Program Speaker,* "Pathophysiology of HIV Associated Dementia: New Roles for MMPs". **International Consortium on Anti-Virals 8th International Symposium,** in Corsica, France, October 2 – 7, 2009.

111. **Overall, C.M.** *Invited Program Speaker,* "Metadegradomics: System-Wide Proteomic Identification of the N-Terminome and Protease Cleavage Products by Terminal Amine Isotopic Labelling of Substrates" (withdrawn). **1st Latin-American Congress on Chemistry, Biochemistry and Chemical Engineering and the 7th International Congress on Chemistry and Chemical Engineering,** Havana City, Cuba, October 12 – 16, 2009.

2010

112. **Overall, C.M.** *Invited Program Speaker*, "The Future of N-Terminomics and Degradomics". **27th Protease Winter School,** Tiers, Italy, February 24 – 28, 2010.

113. **Overall, C.M.** *Invited Program Speaker*, "Forging Industrial Consultancies, Connections and Sabbaticals." **Health Applications of Cell Signalling in Mucosal Inflammation and Pain**, Toronto, ON, Canada. April 15 – 16, 2010.

114. **Overall, C.M.** *Invited Program Speaker,* "Positional N-terminal and C-Terminal Proteomics Deciphers Protein Terminal and Proteolytic Post-Translational Modifications in Complex Proteomes *in vivo".* **Canadian National Proteomics Network 2nd Symposium, New Frontiers in Proteomic Research***,* Montreal, QC, Canada, May 8 – 10, 2010.

115. **Overall, C.M.** *Invited Program Speaker,* "Proteolytic Control of Chemokines". **Chemokine Gordon Research Conference,** Il Ciocco, Barga, Italy, May 30 – June 4, 2010.

116. **Overall, C.M.** *Invited Program Speaker,* "Positional N- and C-terminal Proteomics Deciphers Proteolytic Actions in Complex Proteomes *in vivo*." **First Conference on Proteomics of Protein Degradation and Ubiquitin Pathways,** Vancouver, BC, Canada, June 6 – 8, 2010.

117. **Overall, C.M.** *Program Speaker,* "Proteomics Deciphers MMP Actions in Animal Models *in vivo*." **XXIInd FECTS / ISMB Meeting,** Davos, Switzerland, July 3 – 7, 2010.

118. **Overall, C.M.** *Plenary Speaker,* "Positional N-terminal and C-terminal Proteomics Deciphers Protein Terminal and Proteolytic Post-Translational Modifications in Complex Proteomes *in vivo".* **HUPO 9th Annual World Congress,** Sydney, NSW, Australia, September 19 – 23, 2010.

119. **Overall, C.M.** *Invited Program Speaker,* "Positional N-terminal and C-terminal Proteomics Deciphers Protein Terminal and Proteolytic Post-Translational Modifications in Complex Proteomes *in vivo".* **The 1st Canada-China Bi-annual Symposium on Systems Biology,** Dalian, China, October 20 – 22, 2010.

2011

120. **Overall, C.M.** *Invited Program Speaker,* "To the Ends of the Proteome World: Multiplex Quantitative N and C-Terminomics*".* **7th International Barbados Proteomics Conference,** Barbados, January 16 – 20, 2011.

121. **Overall, C.M.** *Invited Program Speaker,* "To the Ends of the Proteome World: Multiplex Quantitative N and C-Terminomics*".* **Integrated Cellular Pathology—Systems Biology of Human Disease,** Luxembourg, January 26 – 29, 2011.

122. **Overall, C.M.** *Keynote Speaker,* "To the Ends of the Proteome World: Multiplex Quantitative N and C-Terminomics*".* **47th Annual Meeting of the Norwegian Biochemical Society,** Tromsø, Norway, February 3 – 6, 2011.

123. **Overall, C.M.** *Invited Program Speaker*, "MMP Control of Innate Immunity by Chemokine Processing". **28th Protease Winter School,** Tiers, Italy, February 23 – 26, 2011.

124. **Overall, C.M.** *Keynote Speaker,* "Degradomics Uncovers Unexpected New Roles for MMPs in the Regulation of Complement and Coagulation Cascades and Neutrophil Chemotaxis by Discovery of New Substrates of Macrophage MMP12 in Acute and Chronic Arthritis Models Using Knockout Mice". **German Society for Connective Tissue Research,** Cologne, Germany, March 31 – April 2, 2011.

125. **Overall, C.M.** *Keynote Speaker,* "To the Ends of the Proteome World: Multiplex Quantitative N and C-Terminomics*".* **Plant Proteases,** Hemavan, Sweden, April 10 – 14, 2011.

126. **Overall, C.M.** *Keynote Speaker,* "To the Ends of the Proteome World: Multiplex Quantitative N and C-Terminomics*".* **China Human Proteome Organization 7th Annual Conference and 3rd International Forum of Proteomics,** Hangzhou, China, April 15 – 18, 2011.

127. **Overall, C.M.** *Invited Program Speaker,* "Proteomics Analysis of Arthritis Reveals New Roles for MMPs in Preventing Disease and Controlling Inflammation*".* **Inflammation in Chronic Disease Consensus Conference,** Toronto, ON, Canada, May 16 – 18, 2011.

128. **Overall, C.M.** *Invited Program Speaker,* "Degradomics Reveals Unexpected Roles for Macrophage MMP12 in Regulating Coagulation and the Complement System in Arthritis". **FASEB Summer Research Conferences Proteases in Hemostasis and Vascular Biology,** Carefree Arizona, USA, June 12 – 17, 2011.

129. **Overall, C.M.** *Plenary Speaker,* "To the Ends of the Proteome World: Multiplex Quantitative N and C-Terminomics*".* **II International Congress on Analytical Proteomics,** Ourense, Spain, July 19 – 21, 2011.

130. **Overall, C.M.** *Invited Program Speaker,* "Degradomics Reveals Unexpected Roles for Macrophage MMP12 in Regulating Coagulation and the Complement System in Arthritis". **Matrix Metalloproteinase Gordon Research Conference,** Bryant University, Smithfield, RI, USA, August 7 – 12, 2011.

131. **Overall, C.M.** *Keynote Speaker,* "To the Ends of the Proteome World: Multiplex Quantitative N and C-Terminomics*".* **French Mass Spectrometry Society (SFSM) and the French Proteomics Society (SFEAP)**, Avignon, France, September 19 – 22, 2011.

132. **Overall, C.M.** *Keynote Speaker,* "Degradomics Discovers MMP Processing of CCN Family Members Regulated Extracellular Homeostasis*".* **6th International Workshop on the CCN Family of Genes,** Vancouver, BC, Canada, September 24 – 27, 2011.

133. **Overall, C.M.** *Keynote Speaker,* "Degradomics Discovers MMP Processing of CCN Family Members Regulated Extracellular Homeostasis and Complement in Arthritis*".* **Extracellular Matrix: Biogenesis, Assembly and Cellular Interactions,** Münster, Germany, October 6 – 8, 2011.

134. **Overall, C.M.** *Keynote Speaker,* "Traveling to the Ends of the Proteome World: Multiplex N and C-Terminomics Functional Annotates Proteolytically Processed Proteomes". **Integrative Omics-Conference on Disease Mechanisms—From Emerging Technologies to New Perspectives,** Freiburg, Germany, October 9 – 11, 2011.

135. **Overall, C.M.** *Invited Banquet Speaker,* "Advice to Young Scientists". **The 7th General Meeting of the International Proteolysis Society Meeting,** San Diego, CA, USA, October 16 – 20, 2011.

2012

136. **Overall, C.M.** *Keynote Speaker* "Traveling to the Ends of the Proteome World. Positional N-terminal and C-terminal Proteomics Decipher Protein Terminal and Proteolytic Post-translational Modifications in the HPP", **37th Annual Lorne Conference on Proteomics,** Lorne, Victoria, Australia, February 4 – 8, 2012.

137. **Overall, C.M.** *Invited Program Speaker,* "Degradomics Revels New Roles for Macrophage Regulation of Inflammation". The Mouth as a Global Window to Systemic Health, **2012 AAAS Annual Meeting,** Vancouver, BC, Canada, February 17 – 20, 2012.

138. **Overall, C.M.** *Invited Program Speaker,* "Travelling to the Ends of the Proteome World with Terminomics and Degradomics". Can Proteomics Fill the Gap Between the Genome and Phenotypes? **2012 AAAS Annual Meeting,** Vancouver, BC, Canada, February 17 – 20 2012.

139. **Overall, C.M.** *Invited Program Speaker*, "Protease Web Perturbations in Inflammation". **29th Protease Winter School,** Tiers, Italy, February 23 – 26, 2012.

140. **Overall, C.M.** *Invited Program Speaker,* "Moonlighting MMPs: The Ins and Outs of MMP12". **Protease Gordon Research Conference,** Il Ciocco, Barga, Italy, June 17 – 22, 2012.

141. **Overall, C.M.** *Invited Program Speaker,* "Travelling to the Ends of the Proteome World with Terminomics and Degradomics. Can Proteomics Fill the Gap Between the Genome and Phenotypes?" **Methods in Protein Structure Analysis Conference,** Ottawa, Canada, June 25 – 27, 2012 (cancelled).

142. **Overall, C.M.** *Invited Program Speaker,* "Degradomics Analyses of Dynamic Proteolytic Networks in the 4T1 Tumor and Lung Metastases Model of Breast Cancer". **Metastasis 2012,** Brisbane, Queensland, Australia, September 2 – 5, 2012.

143. **Overall, C.M.** *Barry Preston Award Lecture*. **Matrix Biology Society of Australia and New Zealand Annual Meeting**, Surfers Paradise, Queensland, Australia, September 5 – 8, 2012.

144. **Overall, C.M.** *Opening Plenary Speaker,* "Moonlighting MMPs: The Ins and Outs of MMP12". **Protease World in Health and Disease,** Kiel, Germany, September 13 – 15, 2012.

145. **Overall, C.M.** *Invited Program Speaker,* "Moonlighting MMPs: The Ins and Outs of MMP12"*,* **13th Symposium on Proteases, Inhibitors and Biological Control,** Portorož, Slovenia, September 22 – 26, 2012.

146. **Overall, C.M.** *Invited Program Speaker,* "Tools and Methodology for the Characterization of Protein N- and C-Termini and for Proteolytic Post Translational Processing", **ComBio 2012,** Adelaide S.A. Australia, September 23 – 27, 2012.

147. **Overall, C.M.** *Invited Plenary Speaker,* "Tools and Methodology for the Characterization of Protein N- and C-Termini and for Proteolytic Post Translational Processing". **Posttranslational Modifications: Detection and Physiological Role ASBMB Conference,** Granlibakken Resort and Conference Centre, Tahoe City, CA, USA, October 11 – 14, 2012.

148. **Overall, C.M.** *Invited Opening Plenary Speaker,* "Tools and Methodology for the Characterization of Protein N- and C-Termini and for Proteolytic Post Translational Processing". **IIIrd Workshop of Proteomics,** São Paulo, Brazil, November 8 – 9, 2012.

2013

149. **Overall, C.M.** *Invited Program Speaker,* "Protease Degradomics and Terminal Orientated Proteomics-Human Amino Terminome". **38th Annual Lorne Conference on Proteomics**, Lorne, Victoria, Australia, February 7 – 10, 2013.

150. **Overall, C.M.** *Invited Program Speaker,* "Searching for Substrates: Keeping Your Eyes Open in the Moonlight". **30th Winterschool on Proteinases and their Inhibitors,** Tiers, Italy, March, 2013.

151. **Overall, C.M.** *Invited Program Speaker,* "Terminomics Identifies New Inflammatory Pathways Under Proteolytic Regulation *in vivo"*. **5th Canadian National Proteomics Network Symposium,** Vancouver, B.C., Canada. April 20 – 24, 2013.

152. **Overall, C.M.** *Invited Program Speaker,* "Moonlighting MMPs: The Ins and Outs of MMP12". **Matrix Metalloproteinase Gordon Research Conference,** Il Ciocco, Barga, Italy, May 19 – 24, 2013.

153. **Overall, C.M.** *Invited Program Speaker,* "Tools and Methodology for the Characterization of Protein N- and C-Termini and for Proteolytic Post Translational Processing". **20th Meeting on Micro-Methods in Protein Chemistry,** Dortmund, Germany, June 25 – 27, 2013.

154. **Overall, C.M.** *Keynote Speaker,* "High Throughput Proteomics Identifies Proteolytic Signatures and Network Perturbations in Inflammation". **13th International Workshop on Scleroderma Research,** Boston, MA, USA, August 3 – 7, 2013.

155. **Overall, C.M.** *Invited Program Speaker,* **"**Systems-Level Analysis of Inflammatory Proteolytic Events *in vivo* by N-Terminomics Analyses", **12th Human Proteome Organization World Congress,** Yokohama, Japan, September 16, 2013.

156. **Overall, C.M.** *Invited Program Speaker,* **"**Chromosome 6 Terminomics in the HPP", **Human Proteome Project Kyoto Initiative Assembly,** Kyoto, Japan, September 19, 2013.

157. **Overall, C.M.** *Invited Plenary Speaker,* "New Roles for Intracellular Metalloproteinases". **The 8th General Meeting of the International Proteolysis Society Meeting,** Cape Town, South Africa, October 20 – 24, 2013.

158. **Overall, C.M.** *Invited Plenary Speaker,* "New Roles for Intracellular Metalloproteinases in Viral Infection and Arthritis". **9th Pan Pacific Connective Tissue Societies Symposium,** Hong Kong, China, November 24 – 27, 2013.

2014

159. **Overall, C.M.** *Invited Program Speaker,* "Deciphering Molecular Pathways of Inflammation by Tissue Proteomics and Degradomics", **Heart + Lung Science for Healthier Societies – Scientific Symposium**, Vancouver, BC, Canada, February 6, 2014.

160. **Overall, C.M.** *Invited Program Speaker,* "Unexpected Encounters with Metalloproteinases: System-wide Analysis of Proteolysis *in vivo* Uncovers the Metallic Serpin Switch". **31st Winterschool on Proteinases and their Inhibitors,** Tiers, Italy, March 2, 2014.

161. **Overall, C.M.** *Invited Keynote Speaker,* "Tools and Methodology for the Characterization of Protein N- and C-Termini and for Proteolytic Post Translational Processing". **Regulated Proteolysis of Cell Surface Proteins Gordon Research Conference,** Ventura, CA, USA, March 31 – April 4, 2014. *Declined*

162. **Overall, C.M.** *Invited Plenary Speaker,* **"**Unexpected Encounters with Metalloproteinases: System-wide Analysis of Proteolysis *in vivo* Uncovers the Metallic Serpin Switch". **7th International Symposium on the Chemistry and Biology of Serpins,** Leogang, Austria, March 29 – April 2, 2014.

163. **Overall, C.M.** *Invited Plenary Speaker,* "Termini Orientated Proteomics-Human Amino Terminome (TOP-HAT) for the Human Proteome Project: N termini and Nα-acetylation status differentiate stable cleaved protein species from cleavage remnants", **US HUPO**, Seattle, WA, USA. April 6 – 9, 2014.

164. **Overall, C.M.** *CNPN Distinguish Award Lecture, "Protein TAILS Tell Remarkable Tales",* **6th Canadian National Proteomics Network Symposium,** Montreal QC, Canada. April 14 – 16, 2014.

165. **Overall, C.M.** *Invited Plenary Speaker,* "Deep Mining of Immune Pathways by Terminomics Reveals New Gold", **3rd China-Canada Symposium for Systems Biology,** Shanghai, China, May 21 – 21, 2014.

166. **Overall, C.M.** *Invited Plenary Speaker,* "Deep Mining of Immune Pathways by Terminomics Reveals New Gold", **97th Canadian Society for Chemistry Conference,** Vancouver B.C. Canada June 1 – 5, 2014.

167. **Overall, C.M.** *Invited Speaker,* "TAILS Analysis of the Protease Web", **Protease Gordon Research Conference,** Il Ciocco, Barga, Italy, June 22 – 27, 2014.

168. **Overall, C.M.** *Invited Speaker,* "Termini Orientated Proteomics-Human Amino Terminome (TOP-HAT) for the Human Proteome Project: N termini and Nα-acetylation Status Differentiate Stable Cleaved Protein Species from Cleavage Remnants", **10th Siena Proteomics Meeting: From Genome to Proteome,** Siena, Italy, August 31 – September 4, 2014.

169. **Overall, C.M.** *Invited Program Speaker,* "Pervasive Interactions of Proteases and Their Inhibitors form Protein Networks as Part of a Global Protease Web", **XIVth International Symposium on Proteases, Inhibitors and Biological Control,** Portorož, Slovenia, Sept 6 – 10, 2014.

170. **Overall, C.M.** *Invited Program Speaker,* "TMT10-plex Analysis of the N-terminome by TAILS in NFkB Stimulation", **13th Human Proteome Organization World Congress,** Madrid, Spain October 5 – 8, 2014.

171. **Overall, C.M.** *Invited Program Speaker,* "TMT10 plex Analysis of the N-terminome by TAILS in NFkB Stimulation", **4th Vancouver Post-ASMS Symposium,** Vancouver, BC, Canada, October 16, 2014.

172. **Overall, C.M.** *Opening Keynote Address,* "Advances in Bioinformatics in Grappling with Big "omics" Data", BioInfoSummer 2014, **Monash Academy for Cross & Interdisciplinary Mathematical Applications,** Melbourne, Victoria, Australia, December 1 – 5, 2014.

2015

173. **Overall, C.M.** *Plenary Speaker,* "Proteomic and Bioinformatics Analyses of the Proteolytic Network *in vivo*", **20th Lorne Proteomics Symposium,** Lorne, Victoria, Australia, February 5 – 8, 2015.

174. **Overall, C.M.** *Plenary Speaker,* "A New Transcriptional Role for an Extracellular Metalloproteinases in Regulating Life-Saving IFNα Responses Viral Infection," **40th Lorne Conference on Protein Structure and Function,** Lorne Victoria, Australia, February 8 – 12, 2015.

175. **Overall, C.M.** *Plenary Speaker,* "Terminomics in Immunity", **Berlin Proteomic Forum 2015,** Berlin, Germany, 22 – 25 March, 2015.

176. **Overall, C.M.** *Keynote Speaker,* "Proteomic and Bioinformatics Analyses of the Proteolytic Network *in vivo*", **Plant Chemical Proteomics**, Oxford, UK, 12 – 14 April, 2015.

177. **Overall, C.M.** *Plenary Speaker,* "Quantitative Proteomics and Systems Biology Analysis of Proteolytic Networks *in vivo*", American Heart Association Meeting "**Arteriosclerosis, Thrombosis and Vascular Biology / Peripheral Vascular Disease (ATVB/PVD) 2015 Scientific Session**", San Francisco, USA, May 7 – 9, 2015.

178. **Overall, C.M.** *Keynote Speaker,* "New Biological Roles for MMPs Revealed by Proteomics of the ECM *in vivo*", **21st Canadian Connective Tissue Conference,** Quebec City, QC, Canada, May 29 – 30, 2015.

179. **Overall, C.M.** *Plenary Speaker,* "Quantitative Proteomics Analysis of Inflammation in Skin", **Skin Research Group Symposium 2015,** Quebec City, QC, Canada, May 31, 2015.

180. **Overall, C.M.** *Plenary Speaker,* "TAILS Degradomics Unravels New Proteolytic Connections in Immunity", VIB Symposium **"Next-Generation Antibodies and Protein Analysis: Tools and Technologies"**, Ghent, Belgium, June 15 – 16, 2015.

181. **Overall, C.M.** *Invited Speaker,* "Missing Proteins in the Human Proteome Discovered using LysargiNase and TAILS in the Chromosome 6 Project", **C-HPP Workshop, European Proteomics Association IX Annual General Meeting,** Milano, Italy, June 23 – 28, 2015.

182. **Overall, C.M.** *Plenary Speaker,* "Proteogenomics Reveals Intracellular and Nuclear Activity of a Secreted Macrophage Metalloproteinase in Viral Infection is Essential to Invoke the IFNα Secretion by Regulating Gene Transcription", **European Proteomics Association IX Annual General Meeting,** Milano, Italy, June 23 – 28, 2015.

183. **Overall, C.M.** *Invited Speaker,* "Using the 10-Plex TMT Quantitative TAILS N-terminomics with ThermoFisher Scientific Orbitrap Fusion MS Approach to Understand the Mechanism for NFkB Deficiency in Autoimmunity", **European Proteomics Association IX Annual General Meeting,** Milano, Italy, June 23 – 28, 2015.

184. **Overall, C.M.** *Invited Speaker,* "Pervasive Interactions of MMPs with Other Protease Classes and Their Inhibitors Form Protein Networks as Part of a Global Protease Web *in vivo*", **MMP Gordon Research Conference,** Sunday River in Newry, ME, USA, August 2 – 7, 2015.

185. **Overall, C.M.** *Invited Speaker,* "TAILS N-Terminomics Unravels New MALT1 Proteolytic Connections in NFκB Immune Responses", **14th Human Proteomics Organization World Congress (HUPO 2015),** Vancouver, BC, Canada, September 27 – 30, 2015.

186. **Overall, C.M.** *Invited Speaker,* "TAILS N-terminomics Analysis to Identify Missing Proteins in the Human Proteome Project", Bruker Instruments Sponsored Seminar, **14th Human Proteomics Organization World Congress (HUPO 2015),** Vancouver, BC, Canada, September 27 – 30, 2015.

187. **Overall, C.M.** *Opening Plenary Speaker,* "TAILS Proteomics of a MALT1 Immunodeficient Patient Reveals A New Substrate in LUBAC to Regulate Linear Ubiquitination in the Immune Synapse During Lymphocyte NF-kB Signalling", **9th International Proteolysis Society Annual General Meeting,** Penang, Malaysia, October 4 – 8, 2015.

188. **Overall, C.M.** *Opening Plenary Speaker,* "Tools and Methodology for the Characterization of Protein N- and C-Termini and for Proteolytic Post-translational Processing." **5th Proteomics Workshop,** São Paulo, Brazil, November 4, 2015.

189. **Overall, C.M.** *Closing Plenary Speaker,* "TAILS Degradomics Unravels New Proteolytic Connections in Immune Responses", **5th Proteomics Workshop,** São Paulo, Brazil, November 5, 2015.

190. **Overall, C.M.** *Opening Keynote Speaker,* "Quantitative Proteomics and Systems Biology Analysis of Proteolytic Networks *in vivo*", **European Respiratory Society Research Seminar Proteases at the Cutting-edge: Friends or Foes in Chronic Lung Diseases**, Amsterdam, Netherlands, November 11 – 13, 2015.

191. **Overall, C.M.** *Opening Keynote Speaker,* "TAILS Proteomics of a MALT1 Immunodeficient Patient Reveals New Substrates in LUBAC to Regulate Linear Ubiquitination in the Immune Synapse During Lymphocyte NF-kB Signalling", **Disease Proteases Symposium**, Mainz, DE, November 27 – 28, 2015 (*declined*).

192. **Overall, C.M.** *Invited Speaker,* "TAILS Proteomics of a MALT1 Immunodeficient Patient Reveals New Substrates in LUBAC to Regulate Linear Ubiquitination in the Immune Synapse During Lymphocyte NF-kB Signalling", **Molecular and Cellular Mechanisms of Inflammation Workshop**, Ghent, Belgium, December 8, 2015.

2016

193. **Overall, C.M.** *Opening Keynote Speaker,* "Quantitative Proteomics and Systems Biology Analysis of Proteolytic Networks *in vivo*", **Gordon Conference Seminars on Plasminogen Activation & Extracellular Proteolysis,** Ventura, CA, USA, February 13 – 14, 2016.

194. **Overall, C.M.** *Invited Program Speaker,* "TAILS N-terminomics Reveals MALT1 Cleavage and Disassembly of the Linear Ubiquitination Assembly Complex to Down Regulate NF-κB", **33rd Winterschool on Proteinases and their Inhibitors,** Tiers, Italy, February 24 – 27, 2016.

195. **Overall, C.M.** *Invited Speaker,* "Systems Biology Analysis of New Roles for Intracellular MMPs in Cancer Metastasis", **Extracellular Matrix: New Perspectives for Translational Medicine,** Joint Meeting of the German and French Societies for Matrix Biology, Freiburg, Germany, March 3 – 4, 2016.

196. **Overall, C.M.** *Invited Speaker,* "TAILS Proteomics of a MALT1 Immunodeficient Patient Reveals A New Substrate in LUBAC to Regulate Linear Ubiquitination in the Immune Synapse During Lymphocyte NF-κB Signalling", **Omics Towards the Clinic Workshop,** Munich, Germany, May 10, 2016, *withdrawn*.

197. **Overall, C.M.** *Invited Speaker,* "The Chromosome 6 Proteome", **14th Chromosome Centric-Human Proteome Project (CHPP) Shanghai Workshop 2016,** Xiamen, China, May 20 – 21, 2016.

198. **Overall, C.M.** *Invited Speaker,* "Positional Proteomics Technologies to Functionally Annotate Tissue Proteomes in Pathology", **9th National Chinese Human Proteome Organization Congress of China (CN-HUPO),** Xiamen, China, May 22 – 23, 2016.

199. **Overall, C.M.** *Invited Speaker*, "TAILS Proteomics of a MALT1 Immunodeficient Patient Reveals A New Substrate in LUBAC to Regulate Linear Ubiquitination in the Immune Synapse During Lymphocyte NFκB Signalling", **Gordon Research Conference on Proteolytic Enzymes and Their Inhibitors**, Il Ciocco, Lucca, Italy, June 26 – July 1, 2016.

200. **Overall, C.M.** *Opening Keynote Address*, "Proteogenomic Approaches to Explore Protease Functions", **The Biology of Calpains in Health and Disease, FASEB Research Conference**, Big Sky, MT, USA, July 17 – 18, 2016.

201. **Overall, C.M.** *Opening Speaker,* "Quantitative Proteomics and Systems Biology Analysis of MMP Proteolytic Networks *in vivo*", **MMP Symposium,** Oxford, UK, August 4 – 5, 2016.

202. **Overall, C.M.** *Invited Speaker*, "MALT1 Cleavage and Disassembly of Linear Ubiquitination Assembly Complex Down Regulates NF-κB", Collaborative Research Centre, University of Kiel Second International Symposium "**Protease World in Health and Disease**", Kiel, Germany, September 13 – 17, 2016.

203. **Overall, C.M.** *Invited Speaker,* "Meeting the Challenge of Finding the Human Missing Protein Proteome: Top 50 Marathon Challenge". HPP Day, **15th HUPO World Congress, HUPO-2016,** Taipei, Taiwan, September 18, 2016.

204. **Overall, C.M.** *Keynote Speaker*, "TAILS N-terminomics Reveals MALT1 Cleavage and Disassembly of the Linear Ubiquitination Assembly Complex to Down Regulate NF-κB", **15th HUPO World Congress, HUPO-2016,** Taipei, Taiwan, September 19 – 21, 2016.

205. **Overall, C.M.** *Invited Speaker,* Journal of Proteome Research Policy Changes and Special Issue for the HPP", **Human Proteome Project Workshop**, Sun Moon Lake, Taiwan, September 22, 2016.

206. **Overall, C.M.** *Invited Speaker*, "The Proteome and N-Termini Analysis of the ECM in Skin and Cartilage Reveals New Proteolytic Regulation of Inflammatory Networks", **The 2016 American Society of Matrix Biology Meeting "The ECM Microenvironment: A Regulatory Force in Aging and Disease",** Saint Petersburg, FL, USA, November 13 – 16, 2016.

2017

207. **Overall, C.M.** *Invited Speaker*, "Can Proteomics Fill the Gap between Genomics and Phenotypes? The Human Proteome Project", **MEDTalks**, Robert Lee Alumni Centre, University of British Columbia, B.C., Vancouver, Canada, January 2017.

208. **Overall, C.M.** *Invited Speaker*, "What is NeXt After the NeXt-50 Challenge? Known Knowns, Known Unknowns, Unknown Unknowns", **17th C-HPP Symposium,** Tehran, Iran, April 27 – 28, 2017.

209. **Overall, C.M.** *Invited Special Closing Lecture*, "TAILS N-Terminal Positional Proteomics. Translating Proteomics to Human Disease", **17th C-HPP Symposium,** Tehran, Iran, April 27 – 28, 2017.

210. **Overall, C.M.** *Invited Speaker*, "Tumor-Associated Macrophage MMP12 Cleaves Intracellular Tumor Oncogene Targets Preventing Cancer Initiation", **MMP Gordon Research Conference,** University of New England, Biddeford, ME, USA, July 9 – 14, 2017.

211. **Overall, C.M.** *Plenary Speaker*, "Positional Proteomics: Protein Termini Reveal Remarkable TAILS", **V-International Conference in Analytical Proteomics**, Lisbon, Portugal, July 3 – 6, 2017.

212. **Overall, C.M.** *Keynote Speaker*, "Positional Proteomics of Breast Cancer Reveals New Intracellular Proteolytic Mechanisms of Tumor Suppression by Moonlighting Proteases", **Proteases and the Tumour Microenvironment,** Prato, Italy, July 24 – 26, 2017.

213. **Overall, C.M.** *Award Lecture*, "TAILS Tells Wonderful Tales of Protein Termini", **16th Human Proteome Organization World Congress,** Dublin, Ireland, September 20, 2017.

214. **Overall, C.M.** *Invited Speaker*, "Protein TAILS Tell Remarkable Tales, **The Omics Revolution: Towards Personalised Medicine,** Noosa, Queensland, Australia, October 15, 2017.

215. **Overall, C.M.** *Invited Speaker*, "Database Searchable Peptide Libraries for Characterizing PTMs", **2017 Australian Peptide Conference**, Noosa, Queensland, Australia, October 15 – 19, 2017.

2018

216. **Overall, C.M.** *Invited Speaker*, "TAILS N-Terminal Positional Proteomics. Translating Proteomics to Human Immunodeficiency Disease and New Therapies", **23rd Lorne Conference on Proteomics,** Lorne, Victoria, Australia, February 2, 2018.

217. **Overall, C.M.** *Speaker*, "Proteomic Discovery of a Proteolytic Flagellin Family in Diverse Bacterial Phyla that Assembles Enzymatically Active Flagella", **43rd Lorne Conference on Protein Structure and Function,** Lorne, Victoria, Australia, February 6, 2018.

218. **Overall, C.M.** *Invited Speaker*, "A Twist of the TAILS: An Allosteric Inhibitor Rescues Mutant MALT1 in an Immunodeficient Patient", **35rd Winterschool on Proteinases and their Inhibitors,** Tiers, Italy, Feb. 28, 2018.

219. **Overall, C.M.** *Plenary Speaker*, "Target Identification by TAILS N-Terminal Positional Proteomics Leads to Development of a Pharmacological Molecular Corrector for Impaired NF-kB Activation", **Korean HUPO (KHUPO)**, Seoul, Korea, March 29, 2018.

220. **Overall, C.M.** *Plenary Speaker*, "Protein TAILS Tell Remarkable Tales: Proteomic Untangling of the Protease Web in Immunity", **12th International CiM IMPRS Graduate School Meeting,** Münster, DE, April 26, 2018.

221. **Overall, C.M.** *Plenary Speaker*, "Target Identification by TAILS N-Terminal Positional Proteomics Leads to Development of a Pharmacological Molecular Corrector for Impaired NF-kB Activation", **2018 Canadian National Proteomics Network Annual Meeting,** Vancouver, BC, May 3, 2018.

222. **Overall, C.M.** *Speaker*, "Development of a Pharmacological Molecular Corrector for Impaired NF-kB Activation", **Protease and Inhibitors Gordon Research Conference,** Il Ciocco, Italy, June 6, 2018.

223. **Overall, C.M.** *Plenary Speaker*, "Proteolytic Signature Peptides as Mechanism-based and Mechanism Informative Biomarkers", **2018 EuPA Congress**, Santiago de Compostela, Spain, June 19, 2018.

224. **Overall, C.M.** *Invited Speaker*, N-Terminomics of Protein TAILS that Tell Remarkable Tales, **43rd FEBS Congress**, Prague, Czech Republic, July 12, 2018.

225. **Overall, C.M.** *Invited Speaker*, "An Allosteric Inhibitor Rescues Mutant MALT1 in an Immunodeficient Patient", **Gordon Research Conference on "Protein Processing, Trafficking, and Secretion"**, Colby Sawyer, NH, USA, July 19, 2018.

226. **Overall, C.M.** *Invited Speaker*, "A Potent MALT1 Inhibitor is a Molecular Corrector that Rescues Mutant MALT1 Activity and Functions in an Immunodeficient Patient", **Cascadia Proteomics Symposium,** Seattle, July 23, 2018.

227. **Overall, C.M.** *Invited Speaker*, "A Potent MALT1 Inhibitor is a Molecular Corrector that Rescues Mutant MALT1 Activity and Functions in an Immunodeficient Patient", **FEBS Workshop on Proteases, Inhibitors and Biological Control,** Portorož, Slovenia, September 10, 2018.

228. **Overall, C.M.** *Invited Speaker*, "Target Identification by TAILS N-Terminal Positional Proteomics Leads to Development of a Pharmacological Molecular Corrector for Impaired NF-kB Activation", **HUPO (Human Proteome Organization) 17th Annual World Conference,** Orlando, FL, October 1, 2018.

2019

229. **Overall, C.M.** "Deploying a Potent MALT1 Inhibitor as a Molecular Corrector that Rescues Lymphocyte Mutant MALT1 Activity and Functions in an Immunodeficient Patient", **Norman Bethune Symposium,** Vancouver, BC Canada, April 3, 2019.

230. **Overall, C.M.** *Invited Session Opening Speaker*, "Target Identification by TAILS N-Terminal Positional Proteomics Leads to Development of a Pharmacological Molecular Corrector for Mutant MALT1 Impaired NF-kB Activation in Immunodeficiency", **European Federation for Medicinal Chemistry and American Chemical Society, Medicinal Chemistry Frontiers Symposium**, Krakow, Poland, June 10 – 13, 2019.

231. **Overall, C.M.** *Speaker*, "How Do CIHR Peer Review Committees Really Work", **Discovering Scholarship and Research in Academics, ACFD,** June 16 – 18, 2019.

232. **Overall, C.M.** *The Caparica Lecture*, "Target Identification by TAILS N-Terminal Positional Proteomics Leads to Development of a Pharmacological Molecular Corrector for Mutant MALT1 Impaired NF-kB Activation in Immunodeficiency", **ICAP 2019 Conference,** Lisbon, Portugal, July 8 – 11, 2019. (*Cancelled*).

233. **Overall, C.M.** *Speaker*, "Target Identification by TAILS N-Terminal Positional Proteomics Leads to Development of a Pharmacological Molecular Prosthetic for Mutant MALT1 Impaired NF-kB Activation in Immunodeficiency", **Proteases and the Tumour Microenvironment,** Prato, Italy, July 29 – 31, 2019. (*Cancelled*).

234. **Overall, C.M.** *Keynote Speaker,* "Positional Proteomics Deciphers Mechanisms of Inflammation and Immunity", **HUPO (Human Proteome Organization) 18th Annual World Conference,** Adelaide, Australia, September 15 – 19, 2019.

235. **Overall, C.M.** *Plenary Speaker,* "How to Increase Protease Activity in Disease: A Pharmacological Molecular Corrector for Mutant MALT1 in Immunodeficiency", **11th General Meeting of the International Proteolysis Society,** September 29 – October 4, 2019, Marianske Lazne, Czech Republic.

236. **Overall, C.M.** *Plenary Speaker,* "Increasing Diversity in the Human Proteome by Moonlighting Proteins", **Mexican Proteomics Society Annual Meeting,** Acapulco Guerreo, Mexico, October 20 – 24, 2019.

237. **Overall, C.M.** *Plenary Speaker.* "Positional Proteomics to Decipher Biological and Pathological Processes", **2019 Annual Taiwan Proteomics Society Annual General Meeting,** National Cheng Kung University, Tainan, Taiwan, December 7 – 8, 2019 (declined).

2020

238. **Overall, C.M.** *Invited Speaker.* "Positional Proteomics to Decipher Pathobiology, **Lorne Proteomics**, Lorne, Victoria, Australia, February 7, 2020.

239. **Overall, C.M.** *Closing Speaker.* "Positional Proteomics to Decipher Pathobiology, **Protease Winter School,** Tiers, Italy, March 5 – 8, 2020.

240. **Overall, C.M.** *Invited Speaker.* "New MALT1 Substrates in NFkB Activation", **Proteolytic Enzymes and their Inhibitors Gordon Research Conference,** Il Ciocco, Italy, May 24 – 29, 2020 (*COVID-19 postponement*).

241. **Overall, C.M.** *Keynote Speaker.* "Pathobiology of COVID-19 Deciphered by TAILS Analysis of SARS CoV-2CLpro Substrates", **2020 AO-HUPO,** Busan, South Korea, July 1 – 2, 2020 (*COVID-19 postponement*).

2021

242. **Overall, C.M.** *Keynote Speaker.* "Pathobiology of COVID-19 Deciphered by TAILS Analysis of SARS CoV-2 3CLpro Substrates", Proteome Biomarkers Sessions, **2021 AO-HUPO,** Busan, South Korea, June 30 – July 2, 2021(*COVID-19 postponement*).

243. **Overall, C.M.** *Plenary Speaker.* "Pathobiology of COVID-19 Deciphered by Terminomics Analysis of SARS CoV-2 3CLpro Substrates", **7th International Caparica Conference on Analytical Proteomics,** Lisbon, Portugal, July 11 – 15, 2021(*COVID-19 postponement*).

244. **Overall, C.M.** Invited Speaker. "The Proteolytic Landscape of COVID-19 Deciphered by TAILS Analysis of SARS CoV-2 3CLpro Substrates", **12th General Meeting of the International Proteolysis Society,** Singapore, September 20 – 23, 2021 (*COVID-19 postponement*).

2022

245. **Overall, C.M.** *Invited Speaker.* "The Proteolytic Landscape of SARS-CoV-2 3CLpro in COVID-19", **Lorne Proteomics**, Lorne, Victoria, Australia, February 4, 2022 (*in person*).

246. **Overall, C.M.** *Invited Speaker.* "The Proteolytic Landscape of SARS-CoV-2 3CLpro in COVID-19", **Protease Winterschool,** Tiers, Italy, February 19, 2022 (*virtual*).

247. **Overall, C.M.** *Invited Speaker.* The Proteolytic Landscape of SARS-CoV-2 3CLpro in COVID-19", **COVID-19 Immunology Consortium (CIC-BC)**, February 16, 2022 (*virtual*).

248. **Overall, C.M.** *Invited Speaker.* "N-Terminomics of Protein TAILS that Tell Remarkable Tales in Protein Turnover in Autoimmune Disease and COVID-19", **Proteomic Forum / XIV Annual Congress of the European Proteomics Association,** Leipzig, Germany, April 3 – 7, 2022.

249. **Overall, C.M.** *Plenary Session A Speaker.* "Control of ECM Homeostasis in Health and Inflammatory Disease by MMP Cleavage of Non-Matrix Substrates". **Canadian Bone and Joint Conference 2022,** April 21, 2022 (*virtual*).

250. **Overall, C.M.** *Invited Speaker.* "Evasion of Cellular Anti-Viral Defences Deciphered by TAILS N-terminomics Analysis of SARS CoV-2 3CLpro Substrates in COVID-19", **2nd Joint Meeting of Spanish, French and Portuguese Proteomics Societies,** Vilamoura, Portugal, May 11 – 13, 2022.

251. **Overall, C.M.** *Invited Speaker.* "The Proteolytic Landscape of SARS-CoV-2 3CLpro in COVID-19", **Proteolytic Enzymes and their Inhibitors Gordon Research Conference,** Il Ciocco, Italy, June 5 – 10, 2022 (*in person*).

252. **Overall, C.M.** *Invited Speaker.* "Pathobiology of COVID-19 Deciphered by TAILS Analysis of SARS CoV-2 3CLpro Substrates", **Protein Termini 2021,** Bergen, Norway, June 8 – 11th, 2022 (*in person*).

253. **Overall, C.M.** *Keynote Speaker.* "Proteolytic Regulation of Connective Tissue Homeostasis and Inflammation by MMPs", **FASEB 2022 Matricellular Protein Meeting**, Lisbon, Portugal, July 17 – 22, 2022 (*in person*).

254. **Overall, C.M.** *Plenary Speaker.* "N-Terminomics of Protein TAILS that Tell Remarkable Tales of SARS-CoV-2 Evasion of Host Antiviral Defences in COVID-19", **ICAP 2022 Conference,** Lisbon, Portugal, July 16 – 20, 2022 (*in person*).

255. **Overall, C.M.** *Invited Speaker.* "Evasion of Cellular Anti-Viral Defences Deciphered by TAILS N-terminomics Analysis of SARS CoV-2 3CLpro Substrates in COVID-19", **3rd International Symposium on Proteolysis as a Regulatory Event in Pathophysiology**, Kiel, Germany, September 11 – 14, 2022 (*in person*).

256. **Overall, C.M.** *The International Union of Biochemistry and Molecular Biology Keynote Lecture.* "Pathobiology of COVID-19 Deciphered by TAILS Analysis of SARS CoV-2 3CLpro Substrates", **Proteolysis at the Interface Between Health and Disease**, Bled, Slovenia, September 19 – 22, 2022 (*in person*).

257. **Overall, C.M.** *Invited Speaker.* "Evasion of Cellular Anti-Viral Defences by SARS CoV-2 3CLpro in COVID-19", **Earl Davie Symposium**, Vancouver, BC, November 22, 2022.

258. *Invited attendee* to the "**G7 Research Summit on One Health**" *as UBC's representative*, Lake Louise, AB, Canada, November 21 – 23, 2022. The group's mission to serve as the world's leading independent source of information, analysis and research on the G7.

259. **Overall, C.M.** *Invited Speaker.* "Evasion of Cellular Anti-Viral Defences Deciphered by TAILS N-terminomics Analysis of SARS CoV-2 3CLpro Substrates in COVID-19", **Vancouver Post-ASMS Meeting,** Vancouver, BC, November 24, 2022.

260. **Overall, C.M.** *Keynote Speaker.* "The COVID-19 Cellular coup d'état" Deciphered by Terminomics Identification of SARS CoV-2 3CLpro Host Substrates", **HUPO (Human Proteome Organization) 21st Annual World Conference,** Cancun, Mexico, December 4 – 7, 2022 (*in person*).

2023

261. **Overall, C.M.** Invited Speaker. "Employing Proteome-Derived Peptide Libraries for Proteomic Profiling of SARS-CoV-2 3CLpro Main Protease in COVID-19". **Lorne Proteomics**, Lorne, Victoria, Australia, February 4, 2023.

262. **Overall, C.M.** Invited Speaker. "Remodelling the Intracellular Proteome in SARS-CoV-2 Infection by 3CLpro Main Protease Evades Xeonphagy and Highjacks Cellular Resources". **Lorne Proteins**, Lorne, Victoria, Australia, February 8, 2023.

263. **Overall, C.M.** Invited Speaker. "Defeating Neanderthal Genes to Circumvent Host Protection to COVID-19". **Protease Winterschool,** Tiers, Italy, March 1, 2023.

264. **Overall, C.M.** Invited Speaker. "Remodelling the Intracellular Proteome in SARS-CoV-2 Infection by 3CLpro Main Protease Evades Xenophagy and Highjacks Cellular Resources". **2nd WCM-Q Proteomics Conference**, Doha, Qatar, March 7, 2023.

265. **Overall, C.M.** Invited Speaker. "Remodelling the interferon and Chemokine Activity Landscape in COVID-19 and Inflammatory Responses by Immune Cell Proteases and SARS-CoV-2 3Clpro Main Protease Precision Proteolysis Reveals Chinks in the Cell's Armour". **5th International Conference on Cytokines in Cancer**, Kos, Greece, May 14 – 19, 2023.

266. **Overall, C.M.** Invited Speaker. "Defeating Neanderthal Genes to Circumvent Host Protection to COVID-19". **Crosstalk Between the ECM and Proteases from Destruction to Regeneration Conference,** Rehovot, Israel, June 22 – 22, 2023. *Declined*.

267. **Overall, C.M.** Invited Speaker. “The Proteolytic Landscape of COVID-19 Deciphered by TAILS Analysis of SARS CoV-2 3CLpro Substrates”, **12th General Meeting of the International Proteolysis Society,** Singapore, June 26, 2023.

268. **Overall, C.M.** Invited Speaker. “Defeating Neanderthal Genes to Circumvent Host Protection to COVID-19”. **2023 Plant Proteolysis Gordon Research Conference,** August 6 – 11, 2023.

269. **Overall, C.M.** Keynote Speaker. “Defeating Human Host Cell Defences by Stealth SARS-CoV-2 Infection Executed by NSP5/3CLpro Main Protease”, **HUPO (Human Proteome Organization) 22nd Annual World Conference,** Busan, South Korea, September 17 – 20, 2023.

270. **Overall, C.M.** Invited Speaker. “COVID-19 Deciphered by Interactomics and N-Terminomics of SARS-CoV-2 3CLpro Host Substrates”, **12th CN-HUPO Congress & the Proteomic Navigator of the Human Body (π-HuB) Project Global Summit,** Chengdu, China, September 24 – 27, 2023.

271. **Overall, C.M.** Plenary Speaker. “Defeating Human Host Cell Defences by Stealth SARS-CoV-2 Infection Executed by NSP5/3CLpro Protease”, **The Omics Revolution: Translation and Beyond,** Brisbane, Australia, 15th October 2023.

272. **Overall, C.M.** Invited Speaker, “Proteomic Identification of SARS-CoV-2 3CLpro P6–P6’ Active Site Specificity to Inform Optimisation of Superior Quenched Fluorescent Peptide Substrates,” **13th International Peptide Symposium/15th Australian Peptide Conference,** Brisbane, Australia, 17 October 2023.

2024

273. **Overall, C.M.** “Interactomics Identifies SARS-CoV-2 3CLpro Interactors and Substrates Driving Cytoskeletal Substrate Reorganization and Tunnelling Nanotube Formation for Stealth Intercellular Infection”. **Lorne Proteomics**, Lorne, Victoria, Australia, January 31 – Feb. 4, 2024.

274. **Overall, C.M.** Invited Speaker. “Degradomics Techniques to Decipher COVID-19 Mechanisms in Cardiomyopathy”. **Plasminogen Activation and Extracellular Proteolysis Gordon Research Conference,** Ventura, CA, USA, Feb. 18 – 23, 2024 (Declined).

275. **Overall, C.M.** Invited Speaker. “The Great Escape: Tunneling Nanotubes Engineered by SARS-CoV-2,” **2024 BC Proteomics Metalabomics Network Symposium,** Vancouver, BC, February 21, 2024.

276. **Overall, C.M.** Opening Speaker. “The Great Escape: Tunneling Nanotubes Engineered by SARS-CoV-2," **41st Protease Winterschool,** Tiers, Italy, Feb. 23 – March 3, 2024.

277. **Overall, C.M.** Invited Speaker, “Not Just Stamp Collecting. Using Targeted Proteomics to Decipher Cytokine Activation and Inactivation in Inflammation”. **CIHR Symposium on the Periodontitis-Systemic Disease Connection: Recent Developments and Molecular Insights,** Vancouver, April 3, 2024.

278. **Overall, C.M.** Invited Speaker, “Functionalizing Every Human Protein”, **25th Chromosome-Centric Human Proteome Project (C-HPP) Workshop: Characterizing the Building Blocks of the Human Proteome**, Madrid, Spain, April 26th – 28th, 2024.

279. **Overall, C.M.** Invited Speaker. “Development of Novel Molecular Correctors to Restore Impaired Enzymic and Scaffolding Functions in an Immunodeficient Patient Identified by Positional Proteomics,” **Korean Society for Biochemistry and Molecular Biology International Conference**, Busan, Korea, 29 –31 May 2024.

280. **Overall, C.M.** Keynote Speaker. “Employing Proteome-Derived Peptide Libraries for Proteomic Profiling of SARS-CoV-2 3CLpro Main Protease in COVID-19,” **Canadian Society for Chemistry Conference and Exhibition**, Winnipeg, MB, Canada, June 2 – 6, 2024.

281. **Overall, C.M.** Invited Speaker. “The Great Escape” of SARS-CoV-2 by 3CLpro”, **Proteolytic Enzymes and their Inhibitors Gordon Research Conference,** Il Ciocco, Italy, June 9 – 14, 2024.

282. **Overall, C.M.** Selected Speaker. “Multiplex MS Profiling of SARS-CoV-2 3CLpro/Main Protease Cleavage Kinetics for Ranking Interactors as Substrates and Designing Optimal Peptide Assay Formats”, **International Mass Spectrometry Conference,** Melbourne Australia, August 17 – 23, 2024.

283. **Overall, C.M.** Invited Speaker. “Multiplex MS Profiling of SARS-CoV-2 3CLpro/Main Protease Cleavage Kinetics for Ranking Interactors as Substrates and Designing Optimal Peptide Assay Formats”, **Protein Termini 2024,** Oxford, UK, September 8 – 11, 2024.

284. **Overall, C.M.** Invited Speaker. “The Great Escape by SARS-CoV-2 Virus and Main Protease”, **FEBS Workshop Proteolysis: at the Interface between Health and Disease,** Bled, Slovenia, September 14 – 18, 2024.

285. **Overall, C.M.** Invited Speaker. “Methods in Terminomics”, Combined CNPN and US-HUPO Webinar, September 19, 2024.

286. **Overall, C.M.** Invited Speaker. “The Great Escape” of SARS-CoV-2 by 3CLpro Uncovered by TAILS and ICDC-Interactomics”, **22nd Toronto Post-American Society of Mass Spectrometry Symposium,** Toronto, Canada, November 4, 2024.

287. **Overall, C.M.** Invited Speaker. “The Great Escape” of SARS-CoV-2 by 3CLpro Uncovered by TAILS and ICDC-Interactomics”, **17th Montreal Post-American Society of Mass Spectrometry Symposium,** Montreal, Canada, November 5, 2024.

288. **Overall, C.M.** Invited Speaker. “Protein Termini are not just the Ends of Proteins”, **Future of Proteomics Symposium**, West Lake University, Hangzhou, China, November 14, 2024.

289. **Overall, C.M.** Invited Speaker, “Targeted Proteomics to Decipher Cytokine Activation and Inactivation in Inflammation.” **5th Proteomics Symposium on Inflammation and Cancer,** Guangzhou, China, November 30, 2024.

2025

290. **Overall, C.M.** Invited Speaker. “The Great Escape: SARS-CoV-2 Evasion of Antiviral Immunity”, **ASMS Sanibel Conference “Mass Spectrometry in Immunology and Antibody Research**,” Santa Fe, New Mexico, USA, January 23-27, 2025.

291. **Overall, C.M.** Submitted. “Unconventional Secretion and Activity of SARS-CoV-2 Main Protease (3CL^{pro}) by Caspase and 3CLpro Activation of Gasdermin D Pore Formation”, **50th Lorne Proteins 2025,** Lorne, Victoria, Australia, February 9 – 13, 2025.

292. **Overall, C.M.** Invited Speaker. “Caspase and 3CL^{pro} Activation of Gasdermin D Pores Leads to Extracellular Secretion of SARS-CoV-2 3CLpro (Main Protease)”, **42nd Protease Winterschool,** Tiers, Italy, March 12 – 18, 2025.

293. **Overall, C.M.** Submitted. “Unconventional Secretion and Activity of SARS-CoV-2 Main Protease (3CL^{pro}) by Caspase and 3CLpro Activation of Gasdermin D Pore Formation”, **AUS-oMICS 2025**, Cairns, Queensland, May 18 -21, 2025.

294. **Overall, C.M.** Plenary Speaker. “The Great Escape: SARS-CoV-2 Evasion of Antiviral Immunity”, **European Proteomics Association 2025**, Saint-Malo, France, June 16-20, 2025.

295. **Overall, C.M.** Invited Speaker. “Unravelling Matrix Metalloproteinase Cleavage of PCSK9 and ApoE in Regulating LDL-cholesterol and Fatty Liver Disease in Aging”, **Canadian Society of Pharmacology and Therapeutics (CSPT) Annual Meeting**, Vancouver, BC, Canada, June 5-9, 2025.

296. **Overall, C.M.** Invited Speaker. “Unconventional Secretion and Activity of SARS-CoV-2 Main Protease (3CLpro) by Caspase and 3CL^{pro} Activation of Gasdermin D Pore Formation”, **13th General Meeting of the International Proteolysis Society,** Búzios, Brazil, October 26-30, 2025.

297.

2027

298. **Overall, C.M.** Plenary Speaker, **2027 IUBMB-FEBS Meeting**. September, 19 – 23, 2027, Cape Town, South Africa.

Other Invited Presentations at Institutes, Departments and Companies (250)

1979 – 1989

1. "Collagen Structure and Immunology", Connective Tissue Symposium, Adelaide, SA, Australia, July 1979.
2. “Collagenase in Periodontal Tissues and Gingival Crevicular Fluid: Relationship with Periodontal Inflammation”, Society for the Advancement of Dental Research, S.U.N.Y. at Buffalo, N.Y., Buffalo, NY, USA, October 1986.
3. “The Degradative Role of Osteoblasts in Bone Resorption", Department of Oral Biology, S.U.N.Y. at Buffalo, N.Y., U.S.A., Oct 1986.
4. “Assaying and Monitoring Tissue Collagenase in Gingiva and Gingival Crevicular Fluid”, Johnson and Johnson Products Inc., Dental Health Research Centre, New Brunswick, N.J., U.S.A., October 1986.
5. “A Role for the Osteoblast in Bone Resorption", Bone and Mineral Group, Toronto, Ontario, Canada, January 1987.
6. “The Synthesis and Regulation of Matrix Degrading Proteinases and Inhibitors in Periodontal Tissues: Relationship with Inflammation Severity", Faculty of Dentistry, University of British Columbia, BC, Canada, February 1988.
7. “Independent Regulation of Collagenolytic Enzymes and TIMP by TGF-ß”, Cancer Research Laboratories, University of Western Ontario, ON, Canada, June 1988.
8. “TGF-ß Regulation of Collagenase and Clinical Assessment in the Periodontium”, Faculty of Dentistry, University of Texas, Health Science Centre, San Antonio, TX, September 1988.
9. “TGF-ß Regulation of Collagenase and Clinical Assessment in the Periodontium”, Faculty of Dentistry, University of Michigan, Ann Arbor, Michigan, USA, November 1988.
10. “Regulation of Collagenase in the Periodontium and its Clinical Assessment”, Faculty of Dentistry, The University of Adelaide, Adelaide, S.A., Australia, March 1989.
11. “Independent Regulation of Collagenolytic Enzymes and TIMP by TGF-ß in Human Fibroblasts and Rat Bone Cell Populations”, Department of Pathology, The University of Adelaide, S.A., Australia, April 1989.
12. “Regulation of Collagenolytic Enzymes in the Periodontium and Clinical Assessment", Institute of Dental Research, Sydney University, NSW, Australia, April 1989.

1990 – 1996

13. “TGF-ß Regulation of Collagenase and TIMP and their Role in Tumorigenesis”, B.C. Cancer Control Agency, Vancouver, BC, Canada, May 1990.
14. “Collagenase and Gelatinases in Periodontitis: Clinical Assessment and Inhibition by Doxycycline”, Faculty of Dentistry, the University of Adelaide, Adelaide, S.A., Australia, May 1991.
15. “The Involvement of MMPs and Inhibitors in Tumorigenesis, Inflammation and Healing”, Department of Pathology, The University of Adelaide, S.A., Australia, May 1991.
16. “Formative and Resorptive Cellular Phenotypes in Fibroblasts”, Department of Human and Experimental Immunology, Institute of Medical and Veterinary Research, Adelaide, S.A., Australia, May 1991.
17. “Collagenase and Gelatinases in Periodontitis: Clinical Assessment and Inhibition by Doxycycline”, Institute of Dental Research, Sydney University, N.S.W., Australia, May 1991.
18. “Protein Engineering of Type IV Collagenase”, The London Mineralized Tissue Club and the Molecular Biology Laboratories, University of Western Ontario, London, ON, Canada, June 1993.
19. "Matrix Metalloproteinases: Regulation, Mutagenesis, and Function", Biochemistry and Molecular Biology Discussion Group, Department of Biochemistry and Molecular Biology, UBC, Vancouver, BC Canada, January 1995.

20. "Protein Engineering Studies of Matrix Metalloproteinases", Alberta Heritage Foundation for Medical Research, Visiting Lecturer, Cancer Biology Research Group, Calgary, AB, Canada, May 1995.
21. “Tissue Inhibitors of Metalloproteinases”, Department of Biochemistry and Molecular Biology, University of Miami School of Medicine, FL, USA, February 29, 1996.
22. “Discerning Extracellular Matrix Binding Sites on Human 72-kDa Gelatinase: A Protein Engineering Approach”, Joint Diseases Laboratory, Shriners Hospitals for Children, Montreal, McGill University, QC, Canada, May 24, 1996.
23. “Protein Engineering Approach Analysis of the Extracellular Matrix Binding Sites on Human Gelatinase A”, Department of Biochemistry, Laval University, Quebec City, Quebec, Canada, May 27, 1996.

1997

24. “A Protein Engineering Analysis of the Extracellular Matrix Binding Sites on Human Gelatinase A”, Ontario Cancer Institute, University of Toronto, ON, Canada, January 30, 1997.
25. “Structure Function Studies of Gelatinase A”, The Medical Research Council Group in Periodontal Physiology, University of Toronto, ON, Canada, January 31, 1997.
26. “Structure Function Studies of Gelatinase A”, Cancer Research Laboratory, Queen’s University, Kingston, Ontario, Canada, May 23, 1997.
27. “Protein Engineering Studies of Gelatinase A”, Department of Pathology, Wayne State University, Detroit, MI, USA, May 27th, 1997.
28. “Protein Engineering Studies of Gelatinase A: Matrix and TIMP Interactions”, Department of Cell Biology, Queensland University of Technology, Queensland, Australia, July 29, 1997.
29. “Protein Engineering Studies on Gelatinase A”, Prince Henry’s Institute of Medical Research, Monash University, Melbourne, Victoria, Australia, August 13, 1997.
30. “Protein Engineering Studies of Gelatinase A (Matrix Metalloproteinase 2)”, Saint Vincent’s Institute of Medical Research, Melbourne, Victoria, Australia, August 14, 1997.
31. “Protein Engineering Studies of Matrix Metalloproteinases”, Department of Pathology, University of Adelaide, SA, Australia, August 19, 1997.
32. "Protein Engineering Studies of MMPs", British Biotech, Oxford, U.K., October 1997.

1998

33. "Protein Engineering Studies of Gelatinase A", Eastman Dental School, London, U.K., January 20, 1998.
34. "Protein Engineering Studies of Gelatinase A", Wellcome Trust Centre for Cell-Matrix Research, School of Biological Sciences, University of Manchester, U.K., February 26, 1998.
35. “Gelatinase A Domain Functions”, School of Biological Sciences, University of East Anglia, Norwich, U.K., March 24, 1998.
36. “TIMP-2 and TIMP-4 Interactions with Gelatinase A”, Bristol Heart Institute, University of Bristol, Bristol, U.K., April 1998.
37. “Domain Functions of Gelatinase A”, Department of Rheumatology, University of Newcastle and the Freeman Hospital, Newcastle, U.K., April 7 1998.
38. "Protein Engineering Studies of Matrix Metalloproteinases", Department of Craniofacial Development, Guy’s Hospital, London, U.K., May 1998.
39. "Protein Engineering Studies of Gelatinase A", School of Molecular and Medical Biosciences, University of Wales, Cardiff, U.K. June 1998.
40. "Cell Surface Localization and Activation of Matrix Metalloproteinases", Department of Cell Biology, University of Chicago, Chicago, IL, USA, September 9, 1998.

41. "Cell Surface Localization and Activation of Matrix Metalloproteinases", Sutton Arthritis Research Laboratories, Department of Medicine, University of Sydney at Royal North Shore Hospital, Sydney, Australia, October 1998.

1999

42. "Cell Surface Localization and Activation of MMPs", Joint Diseases Laboratory, Shriners Hospitals for Children, McGill University, Montreal, Canada, January 22, 1999.
43. "Cell Membrane Association and Activation of MMPs", Samuel Lunenfeld Research Institute of Mount Sinai Hospital, Toronto, Ontario, Canada, January 28, 1999.
44. "Domains, Modules, and Exosites: Multifunctional Modifiers of Matrix Metalloproteinase Activity", Craniofacial Group and the Department of Biochemistry and Molecular Biology, University of Western Ontario, London, Ontario, Canada, June 2nd, 1999.
45. "Domains, Modules, and Exosites: Multifunctional Modifiers of Matrix Metalloproteinase Activity", The Prostate Centre, Jack Bell Research Centre, Vancouver, BC, Canada, July 23, 1999.
46. "A Novel Chemokine Substrate for MMPs Revealed by Yeast Two-Hybrid Screens", Department of Pathology, Wayne State University, Detroit, MI, USA, October 1st, 1999.
47. "A Novel Chemokine Substrate for MMPs Revealed by Yeast Two-Hybrid Screens", Department of Biochemistry and Molecular Biology, University of Calgary, Calgary, AB, Canada, November 30, 1999.

2000

48. "New Substrates for Proteinases: Yeast Two-Hybrid Screens Reveal Chemokines are Inactivated by MMPs", The National Institutes of Health, Washington D.C., USA, January 21, 2000.
49. "Identification of Chemokines as Substrates for Matrix Metalloproteinases", MRC Group in Periodontal Physiology, University of Toronto, Ontario, Canada, January 27, 2000.
50. "Panning for Novel Proteinase Substrates with the Yeast 2 Hybrid System: MMPs Inactivate Chemokines", Department of Pharmacology, University of Alberta, Edmonton, AB, Canada, April 10, 2000.
51. "Panning for Novel Proteinase Substrates with the Yeast 2 Hybrid System: MMPs Inactivate Chemokines", Cancer Biology Research Group, Mucosal Inflammation Research Group, The Diabetes and Endocrine Research Group, and the Julia McFarlane Diabetes Research Group, University of Calgary, Calgary, AB, Canada, April 12, 2000.
52. "Panning for Novel Proteinase Substrates using Exosite Domains: MMPs Inactivate Chemokines", Max-Planck-Institute of Biochemistry, Martinsried-Planegg, Germany, May 5, 2000.
53. "Modulation of Inflammation by MMP Cleavage of Chemokines", Department of Morphology, University of Geneva Medical Centre, Geneva, Switzerland, May 8, 2000.
54. "Panning for Novel Proteinase Substrates with the Yeast 2 Hybrid System: MMPs Inactivate Chemokines", British Biotech Pharmaceuticals, Oxford, UK, May 15, 2000.
55. "Panning for Novel Proteinase Substrates with the Yeast 2 Hybrid System: MMPs Inactivate Chemokines", The Kennedy Institute of Rheumatology, Imperial College School of Medicine, London, UK, May 17, 2000.
56. "Modulation of Inflammation by MMP Cleavage of Chemokines", Department of Molecular and Cellular Medicine, University of Ottawa, ON, Canada, June 15, 2000.
57. "Modulation of Inflammation by MMP Cleavage of Chemokines", Department of Microbiology and Immunology, University of British Columbia, Vancouver, BC, Canada, September 21, 2000.
58. "Identification of Novel Proteinase Substrates by Yeast Two Hybrid Screens: MMPs Convert Chemokines to Macrophage Antagonists", The Burnham Institute, La Jolla, California, USA, October 31, 2000.
59. "Complex Role of TIMP-4 in Gelatinase A Activation", The Scripps Research Institute, La Jolla, California, USA, November 1, 2000.

60. "Degradomics: Metalloproteinase Cleavage of Substrates", Department of Cell Biology, The University of Western Australia, W.A, Australia, November 20, 2000.
61. "Degradomics: New Metalloproteinase Substrates with Anti-inflammatory Properties", Centre Molecular Medicine and Therapy, University of British Columbia, BC, Canada, November 28, 2000.
62. "Degradomics: New Metalloproteinase Substrates with Anti-inflammatory Properties", Conference of Specialists Series, Clinical Pharmacology Research Organization, University of British Columbia, BC, Canada, December 1, 2000.

2001

63. "Degradomics: New Metalloproteinase Substrates with Anti-inflammatory Properties", Department of Biochemistry, University of Washington, Seattle, WA, USA, January 25, 2001.
64. "Degradomics: New Metalloproteinase Substrates with Anti-inflammatory Properties", Department of Biochemistry, Queens University, Kingston, Ontario, Canada, October 3, 2001.
65. "Chemokines: New Members of the MMP Degradome", Department of Dermatology, University of Würzburg, Würzburg, Germany, October 30, 2001.
66. "Chemokines: New Members of the MMP Degradome", Department of Zoophysiologie, Extracellular Matrix Protein Group, Institut fuer Zoophysiologie, Universität Muenster, Germany, November 6, 2001.

2002

67. "MMP Regulation of Immune Function via Chemokine Processing", B.C. Cancer Research Centre, Vancouver General Hospital, Vancouver, BC, Canada, February 4, 2002.
68. "New Roles for MMPs: Chemokine Cleavage Regulates Inflammation and Immune Responses", Department of Cellular Biochemistry and Biophysics, Sloan-Kettering Cancer Centre, New York City, New York, USA, 4th March 2002.
69. "Degradomic Screening for Novel Protease Substrates: New Roles for MMPs in Chemokine Regulation", National Research Council Biotechnology Research Institute, Montreal, QC, Canada, 3rd June 2002.
70. "Degradomic Screening for Novel Protease Substrates: New Roles for MMPs in Chemokine Regulation", Centre of Research in Rheumatology and Immunology, Centre Hospitalier de l'Université Laval, Quebec City, QC, Canada, 4th June, 2002.
71. "New Roles for MMPs: Chemokine Cleavage Regulates Inflammation and Immune Responses", Rega Institute, Katholieke Universiteit, Leuven, Belgium, 10th September 2002.
72. "New Roles for MMPs: Chemokine Cleavage Regulates Inflammation, Immune Responses and Dementia", Tur de Pathologie, Leige, Belgium, 11th September 2002.
73. "Degradomic Screens Reveals New Roles for MMPs: Chemokine Processing Regulates Inflammation, Immune Responses, HIV and Dementia", AnorMED, Langley, BC, Canada, October 2002.
74. "Degradomic Screens Reveals New Roles for MMPs: Chemokine Processing Regulates Inflammation, Immune Responses, HIV and Dementia", George W. Raiziss Biochemical Rounds Seminar Series, Department of Biochemistry and Biophysics, University of Pennsylvania School of Medicine, USA, 22nd October 2002.
75. "Chemokine Cleavage by MMPs: Regulators of Inflammation and Inducers of Dementia", Lankenau Medical Research Centre, Wynnewood, Pennsylvania, PA, USA, 24th October 2002.
76. "MMP Initiation of Neuronal Apoptosis in HIV Dementia is Executed by Chemokine Cleavage", Department of Pharmacology, University of Minnesota, Minneapolis, MN, USA, 15th November 2002.
77. "MMP Initiation of Neuronal Apoptosis in HIV Dementia is Executed by Chemokine Cleavage", Vanderbilt-Ingram Cancer Centre, Nashville, TN, USA, 5th December 2002.

78. "The Symbiotic Relationship of Pericellular Collagen with Cell Surface MMPs". Department of Cancer Biology, Vanderbilt Medical Centre, Nashville, TN, USA, 6th December 2002.

2003

79. "Metalloproteinase Initiation of Neuronal Apoptosis in HIV Dementia is Executed by Chemokine Cleavage", Department of Biochemistry and Molecular Biology, University of British Columbia, 10th March 2003.
80. "The Symbiotic Relationship of Pericellular Collagen with Cell Surface Collagenolytic Matrix Metalloproteinases", Institute of Biochemistry and Molecular Biology, University of Berne, Berne, Switzerland, 23rd April, 2003.
81. "Metalloproteinase Initiation of Neuronal Apoptosis in HIV Dementia is Executed by Chemokine Cleavage", Theodor Kocher Institut, University of Bern, Switzerland, 25th April 2003.
82. "MMP Structure, Function, Activation and New Roles", Compound Therapeutics, Waltham, MA, USA, 13th May 2003.
83. "New Roles for MMPs: Chemokine Processing Terminates Inflammation and Initiates Neuronal Apoptosis in HIV Dementia", Division of Cancer Cell Research Institute of Medical Science, University of Tokyo, Japan, 9th June 2003.
84. "New Roles for MMPs: Chemokine Processing Terminates Inflammation and Initiates Neuronal Apoptosis in HIV Dementia", Department of Obstetrics and Gynecology, The University of Adelaide, South Australia, Australia, 11th July 2003".
85. "New Roles for MMPs: Chemokine Processing Terminates Inflammation and Initiates Neuronal Apoptosis in HIV Dementia", School of Life Sciences & Faculty of Science Research Centre, Queensland University of Technology (QUT), Brisbane, Queensland, Australia, 1st August 2003.
86. "MMPs Signal Change: Degradomic Substrate Discovery Reveals New Roles for MMPs in Inflammation and HIV Dementia". Novartis Pharmaceuticals, NJ, USA, 14th September 2003.
87. "New Proteomic Techniques of Protease Substrate Discovery Reveal New Roles for MMPs: Chemokine Processing Terminates Inflammation and Initiates Neuronal Apoptosis in HIV Dementia", Eli Lilly, Indianapolis, USA, 23rd September 2003.
88. "New Proteomic Techniques of Protease Substrate Discovery Reveal New Roles for MMPs: Chemokine Processing Terminates Inflammation and Initiates Neuronal Apoptosis in HIV Dementia", Novartis Pharmaceuticals Ag, Protease Platform, Basel, Switzerland, 2nd October 2003.
89. "New Proteomic Techniques of Protease Substrate Discovery Reveal New Roles for MMPs: Chemokine Processing Terminates Inflammation and Initiates Neuronal Apoptosis in HIV Dementia", The Pfizer Lecture, IRCM, Montreal, QC, Canada, 8th December 2003.
90. "New Proteomic Techniques of Protease Substrate Discovery Reveal New Roles for MMPs: Chemokine Processing Terminates Inflammation and Initiates Neuronal Apoptosis in HIV Dementia", Procyon Biopharma, Dorval, QC, Canada, 9th December 2003.

2004

91. "New Proteomic Techniques of Protease Substrate Discovery Reveal New Roles for MMPs: Chemokine Processing Terminates Inflammation and Initiates Neuronal Apoptosis in HIV Dementia", CIHR Group in Matrix Dynamics, University of Toronto, ON, Canada, 19th January 2004.
92. "Protease Functional Proteomics: Novel Matrix Metalloproteinase Substrate Discovery in Breast Carcinoma Reveals New Signalling Functions of MMPs", Sunnybrook & Women's College Health Sciences Centre, North York, Ontario, Canada, 20th January 2004.
93. "Protease Functional Proteomics: Novel Matrix Metalloproteinase Substrate Discovery in Breast Carcinoma Reveals New Signalling Functions of MMPs", Ontario Cancer Institute, Toronto, Ontario, 21st January 2004.

94. "Protease Substrate Discovery by Functional Proteomics: Chemokine Processing by MMPs Terminates Inflammation and Initiates Neuronal Apoptosis in HIV Dementia", George Connell Lecture, Department of Biochemistry, University of Toronto, Canada, 4th February 2004.
95. "New Roles for MMPs: Chemokine Processing Terminates Inflammation and Initiates Neuronal Apoptosis in HIV Dementia", ChemoCentryx, San Francisco, CA, USA, 9th February 2004.
96. "The MMP-2/MT1-MMP Axis: Protein Engineering and Degradomics by Isotope Coded Affinity Tag Tandem Mass Spectrometry". Max-Planck-Institute of Biochemistry, Martinsried-Planegg, Germany, 23rd February 2004.
97. "Proteomic, Genomic and Genetic Methods of Protease Substrate Discovery. MMPs Regulate Repair and Inflammation by Processing of Growth factors and Chemokines", L'Oreal Research Institute, Centre Charles Zviak, Paris, France, 5th March 2004.
98. "New Proteomic Techniques of Protease Substrate Discovery Reveal New Roles for MMPs: Chemokine Processing Terminates Inflammation and Initiates Neuronal Apoptosis in HIV Dementia", INSERM U 582, Institut de Myologie, Groupe Hospitalier Pitie-Salpetriere, Paris, France, March 8, 2004.
99. "Proteomics for Protease Substrate Discovery Reveals New Roles for MMPs: Chemokines in Inflammation and Apoptosis." Genentech, San Francisco, CA, USA, April 27, 2004.
100. "Functional Protease Proteomics of Human Breast Carcinoma". TIMA Mini-Symposium, "Contemplating Cleavage: Proteinase Regulation in Disease and Death, Robert H. Lurie Comprehensive Cancer Centre of Northwestern University, Chicago, IL, USA, May 11, 2004.
101. "System Wide Analysis of the Human Protease Web: Genomic and Proteomic Approaches". NIH/NIDCR, Bethesda, DC, USA June 8, 2004.
102. "Degradomics: Systems Biology of the Human Protease Web". Institut für Molekulare Medizin und Zellforschung Zentrum für Biochemie und Molekulare Zellforschung Albert-Ludwigs-Universität Freiburg, Freiburg, Germany November 18, 2004.

2005

103. "Degradomics and Pharmacoproteomics of the Human Protease Web", Experimental Medicine and Biochemical Sciences, University of Roma 'Tor Vergata', Rome, Italy, February 28, 2005.
104. "Ripples in the Protease Web: Systems Biology of MMP Degradomics and Inhibitor Pharmacoproteomics", March 18, 2005, Faculté des Sciences, Université Paris XII, Paris, March 18, 2005.
105. "Protease Pharmacoproteomics and Degradomics: Systems Biology of the Protease Web", Medical University of South Carolina, South Carolina, Charleston, USA, April 12, 2005.
106. "Proteomic and Genomic Analysis of the Human Protease Web". Department of Chemistry and Biochemistry, Florida State University, Tallahassee, FL, USA, April 14, 2005.
107. "Degradomics and Pharmacoproteomics of the Human Protease Web", Department of Chemistry and Biochemistry, Boca Raton, Florida Atlantic University, FL, USA, April 15, 2005.
108. "Degradomics and Pharmacoproteomics of the Human Protease Web", Novartis Institutes of Biomedical Research, Basel, Switzerland, May 31, 2005.
109. "Ripples in The Protease Web: Pharmacoproteomics and MMP Substrate Degradomics", School of Engineering and Science, International University of Bremen, Bremen, Germany, June 24, 2005.
110. "Degradomics and Pharmacoproteomics of the Human Protease Web", Department of Biochemistry and Molecular Biology, Jozef Stefan Institute, Ljubljana, Slovenia, June 30, 2005.
111. "Ripples in The Protease Web: Pharmacoproteomics and MMP Substrate Degradomics", Weill Medical College of Cornell University, New York, NY, USA, October 21, 2005.

2006

112. "Proteomic and Genomic Analysis of the Human Protease Web", Cancer Biology, MD Anderson Cancer Centre, Houston, TX, USA, February 14, 2006.

113. "Degradomics: Systems Biology of the Protease Web", Colgate Australian Clinical Dental Research Centre, University of Adelaide, South Australia, Australia, April 3, 2006.

114. "Degradomics: Systems Biology of the Protease Web", Biological Sciences, Flinders University, Adelaide, South Australia, Australia, April 5, 2006.

115. "Degradomics: Systems Biology of the Protease Web", Department of Biochemistry and Molecular Biology, Monash University, Melbourne, Victoria, Australia, April 7, 2006.

116. "Degradomics: Systems Biology of the Protease Web", Department of Medicine, University of Alberta, Edmonton, Alberta, Canada, May 8, 2006.

117. "Degradomics: Systems Biology of the Protease Web in the Cancer Microenvironment", The Prostate Centre at Vancouver General Hospital, Vancouver, BC, Canada, June 2, 2006.

118. "Recent Advances in Quantitative Proteomics of Proteases and their Substrates", Novartis Institutes of Biomedical Research, Basel, Switzerland, August 16, 2006.

119. "Recent Advances in Quantitative Proteomics of Proteases and their Substrates", Wellcome Trust Institute, Manchester, UK, September 8, 2006.

120. "Recent Advances in Quantitative Proteomics of Proteases and their Substrates", Institute of Virology, Philipps University, Marburg, Germany, October 6, 2006.

121. "Dynamic Regulation of The Chemokine Web by MMP Proteolysis: Lessons from Proteomics to Knock-out Mice", The Department of Immunology, University of Toronto, Charles Gould Easton Seminar Series, ON, Canada, October 23, 2006.

122. "Recent Advances in Quantitative Proteomics of Proteases and their Substrates", Department of Structural Biology, Institute of Molecular Biology, Barcelona, Spain, November 1, 2006.

2007

123. "Dynamic Regulation of the Chemokine Web by Metalloproteinase Activity: From Proteomics to Knock out Mice". Burnet Institute, Melbourne, Victoria, Australia, February 2, 2007.

124. "Pharmacoproteomic and Degradomic Approaches to Targeting Proteases as Drug Targets". Department of Pharmacology School of Medicine University of Pennsylvania, PA, USA, April 9, 2007.

125. "New Roles for Proteases in Angiogenesis and Tumor Growth Revealed by MMP Degradomics and Proteomics". Institut de Recherches Cliniques de Montréal, Montreal, QC, Canada, June 19, 2007.

126. "Proteolytic Modification of the Proteome *in vivo*: Degradomics Cuts to the Answer". Biocentrum, Basel, Switzerland, June 29, 2007.

127. "Proteolytic Moulding of the Proteome: Degradomics Cuts to the Answer" Institute of Molecular Systems Biology, ETH (Swiss Federal Institute of Technology), Zurich, Switzerland, August 31, 2007.

128. "Quantitative MMP Proteomics and Pharmacoproteomic Profiling of Substrates, Active Site Specificities and Drug Side Effects", Dyax Corporation, Cambridge, MA, USA, October 4, 2007.

129. "Quantitative Protease Proteomics and Pharmacoproteomic Profiling of Substrates, Active Site Specificities and Drug Side Effects", Novartis Institutes for Biomedical Research, Cambridge, MA, USA, October 5, 2007.

130. "Proteolytic Moulding of the Cancer Microenvironment Proteome: Degradomics Cuts to the Answer", Centre for Cancer Therapeutics, Ottawa Health Research Institute, ON, Canada, November 26, 2007.

131. "Proteolytic Modification of the Proteome *in vivo*: Degradomics Cuts to the Answer" Department of Bioinformatics, University of Michigan, MI, USA, November 28, 2007.

132. "Dynamic Regulation of The Chemokine Web and Inflammation by MMP Proteolysis: From Proteomics to Knock-out Mice", School of Dentistry, The University of Michigan, Ann Arbor, MI, USA, 29th November, 2007.

2008

133. "Proteolytic Modification of the Proteome *in vivo*: Degradomics Cuts to the Answer" Weill Cornell Medical College - Physiology, Biophysics and Systems Biology (PBSB) Program, New York, USA, April 7, 2008.

134. "Proteolytic Moulding of the Inflammatory Proteome and Chemokine Signalling Networks: Degradomics Cuts to the Answer" Department of Pharmacology, Stony Brook University, NY, USA, April 8, 2008.

135. "Proteolytic Moulding of the Cancer Microenvironment: Degradomics Cuts to the Answer" Sloan-Kettering Cancer Centre, New York City, New York, USA, April 11, 2008.

136. "Quantitative Proteomics of Proteolytic Post Translational Modification of the Proteome", Department of Biochemistry and Molecular Biology, University of Bern, Bern, Switzerland, 9th May 2008.

137. "Probing Proteolytic Post Translational Modifications of the Proteome Through Quantitative Proteomics", Instituto Universitario de Oncologia, Universidad de Oviedo, Spain, 6th June 2008.

138. "Probing Proteolytic Post Translational Modifications of the Proteome Through Quantitative Proteomics", Johannes Gutenburg Universität, Mainz, Germany, 9th June 2008.

139. "Quantitative Proteomic Analysis of Proteolytic Post Translational Modification of the Tumor Microenvironment: VEGF Mobilization and Regulation of Signalling Networks", B.C. Cancer Research Centre, Vancouver, BC, Canada, June 23, 2008.

140. "Quantitative Proteomic Analysis of Proteolytic Post Translational Modification of the Tumor Microenvironment: VEGF Mobilization and Regulation of Signalling Networks", Flemish Institute for Biotechnology, Ghent, Belgium, September 10, 2008.

141. "Quantitative Proteomic Analysis of Proteolytic Post Translational Modification of the Tumor Microenvironment: VEGF Mobilization and Regulation of Signalling Networks", Institut für Molekulare Medizin und Zellforschung, Albert-Ludwigs-Universität Freiburg, Germany, October 27, 2008.

142. "Metadegradomics: Systems Biology of the Protease Web Revealed by Quantitative N-terminome Analyses", Institut de Biologie et Chimie des Protéine, CNRS, Université Lyon 1, France, 10th December, 2008.

143. "Proteolytic Regulation of the Chemokine Web", University Autonomous of Barcelona, Barcelona, Spain, December 11, 2008.

2009

144. "Proteolytic Regulation of the Chemokine Web", Department of Cellular and Physiological Sciences, University of British Columbia, BC, Canada, January 22, 2009.

145. "Metadegradomics: Systems Biology of the Protease Web Revealed by Quantitative N-terminome Analyses", The Centre Hospitalier Université Laval, Université Laval, Québec City, QC, Canada, April 15, 2009.

146. "Regulation of the Chemokine Web: From Genetic Knockout Mice to Proteomics", 2009 BioConneXion Event, Université Laval, Québec City, QC, Canada, April 15, 2009.

147. "Metadegradomics: Systems Biology of the Protease Web Revealed by Quantitative N-terminome Analyses", Münster, Germany. Westfaelische Wilhelms University, Münster, Germany, June 15, 2009.

148. "MMPs in Breast Cancer Metastasis", INSERM E0336, Institut Pasteur, Paris, France, September 28, 2009.

149. "Metadegradomics: Systems Biology of the Protease Web in Breast Cancer Metastasis Revealed by Quantitative N-terminome Analyses", Centre for Cancer Research, Monash University, Melbourne, Victoria, Australia, November 4, 2009.

2010

150. "MMPs in Breast Cancer Metastasis", Russian Academy of Medical Sciences, Novosibirsk, Russia, February 22, 2010.

151. "Deciphering Roles for MMPs in Regulating Immunity and Cancer Through Proteomics and Genetic Models." iCapture Saint Pauls Hospital, Vancouver BC, Canada, May 21, 2010.

152. "Positional N-terminal and C-terminal Proteomics Deciphers Protein Terminal and Proteolytic Post-Translational Modifications in Complex Proteomes *in vivo*". Shanghai Institute of Systems Biology, Shanghai, China, October 26, 2010.

153. "Positional N- and C-terminal Proteomics Deciphers Protein Termini and Proteolytic Post-Translational Modifications in Complex Proteomes *in vivo*", Institute of Systems Biology, Seattle, USA, November 19, 2010.

154. "Deciphering Roles for MMPs in Regulating Immunity and Cancer Through Proteomics and Genetic Models". Freiburg Institute of Advanced Studies (FRIAS), School of Life Sciences, LifeNet, Albert-Ludwigs Universität Freiburg, Freiburg, Germany, November 22, 2010.

155. "Positional N-terminal and C-terminal Proteomics Deciphers Protein Terminal and Proteolytic Post-Translational Modifications in Complex Proteomes *in vivo",* ZBSA (Centre for Systems Biology), Albert-Ludwigs Universität Freiburg, Freiburg, Germany, November 29 2010.

156. "Travelling to the Ends of the Proteome: Terminomics Deciphers New Signalling Roles for MMPs in the Processing of Moonlighting Intracellular Proteins in the Extracellular Environment". Institute of Cell Biology, ETH, Zurich, Switzerland, December 1, 2010.

2011

157. "Travelling to the Ends of the Proteome: Terminomics Deciphers New Signalling Roles for MMPs in the Processing of Moonlighting Intracellular Proteins in the Extracellular Environment". Department of Chemistry, Edmonton, AB, Canada, January 7, 2011.

158. "Deciphering Roles for MMPs in Regulating Arthritis Progression and Cancer Through Proteomics and Genetic Models". Tur de Pathologie, Leige, Belgium, January 25, 2011.

159. "Deciphering Roles for MMPs in Regulating Arthritis Progression and Cancer Through Proteomics and Genetic Models". Flemish Institute for Biotechnology, Ghent, Belgium, January 31, 2011.

160. "Deciphering Roles for MMPs in Regulating Arthritis Progression and Cancer Through Proteomics and Genetic Models". Faculty of Dentistry Student Research Day, University of Toronto, Toronto, ON, Canada, Feb 15, 2011.

161. "Travelling to the Ends of the Proteome World in Cancer and Inflammation Through Degradomics", Swiss Institute of Bioinformatics (SwissProt), Geneva, Switzerland, April 8, 2011.

162. "Deciphering Roles for MMPs in Regulating Arthritis Progression and Cancer Through Proteomics and Genetic Models". Cardiome Pharma Corporation, Vancouver, BC, Canada, June 14, 2011.

163. "Dissecting Proteolytic Moulded Proteome Landscapes in Inflammation and Breast Cancer by Quantitative Proteomics", Department of Biochemistry & Molecular Biology, University of British Columbia, October 3, 2011.

164. "Travelling to the Ends of the Proteome World in Cancer and Inflammation Through Degradomics", BCCA's Deeley Research Centre, Victoria, BC, Canada, December 7, 2011.

2012

165. "Dissecting Proteolytic Sculpted Proteome Landscapes in Inflammation and Breast Cancer by Quantitative Proteomics". BC Cancer Agency, Vancouver, BC, Canada, March 15, 2012.

166. "Proteomics of Arthritis: New Roles for Regulating Innate Immunity by Chemokine Modifications", Grand Rounds, Department of Rheumatology, the University of British Columbia, BC, Canada, April 13, 2012.

167. "Dissecting Proteolytic Sculpted Proteome Landscapes in Inflammation and Breast Cancer by Quantitative Proteomics". St. Vincent's Institute of Medical Research, Melbourne, Victoria, Australia, October 2, 2012.

2013

168. "Systems-Level Analysis of Proteolytic Events in Increased Vascular Permeability and Complement Activation in Inflammation". ZNE—German Centre for Neurodegenerative Diseases, Ludwig Maximilians Universität München, Germany, February 26, 2013.

169. "Systems-Level Analysis of Proteolytic Events in Increased Vascular Permeability and Complement Activation in Inflammation". Genentech, South San Francisco, CA, USA, April 18, 2013.

170. "Systems-Level Analysis of Proteolytic Events in Increased Vascular Permeability and Complement Activation in Inflammation", Institute for Heart + Lung Health (IHLH), Joint Heart Lung IHLH Quarterly Rounds, Vancouver General Hospital, Vancouver BC, Canada, June 20, 2013.

171. "New Mechanisms Controlling Vascular Permeability in Skin Inflammation Revealed by System Wide Analysis of Inflammation", Department of Cell Biology, Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands, June 24, 2013.

172. "Proteolytic Signatures as Novel Biomarkers of Disease: Technology and Application." Galapagos Pharmaceuticals, Paris, France, December 5, 2013.

173. "A Nuclear Metalloproteinase Drug Target in Viral Infection". Novartis Pharmaceuticals, Basel Switzerland, December 10, 2013.

2014

174. "Deciphering Molecular Pathways of Inflammation and Cancer *in vivo* by Terminomics", Centre for Glycomics, Department of Cellular and Molecular Medicine, Copenhagen, Denmark, February 21, 2014.

175. "A Moonlighting Extracellular Metalloproteinase with Transcriptional Activity is Essential for Interferon alpha Antiviral Immunity", Biomedicum Helsinki, Helsinki, Finland, March 3, 2014.

176. "Deciphering Molecular Pathways of Inflammation and Cancer by Tissue Proteomics and Degradomics", Universität Salzburg, Austria, March 28, 2014.

177. "A New Broad Spectrum Anti-Viral Drug that Boosts Endogenous IFN-γ", Inception Sciences Canada, Vancouver, BC, USA, April 23, 2014.

178. "Deciphering Molecular Pathways of Inflammation and Cancer by Tissue Proteomics and Degradomics", Department of Biochemistry and Molecular Biophysics at Kansas State University, Kansas, USA, May 7, 2014.

179. "Protease Network Crosstalk in Inflammatory Pathways in Inflammation Revealed by TAILS N-Terminomics *in vivo*", Biogenidec, Boston MA, USA, May 9, 2014.

180. "Deciphering Molecular Pathways of Inflammation and Anti-Viral Immunity by Tissue Proteomics and Degradomics", Genentech, South San Francisco, CA, USA, 2014.

181. "The Unexpected Transcriptional Role for Macrophage Metalloproteinase 12 in Interferon-γ Responses and Anti-Viral Immunity", Immunology Department of the Pasteur Institute, Paris, France, October 3, 2014.

182. "Deciphering Molecular Pathways of Inflammation and Anti-Viral Immunity by Tissue Proteomics and Degradomics", Centre for Proteomics and Metabolomics (CPM) at the Leiden University Medical Centre (LUMC) in Leiden, Netherlands, October 31, 2014.

183. "Protease Web Crosstalk in Inflammatory Pathways Revealed by TAILS N-Terminomics *in vivo* Complicates Drug Targeting Validation", Novartis Pharmaceutical, Basel Switzerland, November 4, 2014.

184. "Pervasive Interactions of Proteases and Their Inhibitors Form Protein Networks as Part of a Global Protease Web", University of Freiburg, Germany, November 7, 2014.

185. "The Unexpected Transcriptional Role for Macrophage Metalloproteinase 12 in Innate Immunity and Interferon-γ Responses in Anti-Viral Immunity". The Department of Biomedical and Molecular Sciences, Queens University, Kingston, Ontario, Canada, November 17, 2014.

186. "The Unexpected Transcriptional Role for Macrophage Metalloproteinase 12 in Innate Immunity and Interferon-γ Responses in Anti-Viral Immunity". Department of Immunology, University of Toronto, ON, Canada, November 21, 2014.

187. "The Unexpected Transcriptional Role for Macrophage Metalloproteinase 12 in Innate Immunity and Interferon-γ Responses in Anti-Viral Immunity". Department of Biochemistry, Monash University, Melbourne, Victoria, Australia, December 3, 2014.

2015

188. "Translating Omics to the Clinic: Degradomics Unravelling Mechanisms of Disease", Faculty of Dentistry Board Meeting, UBC Vancouver, BC Canada, March 4, 2015.

189. "The Unexpected Transcriptional Role for Macrophage Metalloproteinase 12 in Innate Immunity and Interferon-γ Responses in Anti-Viral Immunity". Department of Pharmacology and Systems Therapeutics, Icahn School of Medicine, Mount Sinai, New York, NY, USA, September 8, 2015.

190. "MALT1 Hyphenates with Linear Ubiquitination in Lymphocyte Receptor Activation of NFkB", Genentech, San Francisco, CA, USA, September 17, 2015.

191. "MALT1 Hyphenates with Linear Ubiquitination in Lymphocyte Receptor Activation of NFkB", Novartis, Basel Switzerland, December 4, 2015.

2016

192. "MALT1 Hyphenates with Linear Ubiquitination in Lymphocyte Receptor Activation of NFkB", Collaborative Research Group (CRC) on Control of Cell Fate Decisions in the Immune System, Munich, Germany, March 1, 2016.

193. "Systems Biology of the Protease Web", Department of Structural Biology, Molecular Biology Institute of Barcelona, Spain, March 16, 2016.

194. "How Do Proteases in Wound Healing Environments Shape the Inflammatory Response?" Donald Brunette Retirement Symposium, University of British Columbia, Vancouver, BC, Canada, April, 15, 2016.

195. "Pervasive Interactions of Proteases and Their Inhibitors Form Protein Networks as Part of a Global Protease Web", Department of Biomedicine, University of Bergen, Bergen, Norway, June 15, 2016.

196. "TAILS Proteomics of a MALT1 Immunodeficient Patient Reveals A New Substrate in LUBAC to Regulate Linear Ubiquitination in the Immune Synapse During Lymphocyte NF-kB Signalling", Institute of Molecular Health Sciences, ETH Zürich, Hönggerberg, Zurich Switzerland, October 4, 2016.

197. "Analysis of a MALT1 Paracaspase Mutation in an Immunodeficient Patient Reveals New Regulation of LUBAC and Linear Ubiquitination During Lymphocyte NF-kB Signalling", Department of Biochemistry, University of Alberta, Edmonton, AB, November 10, 2016.

2017

198. "New Immunoregulatory Control Mechanisms Dampen Inflammation and Prevent Immunodeficiency Disease Revealed by Proteomics", Department of Oral Biological and Medical Sciences, Faculty of Dentistry, University of British Columbia, Vancouver, BC, Canada, February 1, 2017.

199. "Positional Proteomics Analyses Reveals New Pathologic Mechanisms and Biomarkers of Disease", Leibniz-Institut für Analytische Wissenschaften-ISAS-e.V., Dortmund, Germany, February 16, 2017.

200. "Positional Proteomics Analyses Reveals New Pathologic Mechanisms and Proteolytic Biomarkers of Disease", Department of Biochemistry, Purdue University, West Lafayette, Indiana, USA, March 28, 2017.

201. "New Immunoregulatory Control Mechanisms Dampen Inflammation and Prevent Immunodeficiency Disease Revealed by Proteomics", Pasteur Institute of Tehran, Tehran, Iran, May 2, 2017.

202. "Can Proteomics Fill the Gap between Genomics and Phenotypes? The Human Proteome Project", Division of Cardiology, University of British Columbia Department of Paediatrics, British Columbia Children's Hospital, Vancouver, B.C., May 16, 2017.

203. "Positional Proteomics Analyses Reveals New Pathologic Mechanisms and Proteolytic Biomarkers of Disease", Genentech, San Francisco, CA, USA, May 26, 2017.

2018

204. "Protein TAILS Tell Remarkable Tales: Probing the N-terminome for Mechanistic Insight into Proteolytic Pathways *in vivo*", Department of Biochemistry, Monash University, Melbourne Victoria, Australia, Feb. 9, 2018.

205. "A Pharmacologic Molecular Corrector Rescues Mutant MALT1 Paracaspase Activity and NFkB Activation in a Patient Suffering from Combined Immunodeficiency", Institute of Molecular Medicine and Cell Research, Albert-Ludwigs Universität Freiburg, Freiburg, Germany, March 6, 2018.

206. "Translating N-Terminomics Data: A Pharmacologic Molecular Corrector Rescues Mutant MALT1 Paracaspase Activity and NFkB Activation in a Patient Suffering from Combined Immunodeficiency", Swiss Institute of Bioinformatics (SwissProt), Geneva, Switzerland, March 8, 2018.

207. "Protein TAILS Tell Remarkable Tales: Probing the N-terminome for Mechanistic Insight into Proteolytic Pathways *in vivo*", Lerner Research Institute, Cleveland Clinic, Ohio, USA, March 14, 2018.

208. "Positional Proteomics Analyses Reveals New Pathologic Mechanisms and Proteolytic Biomarkers of Disease", Department of Biology, University of Waterloo, Ontario, Canada, March 16, 2018.

209. "New Immunoregulatory Control Mechanisms Dampen Inflammation and Prevent Immunodeficiency Disease Revealed by Proteomics", College of Dentistry, Yonsei University, Seoul, Korea, March 28, 2018.

210. "TAILS N-Terminal Positional Proteomics. Translating Proteomics to Human Immunodeficiency Disease and New Therapies", Department of Biochemistry, Yonsei University, Seoul, Korea, March 28, 2018.

211. "Translating N-Terminomics Data: A Pharmacologic Molecular Corrector Rescues NFkB Activation in Combined Immunodeficiency", Montreal Clinical Research Institute (IRCM), Montreal, QC, Canada, April 19, 2018.

212. "Translating N-Terminomics Data: A Pharmacologic Molecular Corrector Rescues Mutant MALT1 Paracaspase Activity and NFkB Activation in a Patient with Combined Immunodeficiency", VIB, Ghent, Belgium, April 23, 2018.

213. "Positional Proteomics Analyses Reveals New Pathologic Mechanisms and Proteolytic Biomarkers of Disease", Institute of Organic Chemistry and Biochemistry, Charles University, Prague, Czech Republic, July 13, 2018.

214. "Translating N-Terminomics Data: "A Potent MALT1 Inhibitor is a Molecular Corrector that Rescues Mutant MALT1 Activity and Functions in an Immunodeficient Patient", University of Strasbourg, France, Sept. 4, 2018.

215. **The Xingda Lecture:** "N-terminomics. How TAILS Positional Proteomics Mechanistically Deciphers Pathology and led to an Allosteric Molecular Corrector Rescuing Function in an Immunodeficient Patient", Department of Chemistry, Peking University, Beijing, China, October 19, 2018.

216. "Translating N-Terminomics Data: "A Potent MALT1 Inhibitor is a Molecular Corrector that Rescues Mutant MALT1 Activity and Functions in an Immunodeficient Patient", Genentech, San Francisco, CA, USA, November 13, 2018.

217. "N-terminomics. How TAILS Positional Proteomics Mechanistically Deciphers Pathology and led to an Allosteric Molecular Corrector Rescuing Function in an Immunodeficient Patient", Faculty of Pharmaceutical Sciences, UBC, November 21, 2018.

218. "Degradomics: Overview, Methods, and Experimental Strategies", University of Cape Town, Cape Town, South Africa, November 28, 2018.

219. "Translating N-Terminomics Data: "A Potent MALT1 Inhibitor is a Molecular Corrector that Rescues Mutant MALT1 Activity and Functions in an Immunodeficient Patient", University of Cape Town, Cape Town, South Africa, December 4, 2018.

220. "Loss of Interferon Receptor Binding by Precision Cleavage of Interferon alpha and gamma in Viral Infection and Autoimmunity", University of Cape Town, Cape Town, South Africa, December 5, 2018.

2019

221. "Proteolytic Regulation of Inflammation and Healing", Faculty of Dentistry Research Day, University of British Columbia, Vancouver, BC Canada, January 22, 2019.

222. "Proteases, Immunity, Chemical Biology", UBC Biochemistry, Pharmacology and Physiology Club, University of British Columbia, Vancouver, BC Canada, February 6, 2019.

223. "Deploying Protease Degradomics Platforms and a Molecular Corrector of Lymphocyte Mutant MALT1 in an Immunodeficient Patient", Life Sciences Institute, UBC, Vancouver BC, Canada, March 29, 2019.

224. "A Molecular Prosthetic Rescues NF-kB Activation by the Immune Protease, MALT1". Faculty of Dentistry, McGill University, Montreal, QC, April 29, 2019.

225. **"**Target Identification by TAILS N-Terminal Positional Proteomics and a Pharmacological Molecular Corrector to Increase Mutant MALT1 Impaired NF-kB Activation in Immunodeficiency", Department of Chemistry, Wroclaw University of Science and Technology, Wroclaw, Poland, June 7, 2019.

226. **"**A New Molecular Corrector of MALT1 Rescues Mutant MALT1 and Lymphocyte Functions in an Immunodeficient Patient." Peter MacCallum Cancer Centre, Melbourne, Victoria, Australia, September 10, 2019.

227. "Degradomics: Overview, Methods, and Experimental Strategies", Degradomics Workshop, University of Kiel, Institute of Biochemistry, Germany, September 2019. (*Declined*)

228. "Pervasive Interactions in the Protease Web and within the Proteome. Therapeutic Challenges and Successes", CytomX Therapeutics: Symposium on Proteases & Human Disease, December 5, 2019.

229. "Positional Proteomics to Decipher Biological and Pathological Processes", Institute of Molecular Medicine and Cell Research, Albert-Ludwigs Universität Freiburg, Freiburg, Germany, December 13, 2019.

2020

230. "MALT1 Inhibition for the Treatment of Lymphoma and Enhancement in Immunodeficiency Disease", Department of Haematology, Faculty of Medicine, University of British Columbia, January 23, 2020.

2021

231. "The Cellular *coup d'état* Executed by SARS-CoV2 Proteases to Escape Autophagy and ISG Innate Defences", University of Strasbourg, France, October 10, 2021.

232. "The Proteolytic Landscape of SARS-CoV-2 3CLpro in COVID-19", COVID-MAP, Luxemburg, November 25, 2021 (*virtual*).

233. "The Proteolytic Landscape of SARS-CoV-2 3CLpro in COVID-19", National Institutes of Health, Proteomics Interest Group, USA, December 9, 2021 (*virtual*).

234. "The Proteolytic Landscape of SARS-CoV-2 3CLpro in COVID-19", Genentech, San Francisco, CA, USA, December 10, 2021 (*virtual*).

235. "The Proteolytic Landscape of SARS-CoV-2 3CLpro in COVID-19", Department of Anatomy and Cell Biology, Faculty of Dentistry, McGill University, Montreal, QC, December 15, 2021 (*virtual*).

2022

236. "The Cellular *coup d'état* Executed by SARS-CoV2 Proteases to Escape Autophagy and ISG Innate Defences", Institut Pasteur, Paris, France, November 15, 2022.

237. Chair, Journal Editor Discussion Panel for CNPN Spotlight Series, Montreal, November 29, 2022.

2023

238. "The Cellular *coup d'état* Executed by SARS-CoV2 Proteases to Escape Autophagy and ISG Innate Defences", Life Sciences Institute, University of British Columbia, Vancouver, BC, Canada, January 6, 2023.

239. "Advice for a Young Scientist," Award lecture, 2023 UBC Faculty of Pharmaceutical Sciences Graduate and Postdoctoral Research Symposium, UBC, Vancouver, BC, May 4, 2023.

240. "Leave No Substrates Behind – The Viral Protease Cellular *coup d'état* in COVID-19", Protease Graduate School, Albert-Ludwigs Universität Freiburg, Freiburg, Germany, May 25, 2023.

241. "The Great Escape: Tunneling Nanotube Stealth Intercellular Infection in COVID-19 Executed by 3CLpro Main Protease", University of Strasbourg, Strasbourg, France, October 30, 2023.

242. "The Great Escape: Tunneling Nanotube Intercellular Stealth Infection in COVID-19 Executed by 3CLpro Main Protease", Department of Immunology, University of Toronto, ON, Canada, November 4, 2023.

2024

243. "The Great Escape: Tunnelling Nanotube Intercellular Stealth Infection in COVID-19 Engineered by 3CLpro Main Protease", Department of Biochemistry, University of Alberta, AB, Canada, April 12, 2024.

244. "Protein TAILS Tell Remarkable Tales: Purification of Original and Neo-Protein Termini Reveals Pervasive Proteolytic Processing in Proteomes," Institute for Integrative Biology of the Cell, CNRS, Gif-sur-Yvette CEDEX, France, April 22, 2024.

245. "How to Increase Protease Activity in Disease: A Pharmacological Molecular Corrector for a Patient with Mutant MALT1 in Immunodeficiency", Chemical Genomics Leader Research Initiative, Yonsei University, Seoul, Republic of Korea, June 3, 2024.

246. "The Great Escape of SARS-CoV-2 by $3CL^{pro}$ Uncovered by TAILS and ICDC-Interactomics", Adelaide University, Clinical and Health Sciences, South Australia, August 14, 2024.

2025

247. "Caspase and $3CL^{pro}$ Activation of Gasdermin D Pores Leads to Extracellular Secretion of SARS-CoV-2 3CLpro (MPro)", Institute of Molecular Bioscience, The University of Queensland, February 19, 2025.

248. "Caspase and $3CL^{pro}$ Activation of Gasdermin D Pores Leads to Extracellular Secretion of SARS-CoV-2 3CLpro (MPro)", Jagiellonian University, Institute of Molecular Biology, Krakow, Poland, March 7, 2025.

249. "The Great Escape of SARS-CoV-2 by $3CL^{pro}$ Uncovered by TAILS and ICDC-Interactomics", Department of Molecular Medicine, Morsani College of Medicine, University of South Florida, FL, USA, March 26, 2025.

250. Caspase and $3CL^{pro}$ Activation of Gasdermin D Pores Leads to Extracellular Secretion of SARS-CoV-2 $3CL^{pro}$ (M^{Pro})", Department of Chemistry, University of São Paulo, São Paulo, Brazil, Oct. 17, 2025.

Honorary Lectureships (Selected)

Alberta Heritage Foundation for Medical Research Visiting Lecturer	1995, 1999, 2000
Faculty Forum, Faculty of Dentistry, U.B.C	1996, 1999
Distinguished Speaker, Centre for Cancer Therapeutics, Ottawa Health Research Institute	November 26, 2007
Mentor, HUPO Education Day, 5th HUPO World Congress, Taipei, Taiwan	September 18, 2016
Visiting Professor Pro Tempore, Cleveland Clinic	March 14 – 15, 2018
The Xing Da Lectureship, Peking University, Beijing, China	October 17 –19, 2018
Visiting Scholar, University of Cape Town, Cape Town, South Africa	Nov. 26 – Dec. 7, 2018
The International Union of Biochemistry and Molecular Biology Lecture, Bled, Slovenia	September 19, 2022

(e) Conference Participation (Organizer, Session Chair, SAB)

1988 – 1997

Session Co-Chairman, “Periodontal Research—Pathogenesis”, 66th General Session of the International Association for Dental Research, Montreal, QC, Canada, 1988.

9th Annual Northwest Regional IADR Meeting, BC, Canada, October 1989: Local Arrangements Committee, Symposia Chairman "Indicators of Periodontal Disease", Student Awards Judge.

Session Chairman, “Periodontal Research, Pathogenesis and Modulators of Host Response”, 71st General Session of the International Association for Dental Research, Chicago, USA, March 1993.

13th Annual Northwest Regional International Association for Dental Research Meeting, Local Arrangements Committee, March 1993.

Invited Scientist for “Lunch and Learning”, 75th General Session of the International Association for Dental Research, Orlando, FL, USA, March 19 – 23, 1997.

Short-listed for the Chair of the 2001 MMP Gordon Research Conference, 1997.

1998

Invited International Symposia Speaker, the Matrix Biology Society of Australia and New Zealand Annual Meeting, “Metalloproteinases”, Adelaide, South Australia, September 1998.

Invited International Symposia Speaker, the Matrix Biology Society of Australia and New Zealand Annual Meeting, “Commercialization of the Matrix”, Adelaide, South Australia, September 1998.

Invited International Symposia Speaker, “Extracellular Matrix in Development”, the Australian and New Zealand Society of Cell and Developmental Biology 17th Annual Meeting, Adelaide, South Australia, September 1998.

Invited International Symposia Speaker, 42nd Annual Australian Society for Biochemistry and Molecular Biology Annual Meeting, “MMPs”, Adelaide, South Australia, September 1998.

1999

Invited Symposia Speaker “Life at the Edge: Matrix Remodeling and Signalling at Cell Adhesions”. 77th General Session of the International Association for Dental Research, Vancouver, BC, Canada, March 1999.

Session Chairman, “Matrix Metalloproteinases: Bone Regulation”. 77th General Session of the International Association for Dental Research, Vancouver, BC, Canada, March 1999.

Short-Listed for the International Proteolysis Society Executive Committee, 1999.

Session 1 Chairman, “Molecular Biology of the Extracellular Matrix”, 4th Pan Pacific Connective Tissue Societies Symposium, Queenstown, New Zealand, November 1999.

2000 – 2002

Elected Vice Chairman, 2001 MMP Gordon Research Conference, Il Ciocco, Tuscany, Italy.

Session Chairman, “Metalloproteinase Inhibitors in Tumor Progression”, Membrane-Bound Proteolytic Enzymes and Cancer”, May 2001, Palermo, Italy.

International Scientific Advisory Board, The 2nd General Meeting of the International Proteolysis Society, Freising, Germany, October 2001.

2003

Session Chairman, “MMPs in Health and Diseases”, 5th Pan Pacific Connective Tissue Societies Symposium, Ube, Japan, June 2003.

Program Advisory Committee, Canadian Connective Tissue Society Annual General Meeting, June 2003.

Symposium Chair, 6th World Congress on Inflammation, Vancouver, BC, Canada, August 2003.

Chairman, Matrix Metalloproteinase Symposium, 6th World Congress on Inflammation, Vancouver, BC, August 2003.

Elected Chairman, Matrix Metalloproteinase Gordon Research Conference, Big Sky, Montana, August 17 – 22, 2003.

Session Chairman, "MMPs: Signalling Proteases", Matrix Metalloproteinase Gordon Research Conference, Big Sky, Montana, USA, August 17 – 22, 2003.

Advisory Group, Session Moderator and Speaker at the "Signalling Scissors: New Perspectives on Proteases" Nature Horizons Symposium, Palazzo Arzaga, Italy, 23 – 25 October 2003.

2004

Session Chair and Faculty Member, 21st Winter School on Proteinases and their Inhibitors, Tiers, Italy, February 25 – 29, 2004.

Co-organizer with Drs. Guy Salvesen and Matt Bogyo, 1st Pacific Coast Protease Workshop, Half Moon Bay, CA, USA, April 24 – 26, 2004.

Session Chairman, Second Chianti Meeting on Proteases: Cross-talk Between Proteinases and the Extracellular Environment, Certosa di Pontignano, Siena, Italy, May 16 – 20, 2004.

Member Organizing Committee, Peter Wall Institute for Advanced Studies Exploratory Workshop "Designing the Canadian Blood System of Tomorrow", UBC, Vancouver, BC, Canada, June 14 – 15, 2004.

Session Chairman, "Genomics and Degradomics", Protease and Inhibitors Gordon Research Conference, Colby Sawyer, NH, USA, July 4 – 9, 2004.

International Speaker Lunch and Learning, ComBio 2004, Perth, Australia, September 26 – 30, 2004.

Scientific Advisory Board, Eighth International Conference on the Chemistry and Biology of Mineralized Connective Tissues, Banff, AB, Canada, October 2004.

2005

Session Chair and Faculty Member, 22nd Winter School on Proteinases and their Inhibitors, Tiers, Italy, March 2 – 6, 2005.

Co-organizer with Drs. Guy Salvesen and Matt Bogyo, 2nd Pacific Coast Protease Workshop, Half Moon Bay, CA, USA, April 29 – May 2, 2005.

Session Chair, IXth International Symposium on Protease Inhibitors & Biology, Brdo, Slovenia, June 25 – 29, 2005.

International Scientific and Program Advisory Committee Member, Matrix Metalloproteinase Gordon Research Conference, Big Sky, Montana, USA, August 2005.

Session Chair, Metalloproteinases in the Nervous System—Neurodegenerative Diseases, Memory and Aging, Matrix Metalloproteinase Gordon Research Conference, Big Sky, Montana, USA, August 2005.

Session Chair and Plenary Summary, 3rd Symposium of the International Consortium on Anti-Virals, Peterborough, ON, Canada, September 2005.

International Scientific Advisory Board, The 4th General Meeting of the International Proteolysis Society, Quebec City, QC, Canada, October 2005.

2006

Session Chair and Faculty Member, 23rd Winter School on Proteinases and their Inhibitors, Tiers, Italy, March 1 – 4, 2006.

Co-organizer with Drs. Guy Salvesen and Matt Bogyo, 3rd Pacific Coast Protease Workshop, Desert Hot Springs, CA, USA, April 21 – 24, 2006.

Canadian Association of Biochemistry and Molecular Biology Workshop Organizer, "Degradomics. Systems Biology of the Protease Web Workshop", Edmonton, AB, Canada, May 8 – 9, 2006.

Opening Session Chair, “Degradomics. Systems Biology of Protease Web Workshop”, Edmonton, AB, May 8, 2006.

Opening Session Chair, “Developments in Imaging and Mass Spec Applications”, 18th International Congress on Fibrinolysis and Proteolysis: Proteolysis in the Postgenomic Era, San Diego, CA, USA, August 27 – 31, 2006.

International Organizing Committee, 18th International Congress on Fibrinolysis and Proteolysis: Proteolysis in the Postgenomic Era, San Diego, CA, USA, August 27 – 31, 2006.

Session Chair, Models in Matrix Biology at the “Multi-dimensional Matrix Meeting”, The British Society for Matrix Biology, Newcastle, UK, September 5 – 6, 2006.

Session Chair, MMPs Part 2, at the “Metzincin Metalloproteinases in Health and Disease” Meeting, Centro Stefano Franscini, Monte Vérità, Ascona, Switzerland, September 24 – 29, 2006.

2007

Session Chair and Faculty Member, 24th Winter School on Proteinases and their Inhibitors, Tiers, Italy, February 28 – March 3, 2007.

Co-organizer with Drs. Guy Salvesen and Matt Bogyo, 4th Pacific Coast Protease Workshop, Palm Springs, CA, USA, April 27 – 30, 2006.

Session Chair, “Towards a New Generation of Metalloproteinase Inhibitors”, Matrix Metalloproteinase Gordon Research Conference, Il Ciocco, Barga, Italy, June 3 – 8, 2007.

Organizing Committee, 5th General Meeting, International Proteolysis Society, Patras, Greece, October 20 – 24, 2007.

Session Chair, “Proteomics and Degradomics”, 5th General Meeting of the International Proteolysis Society, Patras, Greece, October 20 – 24, 2007.

Session Chair, “Metalloproteinases and Matrix Turnover”, 7th Pan Pacific Connective Tissue Societies Symposium, Cairns, Australia, October 28 – November 1, 2007.

2008

Session Chair and Faculty Member, 25th Winter School on Proteinases and their Inhibitors, Tiers, Italy, February 27 – March 2, 2008.

Co-organizer with Drs. Guy Salvesen and Matt Bogyo, 5th Pacific Coast Protease Workshop, Borrego Springs, CA, USA, April 25 – 28, 2008.

Elected Vice Chair, Protease and Inhibitors Gordon Research Conference, Colby Sawyer, NH, USA, July 6 – 10, 2008.

Session Chair, “Hot Topics in Protease Research”, Protease and Inhibitors Gordon Research Conference, Colby Sawyer, NH, USA, July 6 – 10, 2008.

Co-Organizer, “2008 Symposium on Proteases in Cell Signalling”, Ames, Iowa, USA, September 18 – 21, 2008.

Session Chair, “Cytokine and Chemokine Processing”, 2008 GFST Symposium on Proteases in Cell Signalling, Ames, Iowa, USA, September 18 – 21, 2008.

2009

Session Chair and Faculty Member, 26th Winter School on Proteinases and their Inhibitors, Tiers, Italy, February 26 – March 1, 2009.

Co-Organizer with Drs. Guy Salvesen and Matt Bogyo, 6th Pacific Coast Protease Workshop, Warner Springs, CA, USA, April 18 – 21, 2009.

Session Chair, “Cell Biology and Substrate Identification”, Matrix Metalloproteinase Gordon Research Conference, Les Diablerets, Switzerland, August 30 – September 4, 2009.

Session Chair, 1st International Congress on Analytical Proteomics, Caparica, Portugal, Sept. 30 – October 3, 2009.

Session Chair, "Degradomics" International Proteolysis Society 2009 6th Annual Meeting, Brisbane, Queensland, Australia, October 27, 2009.

Scientific Advisory Board, 6th Annual Meeting International Proteolysis Society 2009.

2010

Session Chair and Faculty Member, 27th Winter School on Proteinases and their Inhibitors, Tiers, Italy, February 24 – March 28, 2010.

Co-Organizer with Drs. Guy Salvesen and Matt Bogyo, 7th Pacific Coast Protease Workshop, Borrego Springs, CA, USA, April 18 – 21, 2010.

Elected Chairman, Proteolytic Enzymes & Inhibitors Gordon Research Conference, Il Ciocco, Luca, Italy, May 2010.

Session Chairman, "Degradomics", Proteolytic Enzymes & Inhibitors Gordon Research Conference, Il Ciocco, Luca, Italy, May 2010.

Workshop Chair, "Synthesis and Remodeling of ECM", XXII Meeting of the Federation of European Connective Tissue Societies (FECTS), Davos, Switzerland, July 3 – 7, 2010.

2011

Session Chair and Faculty Member, 28th Winter School on Proteinases and their Inhibitors, Tiers, Italy, February 23 – 27, 2011.

7th Annual Meeting International Proteolysis Society 2011, Scientific Advisory Board.

International Committee of the Chairs, 2nd International Congress on Analytical Proteomics, Ourense, Spain, July 19 – 21, 2011.

Session Chairman, "Metalloproteinases in the Omics Era", Matrix Metalloproteinases Gordon Research Conference, Bryant College, RI, USA, August 7 – 12, 2011.

2012

Organizer of AAAS Symposium "Can Proteomics Fill the Gap Between the Genome and Phenotypes?" 2012 AAAS Annual Meeting in Vancouver, BC, Canada, February 16 – 20, 2012. *Featured symposium by AAAS for the media.*

Session Chair and Faculty Member, 29th Winter School on Proteinases and their Inhibitors, Tiers, Italy, February 29 – March 3, 2012.

Co-Organizer with Drs. Guy Salvesen and Matt Bogyo, 9th Pacific Coast Protease Workshop, Temecula, CA, USA, April 22 – 25, 2012.

Member, Executive Committee of Management: Cascadia Proteomics Symposium, Seattle, WA, USA, July 19 – 21, 2012.

Session Chair Molecular Biology, Cascadia Proteomics Symposium, Seattle, WA, USA, July 19 – 21, 2012.

Session Chair, Connective Tissue Remodeling, Matrix Biology Society of Australia and New Zealand Annual Meeting, Surfers Paradise, Queensland, Australia, September 5 – 8, 2012.

2013

Session Chair and Faculty Member, 30th Winter School on Proteinases and their Inhibitors, Tiers, Italy, February 27 – March 2, 2013.

Meeting Chair and Organizer, 5th Canadian National Proteomics Network Symposium, Vancouver BC, April 20 – 24, 2013.

Session Chair, Cascadia Proteomics Symposium, Seattle, WA, USA, July 14 – 16, 2013.

Session Chair, 3rd Vancouver Post-ASMS Symposium, Vancouver, BC, October 3, 2013.

Session Chair, 8th General Meeting of the International Proteolysis Society, 20 – 24 October 2013, Cape Town, South Africa.

2014

Session Chair and Faculty Member, 31th Winter School on Proteinases and their Inhibitors, Tiers, Italy, February 26 – March 1, 2014.

Session Chair, Serpins and Signal Transduction, 7th International Symposium on the Chemistry and Biology of Serpins, Leogang, Austria, March 29 – April 2, 2014.

Session Chair, Best Abstracts Talks, 7th International Symposium on the Chemistry and Biology of Serpins, Leogang, Austria, March 29 – April 2, 2014.

Session Chair, Protein Interactions & Structure, US HUPO 10th Annual Conference, Seattle, WA, April 6 – 9, 2014.

Session Chair, Lightning Talks II, US HUPO 10th Annual Conference, Seattle, WA, April 6 – 9, 2014.

Panellist, Careers in Science, Protease Gordon Research Symposium, Il Ciocco, Barga, Italy, June 22, 2014.

Session Chair, Systems Biology, Proteolytic Enzymes & Inhibitors Gordon Research Conference, Il Ciocco, Luca, Italy, June 22 – 27, 2014.

Session Chair, 14th Symposium Proteases, Inhibitors and Biological Control, Portorož, Slovenia, September 6 – 10, 2014.

Panellist, 13th HUPO General Meeting, Human Infectious Disease-Human Proteome Project (HID-HPP) Madrid, Spain, October 5 – 8, 2014.

Panellist, Careers in Bioinformatics, Monash Academy for Cross & Interdisciplinary Mathematical Applications, Melbourne, Victoria, Australia, December 1 – 5, 2014.

2015

Session Chair, Microbiology and Virology Proteomics, European Proteomics Organization 2015, IXth Annual Conference, Milano, Italy, June 23 – 25, 2015.

C-HPP Workshop Organizing Committee, Milano, Italy, June 23, 2015.

Session Chair, "Metalloproteinase Regulation in the Intra-, Peri-, and Extracellular Space", MMP Gordon Research Conference, Newry, ME, USA, August 2 – 7, 2015.

HUPO 2015 Local Organizing Committee Member, 14th Human Proteomics Organization World Congress (HUPO 2015), Vancouver, BC, Canada, September 27 – 30, 2015.

Preconference Workshop Organizer "TAILS N-Terminal Proteomics", 14th Human Proteomics Organization World Congress (HUPO 2015), Vancouver, BC, Canada, September 27 – 30, 2015.

Session and Organizer Chair "Proteomics and Cell Immunity", 14th Human Proteomics Organization World Congress (HUPO 2015), Vancouver, BC, Canada, September 27 – 30, 2015.

Session Co-Chair with Dr. Bill Hancock New Technologies Session, 14th Human Proteomics Organization World Congress (HUPO 2015), Vancouver, BC, Canada, September 27 – 30, 2015.

Session Chair, "At the Cutting Edge: Diversity of Protease Actions in Chronic Lung Diseases", European Respiratory Society Research Seminar "Proteases at the Cutting-edge: Friends or Foes in Chronic Lung Diseases", Amsterdam, Netherlands, November 11 – 13, 2015.

2016

Faculty, 33rd Winter School on Proteinases and their Inhibitors, Tiers, Italy, February 25 – February 28, 2016.

Session Chair, "Proteome Dynamics: Stability, Turnover and Degradomics", 15th HUPO World Congress (HUPO-2016), Taipei, Taiwan, September 19 – 21, 2016.

Session Chair, "Proteases and their Inhibitors", The 2016 American Society of Matrix Biology Meeting "The ECM Microenvironment: A Regulatory Force in Aging and Disease", November 13 – 17, Saint Petersburg, FL, USA.

2017

Session Chair and Faculty, 34th Winter School on Proteinases and their Inhibitors, Tiers, Italy, March 8 – 11, 2017.

Session Chair, "Uncovering Missing Proteins by Using Various Biological and Clinical Samples", 17th C-HPP Workshop, Tehran, Iran, April 27 – 28, 2017.

Session Co-Chair, "Networking and Interaction through the C-HPP Clusters", 17th C-HPP Workshop, Tehran, Iran, April 27 – 28, 2017.

Panel Member, "Career Mentoring", MMP Gordon Research Symposium, University of New England, Biddeford, ME, USA, July 8 – 9, 2017.

Session Chair, "Target Practice III. MMPs: Critical Effectors in Inflammation", MMP Gordon Research Conference, University of New England, Biddeford, ME, USA, July 9 – 14, 2017

Session Chair, "Tumor Microenvironment Systems Biology", Symposium on Proteases and the Tumour Microenvironment 2017", Monash University Prato Centre, Prato, Italy, July 24 – 26, 2017.

Session Chair, "C-HPP Session", 16th Human Proteome Organization World Congress (HUPO-2017), Dublin, Ireland, September 17, 2017.

Session Chair, "Status of the Missing Proteins NeXt-50 Challenge", Human Proteome Project Workshop, University College Dublin, Ireland, September 21, 2017.

Session Chair, "Proteomics: Emerging Trends in Proteomics", The Omics Revolution: Towards Personalised Medicine, Noosa Heads, Queensland, Australia, October 15, 2017.

Session Chair, "Omics Applications", 12th Australian Peptide Conference, Noosa, Qsl, Australia, October 16 – 19, 2017.

Chair, Degradomics Workshop, International Proteolysis Society 10th Annual Meeting, Calgary, AB, October 27 – 28, 2017.

Co-Chair / Co-Organizer, "International Proteolysis Society 10th Annual Meeting, Banff, AB, Oct 28 – November 2, 2017.

Co-Chair / Co-Organizer, "Degradomics: Overview, Methods, and Experimental Strategies", International Proteolysis Society Degradomics Workshop, University of Alberta, AB, Canada, October 27, 2017.

Session Chair, "Proteomics and Systems Biology", International Proteolysis Society 10th Annual Meeting, Banff, AB, October 28 – November 2, 2017.

2018

Faculty, 35th Winter School on Proteinases and their Inhibitors, Tiers, Italy, February 28 – March 4, 2018.

Session Chair, Proteases as Cellular Signalling Molecules, Proteolytic Enzymes & Inhibitors Gordon Research Conference, Il Ciocco, Luca, Italy, June 3 – 8, 2018.

Session Chair, NeXt-MP50, 19th C-HPP Symposium, Santiago de Compostela, Spain, June 16 – 17, 2018.

Session Chair, Disease Proteomics, Cascadia Proteomics Workshop, Seattle, July 22 – 24, 2018.

Session Chair, Protease Based Therapeutics, Inhibitors, Mechanisms, FEBS Workshop on Proteases, Inhibitors and Biological Control", Portorož, Slovenia, September 8 – 12, 2018.

Session Chair, C-HPP, HUPO Human Proteome Project Workshop, 17th Annual World Conference, Orlando, FL, September 30 – October 3, 2018.

Session Chair, Activity/Chemical Proteomics Session, HUPO (Human Proteome Organization) 17th Annual World Conference, Orlando, FL, September 30 – October 3, 2018.

Panel Member, Future Directions for the HPP, HPP Workshop, Orlando, FL, October 4, 2018.

2019

Faculty and Session Chair, 36th Winter School on Proteinases and their Inhibitors, Tiers, Italy, March 13 – March 17, 2019.

Session Chair, "Novel Substrates and Pathways", Matrix Metalloproteinase Gordon Research Conference, Il Ciocco, Barga, Italy, May 12 – 17, 2019.

Co-Chair, 21st Chromosome-Centric Human Proteome Project Symposium, "Illuminating the Dark Proteome", Saint Malo, France, May 12 –14, 2019.

Co-Chair, the HUPO Human Proteome Project (HPP) C-HPP 22nd Workshop, Adelaide S.A., Australia, September 15, 2019.

Session Chair, Illuminating the Dark Proteome, the HUPO Human Proteome Project Workshop, Adelaide S.A., Australia, September 15, 2019.

Tutor and organiser. Premeeting Trainee Workshop "Degradomics: Overview, Methods, and Experimental Strategies", Degradomics Workshop, Pre-International Proteolysis Society Workshop, Prague, Czech Republic, September 28 – 29, 2019.

2020

Faculty, and Session Chair, 37th Winter School on Proteinases and their Inhibitors, Tiers, Italy, March 4 – March 7, 2020.

Co-Chair and Scientific Advisory Board Member, 23rd C-HPP, HUPO Workshop, St. Petersburg, Russia, May, 2020, *cancelled due to COVID-19*.

Scientific Board Member, 19th Human Proteome Organization World Congress (HUPO 2020 Stockholm), October 2020.

2021

Faculty, and Session Chair, 38th Virtual Winter School on Proteinases and their Inhibitors, Tiers, Italy, February 16 – 18, 2021.

Scientific Board Member, 20th Human Proteome Organization World Congress (HUPO 2021), Stockholm, Sweden, October 24 – 28, 2021.

Panelist, Biology of Disease B/D-HPP Webinar "PTMs in Human Disease", April 26, 2021.

Chair, 23rd C-HPP Workshop, Busan, South Korea, June 29 – July 1, 2021 (*postponed*).

Co-Chair, C-HPP Session, 10th Asia-Oceania HUPO Conference, Busan, South Korea, June 29 – July 1, 2021. (*postponed*).

Session Chair, C-HPP Session, Human Proteome Project Day, Human Proteome Organization World Congress (HUPO 2021), Stockholm, Sweden, October 24 – 28, 2021 (*postponed*).

2022

Faculty and Session Chair, 39th Virtual Winter School on Proteinases and their Inhibitors, February 16 – 18, 2022.

Session Chair, Proteomics Meets Virology — Viral Proteomics, Proteomic Forum / XIV Annual Congress of the European Proteomics Association, Leipzig, Germany, April 3 – 7, 2022.

Organizer and Chair, 23rd Chromosome Centric Human Proteome Project Workshop, Vilamoura, Portugal, May 13 – 14, 2022.

Session Chair, FASEB 2022 Matricellular Protein Meeting, Lisbon, Portugal, July 11, 2022.

Session Chair, Proteolysis at the Interface between Health and Disease, Bled, Slovenia, September 20, 2022.

UBC Sole Representative, G7 Research Summit, Lake Louise, AB, Canada, November 21 –23, 2022.

Session Chair, HUPO (Human Proteome Organization) Chromosome-Centric Human Proteome Project (C-HPP) Workshop, HUPO 21st Annual World Conference, Cancun, Mexico, December 4, 2022.

Scientific Board Member, HUPO (Human Proteome Organization) 21st Annual World Conference, Cancun, Mexico, December 4 – 7, 2022.

Panelist, HUPO Human Proteome Project Grand Project, HPP Day Workshop, HUPO 21st Annual World Conference, Cancun, Mexico, December 8, 2022.

2023

Faculty and Session Chair, 40th Winter School on Proteinases and their Inhibitors, Tiers, Italy, March 1 – 5, 2023.

Tutor and Organiser. Premeeting Trainee Workshop on Protease Proteomics Techniques and Data Analysis", 12th General Meeting of the International Proteolysis Society, Singapore, June 24, 2023.

Session Chair, Cascadia Proteomics Meeting, Seattle, WA, July 17, 2023.

Member, International Advisory Committee (IAC), HUPO (Human Proteome Organization) 22nd Annual World Conference, Busan, Korea, September 17 – 21, 2023.

Organiser and Chair, 24th Chromosome-Centric Human Proteome Project (C-HPP) Workshop, Busan, Korea, September 21, 2023.

Sole Canadian Representative, Kick-off meeting of the International Academy of Phronesis Medicine (Guangdong), South China Institute of Biomedicine, Guangzhou, China, September 22, 2023.

Panelist and Advisor, Proteomic Navigator of the Human Body (π-HuB) Project, Guangzhou, China, September 22, 2023.

Advisor, Proteomic Navigator of the Human Body (π-HuB) Project, Westlake University, Hanzhou, September 27, 2023.

Glycoproteomics Session Chair, The Omics Revolution: Translation and Beyond, Brisbane, Australia, 15th October 2023.

2024

Session Chair, Lorne Proteomics, Symposium Six: Disease Proteomics, Lorne, Victoria, Australia, February, 2nd, 2024.

Faculty and Session Chair, 41st Winter School on Proteinases and their Inhibitors, Tiers, Italy, February 27th – March 3rd, 2024.

Organiser and Chair, 25th Chromosome-Centric Human Proteome Project (C-HPP) Workshop: Characterizing the Building Blocks of the Human Proteome, Madrid, Spain, April 26th – 28th, 2024.

Session Chair, Protease Profiling and Substrate Selection, Proteolytic Enzymes & Inhibitors Gordon Research Conference, Il Ciocco, Luca, Italy, June 9 – 14, 2024.

Organiser and Chair, 26th Chromosome-Centric Human Proteome Project (C-HPP) Workshop, Dresden, Germany, October 19 – 20, 2024.

Co-Chair, 27th Chromosome-Centric Human Proteome Project (C-HPP) Workshop: Machine Learning Applications for the Human Proteome Project, Guangzhou, China, November 28 – 29, 2024.

2025

Faculty and Session Chair, 42nd Winter School on Proteinases and their Inhibitors, Tiers, Italy, March 12th –15th, 2024.

Scientific Advisory Board, HUPO 24th Annual World Conference, Toronto, Canada, November 9 – 13, 2025.

10. SERVICE TO THE UNIVERSITY

(a) Memberships on committees, including offices held and dates

Periodontics Post-Graduate Admissions Committee	1990 – 1996
Dean's Advisory Committee on Promotions and Tenure (elected)	1990 – 1996
Dean's Advisory Committee on Promotions and Tenure (nominated)	2002
Dean's Advisory Committee on Salaries/Merit (elected)	1993 – 1996
Faculty Research Committee	1993 – 2007
Selection Committee, Dean's nominee, Department of Clinical Dental Sciences, Periodontics Professor	1995
Selection Committee, Dean's nominee, Department of Clinical Dental Sciences, Periodontics Professor	1996
Mass Spectrometry Committee, Department of Chemistry	1995 – 1998
Faculty of Medicine First Year Curriculum Committee	1996 – 1997
President's Advisory Committee on the Reappointment of the Dean of Dentistry	2000
UBC Honours and Awards Committee	2001 – 2002
Faculty of Dentistry Security Committee	2001 – 2004
UBC Senior Appointments Committee	2001 – 2002
Selection Committee, Department of Oral Health Position in Oral Medicine	2002 – 2004
Selection Committee, Department of Oral Health Position in Periodontology	2002
Steering Committee, UBC Centre for Blood Research	2003 – 2004
Space Committee, Department of Biochemistry	2002 – 2006
Dean's Advisory Committee on Promotions and Tenure (nominated)	2005 – 2006 2018 – 2024
Selection Committee, Director Centre for Phenogenomics	2009
Academic Committee, Life Sciences Institute, UBC	2014 – 2017
President's Advisory Committee for the Selection of a New Dean of Dentistry	2016 – 2017
Selection Committee, Assistant Professor and Canada Research Chair Selection Committee Department of Oral Biological and Medical Sciences	2017 – 2021
President's Advisory (Search) Committee for UBC Associate Vice-President Research & Innovation	2018 – 2019
Faculty of Pharmaceutical Sciences, UBC Canada Research Chair Selection Committee	2018 – 2019
President's Advisory Committee on Major Awards	2018 – 2021
Selection Committee, Professor (CODED) Selection Committee Department of Oral Biological and Medical Sciences	2022
President's Senior Appointments Committee, University of British Columbia	2022 – 2023
President's Advisory Committee for the Selection of a New Dean of Dentistry	2023 – 2024
Faculty of Dentistry Representative on Faculty of Science Faculty Council	2020 –
Faculty of Dentistry Representative on Faculty of Arts Faculty Council	2021 –
Senator, UBC Senate	2023 –
Member, UBC Senate Research Committee and Scholarship Committee	2023 –

Thesis Supervisory and Examination Committees (selected)

Gheith Ben-Khaial	M.Sc. (Oral Biology)	1990 – 1992
Liasheng Chou	Ph.D. (Oral Biology	1990 – 1997
Edward Putnins	Ph.D. (Oral Biology)	1991 – 1995
Anak Iamaroon	Ph.D. (Oral Biology)	1992 – 1996
Bjorn Steffensen	Ph.D. (Oral Biology) (Chair)	1992 – 1997
Edwin Rydberg	Ph.D. (Biochemistry and Molecular Biology)	1994 – 2000
Amir Ashique	Ph.D. (Oral Biology)	1995 – 1999
Patrick Gowdy	M.Sc. (Biochemistry and Molecular Biology)	1995 – 1997
Debbie McCloy	M.Sc. (Oral Health)	1995 – 1998

Igor Nasonkin	M.Sc. (Biochemistry and Molecular Biology)	1996 – 1997
Angus McQuibban	Ph.D. (Biochemistry and Molecular Biology) (Chair)	1996 – 2001
Eric Tam	M.Sc. (Biochemistry and Molecular Biology) (Chair)	1997 – 2004
Shin Numao	Ph.D. (Chemistry)	1997 – 2003
Gayle Pelman	Ph.D. (Biochemistry and Molecular Biology) (Chair)	1998 – 2004
Heidi Kai	M.Sc. (Oral Biological and Medical Sciences) (Chair)	1998 – 2002
Todd Moore	M.Sc. (Oral Biological and Medical Sciences) (Chair)	1998 – 2001
Natalie Rundle	Ph.D. (Biochemistry and Molecular Biology)	1998 – 2002
Monica Syrzycka	Ph.D. (Genetics)	1998 – 2002
Michael Page	Ph.D. (Biochemistry and Molecular Biology)	1999 – 2004
Anna Gifford	Ph.D. (Biological Sciences, Simon Fraser University)	1999 – 2004
Ted Lakowski	Ph.D. (Pharmaceutical Science)	2000 – 2005
Roshale Gaytmenn	M.Sc. (Oral Biological and Medical Sciences)	2001 – 2002
Winco Wu	Ph.D. (Biochemistry and Molecular Biology)	2001 – 2006
Caroline Chueng	Ph.D. (Experimental Medicine)	2001 – 2007
Morgan Martin	Ph.D. (Microbiology)	2003 – 2008
Carly Huitema	Ph.D. (Microbiology)	2003 – 2009
Mazier Rahmani	Ph.D. (Experimental Medicine)	2005 – 2008
Jonathon Thon	Ph.D. (Pathology)	2005 – 2008
Lindsay Rogers	Ph.D. (Biochemistry)	2006 – 2010
Stephanie Mancini	Ph.D. (Pathology)	2006 – 2009
Grace Tharmarajah	Ph.D. (Medical Genetics)	2009 – 2015
Rouhollah Mousavizadeh	Ph.D. (Medicine)	2011 – 2016
Natalie Marshall	Ph.D. (Microbiology)	2012 – 2018
Ali McAfee	Ph.D. (Biochemistry and Molecular Biology)	2014 – 2018
Daniel Andrews	Ph.D. (Biochemistry and Molecular Biology)	2018 – 2023
Sebastian Dawo	M.Sc. (Biochemistry and Molecular Biology)	2019 – 2022
Cecily Costain	Ph.D. (Botany)	2022 – 2023
Kamryn Diehl	Ph.D. (Botany)	2024 –
Maor Arad	Ph.D. (Biochemistry and Molecular Biology)	2024 –
Oliver Hinse	Ph.D. (Oral Biological and Medical Sciences)	2024 –

Other Comprehensive Examination/Thesis Defence Committees (selected)

Mary MacDonald	Ph.D. (Microbiology) (University Examiner)	1995
Howard G. Damude	Ph.D. (Microbiology) (University Examiner)	1995
Adrienne Wood	M.Sc. (Biochemistry and Molecular Biology)	1996
Patrick Gowdy	M.Sc. (Biochemistry and Molecular Biology)	1996
Wesley Hung	Ph.D. Defense Examination Committee (Chair)	1997
Marty Boulanger	Comprehensive Examination Committee (Biochemistry and Molecular Biology)	1999
Adrian Burke	M.Sc. (Experimental Medicine) (University Examiner)	1999
Blaine Phillips	Ph.D. (Biochemistry and Molecular Biology, University of Calgary) (External Examiner)	1999
Derek Sim	Ph.D. (Biochemistry & Molecular Biology) (University Examiner)	2000
Jonathan Finn	Comprehensive Examination Committee (Biochemistry and Molecular Biology)	2001
Christopher Lowen	Ph.D. (Biochemistry & Molecular Biology) (University Examiner)	2001
Winco Wu	Ph.D. (Biochemistry and Molecular Biology)	2002
Michael Krisinger	Ph.D. (Biochemistry and Molecular Biology)	2003
Brian Wong	Comprehensive Examination Committee (Pathology)	2005
David Hudson	Comprehensive Examination Committee (Biochemistry and Molecular Biology)	2001

Sean Maurice	Comprehensive Examination Committee (Oral Biological and Medical Sciences)	2005
Michael Ryan	Comprehensive Examination Committee (Experimental Medicine)	2006
Angel Yu	Comprehensive Examination Committee (Biochemistry and Molecular Biology)	2008
Dana Anab	Ph.D. Defense Chairman (Occupational Health and Rehabilitation Medicine)	2009
Tse Wong	Ph.D. (Pathology) (University Examiner)	2012
Simonas Savickas	Ph.D., Technical University of Denmark, Denmark	2021
Konstantinos Kalogeropoulos	Ph.D., Technical University of Denmark, Denmark	2022

(b) Administrative Positions

Director, UBC Centre for Blood Research Proteomics Hub 2005 – 2008

(c) Other service, including dates

Dentistry Curriculum Review Committee, Faculty of Dentistry,
The University of Adelaide, S.A. 1979
Student Research Day Committee, Faculty of Dentistry, University of Toronto 1985 – 1988
Faculty of Dentistry, U.B.C. Representative
M.R.C. Review of the Interim Reports of the Advisory Committees, Saskatoon 1993
UBC Vice President Research Office Workshop Presenter "How to Write a CIHR Grant" 2000

11. SERVICE TO THE COMMUNITY

(a) Memberships on scholarly societies, including offices held and dates

International Association for Dental Research (Australia and N.Z. Division)	1979 – 1983
International Association for Dental Research (Canadian Division)	1986 – current
– *Secretary/Treasurer (B.C. Section)*	1991 – 1992
International Association for Dental Research	1986 – current
– Distinguished Scientist Awards Committee	2013 – 2017
– *Chair, Distinguished Scientist Awards Committee*	2017
The American Society for Cell Biology	1988 – 2015
Sigma Xi, The Scientific Research Society	1991 – 1994
American Academy for the Advancement of Science	1993 – 2016
The New York Academy of Sciences	1994 – 1999
American Association for Cancer Research	1996 – 2010
International Matrix Society	1996 – current
American Society for Matrix Biology	2000 – current
– *Council Member*	2017 – 2018
British Society for Matrix Biology	1998 – 2003
Australia and New Zealand Matrix Society	1998 – current
– International Representative	2004 – current
International Proteolysis Society	1999 – current
– Council Member	2001 – 2003
– Council Member	2005 – 2009
Metastasis Research Society	1999 – 2004
The Proteome Society	2001 – current
The Canadian Proteomics Society	2004 – current
– Scientific Advisory Board Member	2004 – 2006
Canadian National Proteomics Network	2004 – current
– Vice President Internal	2012 – 2013

Canadian Academy of Health Sciences	2005 – current
– Inaugural Membership Committee Member	2005 – 2011
– Fellowship Committee	2005 – 2011
– Discipline Director, Dentistry	2017 – 2019
Australian Proteomics Network	2004 – current
– Chair, Foreign Scientific Advisor Board	2004 – current
British Columbia Proteomics Network	2006 – current
– Executive Committee Member	2006 – current
International Union of Basic and Clinical Pharmacology (IUPHAR)	
– Advisory Committee	2014 – current
Human Proteome Organization (HUPO)	
– Elected Member, Executive Committee of HUPO	2014 – 2020
– Nominated Member, HUPO Awards Committee	2014 – 2016
– Nominated Member, Executive Committee, Human Proteome Project (HPP)	2015 – 2025
– Elected Co-Chair, Chromosome-Centric Human Proteome Project	2015 – 2018
– Elected Member, HUPO Council	2017 – 2018
– Elected Treasurer, HUPO	2019 – 2020
– Elected Member, HUPO Council	2021 –
– Elected Chair, Chromosome-Centric Human Proteome Project	2019 –
– Chair, HUPO Humanitarian Committee	2024 –

(b) Memberships in other societies, including offices held and dates

Faculty Association, University of British Columbia	1989 – current
College of Dental Surgeons of British Columbia	1990 – 2014

(c) Memberships on scholarly committees, including offices held and dates

National Health and Medical Research Council of Australia, Foreign Grant Assessor	1993 – 1996
B.C. Health Research Foundation Scientific Advisory Committee, New Investigator Panel	1995
Medical Research Council of Canada, Dental Sciences Grant Committee, Panel Member	1995 – 1998
National Cancer Institute of Canada, National Grants Panel B Member	1996 – 2000
M.R.C., C.I.H.R. Dental Sciences Grant Committee Member Selection Committee	1999, 2001, 2003, 2006, 2008
Council of the Gordon Research Conferences	2001 – 2003, 2009 – 2010
UBC Centre for Blood Research Management & Scientific Planning Steering Committee	2003 – 2004
PENCE Management & Scientific Planning Committee	2003 – 2005
C.I.H.R. Clinical Investigation B Grant Committee, Scientific Officer	2014, 2016 – 2018
C.I.H.R. Oral Health and Oral Health Care of Canadians Committee, Scientific Officer	2020 – 2024
C.I.H.R. Clinical Investigation B Grant Committee, Scientific Officer	2022 – 2024
Council of the π-HuB Project (Proteomic Navigator of the Human Body), Councilor	2023 – 2027
π-HuB Project Nominations Committee, Member	2023 – 2027
International Society of Protein Termini, Scientific Advisory Board Member	2024 –

(d) *Memberships on other committees, including offices held and dates*

Vancouver Community College Program Advisory Committee	1993 – 1994

(e) Editorships (list journal and dates)

Member of the Editorial Board, Journal of Periodontal Research	1992 – 1999
Declined invitation to be on Editorial Board, Biochemical Journal	2004
Declined invitation to be on Editorial Board, Cell Research	2005
Declined invitation to be on Editorial Board, Journal of Biological Chemistry	2008, 2009
Declined invitation to be on Editorial Board, Cancer	2009
Member of the Editorial Board, Molecular & Cellular Proteomics	2011 –
Member of the Editorial Board, Metalloproteinases in Medicine	2013 – 2018

Member of the Editorial Board, Biological Chemistry	2013 – 2020
Member of the Editorial Board, Journal of Proteome Research	2014
Editor, Special Issue, Journal of Proteomics	2014
Editor, *mSystems*	2015 – 2019
Associate Editor, Journal of Proteome Research	2015 –
Co-Editor, Journal of Proteome Research Special Issue 2015:	
3rd Annual Chromosome-Centric Human Proteome Project	2015
Editor, Journal of Proteome Research Special Issue 2016:	
4th Annual Chromosome-Centric Human Proteome Project	2016
Editor, Journal of Proteome Research Special Issue 2017:	
5th Annual Human Proteome Project	2017
Editor, Journal of Proteome Research Special Issue 2018:	
6th Annual Human Proteome Project	2018
Editor, Journal of Proteome Research Special Issue 2019:	
7th Annual Human Proteome Project	2019
Editor, Journal of Proteome Research Special Issue 2020:	
8th Annual Human Proteome Project	2020
Editor, Journal of Proteome Research Special Issue 2021:	
9th Annual Human Proteome Project	2021
Editor, Journal of Proteome Research Special Issue 2022:	
10th Annual Human Proteome Project	2022
Editor, Journal of Proteome Research Special Issue 2023:	
11th Annual Human Proteome Project	2023

(f) Ad hoc Reviewer (journal, agency, etc.)

Grant Agencies
Canadian Institutes of Health Research
National Cancer Institute of Canada
National Institutes of Health, U.S.A.
National Science and Engineering Research Council of Canada
National Health and Medical Research Council of Australia
The Wellcome Trust, U.K.
Canadian Heart and Stroke Foundation
Canadian Arthritis Foundation
Canadian Red Cross
Alberta Cancer Board
Alberta Heritage

Journals
Including Nature, Science, Nature Communications, Nature Methods, Nature Medicine, Nature Cell Biology, Nature Reviews Immunology, Nature Reviews Cancer, Nature Reviews Drug Discovery, Nature Biotechnology, Nature Methods, Nature Structural Biology, Cell Reports, Journal of Biological Chemistry, Proceedings of the National Academy of Science, Journal of Clinical Investigation, Journal of Cell Biology, Journal of Cell Science, Journal of Experimental Cell Research, Journal of Immunology, Blood.

Student Research Awards

Canadian Dental Research Foundation, Graduate Student Research Award Reviewer	1991 – 2000
Canadian Association for Dental Research Award, Student Research Award Reviewer	1996 – 2000

Appointments, Promotion and Tenure Reviewer (selected)

University of Iowa	1995
University of Alberta	1995
University of Washington	1998

University of Western Ontario	2001
Weizmann Institute of Science, Department of Chemical Physics, Israel	2002
Institut Pasteur (Paris)	2002
University of Newcastle on Tyne	2003
Université de Montréal	2004
The Scripps Research Institute	2004
University of Pennsylvania	2004
Université de Montréal	2005
Genentech Inc., South San Francisco	2005
Vanderbilt University	2007
University of Texas, San Antonio	2007
University of Pennsylvania	2011
University of Pennsylvania	2012
University of Pittsburgh	2014
University of Connecticut	2014
University of Notre Dame	2014
Tel Aviv University	2016
Lunenfeld-Tanenbaum Research Institute	2016
Medical School of Michigan	2016
North Eastern University	2023

(g) Selected external Ph.D. examiner (indicate universities and dates)

University of Montreal (declined while on Sabbatical 1997)
University of Alberta (declined while on Sabbatical 1998)
University of Alberta, Blaine Phillips, December 1999.
Kanematsu Laboratories, University of Sydney, Danqing Min, February 2001
University of Sydney, Sonia Saad, September 2001
Northwestern University, Yi Wu, May 2004
The University of Melbourne, A. Peisley, October 2005
University of Alberta, Fang Wu, January 2011
Technical University of Denmark, Copenhagen, December 2021
Technical University of Denmark, Copenhagen, May 2022

(h) Consultant and External Advisor (indicate organization and dates)

External Advisor, Huntington's Disease Proteolysis and Post-Translational Modification Team, HDSA Coalition for the Cure, USA	2004 – 2010
Member, Review Panel, Protease Platform, Novartis Pharmaceuticals, Cambridge, MA, USA	2005
Member, External Advisory Committee, Centre for Protease Research-COBRE, Department of Chemistry and Molecular Biology, North Dakota State University, Fargo, USA	2005 – 2009
Member, Expert Advisory Board, FP7-EU-Project on Proteases in Inflammatory Bowel Disease, University of Berne, Switzerland	2007 – 2011

(i) Other service and Outreach to the community

Kitsilano Little League, Assistant Coach	1992 – 1997
Carnarvon Resident Association, Board Member	1995
Science Outreach, Visiting Speaker at Vancouver School Board Elementary Schools	1996 – current
Science Outreach, Hosted 20 Secondary Students in my Laboratory	1999
Invited Speaker, 16th Annual Research Awards of the Canadian Cancer Society, BC / Yukon Division	April 13, 2000
Canadian Cancer Society Vancouver Island Region, Invited Speaker Donors Day	November 2000
Canadian Cancer Society BC and Yukon Division, Invited Speaker Donors Night,	March 2001
Canadian Cancer Society BC and Yukon Division, Feature of the	

Annual Fund-Raising Mail-out to 200,000 homes in British Columbia and the Yukon April 2001
Best of UBC Speakers Series, UBC at Robson Square December 2001
UBC Continuing Studies, "Chairs in the Square" lecture, UBC at Robson Square
"Life and Death of a Cell: Proteases and HIV" March 2003
Vancouver Island Canadian Cancer Society, Executive Council Meeting,
"Life and Death of a Cancer Cell" November 2005
Cowichan Valley Canadian Cancer Society, Executive Council Meeting,
"Molecular Sheers in Cancer: Cutting to the Chase" October 2006
Vancouver Canadian Cancer Society, Donors Night,
"Why There is No Magic Bullet for Cancer: But Good News for Imaging Breast Cancer Metastases" Sep 2009

ii) Media Mentions

The clinical significance of my research has led to considerable media coverage *e.g.:* I was interviewed for CBC TV News, CBC radio, and national and international papers on our Science paper in which we discovered that chemokine cleavage by MMPs dampens inflammation (2000). In 2001 I was interviewed by the BC TV 6 o'clock news, CKNY radio news, and UBC Reports on MMP involvement in HIV infection and this was followed up in the Vancouver Sun November 6, 2003 and in February 2004 by Ubyssey (the UBC paper) highlighting our HIV AIDS dementia paper in Nature Neuroscience. We received media coverage "Science battling horrors of cancer", in the Cowichan Valley News Leader, Duncan, British Columbia, Canada, November 2006 after my CCS presentation to donors. Recent media coverage includes **Master switch discovery could provide road map for treatment of arthritis and other inflammatory diseases** (22 January 2013; goo.gl/esqopo) led to radio interviews by CBC Victoria, BC and Global BC TV News. **Mapping proteins key to human health and immune system** reporting my 2012 AAAS talks led to radio interviews by the Australian Broadcasting Commission (ABC) and the ABC TV show *Tonic*, and was reported in **The Scientist** (17 February 2012; goo.gl/pRS0G6); **UBC scientists find new way to mobilize immune system against viruses** led to many interviews *e.g.,* by News 1130 Radio, WORLDPHARMANEWS and a newspaper article in the Vancouver Sun (12 May 2014; goo.gl/ywK3Vc, goo.gl/uLfhr2). Coverage in the Australian Press on my **opening Keynote Address at BioInfoSummer 2014**, Melbourne (1 December 2014); interviewed by the Italian press on the HPP (23 June 2015); and interviewed by **Nature (Nature 486:147-8)** on research careers.

Press coverage of the Human Proteome Project in which I was Chair of the Chromosome-centric HPP.
https://www.technologynetworks.com/proteomics/articles/the-journey-to-mapping-the-human-proteome-343448
https://www.drugtargetreview.com/news/74591/first-draft-sequence-of-human-proteome-released/
https://www.labroots.com/trending/cell-and-molecular-biology/18964/mapping-human-proteome-3
http://www.sci-news.com/genetics/human-proteome-blueprint-08984.html
https://www.chemistryworld.com/news/first-draft-of-the-human-proteome-created/4012664.article
https://www.technologynetworks.com/proteomics/news/first-draft-sequence-of-the-human-proteome-is-mapped-341802
https://www.azolifesciences.com/news/20201021/First-ever-draft-sequence-of-the-human-proteome-mapped-successfully.aspx
https://www.technologynetworks.com/proteomics/news/first-draft-sequence-of-the-human-proteome-is-mapped-341802
http://www.sci-news.com/genetics/human-proteome-blueprint-08984.html
https://www.sciencedaily.com/releases/2020/10/201019133648.htm
https://frontlinegenomics.com/first-draft-of-the-human-proteome/
https://www.chemistryworld.com/news/first-draft-of-the-human-proteome-created/4012664.article
https://medicalxpress.com/news/2020-10-scientists-human-proteome.html
https://thedietworld.com/scientists-map-the-human-proteome/
https://lifeboat.com/blog/2020/10/scientists-map-the-human-proteome
https://news.knowledia.com/US/en/articles/researchers-create-high-stringency-blueprint-of-human-proteome-genetics-e3309e5d2c39a017267016848c919aee6fdaad1f
https://www.labroots.com/trending/cell-and-molecular-biology/18964/mapping-human-proteome-3
https://www.drugtargetreview.com/news/74591/first-draft-sequence-of-human-proteome-released/
University of British Columbia FOD Researcher Helps Map the Human Proteome

12. AWARDS AND DISTINCTIONS

(a) Awards for Scholarship (indicate the name of the award, awarding organizations, date)

The John Lewis Award and Medal, Royal Geographical Society of Australia
(*Public Examinations Board, year 11 geography, first placed student in South Australia)* 1972

The University of Adelaide, 1979 – 1986

The Australian Dental Association Prize (*first placed final year student*) 1978
Herbert Gill-Williams Scholarship, The University of Adelaide, S.A. 1979
J.L. Eustace Memorial Award, The University of Adelaide, S.A. 1983
International Association for Dental Research, Australia and N.Z. Division, Travel Award 1983
International Association for Dental Research, Adelaide Sec., Travel Award 1983
J.L. Eustace Scholarship, The University of Adelaide, S.A. 1985 – 1986

University of Toronto, 1984 – 1989

Postdoctoral Fellowship, Medical Research Council of Canada 1984 – 1989
Edward H. Hatton Award, I.A.D.R., First Place Postdoctoral Category 1987
(*"in recognition of the scholarly excellence and the effective presentation of his first scientific paper read before an annual meeting of the Association*")
Student Research Award, C.A.D.R., First Place Postdoctoral Category 1987
Young Investigator Award, Third International Conference on the Chemistry and Biology of Mineralized Tissues 1988
American Association for Dental Research, William J. Gies Award 1989
(*"for the best paper published in the preceding year in the Journal of Dental Research"*)
Canadian Dental Research Foundation Award, First Place 1989

University of British Columbia, 1989 – present

Young Investigator Award, Matrix Metalloproteinase Conference 1989
The 1991 International Association for Dental Research Young Investigator Award 1991
("*In recognition of the significant contribution to Dental Research by a Junior Investigator under the age of 35 years at the time of nomination*")
Postdoctoral Fellowship, Medical Research Council of Canada 1989
(Ranked 1st, declined in favour of Centennial Fellowship, see below)
Centennial Fellowship, Medical Research Council of Canada (*ranked 2nd*) 1989 – 1992
Scholarship, Medical Research Council of Canada 1992
(Declined in favour of Dental Clinician Scientist Award, see below)
Dental Clinician Scientist Award, Medical Research Council of Canada 1992 – 1995
Clinician Scientist Award Phase 2, Medical Research Council of Canada 1995 – 1998
Medical Research Council Scientist Award 2000
(Ranked 2nd of 82 applications, Biomedical Research Category)
Resigned January 01, 2001, in favour of Canada Research Chair (see below)
Canada Research Chair (Tier I) in Protease Proteomics and Systems Biology 2001 – 2022
2002 CIHR Researcher of the Year, Institute Musculoskeletal Health and Arthritis (IMHA) 2003
CIHR Award for Research Excellence in Oral Health, IMHA 2003
Killam Award Research Prize, Senior Science Category, University of British Columbia 2006
Helmholtz Award, for "Proteases, Inhibitors and Biological Control", Portorož, Slovenia 2008
Lifetime Achievement Award, International Proteolysis Society 2011
Barry Preston Award, Matrix Biology Society of Australia and New Zealand 2012
Distinguished Scientist Award for Research in Oral Biology
International Association for Dental Research 2013
Tony Pawson Award for "Outstanding Contribution and Leadership to Proteomics"
Canadian National Proteomics Network 2014
Honorary Professor, Institute of Molecular Medicine and Cell Research,

Albert-Ludwigs-Universität Freiburg im Breisgau 2014
2017 Proteomass Scientific Society Award for "*Outstanding contribution in pioneering the understanding of the processes that explain the architecture of living organisms*" 2017
Tutors Award, International Proteolysis Society 2017
2017 HUPO Discovery Award in Proteomic Sciences, Human Proteome Organization 2017
Fellow of the Royal Society of Canada 2018
Tutors Award, International Proteolysis Society 2019
International Union of Biochemistry and Molecular Biology Lecture, Bled, Slovenia 2022
Helmut Holzer Award for "*great contribution to the advancement in the field of proteolysis*."
Presented by the J. Stefan Institute, Ljubljana, Slovenia 2022
2022 UBC John McNeill Excellence in Health Research Mentorship Award, UBC 2023
Tutors Award, International Proteolysis Society 2023
Yonsei Distinguished Scholar of Yonsei University, Seoul, Republic of Korea 2023
Canada Research Chair Laureate 2023 –
Distinguished University Scholar, University of British Columbia 2024

(b) Awards for Service (indicate the name of the award, awarding organizations, date)
Listed in the Contemporary Who's Who 2004

(c) Other Awards
Faculty of 1000 listed paper (McQuibban *et al.* 2002a) 2002
Faculty of 1000 listed paper (Tam *et al.* 2004a) 2004
Faculty of 1000 listed paper (Tam *et al.* 2004b) 2004
Faculty of 1000 listed paper (Dean and Overall 2007) 2007
Faculty of 1000 listed paper (Wolf, K. *et al.* 2007) 2007
Faculty of 1000 listed paper (Folgueras *et al.* 2008) 2008
Faculty of 1000 listed paper (Schilling and Overall 2008) 2008
Faculty of 1000 listed paper (Wilson *et al.* 013) 2013
Faculty of 1000 listed paper (Klein *et al.* 2015) 2015

(d) Awards for Research Excellence by Trainees Supervised

L. Drouin, Diploma Student in Periodontics
First place, post-graduate category, Dean's Prize, Student Research Day, Faculty of Dentistry
University of Toronto 1988

S. Gangbar, Diploma Student in Periodontics
First place, post-graduate category, Dean's Prize, Student Research Day, Faculty of Dentistry
University of Toronto 1989

R.S. Abbey, M.Sc. student
First place, CDA/DENTSPLY Student Award, Student Research Day, UBC 1995
"Most Outstanding Presentation in Basic Science Research Award," Hinman Student Research Symposium, University of Tennessee, Memphis, Tennessee 1995
Pre-Doctoral CADR representative, 1997 IADR Pre-Doctoral Hatton Award Competition 1997
Runner up, IADR Pre-Doctoral Hatton Award Competition 1997

Bjorn Steffensen, Ph.D. student
Dr. S. Wah Leung Scholarship 1996

Gayle Pelman, Biochemistry 449 student
Violet and Blyth Eagles Undergraduate Prize in Biochemistry (for Best Honours Biochemistry 449 Research Project) 1997

Gayle Pelman, M.Sc. student

Roman M. Babicki Fellowship in Medical Research	1999 – 2000
K.M. Hunter/CIHR Doctoral Research Award	2000 – 2003

G. Angus McQuibban, Ph.D. student

NCIC Student Travel Award, *for oral presentation* at the 1999 MMP Gordon Conference	1999
NCIC Terry Fox Biomedical Research Studentship	1999
MRC Doctoral Research Studentship (*declined*)	1999
Selected as one of 12 presenters at "BioContact 2000" for the "MRC/BioContact 2000 Next Generation Award"	2000
EMBO Fellowship	2001 – 2003
Marianne Huyer Award for best Ph.D. thesis in the Department of Biochemistry and Molecular Biology	2001
UBC Nomination for the Canadian Association for Graduate Studies/UMI Distinguished Dissertation Award	2002

Eric Tam, Ph.D. student

Roman M. Babicki Fellowship in Medical Research	2000 – 2002
Canadian Arthritis Network of Centres of Excellence Fellowship	2001 – 2003
C.I.H.R. Strategic Training Fellowship	2002 – 2003
A.A.C.R. Scholar-in-Training Award to support attendance at the AACR "Proteases, Extracellular Matrix, and Cancer Conference", Hilton Head Island, SC	2002
Marianne Huyer Award for best Ph.D. thesis Department of Biochemistry and Molecular Biology 2005	
Nominated for the national NSERC Thesis Award, University of British Columbia	2005

Angus Tester, Postdoctoral Fellow

A.A.C.R. Takeda Scholar-in-Training Award to support attendance at the AACR Annual General Meeting, Orlando, FL	2004

Jennifer Cox, Ph.D. student

Novice Award (Best Presentation), Protease Winterschool, Tiers, Italy	2005
NSERC PGSD Award	2004 – 2007
CIHR Strategic Training Grant in Cell Signals Fellow	2004 – 2007
S.H. Zbarsky Scholarship, "For the best seminar in the BIOC 530 Seminar course"	2005
Best Poster, MMP Gordon Research Conference	2007
Best Oral Presentation, 25th Protease Winterschool, Tiers, Italy	2008
MSFHR – Student Fellowship	

Bryan Tennant, Work and Learn and Summer Student

Pfizer/IMHA/Rx&D Summer Studentship in Musculoskeletal Research	2005

Oliver Schilling, Postdoctoral Fellow

DFG (German Science Foundation) Postdoctoral Fellowship	2005 – 2008
MSFHR – Postdoctoral Fellowship	2005 – 2008

Patrick Beaudette, Ph.D. student

MSFHR – Student Fellowship	2007 – 2009

Amanda Starr, Ph.D. Student
MSFHR – Trainee Award
NSERC Canadian Graduate Scholarship 2005 – 2008
NSERC National Fellowship (selected from the best NSERC awardees) 2005 – 2007
International Proteolysis Society Travel Award (Brisbane, Australia) 2009

Alain Doucet, Postdoctoral Fellow
MSFHR – Postdoctoral Fellowship

David Rodriguez, Postdoctoral Fellow
MSFHR – Postdoctoral Fellowship

Ulrich auf dem Keller, Postdoctoral Fellow
DFG (German Science Foundation) Postdoctoral Fellowship 2006 – 2009
Genome Canada Travel Award to attend HUPO, Amsterdam 2008
International Proteolysis Society Travel Award (Brisbane, Australia) 2009

Anna Prudova, Postdoctoral Fellow
National Cancer Institute of Canada, Terry Fox Foundation Young Investigator Travel Grant 2008
Genome Canada Travel Award 2008
Best Poster Award, 8th Annual International Conference of the Canadian Proteomics Initiative, Burnaby, Canada 2008
Institute of Circulatory and Respiratory Health Young Investigators Forum Travel Award 2008
Centre for Blood Research Travel Award 2008
Centre for Blood Research Postdoctoral Fellowship 2008 – 2009
Centre for Blood Research Collaborative Training Award 2010 – 2011

Olivier Barré Post, Doctoral Fellow
HUPO Young Investigator Travel Award, HUPO, Toronto 2008
CIHR Post-Doctoral Fellowship 2009 – 2011

Caroline Bellac, Postdoctoral Fellow
Swiss National Foundation Fellowships for Prospective Researchers 2008
International Proteolysis Society Travel Award (Brisbane, Australia) 2009
Swiss National Foundation Fellowships for Advanced Researchers 2010 – 2011

Ben F. Lai, Biochem 449 student
Canadian Biomaterials Society Travel Award (Quebec, Canada) 2009

Philipp Lange, Postdoctoral Fellow
BCPN Young Investigator Travel Award (HUPO, Toronto) 2009
Feodor Lynen Postdoctoral Research Fellowship 2009 – 2011
Joint Michael Smith Foundation for Health Research & Breast Cancer Society of Canada Research Award 2011 – 2012
Alexander von Humboldt Foundation Travel Award (ICSB, Edinburgh, UK) 2010
Alexander von Humboldt Foundation Travel Award (CNPN, Toronto) 2011
Alexander von Humboldt Foundation Travel Award (GRC Systems Biology) 2011

Pitter Huesgen, Postdoctoral Fellow
HUPO Young Investigator Travel Award and a BCPN Travel Award, HUPO, Toronto 2009
German Academic Exchange Service Postdoctoral Fellowship 2009 – 2010
Michael Smith Postdoctoral Fellowship 2010 – 2011
First place Poster Award, Cascadia Proteomics Meeting 2011

Antoine Dufour, Postdoctoral Fellow

First place Poster Award, Cascadia Proteomics Meeting	2011
MMP Gordon Research Conference, Rhode Island, USA (Poster Award)	2011
CIHR Travel Award to attend MMP Gordon Conference, Italy	2012
CIHR Post-Doctoral Fellowship	2012 – 2014
Travel Award from the Canadian Cancer Society to attend IPS 2013, South Africa	2013
Travel Award from the Centre for Blood Research to attend Gordon Conference, Maine	2014
Travel Award by The Society of Arthritis/2014 CCTC chairs for CCTC, Quebec City	2015
Best Poster Award at Canadian Connective Tissue Society CCTC, Quebec City	2015
Travel Award from the Canadian Cancer Society to attend IPS 2015, Malaysia	2015

Theo Klein, Postdoctoral Fellow

BCPN Travel Award to attend the Cascadia Proteomics Meeting, Seattle, WA, USA	2011
BCPN Travel Award to attend the CNPN, Toronto	2017
CNPN Presentation Award in Toronto, ON, Canada	2017

Nikolaus Fortelny, PhD student

Second place oral presentation Award, Cascadia Proteomics Meeting	2012, 2015
Third place oral presentation Award, Cascadia Proteomics Meeting	2013
Oral presentation Award, 31st Winterschool on Proteinases	2014
UBC Four Year Doctoral Fellowship	2014 – 2018
Department of Biochemistry Travel Award	2015
BCPN Travel Award to attend HUPO 2015, Vancouver	2015

Parker Jobin, Summer Student

Centre for Blood Research Summer Studentship	2012
Genome BC Science and Technology Studentship	2013

Natalie Marshall, PhD Student

CIHR Doctoral Research Award (declined)	2013
UBC William and Dorothy Gilbert Scholarship in Bio-Medical Sciences	2015
CIHR Vanier Canada Graduate Scholarship	2013 – 2016
UBC Four-Year Fellowship	2016 – 2017

Parker Jobin, Ph.D. student

UBC Aboriginal Graduate Fellowship	2013
UBC MD/PhD Studentship	2013
Frederick Banting and Charles Best Canada Graduate Scholarship-Master's	2014
CIHR Canada Graduate Scholarship – Master's Award (CGSM)	2014 – 2018
Vanier Canada Graduate Fellowship	2018

Simon Abbey, M.Sc. student

Poster Award, UBC Faculty of Dentistry Research Day	2017

Ulrich Eckhard, Postdoctoral Fellow

MSFHR Post-Doctoral Fellowship	2013 – 2016
BCPN Travel Award to attend HUPO, Japan	2013
ÖGMBT Travel Award to attend HUPO, Japan	2013
US HUPO Travel Award to attend US HUPO, Seattle, WA	2014
CBR Travel Award to attend EuPA, Milan, Italy	2015
BCPN Travel Award to attend Max Quant Summer School, Germany	2015

Giada Marino, Postdoctoral Fellow

Centre for Blood Research Postdoctoral Fellowship	2014

BCPN Travel Award to attend HUPO 2015, Vancouver	2015

Nestor Solis, Postdoctoral Fellow

BCPN Travel Award to attend 14th HUPO 2015, Vancouver, BC, Canada	2015
BCPN Travel Award to attend 8th CNPN Meeting, Montreal, QC, Canada	2016
MSFHR Three-Year Post-Doctoral Fellowship	2016 – 2019
BCPN Travel Award to attend 15th HUPO 2016, Taipei, Taiwan	2016
C.J. Martin Fellowship	2017 – 2019
CBR Travel Fellowship to attend 22nd Lorne Proteomics Conference, Lorne, Australia	2017
International Early Career Travel Award for the 22nd Lorne Proteomics, Lorne, Australia	2017
International Proteolysis Society Tutor Award, Banff, AB, Canada	2017

Janice Tsui, B.Sc. Undergrad

BCPN Undergraduate Training Program	2015
Centre for Blood Research Summer Studentship	2015
COOP placement	2016
NSERC Undergraduate Student Research Award	2016
Centre for Blood Research Summer Studentship	2017

Laura Doenges, B.Sc. Undergrad

Centre for Blood Research Summer Studentship	2016
Bachelor's Thesis, Fakultät Life Sciences der Hochschule Rhein-Waal, Kleve, Germany	
Carl Duisberg International Fellowship, Bayer Foundation	2016

Olivia Bulka, B.Sc. Undergrad

Centre for Blood Research Summer Studentship	2017
Best Poster Presentation Award, CBR Research Day	2017
Centre for Blood Research Summer Studentship	2018

Peter Bell, Postdoctoral Fellow

BCPN Travel Award to attend the MaxQuant Course, Berlin, Germany	2017
BSMB Conference Bursary to attend the Matrix Biology Europe Conference 2018, UK	2018
CBR Postdoctoral Fellow and Research Associate Travel Award 2018,	
to attend the Matrix Biology Europe Conference 2018, Manchester, UK.	2018
ICCBMT Young Investigator Award to attend 13th ICCBMT in Montebello, QC, Canada	2019

Pirjo Astrom, Postdoctoral Fellow

Sigrid Juselius Fellowship	2017
Postdoctoral Researcher Project Funding – The Academy of Finland	2017 – 2019

Isabel Pablos Ocampo, Postdoctoral Fellow

BCPN Travel Award to attend Cascadia Proteomics Symposium	2017
IPS travel award to attend IPS 2019 in Czech Republic	2019
CBR Postdoctoral Fellow and Research Associate Travel Award 2022 to attend	
Gordon Research Conference and Seminar in Italy	2022
Gordon Research Conference and Seminar Travel Award	2022

Yoan Machado, Postdoctoral Fellow

BCPN Travel Award to attend the MaxQuant Course, Berlin, Germany	2017
Michael Smith Foundation for Health Research Three-Year Post-Doctoral Fellowship	2018 – 2021
IPS travel award to attend IPS 2019 in Czech Republic	2019

Peter Grin, Ph.D. Student

UBC Faculty of Medicine Graduate Award	2018

The Centre for Blood Research Graduate Award	2018 – 2019
UBC Four Year Fellowship	2018 – 2022
Doctoral Award: Frederick Banting and Charles Best Canada Graduate Scholarships	2020 – 2023
Gordon Research Conference and Seminar Travel Award	2022

Georgina Butler, Research Associate

CBR Neil Mackenzie Mentorship Excellence Award	2019

Other:

Protein Engineering Networks of Centre of Excellence AGM Program Cover Winner	2003
31st Winterschool Program Cover Award, Nikolaus Fortelny	2014

13. OTHER RELEVANT INFORMATION

Professional development:

U.B.C. Radiation Protection Course	1990
Summer Teaching Institute, Association of Canadian Faculties of Dentistry London, Ontario (56 h)	1993
Ten TAG U.B.C., Faculty Development workshops, attended	1989 – 1991
Summer Teaching Institute, Association of Canadian Faculties of Dentistry Vancouver, B.C. (32 h)	1995
U.B.C. Fire Safety Course	1995
Problem-Based Learning Workshop (16 h)	1996
Problem-Based Learning Workshop (8 h)	1999
Problem-Based Learning Workshop (3 h)	1999
Proteomics Informatics Course, NHLBI Seattle Proteome Centre, Institute for Systems Biology, Seattle, WA USA (40 h)	2008

THE UNIVERSITY OF BRITISH COLUMBIA

Publications Record

316 publications, with an *h-index* = 108 and >41,850 citations—including 68 >100 – 199, 30 >200 – 499, 13 >500 – 999, 3 >1,200 – 1,500, and 1>1,700, 36 high-impact papers in Nature (2), Science (2), Cell and their daughter journals (32), most as senior PI. **** Selected as one of the 20 most significant publications.***

2025 (4/6) as senior PI)

1. * Butler, G.S., Vlok, M., Cesar Ramos de Jesus, H., Kaushal B., Machado, Y., Pablos, I.M., Solis, N., Kappelhoff, R., Bell, P.A., Nore, L., Grin, P., Nguyen, J.P., Cao, Q.T., Lamar, T., Vuong, W., Webster, S.J., Vederas, J.C., Hirota., J.A., Banerjee, A., Jan, E., and **Overall, C.M.** 2024. SARS-CoV-2 Main Protease, 3CLpro, Drives Cytoskeletal Reorganization and Tunnelling Nanotube Formation for Stealth Intercellular Infection. **Nature Communications,** *conditional acceptance.* https://doi.org/10.21203/rs.3.rs-3918469/v1.

2. Grin, P.M., Cesar Ramos de Jesus, H., Pablos, I., Kappelhoff, R., Georgina, G.S., and **Overall, C.M.** 2025. SARS-CoV-2 main protease (3CL^{pro}) cleaves IFN-γ variant, IFN-λ2, and glycosylated IFN-λ1

3. Grin, P.M., Butler, G.S., Sorgi, C.A., Kappelhoff, R., Essalmani, R., Cho, J.-S., Weiss, S.J., Seidah, N., and **Overall, C.M.** 2025. Unravelling Matrix Metalloproteinase Cleavage of PCSK9 and ApoE in Regulating LDL-cholesterol and Fatty Liver Disease in Aging. **Circulation Research,** *submitted*.

4. Pablos, I., Tsui, J., Doenges, L., Machado, Y., Bulka, O., Solis, N., Jobin, P., Marino, G., Eckhard, U., Kappelhoff, R., Hikmet, F., Lindskog, C., Gilks, B., Butler G.S., and **Overall, C.M.** 2024. Regulation of Extracellular Activities of High Mobility Group Box 1 (HMGB1) by Matrix Metalloproteinase 7 (MMP7). **Scientific Reports,** *submitted*.

5. Banerjee, A., Baid, K., Shrivastava, S., Luc, J., Richard, D., Aguiar, J.A., Machado, Y., Aicher, S.-M., Siwak, K.S., LeBlanc, E.V., Khatooni, Z., Lokugamage, K.G., Vu, M.N., Morgan, A., Chiok, K.R., Nguyen, H.T., Stacey, H.D., Scruten, E., Prysliak, T., McArthur, A.G., Yim, W., Miller, M.S., Wilson, H.L., Capellini, T., Faure, P.A., Liu, Q., Mubareka, S., Menachery, V.D., Mossman, K., Muller, M.A., Drosten, C., Colpitts, C.C., Jouvenet, N., **Overall, C.M.,** and Doxey, A.C. 2024. Early Innate Immune Response and Evolution of a SARS-CoV-2 Furin Cleavage Site Inactive Variant in Bat Cells. **Cell Host & Microbe.** *Submitted*.

6. Zhao, Z., Yamamoto, N., Young, J., Solis, N., Fong, A., Al-Seragi, M., Kim, S., Aoki, H., Phanse, S., Le, H.-K, **Overall, C.M.,** Nishikawa, H., BabuM., Nishiyama, K-i, and Duong van Hoa, F. 2025. YibN, a Bona Fide Interactor of YidC with Implications in Membrane Protein Insertion and Membrane Lipid Production. **Journal of Biological Chemistry.** *Submitted*.

2024 (3/6) as senior PI)

7. * Grin, P.M., Baid, K., Cesar Ramos de Jesus, H., Kozarc, N., Bell, P.A., Jiang, S.Z., Kappelhoff, R., Butler, G.S., Leborgne, N.G.F., Pan, C., Pablos, I., Macchado. Y., Vederas, J.C., Kim, H., Banerjee, A., and **Overall, C.M.** 2024. SARS-CoV-2 3CL^{pro} (main protease) Regulates Caspase Activation of Gasdermin-D/E Pores Leading to Secretion and Extracellular Activity of 3CL^{pro}. **Cell Reports 43,** 115080, https://doi.org/10.1016/j.celrep.2024.115080.

8. Cesar Ramos de Jesus, H., Solis, N., Machado, Y., Pablos, I.M., Bell, P.A., Kappelhoff, R., Grin, P.M., Sorgi, C.A., Butler, G.S., and **Overall, C.M.** 2024. Optimized Quenched Fluorescent Peptide Substrates of SARS-CoV-2 3CL^{pro} Main Protease from Proteomic Identification of P6—P6' Active Site Specificity. **Journal of Virology 98,** DOI. 10.1128/jvi.00049-24.

9. Vlok, M., Solis, N., Sadasivan, J., Mohamud, Y., Warsaba, R., Kizhakkedathu, J., Luo, H., **Overall, C.M.**^ and Jan, E^. Identification of the Proteolytic Signature in CVB3-infected Cells. **Journal of Virology 98,** e0049824. doi: 10.1128/jvi.00498-24

10. He, F., Aebersold, R., Baker, M.S., Bian, X., Bo, X., Chan, D.W., Chang, C., Chen, L., Chen, X., Chen, Y.J., Cheng, H., Collins, B.C., Corrale,s F., Cox, J,E.W., Van Eyk, J.E., Fan, J., Faridi, P., Figey,s D., Gao, G.F., Ga,o W., Gao, Z.H., Goda, K., Goh, W.W.B., Gu, D., Guo, C., Guo, T., He, Y., Heck, A.J.R., Hermjakob, H., Hunter, T., Iyer, N.G., Jiang, Y., Jimenez, C.R., Joshi, L., Kelleher, N.L., Li, M., Li, Y., Lin, Q., Liu, C.H., Liu,

F., Liu, G.H., Liu, Y., Liu, Z., Low, T.Y., Lu, B., Mann, M., Meng, A., Moritz, R.L., Nice, E., Ning, G., Omenn, G.S., **Overall, C.M.**, Palmisano, G., Peng, Y., Pineau, C., Poon, T.C.W., Purcell, A.W., Qiao, J., Reddel, R.R., Robinson, P.J., Roncada, P., Sander, C., Sha, J., Song, E., Srivastava, S., Sun, A., Sze, S.K., Tang, C., Tang, L., Tian, R., Vizcaíno, J.A., Wang, C., Wang, C., Wang, X., Wang, X., Wang, Y., Weiss, T., Wilhelm, M., Winkle,r R., Wollscheid, B., Wong, L., Xie, L., Xie, W., Xu, T., Xu, T., Yan, L., Yang, J., Yang, X., Yates, J., Yun, T., Zhai, Q., Zhang, B., Zhang, H., Zhang, L., Zhang, L., Zhang, P., Zhang, Y., Zheng, Y.Z., Zhong Q., and Zhu, Y. 2024. π-HuB: The Proteomic Navigator of the Human Body. **Nature 636,** 322–331. https://doi.org/10.1038/s41586-024-08280-5.

11. Omenn, G.S., Orchard, S., Lane, L., Lindskog, C., Pineau, C., **Overall, C.M.**, Budnik, B., Mudge, J.M., Packer, N.H., Weintraub, S.T., Roehrl, M.H.A., Nice, E., Guo, T., Van Eyk, J.E., Völker, U., Zhang, G., Bandeira, N., Aebersold, R., Moritz, R.L., Deutsch, E.W, 2024. The 2024 Report on the Human Proteome from the HUPO Human Proteome Project. **Journal of Proteome Research 23,** 5,296 – 5,311. doi: 10.1021/acs.jproteome.4c00776.

12. Omenn, G.S., Lane, L., **Overall, C.M.**, Lindskog, C., Pineau, C., Packer, N.H., Cristea, I.M., Weintraub, S.T., Orchard, S., Roehrl, M.H.A., Nice, E., Tiannan Guo, T., Van Eyk, J.E., Liu, S., Bandeira, N., Aebersold, R.L., Moritz, R.L., and Deutsch, E.W. 2024. The 2023 Report on the Proteome from the HUPO Human Proteome Project. **Journal of Proteome Research 23,** 532 – 549. doi: 10.1021/acs.jproteome.3c00591.

2023 (2/5) as senior PI)

13. Bell, P.A., and **Overall, C.M.** 2023. No Substrate Left Behind—Mining of Shotgun Proteomics Datasets Rescues Evidence of Proteolysis by SARS-CoV-23CLpro Main Protease. **International Journal of Molecular Science 24,** 8,723 – 8,739. https://doi.org/10.3390/ijms24108723.

14. Andrews, D., Vlok, M., Akbari Bani, D., Hay, B., Mohamud, Y., Foster, L., Luo, H., **Overall, C.M.**^ and Jan E. ^ 2023. Cleavage of 14-3-3ε by the Enteroviral 3C Protease Dampens RIG-I Mediated Antiviral Signaling. **Journal of Virology 97,** 1 – 19. DOI: 10.1128/jvi.00604-23 (*Editors Pick*).

15. Coates-Park, S., Lazaroff, C., Gurung, S., Rich, J., Colladay, A., O'Neil, M., Butler, G.S., **Overall, C.M.**, Stetler-Stevenson, W.G., Peeney, D. 2023. Tissue Inhibitors of Metalloproteinases are Proteolytic Targets of Matrix Metalloproteinase 9. **Matrix Biology 123,** 59 – 70. doi: 10.1016/j.matbio.2023.09.002.

16. Jenkins B, Eckhard U, **Overall, C.M.,** Doxey AC. 2023 Flagellinolysin. *In*: **Handbook of Proteolytic Enzymes, 4th edition, Vol 1. Metallopeptidases**, Elsevier, Academic Press. Edited by Rawlings, N. D., and Auld, D.S. eBook ISBN: 9780443288500.

17. Omenn, G.S., Lane, L., **Overall, C.M.**, Pineau, C., Packer, N., Cristea, I.M., Lindskog Bergström, C., Weintraub, S., Orchard, S., Roehrl, M.H.A., Nice, E., Liu, S., Bandeira, N., Chen, Y.-J., Guo, T., Aebersold, R., Moritz, R.L., and Deutsch, E.W. 2023. The 2022 Report on the Human Proteome from the HUPO Human Proteome Project. **Journal of Proteome Research 22,** 1024 – 1042. doi: 10.1021/acs.jproteome.2c00498.

2022 (2/3) as senior PI)

18. Bell, P.A., Scheuermann, S., Renner, F., Pan, C.L., Lu, H.Y., Turvey, S.E., Bornancin, F., Régnier, C.H., and **Overall, C.M.** 2022. Integrating Knowledge of Protein Sequence with Protein Function for the Prediction and Validation of New MALT1 Substrates. **Computational and Structural Biotechnology Journal 20,** 4,717 – 4,732. doi: 10.1016/j.csbj.2022.08.021. eCollection 2022. *Citations as of Sep. 1, 2023:* ***5***

19. Haack, A.M., **Overall, C.M.**^, Keller, U.A.D. ^ 2022. Degradomics Technologies in Matrisome Exploration. **Matrix Biology 114,** 1 – 17. doi: 10.1016/j.matbio.2022.10.003. *^Co-communicating Author, Co-Senior Author.*

20. Yates, J.R., Cristea, I.M., Dong, M.-Q., Claire E. Eyers, C.E., LaBaer, J., Jia V. Li, J.V., Jeremy K., Nicholson, J.K., **Overall, C.M.**, Magnus Palmblad, M., and Slavov, N. 2022. Want to Publish in JPR? This Is What You Need to Know! **Journal of Proteome Research 21,** 2,837 – 2,839.

2021 (2/9) as senior PI)

21. * Pablos, I., Machado, Y., Cesar Ramos de Jesus, H., Mohamud, Y., Kappelhoff, R., Lindskog, C., Vlok, M., Bell, P.A, Butler, G.S., Grin, P.M., Cao, Q.T., Nguyen, J.P., Solis, N., Abbina, S., Rut, W., Vederas, J.C., Szekely, L., Szakos, A., Drag, M., Kizhakkedathu, J., Mossman, K., Hirota, J., Jan, E., Lou, H., Banerjee, A., and **Overall, C.M.** 2021. Mechanistic Insights into COVID-19 by Global Analysis of the SARS-CoV-2 $3CL^{pro}$ Substrate Degradome. **Cell Reports 37,** 109892. doi: 10.1016/j.celrep.2021.109892.

Citations as of Sep. 21, 2024: ***81***

22. Davis, B., Backus, K., Winter, G., Chica, R., Li, D., Lee, SY., He, C., Weeks, A., **Overall, C.M.,** Hagihara, S., Thuronyi, B., Kamat, S., Chen, L-L., Hurtado Guerrero, R., Yao, S., Mahal, L.K., Voigt, C., Woo, C., Strauss, E., Kikuchi, K., Dore, T., Radford, S., Li, XD., Heo, WD., Superti-Furga, G., Deans, T., Belousov, V., Matthews, M., Jackson, C., Malek, S., Waldmann, H., Rising, A., Jewett, M., Stamou, D., Parker, E., Murakami, M., Polizzi, K., Hamachi, I., Erb, T., Joo, C., Uesugi, M., Prinjha, R., Rechavi, G., Solano, R., Schulman, B., David, Y., Oslund, R. 2021. Voices of Chemical Biology. **Nature Chemical Biology 17,** 1–4. https://doi.org/10.1038/s41589-020-00714-1.

23. **Overall C.M.** 2021. A Flickering Light at the End of the Pandemic Tunnel. **Journal of Proteome Research 20**, 5223 – 5226. doi: 10.1021/acs.jproteome.1c00866.

24. Fung, S.Y., Lu, H.Y., Sharma, M., Sharma, A.A., Saferali, A., Jia, A., Abraham, L., Klein, T., Gold, M.R., Noterangelo, L.D., **Overall, C.M.**, and Turvey. S.E. 2021. MALT1-Dependent Cleavage of HOIL1 Modulates Canonical NF-κB Signaling and Inflammatory Responsiveness. **Frontiers in Immunology 12**, 749,794. doi: 10.3389/fimmu.2021.749794. eCollection 2021.

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INVENTION DISCLOSURES AND PATENTS

1. "LysargiNase a novel thermophilic digestion protease for Proteomics" by **Overall, C.M.**, Huesgen, P.F., and Gomis-Rüth, F.X., Disclosure 15-099, 2015.
2. "Inhibitors of MMP12 as Antiviral Agents" by **Overall, C.M.**, McManus, B.M., Dive, V., and Marchant, D. International Patent 14 305192.8, February 2014, Disclosure 14-131 ("Metalloproteinase inhibition for broad-spectrum antiviral treatment").
3. "Substituted Arylfluorides as Imaging Agents" by Perrin, D., Ting, R., and **Overall, C.M.** 2010. International Patent Application PCT/CA2008/001368 and US Patent Application 12/670,108, Disclosure 07-079, 2007("Identification of Preferred Matter Composition of Arylboronic Acids in the Production of 18F-Labeled Trifluoroborates").
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7. "Proteome-Wide Isolation of Carboxy Terminal Peptides by Proteolytic Removal of Internal and Amino Terminal Peptides" by **Overall, C.M.** and Schilling, O., Disclosure 08-090, October 13, 2007.
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14. "Using Peptide Standards to Quantify Latent and Active Proteases" by **Overall, C.M.** and Fahlman, R., Disclosure 06-018, June 5, 2005.
15. "Using Peptide Standards to Quantify Proteolytic Processing" by **Overall, C.M.** and Fahlman, R., Disclosure 06-017, June 5, 2005.
16. "The CLIP-CHIP®, a Dedicated Microarray of All Proteases and Inhibitors in Human and Mouse" by **Overall, C.M.** and Kappelhoff, R., Disclosure 06-014, May 9, 2005.
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18. "Red Express: A Colored Bacterial and Eukaryotic Recombinant Protein Expression System" by **Overall, C.M.**, Disclosure 99-014, University of British Columbia, February 1999.
19. "Identification of the TIMP-2 Binding Site on Gelatinase A as a Drug Target" by **Overall, C.M.**, Invention Disclosure, University of British Columbia, March 1999.

20. “Collagen Binding Domains as a Tissue Adhesive” by **Overall, C.M.**, Invention Disclosure, University of British Columbia, April 1999.
21. "A Micro-Volume Dialysis Process" by **Overall, C.M.** The rights for the process have been assigned to C.M. Overall from the Governing Council of the University of Toronto.

SPECIAL COPYRIGHTS

Serial numbers for the CLIP-CHIP® trademarks in Canada and the US are 1,260,571 and 78/656,391, respectively.

OTHER WORKS

Designed, wrote the XHTML code, and maintained the Overall Lab website www.clip.ubc.ca consisting of >165 HTML pages.

CONFERENCE PROCEEDINGS PRE-INDEPENDENT PI

1983 – 1999

1. **Overall, C.M.**, Wiebkin, O.W. and Thonard, J.C. "*In vivo* Collagenase Activity in Inflamed Human Gingiva." Annual Meeting of the Connective Tissue Society of Australia and New Zealand, Adelaide, S.A., Australia, August 1983.

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3. Wiebkin, O.W., **Overall, C.M.** and Thonard, J.C. "Degradation Products from Inflamed Gingival Connective Tissue." 9th International Conference of Oral Biology, Sydney, N.S.W., Australia, July 1983. **Journal of Dental Research 63**, 480.

4. **Overall, C.M.** and Sodek, J. "Collagenolytic Enzymes Synthesized by Osteoblast-Like Cells *in vitro*. Preliminary Characterization of a 3/4-Collagen Endopeptidase Active on Native TC^A Fragments." East Coast Connective Tissue Meeting, Woods Hole, MA., U.S.A., March 1985.

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6. **Overall, C.M.** and Sodek, J. "Collagenolytic Enzymes Synthesized by ROS 17/2.8 Cells *in vitro*. Initial Characterization of a 3/4-Collagen Endopeptidase." Gordon Conference on Periodontal Diseases, Plymouth, N.H., U.S.A., July 1985.

7. **Overall, C.M.** and Sodek, J. "Purification and Characterization of Collagenolytic Enzymes and Inhibitors Synthesized by Osteoblasts." I.A.D.R. Lake Ontario Combined Section Meeting, Rochester, N.Y., U.S.A., November 1985.

8. **Overall, C.M.** and Sodek, J. "Purification and Characterization of a Novel Neutral Metalloproteinase, Synthesized by Osteoblasts, and Cleaves Triple Helical 3/4-Collagen but not Intact Collagen." Gordon Conference on Bones and Teeth, Meriden, N.H., U.S.A., July 1986.

9. **Overall, C.M.** and Sodek, J. "Osteoblast Collagenolytic Proteinases." Workshop 11, Cartilage and Bone Degradation, Federation of European Connective Tissue Societies Meeting, Manchester, England, July 29, 1986.

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11. **Overall, C.M.** "Identification of a Novel Collagenase in Gingival Crevicular Fluid. Purification and Characterization of the Enzyme from Osteoblastic Cells." 65th General Session of the International Association for Dental Research, Chicago, IL., U.S.A., March 1987. **Journal of Dental Research 66**, 104, abst #H16.

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13. **Overall, C.M.**, Wrana, J.L. and Sodek, J. "Transforming Growth Factor-ß (TGF-ß) Regulation of Collagenase and Collagenase Inhibitor (TIMP) Synthesis by Human Gingival Fibroblasts." 66th General Session of the International Association for Dental Research, Montreal, PQ, Canada, March 1988. **Journal of Dental Research 67**, 185, abst #580.

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15. Simic, A., Limeback, H. and **Overall, C.M.** "Isolation and Characterization of High Molecular Weight Porcine Enamel Proteins." 66th General Session of the International Association for Dental Research, Montreal, PQ, Canada, March 1988. **Journal of Dental Research 67**, 391, abst #2223.

16. Birek, P., McCulloch, C.A.G. and **Overall, C.M.** "Automated Periodontal Probe Measures Probing Velocity as an Indicator of Gingival Inflammation." 66th General Session of the International Association for Dental Research, Montreal, PQ, Canada, March 1988. **Journal of Dental Research 67**, 168, abst #446 *and* **Abstracts of Papers of the American Chemical Society 195,** 82.

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18. **Overall, C.M.**, Wrana, J.L. and Sodek, J. "Transforming Growth Factor-ß Regulation of Collagenase, 72 kDa-Progelatinase, TIMP and PAI-1 Expression in Rat Bone Cell Populations and Human Fibroblasts." The Third International Conference on the Chemistry and Biology of Mineralized Tissues, Chatham, MA, USA, October 1988.

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20. **Overall, C.M.** and Sodek, J. "Reciprocal Regulation of Collagenase, Gelatinase, and TIMP Gene Expression and Protein Synthesis in Human Fibroblasts Induced by Concanavalin A." Matrix Metalloproteinase Conference, Destin, FL, U.S.A., September 1989.

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23. **Overall, C.M.** "Matrix Metalloproteinases in Periodontitis. Regulation by TGF-ß." *Invited Program Speaker.* 9th Annual West Coast IADR Section Meeting, Vancouver, B.C., November 1989.

24. **Overall, C.M.**, Wrana, J.L. and Sodek, J. "Transcriptional and Post-Transcriptional Regulation of Type IV Collagenase (MMP-2) by TGF-ß in Human Fibroblasts: Comparisons with Collagenase and TIMP gene expression." 6th International Conference on Differentiation of Normal and Neoplastic Cells, Vancouver, B.C., Canada, August 1990.

25. **Overall, C.M.** "Induction of Formative and Resorptive Cellular Phenotypes in Human Gingival Fibroblasts by TGF-ß1 and Lectins: Transcriptional and Post-Transcriptional Regulation of Matrix Metalloproteinases, TIMP and Matrix Protein Expression." *Invited Program Speaker.* 8th International Conference on Periodontal Research, San Antonio, Texas, November 1990.

26. **Overall, C.M.**, Wrana, J.L. and Sodek, J. "Transcriptional and Post-Transcriptional Regulation of Type IV Collagenase (MMP-2) by TGF-ß in Human Fibroblasts: Comparisons with Collagenase and TIMP Gene Expression." The American Society for Cell Biology, 30th Annual Meeting, San Diego, CA, December 1990. **Journal of Cell Biology 111 (5, pt 2)**, 350a, abst #1959.

27. Lee, W., Aitken, S., Kulkarni, G., Birek, P., **Overall, C.M.**, Sodek, J. and McCulloch, C.A.G. "Relationship of Collagenase Activity in Disease Progression and Inhibition by Doxycycline." The 70th Annual Session of the International Association for Dental Research, Acapulco, Mexico, April 1991. **Journal of Dental Research 70**, 320, abst #441.

28. Uitto, V.-J., Pan, Y.-M., Firth, J. and **Overall, C.M.** "Exogenous Phospholipase C Activates Epithelial Cells to produce Matrix Metalloproteinase." The 70th Annual Session of the International Association for Dental Research, Acapulco, Mexico, April 1991. **Journal of Dental Research 70**, 375, abst #875.

29. **Overall, C.M.** "Properties of 72-kDa and 92-kDa Gelatinases." *Invited Program Speaker.* Gordon Research Conference on Periodontal Diseases, Plymouth, N.H., June 1991.

30. **Overall, C.M.** and Sodek, J. "Purification of Rat Osteosarcoma 72-kDa Gelatinase/Type IV Collagenase." Rat, but not Human 72-kDa Gelatinase Degrades Native Collagen, 3/4-Collagen Fragments, and Gelatin. The American Society for Cell Biology, 31st Annual Meeting, Boston, MA, December 1991. **Journal of Cell Biology 115**, **(3, pt. 2)**, 139a abst #807.

31. Domenicucci, C., Goldberg, H.A., Zhang, Q., **Overall, C.M.**, and Sodek, J. "Characterization of the 32-kDa and 24-kDa Proteins of the Demineralized Collagenous Matrix of Porcine Bone, Dentin and Cementum." 4th International Conference on the Chemistry and Biology of Mineralized Tissues, Coronado, CA, February 1992. **Connective Tissue Research 27 (2-3)**, 113.

32. Maurus, R., Luo, Y., Nguyen, N., **Overall, C.M.**, Tang, H., Smith, M., Brayer, G.D. "Structural Consequences of Two Recombinant Horse Heart Myoglobin Molecules." 35th Annual Meeting of Canadian Federation of Biological Societies, Victoria, B.C., Canada, June 1992.

33. **Overall, C.M.**, Guillemette, J.G., Rafferty, S., Bogumil, R., Lesnicki, G., Mauk, G., Brayer, G.D., and Smith, M. "Enhancement of Endogenous Peroxidase Activity in Horse Heart Myoglobin Through Site-Specific Mutagenesis." Protein Engineering Symposium 1992, Montreal, Quebec, Canada, June 1992.

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35. Dedhar, S., Saulnier, R., Nagle, R., and **Overall, C.M.** "Altered $\alpha 3\beta 1$ and $\alpha 6\beta 4$ Integrin Expression in Invasive and Metastatic Human Prostrate Carcinoma Cells." The American Society for Cell Biology, 32nd Annual Meeting, Denver, Colorado, November 15-19, 1992. **Molecular Biology of the Cell 3 (S)**, 131a, abst #758.

36. Bogumil, R., Hildebrand, D.P., Lloyd, E., **Overall, C.M.**, Tang, H.-L., Smith, M., and Mauk, A.G. 1993. "FTIR and EPR Analysis of Azide Binding to Horse Heart Myoglobin Variants." **Journal of Inorganic Biochemistry 51**, 80, abst. #B025.

37. Maurus, R., Luo, Y., Nguyen, N., **Overall, C.M.**, Tang, H., Smith, M. and Brayer, G.D. 1993. "Structural Characterization of Two Recombinant Horse Heart Myoglobin Molecules." Canadian Federation of Biological Societies, Victoria, British Columbia. **Proceedings of the Canadian Federation of Biological Societies**, abst #201.

38. **Overall, C.M.** and Steffensen, B. "Rat 72-kDa Gelatinase: Purification, Characterization, and cDNA Cloning." 71st General Session of the International Association for Dental Research, Chicago, IL, March 10-14, 1993. **Journal of Dental Research 72**, 293, abst #1518.

39. **Overall, C.M.**, Maurus, R., Bogumil, R., Luo. Y, Guillemette, G., Smith, M., Mauk, A.G., and Brayer, G. "Effects of Polar Substitutions in the Heme Pocket of Myoglobin." Protein Engineering Networks of Centres of Excellence, Annual General Meeting, Edmonton, Alberta, June 26 – 28, 1993.

40. Tang, H., Rafferty, S., Bogumil, R., Hunter, C., Hildebrand, D., Lloyd, E., Lee, H., **Overall, C.M.**, Brayer, G., Mauk, A.G., and Smith, M. "Peroxidase and Hydroxylase Activities of Myoglobin Variants." Protein Engineering Networks of Centres of Excellence, AGM, Edmonton, Alberta, AB, June 26 – 28, 1993.

41. Maurus, R., Luo, Y., Nguyen, N. **Overall, C.M.**, Tang, H.L., Smith, M. and Brayer, G.D. "Structural Studies of Horse Heart Myoglobin From a Synthetic Gene and of Two Variants: Leu104Asn and His64Tyr." West Coast Protein Crystallography Meeting, Monterey, CA, 1993.

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43. Maurus, R., **Overall, C.M.**, Bogumil, R., Luo, Y., Mauk, G., Smith, M., and Brayer, G.D. "Modification of a Hydrophobic Cluster in the Proximal Heme Pocket of Myoglobin." Protein Society, San Diego, CA, 1994. **Proceedings of the Protein Society**, abst #135-T.

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45. **Overall, C.M.**, Wallon, U.M., Steffensen, B., Abbey, R., and Chen, L. "Protein Engineering Studies of 72-kDa Gelatinase/Type IV Collagenase." American Association of Dental Research Annual Meeting, San Antonio, TX., Mar 8 – 12, 1995. **Journal of Dental Research 74**, (AADR Abstracts) 82, abst #561.

46. Brayer, G.D., Luo, Y., Côte, H., Vo, H., Hewitt, J., Braun, C., MacGillivray, R.T.A., Withers, S., and **Overall, C.M.** "Structure and Function of Human Alpha-Amylase." 38th Annual Meeting, Canadian Federation of Biological Societies, Saskatoon, June 14 – 17, 1995.

47. Maurus, R., **Overall, C.M.**, Bogumil, R., Luo, Y., Mauk, A.G., Smith, M., and Brayer, G.D. "Thermal Destabilization of Horse Heart Myoglobin Through Modification of a Hydrophobic Cluster in the Proximal Heme Pocket." West Coast Protein Crystallography Meeting, Monterey, CA, 1995.

48. Craig, B.J. and **Overall, C.M.** "An Integrated Approach for Developing Critical Analysis Skills." The American Association of Dental Schools Annual General Meeting, San Francisco, California, March 1996.

49. Abbey, R. S., Steffensen, B., and **Overall, C.M.** "Locating an Elastin Binding Site on the 72 kDa Type IV Collagenase." Hinman Student Research Symposium, The University of Tennessee, Memphis, TN, 1995.

50. Gürseler, Y., **Overall, C.M.**, Carvalho, R.S., and Bumann, A. "Kollagenase-, Gelatinase- und Kollagennachweis bei menschlichen Desmodontalfibroblasten nach kieterorthopadischer Zahnbewegung." Deutsche Gesellschaft für Kieferorthopadie, Bremen, April 1996.

51. Luo, Y., Withers, S.G., **Overall, C.M.**, and Brayer, G.D. "Inhibitor Rearrangement Following Complex Formation Between Acarbose and Human Pancreatic Alpha-Amylase." International Union Crystallography, Seattle, Washington, 1996.

52. Brayer, G.D., Luo, Y., Withers, S. and **Overall, C.M.** "Inhibitor Binding and Rearrangement in the Active Site of Human Alpha-Amylase." 39th Annual Meeting, Canadian Federation of Biological Societies, London, ON, June, 1996.

53. Rydberg, E.H., **Overall, C.M.**, Brayer, G.D. and Withers, S.G. "Mechanistic Studies of Human Pancreatic Alpha-Amylase." 17th International Congress of Biochemistry and Molecular Biology & 1997 Annual Meeting of the American Society for Biochemistry and Molecular Biology, San Francisco, CA, August 24 – 29, 1997. **FASEB Journal 11,** A1312.

54. Rydberg, E.H., **Overall, C.M.**, Brayer, G.D., and Withers, S.G. "Mechanistic Studies of Human Pancreatic Alpha-Amylase." Canadian Society for Chemistry, Whistler, B.C., May 31 – June 4, 1998.

55. Maurus, R., Rydberg, E.H., Sidhu, G., Vo, H., Hewitt, J., Cote, H., Wang, Y., Numao, S., MacGillivray, R., **Overall, C.M.,** Brayer, G.D., and Withers, S. "Structural Analysis of Recombinant Human Pancreatic Alpha-Amylase and the D300N Mutant Protein in Complex with the Inhibitor Acarbose." West Coast Protein Crystallography Meeting, Monterey, California, March, 1999.

CONFERENCE PROCEEDINGS BY TRAINEES OR COLLABORATORS

1994 – 2024

56. Steffensen, B., Wallon, U.M., and **Overall, C.M.** "The Extracellular Matrix Binding Properties of Recombinant Fibronectin Type II-Like Domain from 72-kDa Gelatinase." 34th Annual Meeting of the American Society for Cell Biology, San Francisco, CA., December 10 – 14, 1994. **Molecular Biology of the Cell 5:S**, 432a, abst #2517.

57. Steffensen, B., Wallon, U.M., and **Overall, C.M.** "Recombinant 72-kDa Gelatinase/Type IV Collagenase Collagen-Binding Domain Interactions with Types I and V Collagens and Fibronectin." American Association of Dental Research Annual Meeting, San Antonio, TX., Mar 8 – 12, 1995. **Journal of Dental Research 74**, (AADR Abstracts) 203, abst #1532.

58. Steffensen, B., Wallon, U.M., and **Overall, C.M.** "The Extracellular Matrix Binding Properties of Recombinant Fibronectin Type II-Like Domain from 72-kDa Gelatinase." Matrix Metalloproteinase Gordon Conference, NH, U.S.A., July 16 – 21, 1995.

59. Steffensen, B. and **Overall, C.M.** "Analysis of Extracellular Matrix Binding Properties of the Fibronectin-Like Domain of 72-kDa Gelatinase by Alanine Scanning Mutagenesis." American Association for Cancer Research Conference on Proteases and Protease Inhibitors, Panama City, FL, January 1996.

60. Wallon, U.M. and **Overall, C.M.** "The Hemopexin-like Domain of Human 72-kDa Gelatinase Depends on Calcium for Structural Integrity and Binding to Fibronectin and Heparin." Conference on "Inhibitors of Metalloproteinases in Development and Disease", Banff, AB, Sept 25 – 29, 1996.

61. Steffensen, B. and **Overall, C.M.** "Novel Mode of 72-kDa Gelatinase Cell Binding by the Collagen Binding Domain." Conference on "Inhibitors of Metalloproteinases in Development and Disease", Banff, AB, Sept 25 – 29, 1996.

62. Wallon, U.M., King, A., DeClerk, Y., and **Overall, C.M.** "TIMP-2 and Extracellular Matrix Binding Properties of Recombinant Hemopexin-like C-Domain of Human 72-kDa Gelatinase." 3rd Pan Pacific Connective Tissue Societies Symposium, Hawaii, November 1996.

63. Wallon, U.M., Bigg, H., King, A., DeClerk, Y., and **Overall, C.M.** "TIMP-2 and Extracellular Matrix Binding Properties of Recombinant Hemopexin-like C-Domain of Human 72-kDa Gelatinase." 75th General Session of the International Association for Dental Research, Orlando, FL., March 19 – 23, 1997. **Journal of Dental Research 76**, (IADR Abstracts), abst# 1287.

64. Abbey, R.S., Steffensen, B., and **Overall, C.M.** "Protein Engineering Analysis of the 72-kDa Gelatinase Collagen Binding Domain." 75th General Session of the International Association for Dental Research, Orlando, FL., March 19 – 23, 1997. **Journal of Dental Research 76**, (IADR Abstracts), abst# 2290.

65. Tjaderhane, L., Salo, T., Larmas, M., Larjava, H.S., and **Overall, C.M.** "A Novel Organ Culture Method for the Study of Human Odontoblast Cell Layer." 75th General Session of the International Association for Dental Research, Orlando, FL., March 19 – 23, 1997. **Journal of Dental Research 76**, (IADR Abstracts), abst# 1140.

66. Iamaroon, A., Wallon, U.M., **Overall, C.M.**, and Diewert, V.M. "72-kDa Gelatinase and Extracellular Matrices Co-Localize During Mouse Cardiac Development." 75th General Session of the International Association for Dental Research, Orlando, FL., March 19 – 23, 1997. **Journal of Dental Research 76**, (IADR Abstracts), abst# 2844.

67. Craig, B.J., Eyre, D., and **Overall, C.M.** "Correlation of Alveolar Bone Loss by the Presence of Bone Collagen Cross-links in Gingival Crevicular Fluid." 76th General Session of the International Association for Dental Research, Nice, France, June 1998. **Journal of Dental Research 77,** (IADR Abstracts) 737, abst# 845.

68. Wallon, U.M. and **Overall, C.M.** 1999. "The Hemopexin-like Domain of Human Gelatinase A Depends on Calcium for Structural Integrity and Binding to Fibronectin and Heparin." In **"Inhibitors of Matrix Metalloproteinases in Development and Disease"**, Edited by Edwards, D., Hawkes, S., and Khokha, R., Gordon and Breach, Amsterdam, Holland, 225.

69. Steffensen, B. and **Overall, C.M.** 1999. "Novel Mode of 72-kDa Gelatinase Cell Binding by the Collagen Binding Domain." In **"Inhibitors of Matrix Metalloproteinases in Development and Disease"**, Edited by Edwards, D., Hawkes, S., and Khokha, R., Gordon and Breach, Amsterdam, Holland, 227.

70. Green-Jarvis, B., King, A., **Overall, C.M.**, and Ochieng, J. "Interactions of Alpha-2HS Glycoprotein with the rC domain of MMP-2." American Association for Cancer Research, Philadelphia, PA, USA, April 10 – 14 1999. **Cancer Research 40,** 707 – 708.

71. McQuibban, G.A., Tam, E., Clark-Lewis, I., and **Overall, C.M.** "Yeast Two-Hybrid Analysis Identifies Monocyte Chemoattractant Protein 3 (MCP-3) as a Substrate for Gelatinase A." Fifth Canadian Connective Tissue Conference, May 28 – 29, 1999.

72. McQuibban, G.A., Tam, E., Clark-Lewis, I., and **Overall, C.M.** *Invited Symposia Speaker*. "Yeast Two-Hybrid Analysis Identifies Monocyte Chemoattractant Protein 3 (MCP-3) as a Substrate for Gelatinase A." MMP Gordon Research Conference, NH, USA, August 11,1999.

73. McQuibban, G.A., Tam, E., Clark-Lewis, I., and **Overall, C.M.** "Yeast Two-Hybrid Cloning of an Extracellular Proteinase Substrate: Gelatinase A Cleaves and Inactivates Monocyte Chemoattractant Protein-3 (MCP-3)." *Invited Symposia Speaker*, International Proteolysis Society, First General Meeting, Mackinac Island, MI, USA, September 26, 1999.

74. McQuibban, G.A., Tam, E., Clark-Lewis, I., and **Overall, C.M.** "Yeast Two-Hybrid Analysis Identifies Monocyte Chemoattractant Protein-3 (MCP-3) as a Novel Substrate for the MMP Gelatinase A." Pan Pacific Connective Tissue Meeting, Queenstown, New Zealand, November 17, 1999.

75. Brayer, G.D., Sidhu, G., Maurus, R., Rydberg, E.H., Braun, C., Wang, Y., Nguyen, N., **Overall, C.M.**, and Withers, S. "Mechanistic Studies of Human Pancreatic Alpha-Amylase." North West Crystallography meeting, Eugene, Oregon, USA, March 2000.

2001

76. Li, C., Wang, Y., Sidhu, G., Maurus, R., Rydberg, E.H., **Overall, C.M.**, Withers, S. and Brayer, G.D. "Mechanistic Studies of Human Pancreatic Alpha-Amylase." North West Crystallography Meeting, Los Angeles, CA, USA, March 2001.

77. Morrison, C.J., Butler, G.S., Bigg, H.F., Soloway, P.D., Roberts C.R. and **Overall, C.M.** "Activation of Gelatinase A by MT2-MMP via a TIMP-2 Independent Pathway and the Role of TIMP-4 in Gelatinase A Activation." Matrix Metalloproteinase Gordon Research Conference, Il Ciocco, Barga, Italy, May 2001.

78. Tam, E.R., and **Overall, C.M.** "Differential Effects of Recombinant MT1-MMP Hemopexin C Domain on Collagenase Activity." *Poster Presentation*, Matrix Metalloproteinase Gordon Research Conference, Il Ciocco, Barga, Italy, May 2001.

79. Butler, G.S. and **Overall, C.M.** "Matrix Metalloproteinase Cleavage of C1q and Mannose Binding Lectin." Matrix Metalloproteinase Gordon Research Conference, Il Ciocco, Barga, Italy, May 2001.

2002

80. Butler, G.S. and **Overall, C.M.** **"**Naturally Occurring Mutants of Mannose Binding Lectin (MBL) are Substrates for the Matrix Metalloproteinase (MMP) Family." Canadian Proteomics Initiative 2nd Annual International Conference, Edmonton, AB, Canada, May 2002.

81. Tam, E.R., Butler, G., and **Overall, C.M.** **"**Collagen Binding Properties of the MT1-MMP Hemopexin C Domain." *Poster Presentation*, Scholar-in-Training Award, American Association for Cancer Research– Proteases, Extracellular Matrix and Cancer, Hilton Head Island, South Carolina, USA, October 9 – 13, 2002.

2003

82. Morrison, C.J., and **Overall, C.M.** *Poster Presentation.* "Characterization of the TIMP-2-Independent Cellular Activation Pathway of MMP-2 by MT2-MMP." MMP Gordon Research Conference, Big Sky, Montana, USA. August 17, 2003.

2004

83. Tam, E.R., Morrison, C.J., Wu, Y.I., Stack, M.S., and **Overall, C.M.** "Membrane Protease Proteomics: Isotope Coded Affinity Tag/Tandem Mass Spectrometry Identification of Novel MT1-MMP Substrates." 6th Joint Conference of the AACR and JCA "Advances in Cancer Research", Hawaii, USA, January 2004.

84. Kappelhoff, R., Puente, X.S., Seth, A., López-Otín, C., and **Overall, C.M.** *Poster Presentation*. "The CLIP Human Protease Chip: Genomic Analysis of all 715 Human Protease and Inhibitor Gene Transcripts in

Human Breast Carcinoma." 95rd Annual Meeting of the American Society for Cancer Research, Orlando, FL, USA. March 2004. Abst # 2183. **Cancer Research 45**.

85. Tester, A.M., Balbín, M., López-Otín, C., Clark-Lewis, I., and **Overall, C.M.** "Elucidating the Phenotype of the MMP8 – / – Mouse: Processing Deficiency of CXC-R2 Binding Chemokines." *Selected Speaker.* 95rd Annual Meeting of the American Society for Cancer Research, Orlando, FL, USA, March 2004. Abst # 2183. **Cancer Research 45.**

86. Cox, J.H., Tester, A.M., and **Overall, C.M.** *Poster Presentation.* "Chemokine Processing by Matrix Metalloproteinase-8." Cell Signalling in Mucosal Inflammation and Pain Annual Meeting. Toronto, ON, Canada. April 2004.

87. Butler, G.S. and **Overall, C.M.** *Oral Presentation.* "The Canonical Methionine 392 of the Metzincin MMP-2 is not Required for Catalytic Efficiency or Structural Integrity." 1st Pacific Coast Protease Spring School, Half Moon Bay, CA, USA. April 2004.

88. Kappelhoff, R., and **Overall, C.M.** *Oral Presentation.* "The Human Protease CLIP-CHIP: Genomic Analysis of all 715 Human Protease and Inhibitor Gene Transcripts in Breast Carcinomas." 1st Pacific Coast Protease Spring School, Half Moon Bay, CA, USA. April 2004.

89. Morrison, C.J., and **Overall, C.M.** *Oral Presentation.* "Activation of MMP-2 (Gelatinase-A) via a TIMP-2-Independent Pathway." 1st Pacific Coast Protease Spring School, Half Moon Bay, CA, USA. April 2004.

90. Dean, R.A., Butler, G. S., and **Overall, C. M.** "Discovery of Novel Matrix Metalloproteinase-2 Substrates by Isotope Coded Affinity Tag Labelling and Tandem Mass Spectrometry." Canadian Proteomics Initiative, Montreal, QC, Canada, May 2004.

91. Butler, G.S., Tam, E.M., and **Overall, C.M.** "Quantitative Proteomic Investigation of MMP Inhibitor Side-effects in Human Breast Carcinoma Using Isotope Coded Affinity Tag and Tandem Mass Spectrometry." Gordon Conference in Proteolytic Enzymes and their Inhibitors, New London, NH, USA, July 5-9, 2004.

92. Tam, E.M., and **Overall, C.M.** *Poster Presentation.* "Identification of Novel MT1-MMP Substrates Using Quantitative Proteomics-Isotope Coded Affinity Tag and Tandem Mass Spectrometry." Centre for Blood Research Reception, University of British Columbia, Vancouver, Canada, September 2004.

93. Kleifeld, O., and **Overall, C.M.** *Poster Presentation.* "Development of Specific MMP-2 Affinity Label for Proteomics Activity Profiling." Centre for Blood Research Reception, University of British Columbia, Vancouver, Canada, September 2004.

94. Kappelhoff, R., and **Overall, C.M.** *Poster Presentation.* "The CLIP Human Protease Chip: Genomic Analysis of all 715 Human Protease and Inhibitor Gene Transcripts in Human Breast Carcinoma." Centre for Blood Research Reception, University of British Columbia, Vancouver, Canada, September 2004.

95. Butler, G.S., and **Overall, C.M.** *Poster Presentation.* "Quantitative Proteomic Investigation of MMP Inhibitor side-effects in Human Breast Carcinoma." Centre for Blood Research Reception, University of British Columbia, Vancouver, Canada, September 2004.

96. Roberts, C.R., Pourmalek, S., Maurice, S., and **Overall, C.M.** "Versican Synthesis and Degradation in Lung Fibrosis." American Society of Matrix Biology Annual Meeting, San Diego, CA, USA, November 2004.

97. Dean, R.A., Butler, G., and **Overall, C.M.** "Degradomic Discovery of Novel Matrix Metalloproteinase-2 Substrates by Isotope Coded Affinity Tag Labelling and Tandem Mass Spectrometry." American Society of Matrix Biology Annual Meeting, San Diego, CA, USA, November 2004.

2005

98. Butler, G.S., and **Overall, C.M.** *Poster Presentation.* "Quantitative Proteomic Investigation of MMP Inhibitor side-effects in Human Breast Carcinoma using Isotope Coded Affinity Tag and Tandem Mass Spectrometry." New Technologies, Novel Approaches in Proteomics Research. Michael Smith Laboratory, University of British Columbia, Vancouver, Canada, January 2005.

99. Dean, R.A., and **Overall, C.M.** *Poster Presentation.* "Degradomic Discovery of Novel Matrix Metalloproteinase-2 Substrates by Isotope Coded Affinity Tag Labelling and Tandem Mass Spectrometry." New Technologies, Novel Approaches in Proteomics Research. Michael Smith Laboratory, University of British Columbia, Vancouver, Canada, January 2005.

100. Kappelhoff, R., and **Overall, C.M.** *Poster Presentation.* "The Human Protease CLIP-CHIP: Genomic Analysis of all 715 Human Protease and Inhibitor Gene Transcripts in Human Breast Carcinoma." New Technologies, Novel Approaches in Proteomics Research. Michael Smith Laboratory, University of British Columbia, Vancouver, Canada, January 2005.

101. Kleifeld, O., and **Overall, C.M.** *Poster Presentation.* "Development of Specific MMP-2 Affinity Label for Proteomics Activity Profiling." New Technologies, Novel Approaches in Proteomics Research. Michael Smith Laboratory, University of British Columbia, Vancouver, Canada, January 2005.

102. Tam, E., and **Overall, C.M.** *Poster Presentation.* "Identification of Novel MT1-MMP Substrates Using Quantitative Proteomics–Isotope Coded Affinity Tag and Tandem Mass Spectrometry." New Technologies, Novel Approaches in Proteomics Research. Michael Smith Laboratory, University of British Columbia, Vancouver, Canada, January 2005.

103. Cox, J.H., Tester, A.M., and **Overall, C.M.** *Oral Presentation (best novice presentation).* "Chemokine Processing by Matrix Metalloproteinase-8." 22nd Winter School on Proteinases and Their Inhibitors. Tiers, Italy, March 2 – 6 2005.

104. Cox, J.H., Tester, A.M., and **Overall, C.M.** *Oral Presentation.* "Regulation of inflammatory and immune responses by matrix metalloproteinase processing of chemokines." 2nd Pacific Coast Protease Workshop. Half Moon Bay, California, USA, April 29 – May 2, 2005.

105. Dean, R. A., and **Overall, C. M.** "Degradomic Discovery of Novel MMP-2 Substrates by Isotope Coded Affinity Tag Labelling and Tandem Mass Spectrometry." 2nd Pacific Coast Protease Workshop, Half Moon Bay, CA, USA, April 30, 2005.

106. Kleifeld, O. and **Overall, C.M.** "Development of Matrix Metalloproteinase Affinity Labels for Proteomics Activity Profiling." The 5th International Conference of the Canadian Proteomics Initiative, Toronto, Ontario, Canada, May 13 – 14, 2005.

107. Fahlman, R., Patel, A., Withers, S., Perrin, D., and **Overall, C.M.** "Selective Active Site Profiling of Cathepsin B Using Targeted ICAT Reagents." The 5th International Conference of the Canadian Proteomics Initiative, Toronto, Ontario, Canada, May 13 – 14, 2005.

108. Dean, R.A., Butler, G.S., and **Overall, C. M.** "Degradomic Discovery of Novel Matrix Metalloproteinase-2 Substrates by Isotope Coded Affinity Tag Labelling, iTRAQ and Tandem Mass Spectrometry**."** MMP Gordon Research Conference, Big Sky, MT, USA, August 2005.

109. Kappelhoff, R., Puente, X.S., Seth, A., López-Otín. C., and **Overall, C.M.** *Poster Presentation.* "The CLIP-CHIP: A Dedicated and Complete Microarray for Every Human Protease, Inactive Homologue and Inhibitor." 4th General Meeting of the International Proteolysis Society, Quebec City, Canada, October 2005.

110. Kappelhoff R., Puente, X.S., Seth, A., López-Otín. C., and **Overall, C.M.** *Poster Presentation.* "The CLIP-CHIP: A Dedicated and Complete Microarray for Every Human Protease, Inactive Homologue and Inhibitor." American Association for Cancer Research Special Conference on Cancer. Proteases and the Tumor Microenvironment, Bonita Springs, FL, USA, December 2005.

111. Morrison, C.J., and **Overall, C.M.** *Poster Presentation.* "Characterization of an Alternative TIMP-2-Independent Cellular Activation Pathway of MMP-2 by MT2-MMP: Role of the Hemopexin C Domain." American Association for Cancer Research Special Conference on Cancer. Proteases and the Tumor Microenvironment. Bonita Springs, Florida, USA, December 2005.

112. Cox, J.H. and **Overall, C.M.** *Oral Presentation.* "Regulation of inflammatory and immune responses by matrix metalloproteinase processing of CXCR3 chemokines." 6th Pan Pacific Connective Tissue Society Symposium. Waikoloa, Hawaii, USA, December 1 – 5, 2005.

2006

113. Cox, J.H. and **Overall, C.M.** *Poster Presentation*. "Regulation of Inflammatory and Immune Responses by Matrix Metalloproteinase Processing of Chemokines." Keystone Symposium: Chemokines and Chemokine Receptors. Snowbird, Utah, January 15 – 20, 2006.

114. Starr, A.E., Dean, R.A., **Overall, C.M.** *Poster Presentation*. "CC Chemokine Processing by Matrix Metalloproteinases." Keystone Symposia: Chemokines and Chemokine Receptors, Snowbird, Utah, January 15 – 20, 2006.

115. Starr, A.E., and **Overall, C.M.** *Oral Presentation.* "Chemokine Processing by Matrix Metalloproteinases." 23rd Winter School on Proteinases and Their Inhibitors, Tiers, Italy, March 2006.

116. Dean, R.A., and **Overall, C.M.** *Oral Presentation*. "The Application of Proteomic Techniques for the Degradomic Discovery of Novel Matrix Metalloproteinase-2 Substrates." 23rd Winter School on Proteinases and their Inhibitors, Tiers, Italy, March 1, 2006.

117. Starr, A.E., Dean, R.A., and **Overall, C.M.** *Poster Presentation.* "CC Chemokine Processing by Matrix Metalloproteinases." Cell Signalling in Mucosal Inflammation and Pain. Annual Meeting. Toronto, Ontario, Canada. April 2006.

118. Cox, J.H., Tester, A.M., and **Overall, C.M.** *Poster Presentation.* "Matrix metalloproteinase-8 Regulates Neutrophil Migration via Proteolytic Activation of LPS-induced CXC Chemokine." Cell Signalling in Mucosal Inflammation and Pain Annual Meeting. Toronto, Ontario, Canada. April 2006.

119. Doucet, A., and **Overall, C.M.** *Oral Presentation*. "Human Pre-elafin Inhibitory Function is Essential to Preserve Lung Tissue Integrity, but not Neutrophil Influx, in Experimental Emphysema." 3rd Pacific Coast Protease Spring School, Desert Hot Springs, CA, USA. April 2006.

120. Gioia, M., and **Overall, C.M.** *Oral Presentation*. "Different Aspects of the Mechanism by which Gelatinases, Collagenases and Membrane-type Metalloproteinases Recognize Collagen I and Enzymatically Process the two Chains." 3rd Pacific Coast Protease Spring School, Desert Hot Springs, CA, USA. April 2006.

121. Kappelhoff, R., and **Overall, C.M.** *Oral Presentation*. "The CLIP-CHIP: Genomic Analysis and Profiling of all 721 Proteases, Inactive Homologues and Inhibitor Gene Transcripts in Human Tissues." 3rd Pacific Coast Protease Spring School, Desert Hot Springs, CA, USA. April 2006.

122. Morrison, C.J., and **Overall, C.M.** *Oral Presentation*. "Characterization of an Alternative TIMP-2-independent Cellular Activation Pathway of MMP-2 by MT2-MMP: Role of the Hemopexin C Domain." 3rd Pacific Coast Protease Spring School, Desert Hot Springs, CA, USA. April 2006.

123. Kappelhoff, R., Puente, X.S., Seth, A., López-Otín. C., and **Overall, C.M.** *Invited Talk*. "The Human Protease CLIP-CHIP: Genomic Analysis of all 721 Human Protease and Inhibitor Gene Transcripts in Human Tissue. Degradomics." Systems Biology of the Protease Web Workshop, Edmonton, Alberta, Canada, May 8 – 9, 2006.

124. Kappelhoff, R., Puente, X.S., Seth, A., López-Otín. C., and **Overall, C.M.** *Poster Presentation* (Bronze award). "The Human Protease CLIP-CHIP: Genomic Analysis of all 721 Human Protease and Inhibitor Gene Transcripts in Human Tissue." 6th annual meeting of the Canadian Proteomic Initiative, Edmonton, Canada, May 2006.

125. Schilling, O., and **Overall, C.M.** *Invited Talk.* "System-wide Substrate Screens to Determine Protease Cleavage Site Selectivity." *Invited speaker* at the University of Mainz and Jacobs University of Bremen, Germany. June 2006.

126. Schilling, O., and **Overall, C.M.** *Poster Presentation*. "CLIP-PICS: Proteome-wide Identification of Protease Cleavage Sites." Gordon Research Conferences on Proprotein processing, trafficking & Secretion. New London, NH, USA. July 2006.

127. Morrison, C.J., and **Overall, C.M.** *Poster Presentation*. "TIMP-Independence of MMP-2 Activation by MT2-MMP is Determined by Contributions of Both the MT2-MMP Catalytic Domain and Hemopexin C Domains."

Metzincin Metalloproteinases in Health and Disease Meeting, Centro Stefano Franscini, Monte Verità, Ascona, Switzerland, September 24 – 29, 2006.

128. Kappelhoff, R., Puente, X., Seth, A., López-Otín, C., and **Overall, C.M.** *Poster Presentation.* "The CLIP-CHIP. Genomic Analysis and Profiling of all 721 Proteases, Inactive Homologues, and inhibitor Gene Transcripts in Human Tissues." Metzincin Metalloproteinases in Health and Disease Meeting, Centro Stefano Franscini, Monte Verità, Ascona, Switzerland, September 24 – 29, 2006.

129. Cox, J.H., Tester, A.M., and **Overall, C.M.** *Invited Talk.* "Matrix Metalloproteinase-8 Regulates Neutrophil Migration via Proteolytic Activation of LPS-induced CXC Chemokine." Life Sciences Institute Graduate Student Association Research Day. Vancouver, BC, Canada. October 2006.

130. Starr, A.E., Dean, R.A., and **Overall, C.M.** *Poster Presentation.* "CC Chemokine Processing by Matrix Metalloproteinases". Life Sciences Institute Graduate Student Association Research Day. Vancouver, BC, Canada. October 2006

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131. Dean, R.A., and **Overall, C.M.** *Invited talk.* "Proteomic Discovery of Metalloproteinase Substrates in the Cellular Context by Isotope Tag Labelling Reveals Diverse Substrate Degradomes." New Approaches for Elucidating Protease Biology and Therapeutic Opportunities – Biochemical Society, Royal Agriculture College, Cirencester, UK, January 6, 2007.

132. Repnik, U., Starr, A. E., **Overall, C.M.**, Turk, V., and Turk, B. "Chemokines as Targets for Cathepsins: Possible Role in Rheumatoid Arthritis?" 24nd Protease Winter School, Tiers, Italy, February 28 – March 3, 2007.

133. Schilling, O. and **Overall, C.M.** "CLIP-PICS: Proteome-wide Identification of Protease Cleavage Specificity", *Speaker,* 24nd Protease Winter School, Tiers, Italy, February 28 – March 3, 2007.

134. Prazen, B.J., Rouwette, T., Foster, L.J., Schilling, O., Pratt, B.S., Doucet, A., Kleifeld, O., **Overall, C.M.**, and Nilsson, E.J. "Comparison of Methods of Applying the Trans-Proteomic Pipeline to Mascot Peptide Matches." US HUPO 2007: From Genes to Function, Seattle WA, USA, 4 – 8 March 2007.

135. Auf dem Keller, U., Harwig, C., Perrin, D., and **Overall, C.M.** *Oral Presentation*. "System-wide Identification and Analysis of Proteases and Their Substrates in Breast Carcinogenesis." 4th Pacific Coast Protease Spring School, Borrego Springs, CA, USA, April 29, 2007.

136. Cox, J.H., and **Overall, C.M.** *Oral Presentation.* "The Role of Matrix Metalloproteinase-8 in Rheumatoid Arthritis." 4th Pacific Coast Protease Spring School, Borrego Springs, CA, USA, April 29, 2007.

137. Dean, R.A., and **Overall, C.M.** *Oral Presentation.* "Proteomic Discovery of MMP Substrates by Isotope Tag Labelling Reveals Diverse Substrate Degradomes." 4th Pacific Coast Protease Spring School, Borrego Springs, CA, USA, April 29, 2007.

138. Prudova, A., Doucet, A., auf dem Keller, U., Gioia, M., and Overall., C.M. *Oral Presentation.* "A Proteomic Screen to Characterize N-terminal Processing in Stored Platelets." 4th Pacific Coast Protease Spring School, Borrego Springs, CA, USA, April 29, 2007.

139. Vergote D., Butler G. S., Ooms M., Cox J. H., Silva C., Hollenberg M. D., Jhamandas J. H., **Overall C. M.** and Power C. "A Novel Mechanism of Neurodegeneration in HIV-associated Dementia: a Proteolytic Product of the Chemokine CXCL12 Mediates its Neurotoxic and Neuroinflammatory Properties Through a Change in Receptor Specificity from CXCR4 to CXCR3." VIIIth French Society for Neuroscience Meeting, Montpellier, France, May 22 – 25, 2007.

140. Butler, G.S., Dean, R.A., Tam, E.M., and **Overall, C.M.** *Poster Presentation.* "Pharmacoproteomics to Validate MT1 MMP-mediated Protein Shedding Using a Hydroxamate Inhibitor." Matrix Metalloproteinase Gordon Research Conference, Il Ciocco, Barga, Italy, June 3 – 8, 2007.

141. Cox, J.H., Starr, A.E., Kappelhoff, R., Roberts, C.R., and **Overall, C.M.** *Poster Presentation.* "Matrix Metalloproteinase-8 Deficiency Causes More Severe Arthritis in Male *MRL/lpr* Autoimmune Mice." Matrix Metalloproteinase Gordon Research Conference, Il Ciocco, Barga, Italy, June 3 – 8, 2007.

142. Cox, J.H., Starr, A.E., Kappelhoff, R., Roberts, C.R., and **Overall, C.M.** "Matrix Metalloproteinase-8 Deficiency Causes More Severe Arthritis in Male *MRL/lpr* Autoimmune Mice." Canadian Arthritis Network Annual Scientific Meeting. Halifax, Canada, Oct 10 – 14, 2007.

143. Lin, M., Jackson, P., Tester, A.M., Diaconu, E., **Overall, C.M.**, Blalock, J.E., Pearlman, E. MMP-8 Enhanced Neutrophil Migration Through the Corneal Stroma is Associated with the Generation of the Neutrophil Chemotactic Tripeptide, Pro-Gly-Pro. 40th Annual Meeting of the Society for Leukocyte Biology, Cambridge, Massachusetts, USA, October 11 – 14, 2007. **Journal of Leukocyte Biology 146**, 146.

144. Auf dem Keller, U., Ting, R., Harwig, C., Dedhar, S., Perrin, D., and **Overall, C.M.** "Substrate Degradomics and Activity Imaging of Matrix Metalloproteinases in Breast Carcinogenesis. 5th General Meeting of the International Proteolysis Society Annual Meeting, Patras, Greece, October 20 – 24, 2007, P66.

145. Gioia, M., Foster, L., and **Overall, C.M.** *Poster Presentation. "*Cell-based Identification of Natural Substrates and Cleavage Sites for Matrix Metalloproteinase 2 (MMP2) by SILAC-proteomics." 5th General Meeting of the International Proteolysis Society Annual Meeting, Patras, Greece, October 20 – 24, 2007, P226.

146. Prudova, A., auf dem Keller, U., Gioia, M., and **Overall, C.M.** *Poster Presentation. "*Proteomic Discovery of Matrix Metalloproteinase-2 Substrates Using Terminal Amino Isotopic Labelling of Substrates (TAILS)." 5th General Meeting of the International Proteolysis Society Annual Meeting, Patras, Greece, October 20 – 24, 2007, P304.

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147. Beaudette, P. and **Overall, C.M.** *Oral Presentation.* "Polymer-mediated Purification of Protease Cleavage Products." 25th Protease Winter School 2008, Tiers, Italy, February 27, 2008.

148. Gioia, M. and **Overall, C.M.** *Oral Presentation.* **"**Cell-based Identification of Natural Substrates for Gelatinase A (MMP-2) by SILAC proteomics." 25th Protease Winter School 2008, Tiers, Italy, February 27, 2008.

149. Cox, J.H. and **Overall, C.M.** *Oral Presentation.* "Neutrophil Collagenase (MMP8): Regulatory Roles in Inflammation and Autoimmunity." 25th Protease Winter School 2008, Tiers, Italy, February 28, 2008.

150. Rodriguez, D., and **Overall, C.M.** *Oral Presentation.* "Quantitative Mass Spectrometry Based MMP-Interactomics: Interactors Get Exosited." 5th Pacific Coast Proteolysis Spring School, Borrego Springs, CA, April 2008.

151. Bellac C.L., and **Overall, C. M.** *Oral Presentation.* "Assessing the Role of Matrix Metalloproteinase 12 in Rheumatoid Arthritis." 5th Pacific Coast Proteolysis Spring School, Borrego Springs, CA, April 2008.

152. Doucet, A., and **Overall, C.M.** *Oral Presentation.* "Revealing protease substrates in complex biological samples using terminal amino isotopic Labelling of substrates and mass spectrometry." 5th Pacific Coast Proteolysis Spring School, Borrego Springs, CA, April 2008.

153. Starr, A.E., and **Overall, C.M.** *Oral Presentation.* "Matrix Metalloproteinase Processing of Monocyte Chemoattracting CC Chemokines." 5th Pacific Coast Protease Spring School, Borrego Springs, CA, USA, April 2008.

154. Kappelhoff, R., Puente, X.S., Wilson, C.H., Seth, A., López-Otín, C., and **Overall, C.M.** *Oral Presentation.* "The CLIP-CHIP™ Microarray: Tissue Profiling of all Proteases, Non-proteolytic Homologs and Inhibitors Transcripts in Human and Mouse." 5th Pacific Coast Protease Spring School, Borrego Springs, CA, USA, April 2008.

155. auf dem Keller, U., Ting, R., Harwig, C., Lou, Y., Austin, P., Roskelley, C., Ruth, T.J., and **Overall, C.M.** *Poster Presentation.* "Substrate Degradomics and Activity Imaging of Proteases in Breast Carcinogenesis." CBCRA Reasons for Hope 2008, Vancouver, BC, April 2008.

156. Morrison, C.J., Mancini, S., Roskelley, C., and **Overall, C.M.** *Poster Presentation.* "Microarray and Proteomic Analysis of Breast Cancer and Osteoblast Co-cultures: Role of Matrix Metalloproteinase (MMP)-13 in Bone Metastasis." CBCRA Reasons for Hope 2008, Vancouver, BC, Canada, April 2008.

157. Rodriguez, D., and **Overall, C. M.** *Poster Presentation.* "Quantitative Mass Spectrometry Based MMP-Interactomics: Interactors Get Exosited." 8th International Conference of the Canadian Proteomics Initiative, Burnaby, BC, Canada, May 5, 2008.

158. auf dem Keller, U., Prudova, A., and **Overall, C.M.** "Proteomic Discovery of Matrix Metalloproteinase-2 Substrates using Terminal Amino Isotope Labelling of Substrates." The 8th International Conference of the Canadian Proteomics Initiative, Burnaby, BC, Canada, May 5, 2008.

159. Prudova, A., auf dem Keller, U., Serrano, K., Devine D. and **Overall, C.M.** "Characterization of Proteolytic Processing in Stored Platelets using Terminal Amine Isotopic Labelling of Substrates (TAILS)." 8th Annual International Conference of the Canadian Proteomics Initiative. Burnaby, BC, Canada, May 2008.

160. Prudova, A., auf dem Keller, U., Serrano, K., Devine D. and **Overall, C.M.** "Characterization of Proteolytic Processing in Stored Platelets using Terminal Amine Isotopic Labelling of Substrates (TAILS)." Institute of Circulatory and Respiratory Health Young Investigators Forum. Montreal, QC, Canada, May 2008.

161. Rodriguez, D., and **Overall, C.M.** "Quantitative Mass Spectrometry Based MMP Interactomics: Interactors Get Exosited. 14th Canadian Connective Tissue Conference, Montreal, QC, Canada, June 2008.

162. Butler, G.S., Dean, R.A., Tam, E.M., and **Overall, C.M.** "Revealing Substrates of MT1-MMP: Potential Regulation of PCSK9." *Invited Talk*. Gordon Research Conference on Proteolytic Enzymes and their Inhibitors, New London, New Hampshire, USA, June 6 – 11, 2008.

163. Rodriguez, D., and **Overall, C.M.** "Quantitative Mass Spectrometry Based MMP Interactomics: Interactors Get Exosited." Gordon Research Conference on Proteolytic Enzymes and their Inhibitors, New London, New Hampshire, USA, June 6 – 11, 2008.

164. Kleifeld, O., Doucet, A., auf dem Keller, U., Schilling, O., Kainthan, R.K., Foster, L.J., Kizhakkedathu, J., and **Overall, C.M.** "Terminal Amino Isotope Labelling of Substrates (TAILS): System-Wide Proteomic Identification of Protease Cleavage Products." Gordon Research Conference on Proteolytic Enzymes and their Inhibitors, New London, New Hampshire, USA, June 6 – 11, 2008.

165. Doucet, A., and **Overall, C.M.** "Protease Cleavage Site Determination in Complex Substrates Using Quantitative Proteomics: Complementing Edman Sequencing." Gordon Research Conference on Proteolytic Enzymes and their Inhibitors, New London, New Hampshire, USA, July 6 – 11, 2008.

166. Cox, J.H. and **Overall, C.M.** *Invited Oral Presentation.* "Delayed Neutrophil Apoptosis in MMP Deficient Mice." Gordon Research Conference on Cell Death. Lucca, Italy, July 6 – 11, 2008.

167. auf dem Keller, U., Ting, R., Harwig, C., Lou, Y., Austin, P., Roskelley, C., Ruth, T.J., Dedhar, S., Perrin, D.M., and **Overall, C.M.** "Substrate Degradomics and Activity Imaging of Matrix Metalloproteinases in Breast Carcinogenesis." Joint Metastasis Research Society – AACR Conference on Metastasis, Vancouver, BC, Canada, August 2008.

168. Prudova, A., auf dem Keller, U., and **Overall, C.M.** "Proteomic Discovery of Matrix Metalloproteinase-2 Substrates using Terminal Amine Isotopic Labelling of Substrates (TAILS) Approach." Joint Metastasis Research Society – AACR Conference on Metastasis, Vancouver, Canada, August 2008.

169. auf dem Keller, U., Prudova, A., Lou, Y., Dedhar, S., and **Overall, C.M.** *Selected Speaker.* "Multiplex Substrate Degradomics of Matrix Metalloproteinases in Breast Carcinogenesis." HUPO 7th Annual World Congress, Amsterdam, the Netherlands, August 2008.

170. Prudova, A., auf dem Keller, U., and **Overall, C.M.** *Selected speaker.* "Multiplex System-Wide Discovery of Protease Substrates and their Cleavage Sites." HUPO 7th Annual World Congress, Amsterdam, the Netherlands, August 2008.

171. Bellac C.L., Dean R.A., Doucet A., and **Overall, C.M.** "Characterization of Matrix Metalloproteinase 12 in Acute and Chronic Inflammation: 11th Symposium on Proteinase Inhibitors and Biological Control." Portorož, Slovenia, August 2008.

172. Kappelhoff, R. and **Overall CM.** *Invited Talk*. "The CLIP-CHIP Microarray: Tissue profiling of all Proteases, Inhibitors and Non-Proteolytic Homologs in Human and Mouse." Molecular Life Sciences Seminar, Jacobs University Bremen, Germany, October 06, 2008.

2009

173. Beaudette, P. and **Overall, C.M.** *Oral Presentation*. "Polymers for Proteomics." 26th Protease Winter School, Tiers, Italy, February 2009.

174. Starr, A.E., and **Overall, C.M.** *Poster Presentation*. "Cleavage and Activation of Monocyte Chemoattractants CCL15 and CCL23 by Matrix Metalloproteinases." 3rd Annual Heart, Lung and Blood Research and Education FEST, Vancouver, BC Canada, March 2009.

175. Prudova, A., auf dem Keller, U., Gioia, M., and **Overall, C.M.** *Poster presentation.* "Proteomic Discovery of Matrix Metalloproteinase-2 Substrates using Terminal Amine Isotopic Labelling of Substrates (TAILS) Approach." 3rd Annual Heart, Lung and Blood Research and Education FEST, Vancouver, BC Canada, March 2009.

176. Auf dem Keller, U., Prudova, A., Lou, Y., Dedhar., S., and **Overall., C.M.** *Oral Presentation.* "Substrate Degradomics of Matrix Metalloproteinases in Breast Carcinogenesis." 6th Pacific Coast Protease Spring School, Warner Springs, CA, USA, April 2009.

177. Barré, O., Starr., A., Goebeler, V., Prudova, A., Bellac, C., Morrison, C., Cox, J., Doucet, A., auf dem Keller, U., Rodriguez, D., Schilling, O., and **Overall, C.M.** *Oral Presentation.* "Family-wide Analysis of Cleavage Site Specificity of Matrix Metalloproteinases (MMPs) and Type II Transmembrane Serine Proteases (TTSPs) by PICS (proteome-wide identification of cleavage specificity)." 6th Pacific Coast Protease Spring School, Warner Springs, CA, USA, April 2009.

178. Butler, G.S. and **Overall, C.M.** *Oral Presentation.* "Mislocalized or Misunderstood? – Proteomics vs. Dogma." 6th Pacific Coast Protease Spring School, Warner Springs, CA, USA, April 2009.

179. Goebeler, V., and **Overall, C.M.** *Oral Presentation*. "Characterization of Human Matrix Metalloproteinase 26 and 27." 6th Pacific Coast Protease Spring School, Warner Springs, CA, USA, April 2009.

180. Huesgen, P.F., Schumann, H., Adamska, I., and **Overall C.M**. *Oral Presentation*. "Protease Networks – From Protein Quality Control in Photosystem II to Cleavage Site Specificity Mapping of Human Aspartic Proteases." 6th Pacific Coast Protease Spring School, Warner Springs, CA, USA, April 2009.

181. Morrison, C.J., Mancini, S., Roskelly, C., and **Overall, C.M.** *Oral Presentation*. "Microarray and Proteomic Analysis of Breast Cancer and Osteoblast Co-Cultures; Role of Matrix Metalloproteinase (MMP)-13 in Bone Metastasis." 6th Pacific Coast Protease Spring School, Warner Springs, CA, USA, April 2009.

182. Prudova, A., Serrano, K., auf dem Keller, U., Devine, D., and **Overall, C.M**. *Oral Presentation*. "Role of Proteolysis in Platelet Storage Lesion: Connecting Proteases to Their Substrates." 6th Pacific Coast Protease Spring School, Warner Springs, CA, USA, April 2009.

183. Starr, A.E., and **Overall, C.M.** *Oral Presentation*. "Matrix Metalloproteinase Processing of Monocyte Chemoattracting CC Chemokines." 6th Pacific Coast Protease Spring School, Warner Springs, CA, USA, April 2009.

184. Prudova, A., auf dem Keller, U., Serrano, K., Devine, D.V., and **Overall, C.M.** *Poster Presentation*. "Characterization of Proteolytic Processing in Stored Platelets using Terminal Amine Isotopic Labelling of Substrates (TAILS)." UBC Pathology Day, Vancouver, BC, Canada, May 28, 2009.

185. Bellac C.L., Auf dem Keller, U., and **Overall, C.M.** *Poster Presentation.* "Proteomic Identification of Macrophage-related Substrates of MMP12. Changing the Substrate Repertoire by Triggering Inflammation." 4th Symposium on International Symposium on Enabling Technologies for Proteomics (ETP) Vancouver, BC, Canada, May 2009.

186. Morrison, C.J., Mancini, S., Roskelley, C., and **Overall, C.M**. *Poster Presentation.* **"**Microarray and Proteomic Analysis of Breast Cancer and Osteoblast Co-cultures: Role of Matrix Metalloproteinase (MMP)-

13 in Bone Metastasis." 4th Symposium on International Symposium on Enabling Technologies for Proteomics (ETP) Vancouver, BC, Canada, May 2009.

187. auf dem Keller, U., Lou, Y.M., Ting, R., Harwig, C., Prudova, A., Dedhar, S., Perrin, D.M., and **Overall, C.M.** 2009. "Substrate Degradomics and Activity Imaging of Matrix Metalloproteinases in Breast Carcinogenesis". **Clinical & Experimental Metastasis 26,** 866. Joint Metastasis Research Society-AACR Conference on Metastasis. Vancouver, BC, August 4 – 6, 2009.

188. Morrison, C.J., Mancini, S., Roskelley, C., and **Overall, C.M**. *Poster Presentation.* "Microarray and Proteomic Analysis of Breast Cancer and Osteoblast Co-cultures: Role of Matrix Metalloproteinase (MMP)-13 in Bone Metastasis." Matrix Metalloproteinase Gordon Research Conference, Les Diablerets, Switzerland, August 30 – September 4, 2009.

189. Huesgen, P.F., Masson, O., Liaudet-Coopman, E., and **Overall, C.M**. *Poster Presentation.* "Proteome Wide Peptide Libraries for MS/MS Identification of Human Protease Cleavage Sites." 8th HUPO World Congress, Toronto, Ontario, Canada, September 26 – 30, 2009.

190. Lange, P.F., auf dem Keller, U., Kappelhoff, R., and **Overall, C.M.** *Poster Presentation.* "Deciphering the Degradome of Matrix Metalloproteinases in Breast Carcinogenesis." 8th HUPO World Congress, Toronto, ON, Canada, September 26 – 30, 2009.

191. Starr, A.E., and **Overall, C.M.** *Poster presentation.* "Cleavage and Activation of Monocyte Chemoattractants CCL15 and CCL23 by Matrix Metalloproteinases." 6th General Meeting of the International Proteolysis Society, Surfer's Paradise, Australia, October 26 – 30, 2009.

192. Bellac, C.L., Auf dem Keller, U., **Overall, C.M.** *Poster Presentation.* "Proteomic Identification of Substrates Cleaved by the Macrophage-specific Matrix Metalloproteinase-12 in Arthritis and Experimental Models of Inflammation *in vivo*." 6th General Meeting of the International Proteolysis Society, Surfers Paradise, Australia, October 26 – 30, 2009.

193. Doucet, A., Kleifeld O., auf dem Keller U., Schilling O., Foster L., Kizhakkedathu J., **Overall, C.M.** *Poster Presentation.* "Analysis of Protease Substrates and Protein N-terminal Peptides from Complex Proteomes using Terminal Amine Isotope Labelling of Substrates (TAILS)." 6th General Meeting of the International Proteolysis Society, Surfers Paradise, Australia, October 26-30, 2009.

194. Becker-Pauly, C., auf dem Keller, U., Debela, M., Magdolen, V., Stöcker, W. and **Overall, C.M.** *Selected Oral Presentation.* "Meprin Metalloproteinases Within the Proteolytic Web: N-TAILS Reveals Substrate/Protease Interactions in Cell Differentiation and Proliferation." 6th General Meeting of the International Proteolysis Society, Surfers Paradise, Australia, October 26 – 30, 2009.

195. auf dem Keller, U., Prudova, A., and **Overall, C.M.** *Selected Oral Presentation.* "From Degradomics to Metadegradomics: Exploring Proteolysis in Breast Cancer Metastasis." 6th General Meeting of the International Proteolysis Society, Surfers Paradise, Australia, October 26 – 30, 2009.

196. Serrano, K., Prudova, A., **Overall, C.M.,** and Devine, D.V. *Abstract selected for oral presentation.* "The Effects of Protease Inhibitors on the Platelet Storage Lesion." Transfusion 49 (3S): 8A. AABB Annual Meeting, New Orleans, USA, October 24 – 27, 2009.

2010

197. Marchant, D.J., Cheung, C., Wadsworth, S., Carthy, J., Ng, J., Heilbron, K., Luo, Z., Hegele, R.G., **Overall, C.M.,** McManus, B.M. 2010. *Poster Presentation.* "Matrixmetalloproteinase-12 Regulates the Antiviral Immune Response During Viral Myocarditis Through Interaction With Gene Regulatory Regions". **Circulation 122,** 9085.

198. Bellac, C.L., and **Overall, C.M**. *Oral Presentation.* "Assessing the Role of Macrophage-Specific Matrix Metalloproteinase-12 (MMP12) in Acute and Chronic Inflammation by Identifying MMP12 Substrates in Arthritis and Experimental Models of Inflammation by iTRAQ-TAILS." 7th Pacific Coast Protease Spring School, Borrego Springs, California, USA, April 2010.

199. Huesgen, P.F. and **Overall, C.M**. *Oral Presentation.* "Proteome-wide Analysis of Carboxy-termini: C-Terminomics." 7th Pacific Coast Protease Spring School, Borrego Springs, California, USA, April 2010.

200. Kappelhoff, R. and **Overall, C.M**. *Oral Presentation.* "The CLIP-CHIP Microarray: A Tool for Profiling and Comparing Protease and Inhibitor Gene Expression in Human and Mouse Tissues." 7th Pacific Coast Protease Spring School, Borrego Springs, California, USA, April 2010.

201. Prudova, A. and **Overall, C.M.** *Invited Oral Poster Presentation.* "Multiplex *in vivo* Degradomics in Mice Reveals Diverse Cleaved Protein Profiles." Gordon Research Conference "Proteolytic Enzymes & Their Inhibitors", Il Ciocco, Barga, Italy, May 2010.

202. Bellac, C.L., Starr, A.E., Auf dem Keller, U., and **Overall, C.M.** *Poster presentation.* "A Protective and Gender-Dependent Role for Matrix Metalloproteinase-12 in Rheumatoid Arthritis." Gordon Research Conference on Proteolytic Enzymes & Their Inhibitors, Il Ciocco, Barga, Italy. May 2010.

203. Huesgen, P.F., Masson, O., Liaudet-Coopman, E., and **Overall, C.M.** *Poster Presentation.* "Proteomic Characterization of Human BACE1 and Related Aspartic Protease Cleavage Site Specificities." Gordon Research Conference on Proteolytic Enzymes and Their Inhibitors, Il Ciocco, Barga, Italy. May 2 – 7, 2010.

204. Kappelhoff, R., Puente, X.S., Wilson, C.H., Seth, A., López-Otín, C., and **Overall, C.M.** *Poster Presentation*. "THE CLIP-CHIP™ Microarray: Tissue Profiling of all Proteases, Inhibitors and non-proteolytic Homologs in Man." Gordon Research Conference on Proteolytic Enzymes and Their Inhibitors. Il Ciocco, Barga, Italy. May 2 – 7, 2010.

205. Lange, P.F., auf dem Keller, U., Kappelhoff, R., and **Overall, C.M.** *Poster Presentation*. "The *in vivo* Degradome of Matrix Metalloproteinases in Breast Carcinogenesis – Unravelled by Quantitative Proteomics." Gordon Research Conference on Proteolytic Enzymes and Their Inhibitors. Il Ciocco, Barga, Italy. May 2 – 7, 2010.

206. Schilling, O., Barré, O., Huesgen, P.F., and **Overall, C.M.** *Poster Presentation*. "Proteome-wide Characterization of Protein Carboxy-Termini." Gordon Research Conference on Proteolytic Enzymes & Their Inhibitors, Il Ciocco, Barga, Italy, May 2010.

207. Huesgen, P.F., Masson, O., Liaudet-Coopman, E., and **Overall, C.M.** *Poster Presentation.* "Proteomic Characterization of Human BACE1 and Related Aspartic Protease Cleavage Site Specificities." Proteomics of Protein Degradation and Ubiquitin Pathways. 1st PPDUP Conference, Vancouver, BC, Canada, June 6, 2010.

208. Kappelhoff, R., Puente, X.S., López-Otín, C., and **Overall, C.M.** *Poster Presentation*. "Profiling USPs and Other Intracellular Proteases with the Human and Murine CLIP-CHIP Microarray." Proteomics of Protein Degradation and Ubiquitin Pathways. 1st PPDUP Conference, Vancouver, BC, Canada, June 6, 2010.

209. Starr, A.E., and **Overall. C.M.** *Oral Presentation.* "Matrix Metalloproteinase Processing of Monocyte Chemoattracting CC Chemokines." 3rd Annual LSI Research Day, Vancouver, BC, Canada, August 2010.

210. Schilling, O., Barré, O., Huesgen, P.F., and **Overall, C.M.** *Poster Presentation*. "Proteome-wide Characterization of Protein Carboxy-Termini." *CBR Research Day*, Vancouver, BC, Canada, August 24, 2010.

2011

211. Marchant, D., Bellac, C., Wadsworth, S., Robertson, G., Carthy, J., Luo, Z., Hegele, R.G., **Overall, C.M.,** McManus, B. M. Matrix Metalloproteinase-12 Regulates Gene Expression by Protein Digestion And Gene Binding In Bronchial Epithelial Cells. Colorado, USA., Am. J. Respir. Crit. Care Med. **183,** 2011:A2436, May 15, 2011.

212. Prudova, A., and **Overall C.M.** *Oral Presentation.* "Degradomics as Applied to Immune/Inflammatory Disease, Chemokine Processing and Innate Immunity – Part 1." CBR-CSL-Behring Mini-Symposium, Vancouver, BC, Canada, January 2011.

213. Butler, G.S., and **Overall C.M.** *Oral Presentation.* "Degradomics as Applied to Immune/Inflammatory Disease, Chemokine Processing and Innate Immunity – Part 2." CBR-CSL-Behring Mini-Symposium, Vancouver, BC, Canada, January 2011.

214. Huesgen, P.F., Alami, M., Lange, P.F., Foster, L.J., Schroeder, W.P., **Overall, C.M.,** and Green, B.G. *Invited Talk.* "Crossing Four Membranes: Insights from the N-terminome of a Diatom." 1st Conference on Plant Proteases. Hemavan, Sweden, April 10 – 14, 2011.

215. Kappelhoff, R., Butler, GS, and **Overall, CM.** *Oral Presentation.* "What's Up With Wild-type? Comparing Wild-type and Knock-out Mice on Transcriptomic and Proteomic Level". 8th Pacific Coast Protease Spring School, Borrego Springs, California, USA, April 2011.

216. Dufour, A., and **Overall, C.M.** *Oral Presentation.* "Small-Molecule Anticancer Compounds Selectively Target the Hemopexin Domain of Matrix Metalloproteinase-9." 8th Pacific Coast Protease Spring School, Borrego Springs, California, USA, April 2011.

217. Huesgen, P.F., Alami, M., Lange, P.F., Foster, L.J., Schroeder, W.P., **Overall, C.M**., and Green, B.G. *Poster Presentation*. "Crossing Four Membranes: Insights from the N-terminome of a Diatom." 3rd Symposium of the Canadian National Proteomic Network, Banff, AB, Canada. May 8 – 11, 2011.

218. Prudova, A., and **Overall, C.M.** *Selected Oral Presentation*. "Proteome Profiling and Identification of *in vivo* Substrates of Cysteine Cathepsins in a Murine Model of Pancreatic Cancer." Cascadia Proteomics Meeting, Seattle, WA, USA, July 2011.

219. Huesgen P.F., Dufour A., Schilling O., and **Overall, C.M.** *Selected Oral Presentation*. "Characterization of the Prime and Non-Prime Active Site Specificities of Proteases: Taking PICS to see more Clearly". Cascadia Proteomics Meeting, Seattle, WA, USA, July 2011.

220. Schilling, O., Barré, O., Huesgen, P.F., and **Overall, C.M.** *Poster Presentation.* "Proteome-wide characterization of Protein Carboxy-Termini: C-terminomics." Cascadia Proteomics Meeting, Seattle, WA, USA, July 2011.

221. Schilling, O., Huesgen, P., Dufour, A., Butler, G., and **Overall, C.M.** *Poster presentation.* "Family Wide Proteomic Characterization of the Prime and Non-Prime Active Site Specificities of Human MMPs: Taking PICS to See More Clearly." Gordon Research Conference, Bryant University, RI, USA, August 7 – 11, 2011.

222. Nguyen, K., Huesgen, P.F., Lange, P.F., and **Overall, C.M.** *Poster Presentation*. "The Human Red Blood Cell N-terminome." Centre for Blood Research, Research Day, Vancouver, BC, Canada, August 18, 2011.

223. Dufour, A., and **Overall, C.M.** *Invited Talk.* "Small-molecule Anticancer Compounds Selectively Target the Hemopexin Domain of Matrix Metalloproteinase-9." Global COE program Symposium, Awaji Island, Japan, September 9 – 10th, 2011.

224. Dufour, A., and **Overall, C.M.** *Invited Talk.* "The role of MT1-MMP in Cancer Cell Migration and Metastasis." Lab of Makoto Noda, Kyoto Medical School, Kyoto, Japan, September 16th, 2011.

225. Butler, G.S. and **Overall, C.M.** *Poster Presentation.* "Moonlighting Proteins: A Novel Class Of Matrix Metalloproteinase Substrates Discovered By Degradomics." 7th General Meeting of the International Proteolysis Society, San Diego, CA, USA, October 16 – 20, 2011.

226. Huesgen, P.F., Schilling, O., Prabu-Jeyabalan, M., and **Overall, C.M.** *Poster presentation*. "Family-Wide Characterization of Human Aspartic Proteases and Matrix Metalloproteinases Specificities by Proteomic Identification of Cleavage Sites (PICS)." 7th General Meeting of the International Proteolysis Society, San Diego, CA, USA, October 16 – 20, 2011.

227. Jefferson, T., Broder, C., Hedrich, J., auf dem Keller, U., Schilling, O., Bond, J.S., Pietrzik, C., Postina., R., **Overall, C.M.**, and Becker-Pauly, C. *Invited Poster Presentation.* "Proteases Crossing at the Cell Surface: Meprin beta Activates Adam10 and is *vice versa* Shed into the Extracellular Space". 7th General Meeting of the International Proteolysis Society, San Diego, California, USA, October 16 – 20, 2011.

228. Jefferson, T., Causevic, M., auf dem Keller, U., Schilling, O., Isbert, S., Geyer, R., Jumpertz, T., Weggen, S., Bond, J.S., **Overall, C.M.,** Pietrzik, C.U., and Becker-Pauly, C. *Poster Presentation.* "Meprin beta a Novel

Target for Neurodegenerative Disorders? The Metalloprotease Meprin beta Processes the Amyloid Precursor Protein *in vivo* and Generates Non-Toxic N-terminal Fragments." 7th General Meeting of the International Proteolysis Society, San Diego, California, USA, October 16 – 20, 2011.

229. Kappelhoff, R., Butler, G.S., Prudova, A., and **Overall, C.M.** *Poster presentation.* "What's Up With Wild-type? Comparing Wild-type and Knock-out Mice on Transcriptomic and Proteomic level". 7th General Meeting of the International Proteolysis Society, San Diego, California, USA, October 16 – 20, 2011.

230. Lange, P.F., Lou, Y., auf dem Keller, U., McDonald, P., Dedhar, S., and **Overall, C.M.** *Poster presentation.* "Deconvoluting Protease Activities in Cancer Progression and Metastasis by Linkage of Protein Termini with Underlying Proteolytic Processing." 7th General Meeting of the International Proteolysis Society, San Diego, California, USA, October 16 – 20, 2011.

231. Laurent-Matha, V., Huesgen, P.F., Derocq, D., Masson, O., Prebois, C., Gary-Bobo, M., Lecaille, F., Hollingsworth, R.E., Smith, G., Magnus, Lalmanach, G., **Overall, C.M.,** and Liaudet-Coopman, E. *Poster presentation.* "Pro-Cathepsin D Secreted by Breast Cancer Cells Participates in the Proteolytic Networks of the Tumor Micro-environment by Degrading Cystatin C at Acidic pH, Leading to an Up-Regulation of the Cysteine Cathepsin Proteolytic Activity." 7th General Meeting of the International Proteolysis Society, San Diego, California, USA, October 16 – 20, 2011.

232. Prudova, A., Gocheva, V., auf dem Keller, U., Olson, O., Joyce, J., and **Overall, C.M.** *Invited Poster Presentation.* "Proteome Profiling and Identification of *in vivo* Substrates of Cysteine Cathepsins in a Murine Model of Pancreatic Cancer". 7th General Meeting of the International Proteolysis Society, San Diego, California, USA, October 16 – 20, 2011.

233. Prudova, A.^, Gocheva, V.^, auf dem Keller, U.^, Olson, O., Joyce, J., and **Overall, C.M.** (^equal contributions). *Poster Presentation.* "Proteome Profiling and Identification of *in vivo* Substrates of Cysteine Cathepsins in a Murine Model of Pancreatic Cancer". The 5th Annual Earl Davie Symposium, November 2011, Vancouver, BC, Canada.

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234. Klein, T. and **Overall, C.M.** *Oral Poster Presentation.* "Investigating Substrate Specificity of Deubiquitinating Enzymes." Protein Degradation Pathways in Health and Disease, San Diego CA, USA, January 22 – 25 2012.

235. Lange, P.F. and **Overall, C.M.** *Oral Poster Presentation.* "Modulation of the Proteolytic Network in Cancer Progression and Metastasis Pinpointed by Positional Proteomics". 4th Annual BCPN Symposium. Victoria, BC, Canada. February 20th, 2012.

236. Lange PF, Lou Y, auf dem Keller U, Kappelhoff R, McDonald P, Dedhar S, **Overall CM**, *Oral Presentation*, "Protein Termini and their Modifications Identified by Positional Proteomics and Linked to Protein Function in Cancer" BCPN Proteomics Symposium**,** Victoria, Canada, February 2012.

237. Huesgen, P.F., Schilling, O., Prabu-Jayabalan, M. and **Overall, C.M.** *Poster Presentation.* "Family-wide Characterization of Human Aspartic Proteases and Matrix Metalloproteinases Specificities by Proteomic Identification of Cleavage Sites (PICS)". 5th Annual BCPN Symposium. Victoria, BC, Canada. February 20th, 2012.

238. Huesgen, P.F. and **Overall, C.M.** *Oral Presentation.* "Characterization of the Prime and Non-Prime Active Site Specificities of Proteases: Taking PICS to see More Clearly". 29th Protease Winter School 2012. Tiers, Italy, February 29th – March 4th, 2012.

239. Kappelhoff, R., Barré, O., and **Overall, C.M.** *Oral Presentation.* "Proteomic Identification of Natural Substrates for Matriptase-2. 9th Pacific Coast Protease Spring School, Temecula, California, USA, April 2012.

240. Dufour, A., Bellac, C.L., and **Overall, C.M.** *Oral Presentation.* "Mirror, Mirror, on the Wall, I Need Confirmation. Tell me the Best Protease of All… to Dampen Inflammation." 9th Pacific Coast Protease Spring School, Temecula, California, USA, April 2012.

241. Prudova, A., auf dem Keller, U., Eckhard, U., Gocheva, V., Joyce, J., and **Overall, C.M.** *Oral Presentation.* "Multiplex *in vivo* Degradomics: Challenges, Solutions and Lessons learned." University of Victoria, Victoria, BC, Canada, April 2012.

242. Lange PF, Lou Y, auf dem Keller U, Kappelhoff R, McDonald P, Dedhar S, **Overall CM**, *Oral Presentation*, "Modulation of the Proteolytic Network in Cancer Progression and Metastasis Pinpointed by Positional Proteomics", Canadian Proteomics Network Symposium, Toronto, Canada, April 2012.

243. Butler, G.S., Wang., Y., and **Overall, C.M.** *Poster Presentation*. "Matrix Metalloprotease Processing of Plasminogen Receptors." Keystone Symposia. The Role of Inflammation During Carcinogenesis. Dublin, Ireland, May 2012.

244. Prudova, A., auf dem Keller, U., Fingleton B., and **Overall, C.M.** *Poster Presentation*. "Protease Web and Proteolytic Signature of Skin Inflammation: Master Regulation of Inflammation by MMP2" Keystone Symposia. The Role of Inflammation During Carcinogenesis, Dublin, Ireland, May 2012.

245. Lange PF, Lou Y, auf dem Keller U, Kappelhoff R, McDonald P, Dedhar S, **Overall CM**, *Oral Presentation*, "Modulation of the Proteolytic Network in Breast Cancer Progression and Metastasis". International Conference on the Systems Biology of Human Disease (SBHD), Heidelberg, Germany, May 2012.

246. Huesgen, P.F. and **Overall, C.M.** *Oral Presentation*. "Pinpointing Protein Processing, Trafficking and Function by Positional Proteomics". Department of Biology, University of Konstanz, Konstanz, Germany. May 3rd, 2012.

247. Huesgen, P.F., Lange, P.F., Nguyen, K. and **Overall, C.M.** *Poster Presentation.* "New Beginnings: Proteomic Profiling of Protein N-termini from Red Blood Cells." Keystone Symposia Conference on Proteomics and Interactomics. Stockholm, Sweden, May 7 – 12, 2012.

248. Huesgen, P.F. and **Overall, C.M.** *Oral Presentation*. "Pinpointing Protein Processing, Trafficking and Function by Positional Proteomics". Institute for Molecular Medicine and Cell Biology, Albert-Ludwigs-University Freiburg, Freiburg, Germany, May 15, 2012.

249. Huesgen, P.F., Gomis-Rueth, F.X. and **Overall, C.M.** *Poster Presentation.* "Ulilysin as Novel Digestive Enzyme for Proteomics". 60th ASMS Conference on Mass Spectrometry and Allied Topics. Vancouver, BC, Canada, May 20 – 24, 2012.

250. Li, Y., Ting, R., Harwig, C.W., auf dem Keller, U., Bellac, C.L., Lange, P.F., Inkster, J.A.H., Schaffer, P., Adam, M.J., Ruth, T.J., **Overall, C.M.,** and Perrin, D.F. *Poster Presentation.* "One Step ^{18}F-Labelling of Marimastat to Image Breast Cancer-Associated Matrix Metalloprotease Activity in Mice." SNM Annual Meeting, Miami Beach Convention Centre, Miami, Florida, USA, June 9 – 13, 2012.

251. Lange P.F., Lou, Y., auf dem Keller, U., Kappelhoff, R., McDonald, P., Dedhar, S., **Overall, C.M**. *Oral Presentation*, "Protein Termini and their Modifications Identified by Positional Proteomics and Linked to Protein Function in Cancer". Cascadia Proteomics Symposium, Seattle, WA, USA, July 19 – 21 2012.

252. Fortelny, N., Lange, P., Pavlidis, P., and **Overall, C.M.** Oral Presentation. "Network Analysis of the Protease Web Indicates a Pervasive and Complex Proteolytic System". Cascadia Proteomics Symposium, Seattle, WA, USA, July 19 – 21 2012.

253. Dufour, A. and **Overall, C.M.** *Oral Presentation.* "Resolving Inflammation by Macrophages: Pleiotropic Mechanistic Roles of Matrix Metalloproteinase-12 in Arthritis Revealed by Terminomics." Cascadia Proteomics Symposium. Institute of Systems Biology, Seattle, USA, July 2012.

254. Fortelny, N., Lange, P., Pavlidis, P., and **Overall, C.M.** *Oral Presentation*. "Network Analysis of the Protease Web Indicates a Pervasive and Complex Proteolytic System". Cascadia Proteomics Symposium, Seattle, WA, USA, July 19 – 21 2012.

255. Huesgen, P.F. and **Overall, C.M.** *Oral Presentation. "*TAILS Tales: Proteomics Targeting Proteases". Hoffmann La Roche, Basel, Switzerland. November 29th, 2012.

256. Prudova, A., auf dem Keller, U., Eckhard, U., Gocheva, V., Joyce, J., and **Overall, C.M.** *Oral Presentation.* "Multiplex *in vivo* Degradomics: Connecting Proteases to their Functions." Department of Biochemistry and Molecular Biology Seminar, University of British Columbia, Vancouver, BC, Canada, December 2012.

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257. Fortelny, N., Lange, P., Pavlidis, P., and **Overall, C.M.** *Oral Presentation*. Network Analysis of the Protease Web Indicates a Pervasive and Complex Proteolytic System. Asia Pacific Bioinformatics Conference, Vancouver, BC, Canada, January 21 – 23 2013.

258. Fortelny, N., Lange, P.F, Pavlidis, P., and **Overall, C.M.** Network Analysis of the Protease Web Indicate a Pervasive and Complex Proteolytic System. *Oral and Poster Presentations.* Asia Pacific Bioinformatics Conference, Vancouver, BC, Canada, January 21 – 23, 2013.

259. Fortelny, N., Kappelhoff, R., Lange, P.F., Pavlidis, P., and **Overall, C.M.** Bioinformatics Analysis of the Human Protease Web Reveals a Highly Robust Pervasive Interaction Network. *Oral Presentation*, Canadian National Proteomics Network 5th Annual Symposium, Vancouver, BC, Canada, April 20 – 24, 2013.

260. Rogers, L.D., Blobel, C.P., and **Overall, C.M.** Terminomics Analyses of Primary Cell Culture Supernatants Identify a Role for Adam17 in Extracellular Cathepsin Activity. *Poster Presentation* Canadian National Proteomics Network 5th Annual Symposium, Vancouver, BC, Canada, April 20 – 24, 2013.

261. Klein, T., Marshall, N.C., Finlay, B.B., and **Overall, C.M**. Investigating Proteolytic Events During Salmonella Infection using TAILS. *Poster Presentation*, Canadian National Proteomics Network 5th Annual Symposium, Vancouver, BC, Canada, April 20 – 24, 2013.

262. Eckhard, U., Huesgen, P.F., Lange, P.F., Nguyen, K., Marino, G., Klein, T., Kappelhoff, R., and **Overall, C.M.** Shedding light on placental infection and inflammation in preterm birth – A Proteomics & Transcriptomics Approach. *Poster Presentation*, Canadian National Proteomics Network 5th Annual Symposium, Vancouver, BC, Canada, April 20 – 24, 2013.

263. Marino, G., Huesgen, P.F., Schilling, O., and **Overall, C.M**. Family-wide Characterization of Plant and Human Matrix Metalloproteases Specificities by Proteomic Identification of Cleavage Sites (PICS). *Poster Presentation,* Canadian National Proteomics Network 5th Annual Symposium, Vancouver, BC, Canada, April 20 – 24, 2013.

264. Lange, P.F., Lou, Y., auf dem Keller, U., Kappelhoff, R, Dufour, A., McDonald, P.C., Dedhar, S., and **Overall, C.M.** Systems Analysis of Proteolytic Processes in Breast Cancer Progression and Metastasis. *Poster Presentation,* Canadian National Proteomics Network 5th Annual Symposium, Vancouver, BC, Canada, April 20 – 24, 2013.

265. Huesgen P.F., Lange P.F., Rogers L.D., Gomis-Rueth F.X., and **Overall C.M.** Ulilysin as novel digestive enzyme for proteomics. *Poster Presentation*, Canadian National Proteomics Network 5th Annual Symposium, Vancouver, BC, Canada, April 20 – 24, 2013.

266. Kappelhoff, R., Puente, X.S., Wilson, C., Seth, A., Lopez-Otin, C., and **Overall, C.M.** The CLIP-CHIP Microarray: Profiling all Proteases, Inhibitors and their homologues in man. *Poster Presentation*, Canadian National Proteomics Network 5th Annual Symposium, Vancouver, BC, Canada, April 20 – 24, 2013.

267. Marshall, N.C., Klein, T., Stoynov, N., Foster, L.J., **Overall, C.M.**, Finlay, B.B. Alterations to the human epithelial cell N-terminal proteome during pathogenic Escherichia coli infection. *Poster Presentation*, Canadian National Proteomics Network 5th Annual Symposium, Vancouver, BC, Canada, April 20 – 24, 2013.

268. Huesgen P.F., Lange P.F., Rogers L.D., Gomis-Rueth F.X., **Overall C.M.** Ulilysin as novel digestive enzyme for proteomics. *Oral Presentation*, 10th Pacific Coast Protease Spring School. Desert Hot Springs, CA, USA, April 28 – May 1, 2013.

269. Eckhard, U., Huesgen, P.F., Lange, P.F., Nguyen, K., Marino, G., Klein, T., Kappelhoff, R., and **Overall, C.M.** Fishing for N-termini and shedding light on placental infection & inflammation in preterm birth. *Oral Presentation*, 10th Pacific Coast Protease Spring School. Desert Hot Springs, CA, USA, April 28 – May 1, 2013.

270. Marino, G., Huesgen, P.F., Schroeder, W., Funk, C., and **Overall, C.M.** Taking "PICS" to See More Clearly: New Insights into the Arabidopsis MMP Family. *Oral Presentation,* 10th Pacific Coast Protease Spring School. Desert Hot Springs, CA, USA, April 28 – May 1, 2013.

271. Dufour, A., Lange, P., Kappelhoff, R., MacDonald, P., Lou, Y., Dedhar, S., and **Overall, C.M.** The Philosophical Conundrum of MMP12: To Be or Not To Be An Anti-target." *Oral Presentation,* 10th Pacific Coast Protease Spring School, Desert Hot Springs, CA, USA, April 28 – May 1, 2013.

272. Lange, P.F., Huesgen, P.F., Nguyen, K., and **Overall, C.M.** The Human Erythrocyte Proteome and N-Terminome. *Poster Presentation*, Cascadia Proteomics Symposium, Seattle, WA, USA, July 14 – 16, 2013.

273. Prudova, A., auf dem Keller, U., Eckhard, U., Fingleton, B., and **Overall, C.M.** System-wide Analysis of Proteolytic Signalling in Mouse Skin Inflammation. *Oral and Poster Presentations,* Cascadia Proteomics Symposium, Seattle, WA, USA, July 14 – 16, 2013.

274. Fortelny, N., Kappelhoff, R., Lange, P.F., Pavlidis P., and **Overall, C.M.** Gene Coexpression and Protein Interaction Networks to Fill in Gaps in the Protease Web. *Oral Presentation*, Cascadia Proteomics Symposium, Seattle, WA, USA, July 15 – 16, 2013.

275. Eckhard, U., Huesgen, P.F., Brandstetter, H., and **Overall, C.M.** Proteomic Protease Specificity Profiling of Clostridial Collagenases Reveals their Nature as Dedicated Matrix Degraders. *Oral Presentation*, Cascadia Proteomics Symposium, Seattle, WA, USA, July 15 – 16, 2013.

276. Klein, T., Marshall, N.C., Finlay, B.B., and **Overall, C.M**. Investigating Proteolytic Events During Salmonella Infection. *Oral and Poster Presentation*, Cascadia Proteomics Symposium, Seattle, WA, USA, July 14 – 16, 2013.

277. Eckhard, U., Huesgen, P.F., Lange, P.F., Nguyen, K., Marino, G., Klein, T., Kappelhoff, R., and **Overall, C.M.** Shedding Light on Placental Infection and Inflammation in Preterm Birth by Terminomics – A Comprehensive Protein Termini Orientated Genome-wide Analysis of Human Placental Tissue. *Poster Presentation,* 12th Human Proteome Organization World Congress, Yokohama, Japan, September 16, 2013.

278. Prudova, A., Gocheva, V., auf dem Keller, U., Olson, O., Joyce, J., and **Overall, C.M.** Proteome Profiling and Identification of *in vivo* Substrates of Cysteine Cathepsins in a Murine Model of Pancreatic Cancer. *Poster Presentation,* 12th Human Proteome Organization World Congress, Yokohama, Japan, September 16, 2013.

279. Dufour, A., Lange, P.F., Kappelhoff, R., MacDonald, P., Lou, Y., Dedhar, S., and **Overall, C.M.** Proteomic and Degradomic Analysis of the Tumor Microenvironment of Breast Cancer. *Poster Presentation*, 8th General Meeting of the International Proteolysis Society, Cape Town, South Africa, October 20 – 24, 2013.

280. Butler, G.S., Jobin, P., Eckhard, U., Bellac, C. Kwon, N.H., and **Overall, C.M.** Tryptophanyl-tRNA Synthetase – An Extracellular Moonlighting Target of Matrix Metalloproteinases. *Poster Presentation*, 8th General Meeting of the International Proteolysis Society, Cape Town, South Africa, October 20 – 24, 2013.

281. Kappelhoff, R., Dufour, A., Kleifeld, O., Barré, O., auf dem Keller, U., and **Overall, C.M.** Proteomic identification of natural substrates for Matriptase-2. *Poster Presentation*, 8th General Meeting of the International Proteolysis Society, Cape Town, South Africa, October 20 – 24, 2013.

282. Butler, G.S., Wang, Y., and **Overall, C.M.** Matrix Metalloproteinase Processing of Plasminogen Receptors. *Oral and Poster Presentations*, 7th Annual Earl W. Davie Symposium, Vancouver, BC, Canada, November 14, 2013.

283. Eckhard, U., Huesgen, P.F., Brandstetter, H., and **Overall, C.M.** Active Site Specificity Profiling of *Clostridial* Collagenases by Mass Spectrometry. *Oral and Poster Presentations*, 7th Annual Earl W. Davie Symposium, Vancouver, BC, Canada, November 14, 2013.

284. Lange, P.F., Huesgen, P.F., Nguyen, K., and **Overall, C.M.** The Human Erythrocyte Proteome and N-Terminome. *Poster Presentation*, 7th Annual Earl W. Davie Symposium, Vancouver, BC, Canada, November 14, 2013.

285. Kappelhoff, R., Dufour, A., Kleifeld, O., Barré, O., auf dem Keller, U., and **Overall, C.M.** Proteomic identification of natural substrates for Matriptase-2. *Oral and Poster Presentations*, 7th Annual Earl W. Davie Symposium, Vancouver, BC, Canada, November 14, 2013.

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286. McLeod, J., Eckhard, U., Klein, T., Kleifeld, O., Glogauer, M., and **Overall, C.M**. N-terminone Analysis of Periodontal Disease Mouth Rinse Samples by TAILS Quantitative Proteomics. *Poster Presentation,* UBC Dentistry Research Day, Vancouver, BC, Canada, January 28, 2014.

287. Eckhard, U., Huesgen, P.F., Lange, P.F., Prudova, A., Fortelny, N., Nguyen, K., McLeod, J., Serrano, K., Kleifeld, O., Glogauer, M., Devine, D., and **Overall, C.M.** Annotating Protein N-termini for the Human Proteome Project: Nα-acetylation, N-terminal Methionine Excision and Proteolytic Processing as Crucial Events in the Life of a Protein and Proteolytic Signatures as Precise Reflections of the Functional State of a Biological System. *Oral Presentation*, 31st Winter School on Proteases and Inhibitors, Tiers, South Tyrol, Italy, February 26 – March 2, 2014.

288. Fortelny, N., Lange, P.F., Pavlidis, P., **Overall, C.M.** Pervasive Interactions of Proteases and their Inhibitors form Protein Networks as Part of a Global Protease Web. *Oral Presentation,* 31st Winter School on Proteinases and Inhibitors, Tiers, Italy, February 26 – March 2, 2014.

289. Butler, G.S., Wang, Y., and **Overall, C.M.** Matrix Metalloproteinase Processing of Plasminogen Receptors. *Poster Presentation*, Keystone Conference Inflammation, Infection and Cancer, Whistler, BC, Canada, March 9 – 14, 2014.

290. Rogers, L.D., Blobel, C.P., and **Overall, C.M.** Terminomics Analyses of Primary Cell Culture Supernatants Identify a Role for Adam17 in Extracellular Cathepsin Activity. *Poster Presentation*, Keystone Conference Inflammation, Infection and Cancer, Whistler, BC, Canada, March 9 – 14, 2014.

291. Dufour, A., Lange, P.F., Kappelhoff, R., MacDonald, P., Lou, Y., Dedhar, S., and **Overall, C.M.** Proteomic and Degradomic Analysis of the Tumor Microenvironment of Breast Cancer. *Poster Presentation*, Keystone Conference, Inflammation, Infection and Cancer, Whistler, BC, Canada, March 9 – 14, 2014.

292. Fortelny, N., Lange, P.F., Pavlidis, P., and **Overall, C.M.** Pervasive Interactions of Proteases and their Inhibitors form Protein Networks as Part of a Global Protease Web. *Oral Presentation,* 7th International Symposium on Serpin Biology, Structure and Function, Leogang, Austria, March 29 – April 2, 2014.

293. Marshall, N.C., Klein, T., Stoynov, N., Foster, L.J., Finlay, B.B., **Overall, C.M.** *Poster presentation.* Virulence factors of pathogenic *E. coli* affect global proteolysis in infected human cells. Canadian National Proteomics Network Symposium, Montreal, QC, April 2014.

294. Eckhard, U., Huesgen, P.F., Lange, P.F., Nguyen, K., Kappelhoff, R., and **Overall, C.M**. Placental N-terminomics Points Towards Cortisol Binding Globulin (CBG) Processing by Matrix Metalloproteinases (MMP) During Pregnancy. *Lightning Talk and Poster Presentation,* US HUPO, Seattle, WA, USA, April 6 – 9, 2014.

295. Fortelny, N., Cox, J., Lange, P.F., Pavlidis, P., and **Overall, C.M.** Pervasive Interactions of Proteases and their Inhibitors form Protein Networks as Part of a Global Protease Web. *Poster Presentation,* US HUPO, Seattle, WA, USA, April 6 – 9, 2014.

296. McLeod, J., Eckhard, U., Klein, T., Kleifeld, O., Glogauer, M., and **Overall, C.M.** Tracking Protease Action in Periodontal Disease Mouth Rinse Samples by N-Terminomics. *Poster Presentation,* Normane Bethune Symposium, Vancouver, BC, Canada, April 9, 2014.

297. Eckhard, U., Huesgen, P.F., Schilling, O., Butler, G.S., Cox, J., Goebeler, V., Kappelhoff, R., auf dem Keller, U., Klein, T., Prudova, A., Starr, A.E., Wang, Y., and **Overall, C.M.** Family-Wide Specificity Portrayal of Human Matrix-Metalloproteinases (MMPs). *Oral Presentation*, Pacific Coast Protease Spring School, Desert Hot Springs, CA, USA, April 29 – May 2, 2014.

298. Dufour, A., Fortelny, N. and **Overall, C.M.** Taking The Matrix Out Of The Equation. *Oral Presentation*, Pacific Coast Protease Spring School, Desert Hot Springs, CA, USA, April 29 – May 2, 2014.

299. Klein, T., Fung, S.Y., Blank, M.A., Viner, R.I, Turvey, S.E., and **Overall, C.M.** N-terminal proteomics using TAILS on B-lymphocytes of a patient with combined immunodeficiency. *Poster Presentation*, ASMS, Baltimore, MA, USA, June 15 – 19, 2014.

300. Dufour, A., Fortelny, N. and **Overall, C.M.** Taking The Matrix Out Of The Equation. *Poster Presentation*, Gordon Research Conference, Il Ciocco, Barga, Italy, June 22 – 27, 2014.

301. Dufour, A., Bellac, C., Kappelhoff, R., Starr, A., Fortelny, N. and **Overall, C.M.** Macrophage MMP12 Dampens Inflammation And Neutrophil Recruitment In Arthritis: Pleiotropic Protective Roles Revealed By TAILS Terminomics. *Oral Presentation*, Gordon Research Conference, Il Ciocco, Barga, Italy, June 22 – 27, 2014.

302. McLeod, J., Marino, G., Kappelhoff, R., and **Overall, C.M.** Establishing a Murine Model to Investigate the Role of MMP's in Bacterial Infection. *Lightening Talk and Poster Presentation,* Centre for Blood Research Day, Vancouver, BC, Canada, August 13, 2014.

303. Yang, S., Fortelny, N., Lange, P.F., **Overall, C.M.,** and Pavlidis, P. TopFINDer: Software for retrieving information for termini lists from the TopFIND database *Lightening Talk and Poster Presentation,* Centre for Blood Research Day, Vancouver, BC, Canada, August 13, 2014.

304. Dufour, A., Bellac, C., Kappelhoff, R., Starr, A., Fortelny, N. and **Overall, C.M.** Macrophage MMP12: Pleotropic Protective Roles in Inflammation Revealed By TAILS Terminomics. *Oral Presentation*, Earl W. Davie Symposium, Vancouver, BC, Canada, November 13, 2014.

305. Marino, G., McLeod, J., Kappelhoff, R., Conway, E.M., and **Overall C.M.** Investigating the Role of matrix Metalloproteases In Complement Cascade Activation. *Poster Presentation*, Earl W. Davie Symposium, Vancouver, BC, Canada, November 13, 2014.

306. Jobin, P., Butler G.S., and **Overall C.M.** Tryptophanyl tRNA synthetase as an antiangiogenic target of matrix metalloproteinase processing. *Poster Presentation* CITAC/ACCFC Annual General Meeting 2014, Toronto, ON, Canada, November 25, 2014.

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307. Abbey, R.S., Eckhard, U., Tharmarajah, G., Matthew, I., and **Overall C.M**. *Poster Presentation.* "Annotating the N-Terminome of Human Dental Pulp." UBC Dentistry Education Symposium & 8th Research Day 2015, Vancouver, BC, Canada, January 27, 2015.

308. Nguyen, K., Eckhard, U., Marino, G., Matthew, I., and **Overall C.M**. *Poster Presentation.* "Inflammatory Proteomics—The Protease Web in Normal and Inflamed gingiva." UBC Dentistry Education Symposium & 8th Research Day 2015, Vancouver, BC, Canada, January 27, 2015.

309. Marshall, N.C., Thejomayen, M.P., Klein, T., Stoynov, N., Foster, L.J., Finlay, B.B., and **Overall, C.M.** *Oral and Poster Presentation.* On the hunt for mitochondrial proteolysis: Profiling proteolytic changes in the mitochondrial proteome during bacterial infection. 40th Annual Lorne Conference on Protein Structure & Function, Australia, February 2015.

310. Fortelny, N., Cox, J.H., Starr, A.E., Lange, P.F., Pavlidis, P., and **Overall, C.M.** *Poster Presentation*. "The protease web: a pervasive and complex proteolytic network." 14th Annual International Symposium, Institute of Systems Biology, Seattle, WA, USA, April 6 – 7, 2015.

311. Dufour, A., Kappelhoff, R., Fortelny, N, and **Overall, C.M.** *Oral Presentation*. "Novel pleiotropic roles of MMP12 in breast cancer that will make you *syk*." 12th Pacific Coast Protease Spring School, Desert Hot Springs, CA, USA, May 3 – 6, 2015.

312. Eckhard, U., Marino, G., Mansfiel, M.J., Bandukwala, H., Chen, J., Hagi-Yusuf, J., Holyoak, T., Charles, T., **Overall, C.M.,** and Doxey, A.C. *Oral Presentation*. "A unique family of bacterial flagellins reveals its proteolytic face." 12th Pacific Coast Protease Spring School, Desert Hot Springs, CA, USA, May 3 – 6, 2015.

313. Fortelny, N., Cox, J.H., Yang, S., Kappelhoff, R., Starr, A.E., Lange., P.F., Pavlidis, P., and **Overall, C.M.** *Oral Presentation*. "Making sense of lists of protease substrates using TopFINDer and PathFINDer." *12th* Pacific Coast Protease Spring School, Desert Hot Springs, CA, USA, May 3 – 6, 2015.

314. Kappelhoff, R., and **Overall, C.M.** *Oral Presentation.* "It's easy being green." 12th Pacific Coast Protease Spring School, Desert Hot Springs, CA, USA, May 3 – 6, 2015.

315. Marino, G., McLeod, J., Eckhard, U., and **Overall, C.M.** *Oral Presentation.* "Pulmonary fibrosis: TAILS N-terminomics to unravel the role of MMP2 and MMP12." 12th Pacific Coast Protease Spring School, Desert Hot Springs, CA, USA, May 3 – 6, 2015.

316. McLeod, J., Marino, G., Kappelhoff, R., and **Overall, C.M.** *Oral Presentation.* "Establishing a Murine Model to Investigate the role of Matrix Metalloproteinases in Bacterial Infection." 12th Pacific Coast Protease Spring School, Desert Hot Springs, CA, USA, May 3 – 6, 2015.

317. Solis, N., Dufour, A., Kappelhoff, R., Kristensen, A.R., and **Overall, C.M.** *Oral Presentation*. "Multi-omics platforms to examine proteolytic cleavage, protease expression and whole cell protein abundances in macrophage differentiation." 12th Pacific Coast Protease Spring School, Desert Hot Springs, CA, USA, May 3 – 6, 2015.

318. Dufour, A., Kappelhoff, R., Lange, P., Fortelny, N., Eckhard, U., and **Overall, C.M.** *Poster Presentation.* "Subtracting the matrix out of the equation: matrix metalloproteinases in diseases Subtracting the matrix out of the equation: matrix metalloproteinases in diseases." 21st Canadian Connective Tissue Conference, Quebec City, QC, Canada, May 28 – 30, 2015.

319. Marshall, N.C., Thejomayen, M.P., Klein, T., Stoynov, N., Foster, L.J., **Overall, C.M.** and Finlay, B.B. *Oral Presentation.* On the hunt for mitochondrial proteolysis: Profiling proteolytic changes in the mitochondrial proteome during bacterial infection. Genome BC Genomimcs Forum/Research Exchange, Vancouver, BC, May 2015.

320. Eckhard, U., Marino, G., Gandhi, S., Campbell, A., and **Overall, C.M.** *Poster Presentation.* "The human heart N-terminome: A new strategy to identify Human Proteome Project "missing proteins"." European Proteomics Association IX Annual General Meeting, Milano, Italy, June 23 – 28, 2015.

321. Marino. G., McLeod, J., Eckhard, U., and Overall, C.M. *Poster Presentation*. "Unraveling the role of MMP2 and MMP12 in pulmonary fibrosis by TAILS N-terminomics." European Proteomics Association IX Annual General Meeting, Milano, Italy, June 23 – 28, 2015.

322. Marshall, N.C., Klein, T., Thejomayen, M.P., Stoynov, N., Foster, L.J., **Overall, C.M.**, Finlay, B.B. *Poster presentation*. Virulence factors of pathogenic Escherichia coli are injected into human cells and affect the human cellular N-terminal proteome. 2nd International E. coli & the Mucosal Immune System Symposium, Belgium, July 2015.

323. Eckhard, U., Marino, G., Abbey, S.R., Tharmarajah, G., Matthews, I., and **Overall, C.M.** *Poster Presentation.* "TAILS N-terminomics: A New Strategy to Identify Human Proteome Project "Missing Proteins". 7th MaxQuant Summer School, Munich, Germany, June 29 – July 3, 2015.

324. Dufour, A., Lou, Y., McDonald, P., Kappelhoff, R., Lange, P., Fortelny, N., Dedhar, S., and **Overall, C.M.** *Oral Presentation*. "Moonlighting MMP12 decreases breast cancer cell prognosis by cleavage of intracellular Syk". Gordon Research Seminar, Newry, Maine, U.S.A., August 1 – 2, 2015.

325. Dufour, A., Bellac, C., Kappelhoff, R., Fortelny, N. and **Overall, C.M.** *Oral Presentation*. "Macrophage MMP12 Dampens Inflammation: Pleiotropic Protective Roles Revealed By TAILS Terminomics. Gordon Research Conference." Newry, Maine, U.S.A., August 2 – 7, 2015.

326. Klein, T., Fung, S.Y., Renner, F., Blank, M.A., Viner, R.I., Regnier, C.H., Turvey, S.E., and **Overall, C.M.** *Oral Presentation*. "New roles of MALT1 proteolysis in B cell function deciphered using multiplexed N-terminal proteomics using TAILS." 4th European Congress of Immunology, Vienna, Austria, 6 – 9 September 2015.

327. Klein, T., Fung, S.Y., Renner, F., Blank, M.A., Viner, R.I., Regnier, C.H., Turvey, S.E., and **Overall, C.M**. *Oral Presentation*. "Multiplexed N-terminal proteomics using TAILS on lymphocytes to unravel the role of proteolysis in B cell function and identify missing proteins for the Human Proteome Project." HUPO 14th Annual World Congress, Vancouver Canada, 27 – 30 September 2015.

328. Eckhard, U., Marino, G., Matthews, I., Glogauer, M., and **Overall, C.M.** *Short Talk and Poster Presentation*. Using TAILS N-terminomics to identify missing proteins and study inflammatory gingival diseases. HUPO 14th Annual World Congress**,** Vancouver Canada, 27 – 30 September 2015.

329. Fortelny, N., Yang, S., Lange, P.F., Pavlidis, P., and **Overall, C.M.** *Poster Presentation.* "Truncated protein isoforms and their genesis in the human proteome." HUPO 14th Annual World Congress**,** Vancouver Canada, September 27 – 30, 2015.

330. Fortelny, N., Cox, J.H., Starr, A.E., Lange, P.F., Pavlidis, P., and **Overall, C.M.** *Poster Presentation.* "The protease web: A pervasive and complex proteolytic network generating a multitude of protein isoforms." HUPO 14th Annual World Congress**,** Vancouver Canada, September 27 – 30, 2015.

331. Kappelhoff, R., Dufour, A., Solis, N., **Overall, C.M.** *Poster Presentation.* Proteomic identification of natural substrates for Matriptase-2. HUPO 14th Annual World Congress**,** Vancouver Canada, September 27 – 30, 2015.

332. Marino. G., McLeod, J., Eckhard, U., and **Overall, C.M.** *Poster Presentation*. "Pulmonary fibrosis: TAILS N-terminomics unravels the role of MMP12. HUPO 14th Annual World Congress**,** Vancouver Canada, September 27 – 30, 2015.

333. Solis, N., Dufour, A., Kappelhoff, R., Kristensen, A.R. and **Overall, C.M.** *Poster and Oral Presentation.* Multi-omics to examine proteolytic cleavage, expression and abundances in macrophage differentiation. HUPO 14th Annual World Congress, Vancouver Canada, September 27 – 30, 2015.

334. Marshall, N.C., Thejomayen, M.P., Klein, T., Stoynov, N., Foster, L.J., Finlay, B.B., **Overall, C.M.** *Oral and Poster Presentation.* Pathogenic *E. coli* infection alters the mitochondrial proteome and mitochondrial proteolysis. HUPO 14th Annual World Congress, Vancouver Canada, September 27 – 30, 2015.

335. Marshall, N.C., Thejomayen, M.P., Klein, T., Stoynov, N., Foster, L.J., Finlay, B.B., **Overall, C.M.** *Oral and Poster Presentation.* Pathogenic *E. coli* manipulate global proteolysis within human intestinal cells during infection. HUPO 14th Annual World Congress, Vancouver Canada, September 27 – 30, 2015.

336. Dufour, A., Lou, Y., McDonald, P., Kappelhoff, R., Lange, P., Fortelny, N., Dedhar, S., and **Overall, C.M.** *Poster Presentation.* "Moonlighting MMP12 decreases breast cancer cell prognosis by cleavage of intracellular Syk." 9th General Meeting of the International Proteolysis Society, Penang, Malaysia, October 4 – 8, 2015.

337. Fortelny, N., Kappelhoff, R., Lange, P., Pavlidis, P., and **Overall, C.M.** *Poster Presentation*. Characterization and prediction in a computational representation of the protease web. 9th General Meeting of the International Proteolysis Society, Penang, Malaysia, October 4 – 8, 2015.

338. Butler, G.S., Tsui, J., Klein, T., and **Overall, C.M.** *Poster Presentation.* Unravelling interconnections of plasmin in the protease web using N-terminomics. 9th General Meeting of the International Proteolysis Society, Penang, Malaysia, October 4 – 8, 2015.

339. Kappelhoff, R., Dufour, A., Solis, N., and **Overall, C.M.** *Poster Presentation.* Proteomic identification of natural substrates for Matriptase-2. 9th General Meeting of the International Proteolysis Society, Penang, Malaysia, October 4 – 8, 2015.

340. Mallia-Milanes, B., Dufour, A., Bailey, H., Meakin, G., Leme, A., Bolton, C., Shapiro, S., **Overall, C.M.**, and Johnson S. *Oral Presentation.* A Two Species Proteomics Approach to Determine MMP-12 Substrates in COPD, Winter Meeting of the British-Thoracic-Society 2015, Abstract S129, Thorax, Vol. 70, Supplement 3, A73-74, London, United Kingdom, December 2 – 4, 2015.

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341. Eckhard U. and **Overall, C.M.** *Oral Presentation*. Taking PICS and telling TAILS of proteolytic enzymes in health and disease. Invited Talk at Novo Nordisk, Måløv, Denmark, January 11, 2016.

342. Dufour, A., Bellac, C., Kappelhoff, R., Starr, A., Fortelny, N. and **Overall, C.M.** *Oral Presentation.* Macrophage MMP12 Dampens Inflammation: Pleiotropic Protective Roles Revealed By TAILS Terminomics." GTC Protease Inhibitors in Drug Discovery Conference, San Diego, CA, USA, February 26 – 27, 2016.

343. Dufour, A., Bellac, C., Kappelhoff, R., Starr, A., Fortelny, N. and **Overall, C.M.** *Oral Presentation.* Macrophage MMP12 Dampens Inflammation: Pleiotropic Protective Roles Revealed By TAILS Terminomics. Life Science Institute, University of British Columbia, Vancouver, BC, Canada, March 10, 2016.

344. Fung, S.Y., Klein, T., Renner, F., Blank, M.A., Dufour, A., Kang, S., Bolger-Munro, M., Scurll, J.M., Priatel, J.J., Schweigler, P., Melkko, S., Gold, M.S., Viner, R.I., Régnier, S.H., **Overall, C.M.** and Turvey, S.E. *Poster Presentation.* The Paracaspase MALT1 Cleaves HOIL1 Reducing Linear Ubiquitination by LUBAC to Dampen Lymphocyte NF-□B Signalling. Keystone Symposia, Whistler, BC, Canada, March 13 – 17, 2016.

345. Klein, T., Fung, S.Y., Renner, F., Blank, M.A., Dufour, A., Kang, S., Bolger-Munro, M., Scurll, J.M., Priatel, J.J., Schweigler, P., Melkko, S., Gold, M.S., Viner, R.I., Régnier, S.H., Turvey, S.E., and **Overall, C.M.** *Poster Presentation.* Multiplexed N-terminal TAILS Proteomics on B cells from a Patient with a Mutation in MALT1 Reveals HOIL-1 as a Novel Paracaspase Substrate in Activated Lymphocytes." NF-kB and MAP Kinase Signalling in Inflammation. Ubiquitin Signalling. Keystone Symposia, Whistler, BC, Canada, March 13 – 17, 2016.

346. Solis, N., Dufour, A., Kappelhoff, R., Kristensen, A., Foster, L., **Overall, C.M.**, *Poster Presentation*. Understanding macrophage differentiation using protease degradomics: microarrays (CLIP-CHIP), proteomics and TAILS terminomics. Annual Canadian National Proteomics Network Symposium, Montreal, QC, Canada, April 12 – 13, 2016.

347. Klein, T., Fung, S.Y., Renner, F., R.I., Régnier, S.H., Turvey, S.E., and **Overall, C.M.** *Oral Presentation*. MALT1 is a negative regulator of lymphocyte NF-κB activation by cleavage of HOIL1. Pacific Coast Protease meeting, Desert Hot Springs, CA, USA, April 24 – 27, 2016.

348. Jobin, P., Butler, G., **Overall C.M.** *Oral Presentation*. Tryptophanyl tRNA synthetase as an anti-angiogenic target of MMP processing. Pacific Coast Protease meeting, Desert Hot Springs, CA, USA, April 24 – 27, 2016.

349. Klein, T., Butler, G., **Overall C.M.** *Oral Presentation*. TAILS N-terminal Proteomics to Elucidate the Plasmin Degradome. Bruker User Meeting, Vancouver, BC, Canada, May 5, 2016

350. Marshall, N., Klein, T., Finlay, B.B., **Overall C.M.** *Oral Presentation*. Exploring mitochondrial proteolysis during infection & apoptosis using TAILS N-terminomics. Bruker User Meeting, Vancouver, BC, Canada, May 5, 2016.

351. Zhang, X., Klein, T., Cui, J., Ou, K., Hinkle, C., Li, W., **Overall, C.M.**, and Reilly, M.P. Identification of Proteolytic Substrates for ADAMTS7 Using Terminal Amine Isotope Labelling of Substrates (TAILS). Arteriosclerosis, Thrombosis and Vascular Biology/Peripheral Vascular Disease (ATVB/PVD) Conference, Nashville, TN, United States, May 5 – 7, 2016.

352. Eckhard, U., Doxey, A.C., and **Overall, C.M.** *Oral Presentation*. Clostridial collagenases – From structural biology and proteomics to proteolytic flagella (and back). Invited Talk at the Department of Biology, University of Waterloo, ON, Canada, May 20, 2016.

353. Solis, N., Dufour, A., Kappelhoff, R., Kristensen, A., Foster, L., **Overall, C.M.**, *Poster Presentation*. Integrating protease-specific microarrays (CLIP-CHIP) with proteomics (SILAC) and terminomics (TAILS) to profile macrophage differentiation. American Society for Mass Spectrometry Annual Conference on Mass Spectrometry and Allied Topics, San Antonio, TX, United States, June 5 – 9, 2016.

354. Dufour, A., Solis, N., Kappelhoff, R., Fortelny, N. Kristensen, A., Foster, L. and **Overall, C.M.** *Oral Presentation.* Multi-omics Analysis of Macrophage Polarization. Gordon Research Seminar, Il Ciocco, Italy, June 25, 2016.

355. Klein, T., Fung, S.Y., Renner, F., R.I., Régnier, S.H., Turvey, S.E., and **Overall, C.M.** *Oral Presentation*. MALT1 cleaves HOIL1 to reduce linear ubiquitination and put the brake on NF-κB activation in lymphocytes. Centre for Blood Research Seminar, Vancouver, BC, Canada, June 29, 2016.

356. Klein, T., Fung, S.Y., Renner, F., R.I., Régnier, S.H., Turvey, S.E., and **Overall, C.M.** *Oral Presentation*. MALT1 cleaves HOIL1 to reduce linear ubiquitination and put the brake on NF-κB activation in lymphocytes. Cascadia Proteomics Symposium, Seattle, WA, USA, July 11 – 12, 2016.

357. Jobin, P.G., Butler, G.S., and **Overall, C.M**. *Oral Presentation*. A novel pro-inflammatory role for moonlighting extracellular tryptophanyl tRNA synthetase and its modulation by MMP proteolytic processing. Centre for Blood Research seminar, Vancouver, BC, Canada, August 3, 2016.

358. Butler, G.S. *Oral Presentation*. From Inside to Outside of the Box: From Specific Interactions to Unexpected Substrates of MMPs. Metalloproteinases and their inhibitors: Beginning Past and Future, Oxford, U.K. August 4 – 5, 2016.

359. Butler, G.S., Jobin, P., Tsui, J., Doenges, L. and **Overall, C.M.** *Poster Presentation*. Expanding the Degradome of MMPs: Moonlighting MMP Substrates. Metalloproteinases and their inhibitors: Beginning Past and Future, Oxford, U.K. August 4 – 5, 2016.

360. Doenges, L., Butler, G.S., and **Overall, C.M.** *Poster Presentation.* Matrix Metalloprotease Processing of S100A11 – Regulation of Proinflammatory Functions. Centre for Blood Research Day, Vancouver, BC, Canada, August 16, 2016.

361. Solis, N., and **Overall, C.M.** *Poster Presentation*. Low microgram amount protein samples coupled with novel polymers for TAILS terminomics yield efficient enrichments utilizing precipitation with organic solvents. 15th annual Human Proteome Organization (HUPO) World Congress, Taipei, Taiwan, September 18 – 22, 2016.

362. Solis, N., and **Overall, C.M.** *Poster Presentation*. Low microgram amount protein samples coupled with novel polymers for TAILS terminomics yield efficient enrichments utilizing precipitation with organic solvents. 8th Asia Oceania HUPO conference, Sun Moon Lake, Taipei, Taiwan, September 22 – 23, 2016.

363. Jobin, P.G., Butler, G., and **Overall, C.M**. *Oral Presentation*. Emerging roles of proteases and translating them to the clinic. UBC MD/PhD Program's Building Bridges Seminar, Vancouver, BC, Canada, October 24, 2016.

2017

364. Abbey, S.R., Eckhard, U., Matthew, I., and **Overall, C.M.** Poster Presentation. Proteomic Changes Between the Dental Pulp Stroma and Odontoblast Regions. UBC Dentistry Research Day, Vancouver, BC, Canada, January 24, 2017.

365. Solis, N., Dufour, A., Kappelhoff, R., Kristensen, A., Foster, L., and **Overall, C.M.** *Oral Presentation*. A combination of omics strategies to elucidate the proteolytic networks in macrophage differentiation. 22rd Annual Lorne Proteomics Symposium, Lorne Australia. February 2 – 5, 2017.

366. Klein, T. *Oral Presentation*. TMT-TAILS to study loss and chemical biological restoration of function of mutant MALT1 function in patient lymphocytes. CNPN 2017 meeting, Toronto, ON, Canada, April 18 – 20, 2017.

367. Jobin, P.G., and **Overall, C.M.** *Oral Presentation*. Tryptophanyl tRNA synthetase as an inflammatory target of matrix metalloproteinase processing. Pacific Coast Protease Spring School, Desert Hot Springs, California, USA, May 7 – 10, 2017.

368. Butler, G.S., and **Overall, C.M.** *Oral Presentation*. Unravelling interconnections of plasmin in the protease web using N-terminomics. Pacific Coast Protease Spring School, Desert Hot Springs, California, USA, May 7 – 10, 2017.

369. Rozmus, J., and **Overall, C.M.** *Oral Presentation*. The Expression of SENP1 is Critical for Early B Cell Development. Pacific Coast Protease Spring School, Desert Hot Springs, California, USA, May 7 – 10, 2017.

370. Bell, P.A., and Briggs M.D. *Oral Presentation*. Investigating ER stress and the role of MANF in skeletal dysplasia. Pacific Coast Protease Spring School, Desert Hot Springs, California, USA, May 7 – 10, 2017.

371. Solis, N., Mark, J., Parambath, A., Kizhakkedathu, J., and **Overall, C.M.** *Poster Presentation.* Precipitation of HPG-ALD Polymer Using Organic Solvents Improves Peptide Identification in TAILS Terminomics. 65th ASMS Conference von Mass Spectrometry and Allied Topics, Indianapolis, IN, USA, June 4 – 8, 2017.

372. Butler, G.S. *Oral Presentation.* Using TAILS to Map the Protease Web. Centre for Blood Research Summer Seminar, Vancouver BC, Canada, June 21, 2017.

373. Solis, N., Rozmus, J. Butler, G., and **Overall, C.M.** *Oral Presentation*. An Overall view of proteolysis in innate and acquired immune processes, Centre for Blood Research Seminar Series, Vancouver BC, Canada, June 21, 2017.

374. Dufour, A., and **Overall, C.M.** *Oral Presentation*. Post-Translational Truncation of IFN-? Dampens Proinflammatory Macrophage Responses and Is Reduced in Autoimmune Disease. Gordon Research Conference - Matrix Metalloproteinases. University of New England, Biddeford, ME, USA, July 9 – 14, 2017.

375. Pablos Ocampo, I. *Oral Presentation.* Proteomic profiling of feverfew pollen, a relevant allergen source. Cascadia Proteomics Symposium, Seattle, WA, USA, July 17 – 18, 2017.

376. Jobin, P.G., Butler, G.S., and **Overall, C.M.** *Poster Presentation*. A novel marker of Human M1 macrophages and its activities. Centre for Blood Research Day, Vancouver, BC, Canada, August 17, 2017.

377. Bulka, O., Klein, T., Solis, N., Butler, G.S., and **Overall, C.M.** *Poster Presentation*. **Best Presentation Award** Mapping the Degradome of Matrix Metalloproteinase 1 (MMP-1). Centre for Blood Research Day, Vancouver, BC, Canada, August 17, 2017.

378. Tsui, J., Butler, G.S., and **Overall, C.M.** *Poster Presentation*. Unravelling the Interconnections of MMPs and the Plasminogen System using Degradomics. Centre for Blood Research Day, Vancouver, BC, Canada, August 17, 2017.

379. Dufour, A., et al., and **Overall, C.M.** *Oral Presentation.* Post-translational truncation of IFN-γ dampens proinflammatory macrophage responses leading to defects in autoimmune disease. 10th General Meeting of the International Proteolysis Society, Banff, AB, Canada, October 28 – November 2, 2017.

380. Solis, N., Dufour, A., Kappelhoff, R., Kristensen, A., Foster, L., and **Overall, C.M**. *Poster Presentation*. Multi-omic protease analysis of differentiated macrophages. 10th General Meeting of the International Proteolysis Society, Banff, AB, Canada, October 28 – November 2, 2017.

381. Jobin, P.G., **Overall, C.M.,** and Butler, G.S. *Poster Presentation*. Extracellular moonlighting tryptophanyl tRNA synthetase is a protease-mediated molecular switch between pro-inflammatory and anti-proliferative activities. 10th General Meeting of the International Proteolysis Society, Banff, AB, Canada, October 28 – November 2, 2017.

382. Astrom, P., Dufour, A., Juurikka, K., Kauppila, J., Salo, T., and **Overall, C.M.** *Poster Presentation*. Terminal Amine Isotopic Labelling of Substrates (TAILS) reveals novel potential substrates of tumor suppressive matrix metalloproteinase-8 in oral carcinoma. 10th General Meeting of the International Proteolysis Society, Banff, AB, Canada, October 28 – November 2, 2017.

383. Kappelhoff, R., Puente, X.S., Wilson, C.H., Seth, A., Lopez-Otin, C., and **Overall, C.M**. *Poster Presentation*. Overview of transcriptomic analysis of all human proteases, non-proteolytic homologs and inhibitors: Organ, tissue and ovarian cancer cell line expression profiling of the human protease degradome by the CLIP-CHIP DNA microarray. 10th General Meeting of the International Proteolysis Society, Banff, AB, Canada, October 28 – November 2, 2017.

384. Butler, G.S., Tsui, J., Klein, T., Solis, N., and **Overall, C.M**. *Poster Presentation*. Exploring novel substrates of plasmin discovered using Terminal Amino Isotopic Labelling of Substrates (TAILS). 10th General Meeting of the International Proteolysis Society, Banff, AB, Canada, October 28 – November 2, 2017.

2018

385. Solis, N., Dufour, A., Kappelhoff, R., Kristensen, A., Foster, L., and **Overall, C.M**. *Poster Presentation*. Integrated Degradomics in Differentiated Macrophages. 23rd Annual Lorne Proteomics Symposium, Lorne Australia. February 1 –4, 2018.

386. Pablos Ocampo, I., Butler, G.S., and **Overall, C.M.** *Oral Presentation.* Proteolytic Regulation of High Mobility Group Box 1 (HMGB1) Activity by Matrix Metalloproteinase 7. 35th Winter School on Proteinases and Their Inhibitors, Tiers am Rosengarten, Italy, February 28 – March 4, 2018.

387. Machado, Y. *Oral Presentation*. Fold-stability is a key factor for allergenicity and immunogenicity of the major birch pollen allergen Bet v 1. 35th Winter School on Proteinases and Their Inhibitors, Tiers am Rosengarten, Italy, February 28 – March 4, 2018.

388. Solis, N. *Oral Presentation*. Multi-omic Protease Analysis of Differentiated Macrophages. BCPN Symposium, Vancouver, BC, Canada, May 4, 2018.

389. Bell, P.A., Matthew, I., Solis, N., **Overall, C.M.** *Poster Presentation*. An optimised sample preparation and analysis workflow for expansion of the human bone proteome. Matrix Biology Europe (MBE), Manchester, UK, July 21 – 24, 2018.

390. Astrom, P., Dufour, A., Villalba Esparza, M., Lou, Y., Kappelhoff, R., Fortelny, N., MacDonald, P., Dive, V., Lerma, E., Dedhar, S., Calvo, A., and **Overall, C.M.** *Poster Presentation*. Intracellular MMP12 Increases Breast Cancer Metastasis. American Society for Matrix Biology, Las Vegas, NV, USA, October 14 – 17, 2018.

391. Astrom, P., Dufour, A., Villalba Esparza, M., Lou, Y., Kappelhoff, R., Fortelny, N., MacDonald, P., Dive, V., Lerma, E., Dedhar, S., Calvo, A., and **Overall, C.M.** *Oral Presentation*. Intracellular MMP12 Increases Breast Cancer Metastasis. American Society for Matrix Biology, Las Vegas, NV, USA, October 14 – 17, 2018.

392. Butler, G.S. *Oral Presentation*. "The Box". Norman Bethune Symposium, Vancouver, BC, Canada, April 2nd, 2019.

2019

393. Butler, G.S. *Oral Presentation* "Using degradomics to uncover novel roles of matrix metalloproteinases (MMPs)". Faculty of Dentistry, UBC, OBMS Public Lecture Series, Vancouver, Canada. May 1st 2019.

394. Vlok, M., Solis, N., Jagdeo, J., Dufour, A., Jan, E., and **Overall, C.M**. *Poster Presentation.* Proteolytic signatures in enterovirus-infected cells. 11th Canadian National Proteomics Network Annual Meeting, Quebec City, QC, Canada, May 6 – 8, 2019.

395. Solis, N. *Oral Presentation*. "Mass Spectrometry-based Terminomics and Proteomics as a Tool to Profile Macrophage Populations" Faculty of Dentistry, UBC, OBMS Public Lecture Series, Vancouver, Canada. 2019

396. Vlok, M., Solis, N., Jagdeo, J., Dufour, A., Jan, E., and **Overall, C.M.** *Oral Presentation*. Positional proteomic analysis reveals novel cleavage products that promote enterovirus infection. 9th Annual Cascadia Proteomics Symposium, Seattle, WA, USA, July 8 – 9, 2019.

397. Solis, N. *Oral Presentation*. TAILS terminomics, shotgun proteomics and transcriptomics analysis of macrophage differentiation. 9th annual Cascadia Proteomics Symposium, Seattle, WA, USA, July 8 – 9, 2019.

398. Bell, P.A., Matthew, I., Solis, N., **Overall, C.M.** *Poster Presentation*. An optimised sample preparation and analysis workflow for expansion of the human bone proteome. 9th annual Cascadia Proteomics Symposium, Seattle, WA, USA, July 8 – 9, 2019.

399. Grin, P**.** *Oral Presentation*. Proteolytic Processing by Matrix Metalloproteinases in Cholesterol Homeostasis. Centre for Blood Research Seminar Series, Vancouver BC, Canada, July 17, 2019.

400. Pablos, I. *Oral Presentation*. Proteolytic Regulation of Pro-inflammatory Activity of High Mobility Group Box 1 (HMGB1) by Matrix Metalloproteinase 7 (MMP7). Centre for Blood Research Seminar Series, Vancouver BC, Canada, July 17, 2019.

401. Bell, P.A. *Oral Presentation*. A Search for Missing Proteins in Human Alveolar Bone. Centre for Blood Research Seminar Series, Vancouver BC, Canada, July 17, 2019.

402. Naidu, N., Grin, P.M., Butler, G.S., and **Overall C.M.** Poster Presentation. "Cholesterol Regulation by Membrane Type-1 Matrix Metalloproteinase in MDA-MB-231 Breast Cancer Cells". CBR Research Day 2019, Vancouver, BC, Canada, August 13, 2019

403. Butler, G.S. *Invited talk*, "From Tadpole TAILS to Diagnosing Disease: The Evolution of Protease Research" Café Scientifique, Vancouver, Canada, August 27th, 2019.

404. Solis, N. *Oral Presentation*. Integrated TAILS Terminomics, Shotgun, and Transcriptomics Analysis of Macrophage Polarization and Activation. 18th Human Proteome Organization World Congress, (HUPO 2019), Adelaide, Australia, September 15 – 19, 2019.

405. Pablos, I. Poster Presentation. Proteolytic Regulation of Pro-inflammatory Activity of High Mobility Group Box 1 (HMGB1) by Matrix Metalloproteinase 7 (MMP7). 11th General Meeting of the International Proteolysis Society, Czech Republic, September 29 – October 4, 2019.

406. Bell, P.A. Poster Presentation. "MALT1 Cleaves the RNAse N4BP1 in B and T lymphocytes, and Regulates N4BP1 Cellular Localization and Function. 11th General Meeting of the International Proteolysis Society, Czech Republic, September 29 – October 4, 2019.

407. Jobin, P.G., Solis, N., Machado, Y., Bell, P.A., Kwon, N.H., Kim, S., **Overall, C.M.**, Butler G.S. Poster Presentation "Matrix Metalloproteinases Modulate Inflammation Through Processing of Secreted tRNA Synthetases" 11th General Meeting of the International Proteolysis Society, Czech Republic, September 29 – October 4, 2019.

408. Bell, P.A., Solis, N., Matthew, I., and **Overall, C.M.** *Oral Presentation.* Proteomic analysis of Human Bone for the Identification of Missing Proteins and Characterization of the Bone N-Terminome. 13th International Conference on the Chemistry and Biology of Mineralized Tissue, Montebello, Quebec, QC, Canada, October 20 – 25, 2019.

2021

409. Vlok, M., Solis, N., Sadasivan, J., Mohamud, Y., Warsaba, R., Luo, H., **Overall, C.M.,** and Jan, E. *Oral Presentation*. Coxsackievirus B3 alters the host proteome to facilitate virus infection" TALK 3MT – Canadian Society for Virology (online), 2021.

410. Vlok, M., Solis, N., Sadasivan, J., Mohamud, Y., Warsaba, R., Luo, H., **Overall, C.M.,** and Jan, E. *Oral Presentation.* Positional proteomic analysis reveals novel cleavage products that promote Coxsackievirus B3 infection. American Society for Virology (online), 2021.

411. Vlok, M., Solis, N., Sadasivan, J., Mohamud, Y., Warsaba, R., Luo, H., **Overall, C.M.,** and Jan, E. *Oral Presentation and Poster Presentation.* Positional proteomic analysis reveals novel cleavage products that promote enterovirus infection. Canadian National Proteomics Network TraineSymposium (Online), 2021.

2022

412. Pablos, I., Machado, Y., de Jesus, H.C.R., Mohamud, Y., Kappelhoff, R., Lindskog, C., Vlok, M., Bell, P.A, Butler, G.S., Grin, P.M., Cao, Q.T., Nguyen, J.P., Solis, N., Abbina, S., Rut, W., Vederas, J.C., Szekely, L., Szakos, A., Drag, M., Kizhakkedathu, J., Mossman, K., Hirota, J., Jan, E., Lou, H., Banerjee, A., and **Overall, C.M.** *Oral Presentation.* Mechanistic Insights into COVID-19 by Global Analysis of the SARS-CoV-2 $3CL^{pro}$ Substrate Degradome. International Proteolysis Society (IPS) Symposium: Proteases in SARS-CoV2 Infections – Webinar. January 20th, 2022.

413. Grin, P.M., de Jesus, H.C.R, Pablos, I., Bell, P.A., Machado, Y., Butler, G.S., Kappelhoff, R., and **Overall, C.M.** *Oral Presentation*. Defeating an antiviral interferon response by SARS-CoV-2 main protease (3CLpro) cleavage. Gordon Research Seminar, Il Ciocco, Italy, June 4 - 5th, 2022.

414. Grin, P.M., de Jesus, H.C.R, Pablos, I., Bell, P.A., Machado, Y., Butler, G.S., Kappelhoff, R., and **Overall, C.M.** *Poster Presentation*. Defeating an antiviral interferon response by SARS-CoV-2 main protease (3CLpro) cleavage. Gordon Research Conference, Il Ciocco, Italy, June 5 - 10th, 2022.

415. Bell, P.A., Scheuermann, S., Renner, F., Lu, H.Y., Turvey, S.E., Bornancin, F., Régnier, C.H., and **Overall, C.M.** *Poster Presentation.* Integrating knowledge of protein sequence with protein function for the prediction and validation of new MALT1 substrates. Gordon Research Conference, Il Ciocco, Italy, June 5 - 10th, 2022.

416. Pablos, I., Machado, Y., de Jesus, H.C.R., Mohamud, Y., Kappelhoff, R., Lindskog, C., Vlok, M., Bell, P.A, Butler, G.S., Grin, P.M., Cao, Q.T., Nguyen, J.P., Solis, N., Abbina, S., Rut, W., Vederas, J.C., Szekely, L., Szakos, A., Drag, M., Kizhakkedathu, J., Mossman, K., Hirota, J., Jan, E., Lou, H., Banerjee, A., and

Overall, C.M. *Oral Presentation.* SARS-CoV-2 Main Protease 3CLpro Disrupts Antiviral Autophagy by Cleaving Galectin-8. Gordon Research Seminar, Il Ciocco, Italy, June 4 - 5th, 2022.

417. Pablos, I., Machado, Y., de Jesus, H.C.R., Mohamud, Y., Kappelhoff, R., Lindskog, C., Vlok, M., Bell, P.A, Butler, G.S., Grin, P.M., Cao, Q.T., Nguyen, J.P., Solis, N., Abbina, S., Rut, W., Vederas, J.C., Szekely, L., Szakos, A., Drag, M., Kizhakkedathu, J., Mossman, K., Hirota, J., Jan, E., Lou, H., Banerjee, A., and **Overall, C.M.** *Oral Presentation.* SARS-CoV-2 Main Protease 3CLpro Disrupts Antiviral Autophagy by Cleaving Galectin-8. Gordon Research Conference, Il Ciocco, Italy, June 5 - 10th, 2022.

418. Pablos, I., Machado, Y., de Jesus, H.C.R., Mohamud, Y., Kappelhoff, R., Lindskog, C., Vlok, M., Bell, P.A, Butler, G.S., Grin, P.M., Cao, Q.T., Nguyen, J.P., Solis, N., Abbina, S., Rut, W., Vederas, J.C., Szekely, L., Szakos, A., Drag, M., Kizhakkedathu, J., Mossman, K., Hirota, J., Jan, E., Lou, H., Banerjee, A., and **Overall, C.M.** *Oral and Poster Presentations.* SARS-CoV-2 Main Protease 3CLpro Disrupts Antiviral Autophagy by Cleaving Galectin-8. Gordon Research Conference, Il Ciocco, Italy, June 5 - 10th, 2022.

419. Butler, G.S., de Jesus, H.C.R., Vlok, M., Machado, Y., Pablos, I. Kappelhoff, R. Solis, N., Bell, P.A., Nore, L., Nguyen, J.P., Cao, Q.T., Grin, P.M., Vederas, J.C., Hirota, J., Lindskog, C., Jan. E., and **Overall, C.M.** *Poster Presentation*. SARS-CoV-2 main protease, $3CL^{pro}$(nsp5), regulates the formation of tunneling nanotubes by coordinating cytoskeletal reorganization. HUPO 21st Annual World Congress, Cancun, Mexico, December 2-6, 2022.

420. de Jesus, H.C.R., and **Overall, C.M.** *Poster Presentation*. Substrate Sequence Specificity Determination of the SARS-CoV-2 3CL Protease by Proteomic Identification of Cleavage Sites. HUPO 21st Annual World Congress, Cancun, Mexico, December 2-6, 2022.

421. Kappelhoff, R., Pablos, I., de Jesus, H.C.R., Butler, G.S., Bell, P.A., Grin, P.M., and **Overall, C.M.** *Poster Presentation*. Proteomic Tools for COVID-19 Research: Protein Expression and Antibody Production of SARS-CoV-2 3CL Main Protease. HUPO 21st Annual World Congress, Cancun, Mexico, December 2-6, 2022.

2023

422. Grin, P.M., and **Overall, C.M.** *Oral Presentation*. Defeating an Antiviral Interferon Response by SARS-CoV-2 Main Protease Cleavage. Protease Winterschool, Tiers, Italy, March, 2023

423. Bell, P.A., Kappelhoff, R., H.C.R., Butler, G.S., Grin, P.M., and **Overall, C.M.** *Oral Presentation*. No Substrate Left Behind – Data Mining for Evidence of Proteolysis. 20th Pacific Coast Protease Spring School, Borrego Springs, California, USA, April 2023.

424. Bell, P.A., Kappelhoff, R., H.C.R., Butler, G.S., Grin, P.M., and **Overall, C.M.** *Oral Presentation*. No Substrate Left Behind – Data Mining for Evidence of Proteolysis. HUPO 22nd Annual World Congress, Busan, South Korea, September 11-16, 2023.

Published Notes in Technical Bulletins

1. Overall, C.M. 1988. “Locating Sample Wells in Mighty Small Gels”. The Lab Notebook, New Product News from Hoefer 88 (3), 8.

2. Overall, C.M. 1996. “The Gel Destain Saga Continues!” Waste Watchers 3 (4), 3.