

# IMOGEN R. COE

## Curriculum Vitae

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Imogen Ruth Coe, Ph.D.  
Professor (tenured),  
Department of Chemistry & Biology,  
Faculty of Science,  
Ryerson University

### ADDRESS

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### AFFILIATE SCIENTIST

Li Ka Shing Knowledge Institute  
Keenan Research Centre  
St. Michael's Hospital

### ADJUNCT MEMBER

Graduate Program in Biology  
York University

### CITIZENSHIP

Canada  
United Kingdom

### EDUCATION

Doctor of Philosophy  
University of Victoria  
Dept. of Biology 1992  
Master of Science  
University of Victoria  
Dept. of Biology 1987  
Bachelor of Science, (Hons.)  
Exeter University, U.K.  
Dept. of Biol. Sci. 1984

### EMPLOYMENT

August 2012 – July 2017

Founding Dean, Faculty of Science, Ryerson University

August 2012 – Present

Professor, Dept. Chemistry & Biology, Ryerson University

November 2011 – July 2012

Associate Dean, Research and Partnerships, Faculty of Science  
and Engineering (FSE), York University

July 2011 – November 2011

Chair, Dept. of Biology, FSE, York University

February 2011

Appointed as Senior Research Scientist, Southlake Regional  
Healthcare Centre

January 2011

Promoted to Full Professor, FSE, York University

July 2010 – June 2010

Sabbatical

January 2005 – June 2010

Chair, Dept. of Biology, FSE, York University

July 2003 – December 2010

Associate Professor, Dept. of Biology, FSE, York University.  
Appointed by Faculty of Graduate Studies to the Graduate  
Program in Chemistry (FSE), the Graduate Program in  
Kinesiology and Health Science (Faculty of Health) and the  
Graduate Program in Health (Faculty of Health).

June 1997 – June 2003

Assistant Professor, Dept. of Biology, FSE, York University

May 1995 – May 1997

AHFMR Postdoctoral Fellow, Dept. Biochemistry & Dept.  
Oncology, University of Alberta (Advisor, Dr. C.E. Cass)

June 1992 – April 1995

Postdoctoral Fellow, Dept. Neurology, University of California,  
San Francisco (Advisor, Dr. I. Diamond)

July 1997 – December 1997 Maternity Leave

May 2001 – August 2001 Maternity Leave

## ADMINISTRATIVE ACTIVITIES AS DEAN, FACULTY OF SCIENCE (selected)

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2017 -

Joint Committee – Salary Anomalies

Joint Committee – Teaching Stream

2015 - 2016

Member of the Administration Bargaining Team for Negotiations, Collective Agreement with RFA.

2016, 2017

Speaker, Academic Leadership Program (founded and run by Dr. Ken Jones), “How to Build a Research Culture”

2013 – present

Co-founder and interim academic director, Ryerson Urban Water Centre

2013 – 2014

Member, Search Committee, Dean of Faculty of Engineering & Architectural Science

Since 2012, Member, Steering Committees for several major infrastructure initiatives; Innovation & Science Building, Centre for Urban Innovation, SIF Kerr Hall Laboratory Sciences teaching lab renovation project, MaRS facility

## BOARD MEMBERSHIP

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**Girls in STEM Executive Advisory Council, 2016 - present**

FIRST Robotics Canada (FRC)

**Michael Garron Hospital (formerly Toronto East General Hospital) 2015 – Present**

Member of the Performance Monitoring and Quality Committee 2015 – 2016

Member of the Innovation Task Force 2015-2016

**Canadian Mining Innovation Council 2015 – Present**

Member of the Strategy and Innovation Committee

**HerVolution 2014- Present**

Advisory Board

## SCHOLARLY & PROFESSIONAL ACTIVITIES

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Scientific Society executive member

2007 – 2009: Treasurer and Secretary, Canadian Council of University Biology Chairs (Host and organizer of Annual CCUBC meeting for 2008, held at the ROM, Nov 4-6)

Scientific Society member

2009 – 2010 Member of the International Scientific Committee, Purines 2010, May 30 – June 2, Tarragona-Barcelona (<http://www.purines2010.org/>)

2005 – 2011: Canadian Council of University Biology Chairs (Executive member from 2007 onwards).

1997 – present: CSBMCB

2000 – 2007: Society of General Physiologists

1993 – 1996: Endocrine Society

2016 - present: Biophysical Society

### Reviewer – academic

Invited External Reviewer – Faculty of Science and Decanal Search Process, University of Western Ontario (May 10-12, 2010)

### Reviewer – funding agencies

Internal/Panel Member:

2016: CIHR, Project Grants – virtual panel reviewer

2011; 2012: E.W.R. Steacie Memorial Fellowship Selection Committee, NSERC

2009: CIHR, Cell Physiology Panel (F2F)

2006-2009: GSC 32 (Cell Biology) Natural Science and Engineering Research Council, Canada (NSERC)

Note: The 2009 competition was the year when a complete change in evaluation method for NSERC Discovery Grants was instituted. In addition to serving on the panel, I was also part of the funding sub-committee for this panel that developed the “binning” criteria and process for this panel.

2005-2006: Member, Ontario Graduate Scholarship Panel, Life Sciences

2004-2005: Member, Ontario Graduate Scholarship Panel, Life Sciences

2001-2002: Member, Panel G, National Cancer Institute of Canada

2000-2001: Member, Panel G, National Cancer Institute of Canada

### External Reviewer

International

2009: The Wellcome Trust, Program/Project Grants (UK)

2007: The Hong Kong Research Council (PRC)

2006: The Hong Kong Research Council (PRC)

2004: The Wellcome Trust, Project Grants (UK)

2003: NIH, PHRA Study Section (USA)

National (excluding CIHR/NSERC)

2007: Heart and Stroke Foundation, Canada

2002: NSERC Discovery Grants Program

2002: Alberta Heritage Foundation for Medical Research

2002: Heart and Stroke Foundation, Canada

2000: CIHR Operating Grants Program

2000: March of Dimes Research Grants, Canada

2000: NSERC Operating Grants Program

2000: Premiers Research Excellence Awards, Ontario (now known as the ERAs)

### Journal Reviewer

- Nucleotides and Nucleic Acids
- Biochemistry and Cell Biology
- Nucleosides
- FEBS Letters
- Biochemical Pharmacology
- Journal of Neurochemistry
- Journal of Physiology and Biochemistry
- FASEB
- AntiViral Therapy
- Current Drug Metabolism
- American Journal of Physiology - Heart and Circulatory Physiology
- Journal of Cell Physiology
- Journal of Neurochemistry
- Journal of Biological Chemistry
- Trends in Pharmacological Sciences
- BBA-Biomembranes
- Journal of Neurochemistry
- DNA Sequence – The Journal of DNA Mapping and Sequencing
- Kidney International
- Journal of Biological Chemistry
- Brain Research
- Molecular and Cellular Biology
- Oncology
- American Journal of Physiology - Cell

- Physiology
- Journal of Neuroscience Research
- Journal of Cell Physiology
- Cell Biochemistry and Function
- Journal of Pharmacology and Experimental Therapeutics
- Molecular Biology and Evolution

## RECOGNITIONS & AWARDS

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2016

**Canada's Most Powerful Women: Top 100 Award Winner.** WXN (Women's Executive Network) Award. Award winner in SunLife Financial Trailblazers and Trendsetters category for work in advancing women in STEM in Canada.

2005

**Alberta Heritage Foundation Medical Research Visiting Speaker Award.** Alberta Heritage Foundation for Medical Research.

2009, 2008, 2007, 2004, 2003, 2002 & 2001

**Merit Award.** York University. Merit according to faculty level criteria for excellence.

## INVITED TALKS

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### RESEARCH INTERNATIONAL

- 2015 16<sup>th</sup> International Symposium on Purines and Pyrimidine Metabolism in Man "The SLC29A Family of Nucleoside Transporters: New Modalities of Regulation and Therapeutics". Columbia University, New York, NY, USA Jun 6<sup>th</sup> to 9<sup>th</sup>.
- 2015 2<sup>nd</sup> International Congress of Purinergic Signaling in South America & 5th Mtg Brazilian Purines Club, "The SLC29A Family of Nucleoside Transporters: New Modalities of Regulation and Therapeutics". Maresias, Sao Paulo, Brazil May 30<sup>th</sup> to June 2<sup>nd</sup>.
- 2014 Purines 2014 – International Conference on Nucleotides, Nucleosides and Nucleobases. "Novel modes of regulation of the equilibrative nucleoside transporters (ENTs)". Bonn, Germany, July 23<sup>rd</sup> to 27<sup>th</sup>.
- 2013 Institute for Biology, Graduate Program in Neurosciences, Fluminense Federal University of Rio de Janeiro "Nucleoside Transport Proteins: In and out, ups and downs". Rio de Janeiro, Brazil, November 27<sup>th</sup>.
- 2013 Department of Cell Biology, University of Calabria, "Understanding the Purinome: The Role of Nucleoside Transporters". Cosenza, Italy, March 6<sup>th</sup>.

- 2012 Departamento de Bioquímica y Biología Molecular, University of Barcelona, "Understanding the Purinome: The Role of Nucleoside Transporters"  
Barcelona, Spain, June 1<sup>st</sup>.
- 2012 Samsung Medical Centre, Sungkyunkwan University, "Equilibrative Nucleoside Transporters and Diabetes".  
Seoul, South Korea, Feb 24<sup>th</sup>
- 2012 Konkuk University, "Understanding the Purinome: The Role of Nucleoside Transporters".  
Seoul, South Korea, Feb 23<sup>rd</sup>.
- 2012 Suncheon National University, "Understanding the Purinome: The Role of Nucleoside Transporters".  
Suncheon, South Korea Feb 21<sup>st</sup>.
- 2010 Purines 2010, "Role of Nucleoside Transporters in Cardiovascular Physiology"  
Tarragona, Spain, June 2<sup>nd</sup>.
- 2009 University of Calabria, Department of Cell Biology. Three 2-hour graduate lectures on nucleoside transporter structure, function, regulation & evolution.  
Cosenza, Italy, November 4<sup>th</sup> to 5<sup>th</sup>.
- 2009 Department of Cell Biology, University of Calabria, "Nucleoside Transporters; from Physiology to Evolution" Nov 4.
- 2007 Departamento de Bioquímica y Biología Molecular, University of Barcelona, "Nucleoside Transporters: What's next?"  
Barcelona, Spain, September 21<sup>st</sup>.
- 2006 Membrane Transport Group, University of Barcelona, "Studies on Nucleoside Transporters: From Evolution to Regulation".  
Barcelona, Spain, March 17<sup>th</sup>.
- 2000 Department of Biology, Hamilton College, New York. "Moving Molecules across Membranes: The structure and function of nucleoside transporters".
- 2000 Department of Biology, Colgate University, New York. "Moving Molecules across Membranes: The structure and function of nucleoside transporters".

## RESEARCH NATIONAL

- 2015 "Moving Molecules Across Membranes: The Transporter," Popular Science Lecture Series, St. Michaels Hospital. Toronto, Ontario, May 14<sup>th</sup>.
- 2014 "Moving Molecules Across Membranes: Studies on Transporters" St. Michaels Hospital, Research Seminar series. Toronto, Ontario, October 1<sup>st</sup>.
- 2013 "Understanding the Purinome: The Role of Nucleoside Transporters" Program in Cell Biology, Hospital for Sick Children. Toronto, Ontario, March 1<sup>st</sup>.
- 2013 "Understanding the Purinome: The Role of Nucleoside Transporters" Department of Chemistry and Biology, Ryerson University. Toronto, Ontario, January 31<sup>st</sup>.
- 2011 Research Rounds, Southlake Regional Health Centre. Newmarket, Ontario, April 12<sup>th</sup>.
- 2010 "Moving Molecules across Membranes", Board of Governors, York University.  
Toronto, Ontario.
- 2009 "Drug Transporters: Opportunities and Challenges", Astra-Zeneca, York University. Toronto, Ontario, January 9<sup>th</sup>.
- 2008 "Partnering with Southlake: Research Potential", Southlake Regional Health Centre.  
Newmarket, Ontario, January 31<sup>st</sup>.
- 2008 "Partnering with Southlake: Research Potential", IBM. Markham, Canada, July 9<sup>th</sup>.

- 2008 "Drug Transporters: Opportunities and Challenges" Sanofi Pasteur. Toronto, Ontario, May 13<sup>th</sup>.
- 2006 "Studies on Nucleoside Transporters: New Models and Old Paradigms", Department of Physiology and Pharmacology, University of Western Ontario. London, Ontario, April 3<sup>rd</sup>.
- 2005 "Nucleoside Transporters in the Cardiovascular System: New Models and Old Paradigms", AHFMR invited speaker, Cardiovascular Research Group, University of Calgary. Calgary, Alberta.
- 2004 "Moving Molecules across Membranes: Studies on Nucleoside Transporters". Department of Chemistry, York University. Toronto, Ontario.
- 2004 "Moving Molecules across Membranes: Structure, Regulation and Evolution of Nucleoside Transporters", Department of Biochemistry and QCRI, Queens University. Kingston, Ontario.
- 2001 "Moving Molecules across Membranes: The structure and function of nucleoside transporters." Department of Zoology, University of Toronto. Toronto, Ontario.
- 2000 "Regulation of Nucleoside Transporters", Department of Human Biology and Nutritional Science, University of Guelph. Guelph, Ontario.
- 1999 "Regulation of Nucleoside Transporters: Implications for improved chemotherapeutics". Biochem Pharma. Laval, Quebec.
- 1997 "Molecular Biology of Nucleoside Transporters", Department of Oncology, University of Alberta. Edmonton, Alberta.
- 1996 "Moving Molecules across Membranes: Nucleoside Transporters". Department of Biology, York University. Toronto, Ontario.
- 1995 "Moving Molecules across Membranes: Nucleoside Transporters and their role in alcoholism", Department of Biological Sciences, University of Alberta. Edmonton, Alberta.

## **ACADEMIC** INSTITUTIONAL (external to RyersonU)

- 2015 "Transformative Alignment of Institutional Mission for Maximum Community Impact" Presentation given in conjunction with Canon Design (Mark Whitely, Jill Kurth and Safdar Abidi), Society for College and University Planners, 2015 National Conference; Great (Un-funded) Expectations: Integration, Innovation and Collaboration for Quality, Sustainable Higher Education. Chicago, Illinois, USA. July 11<sup>th</sup> to 15<sup>th</sup>.
- 2014 "Transformative Alignment of Institutional Mission for Maximum Community Impact" Presentation given in conjunction with Canon Design (Mark Whitely, Jill Kurth and Safdar Abidi), Society for College and University Planners, 2014 North Central Regional Conference; Great (Un-funded) Expectations: Integration, Innovation and Collaboration for Quality, Sustainable Higher Education. Toronto, Ontario, Canada. November 5<sup>th</sup> to 7<sup>th</sup>.

## **SCIENCE** POLICY & COMMUNICATION

- 2017 **Invited Panelist** "Promoting Women in STEM 2017" organized by Inside Government. Hallam Conference Centre, London, England. March 30<sup>th</sup>.
- 2017 **Invited Podcast Interview** "Dr. Imogen Coe: Studying Drug Transport Proteins for Use in Novel Therapies and Supporting Diversity in STEM", People Behind the Science Podcast (<http://www.peoplebehindthescience.com/dr-imogen-coe/>). January 23<sup>rd</sup>.
- 2017 **Keynote Speaker** "Equity, Diversity, and Inclusivity in STEM", at Beyond the B.Sc. Conference at Ryerson University. Toronto, Ontario, Canada. January 22<sup>nd</sup>.

- 2017 **Keynote Speaker** "Equity, Diversity, and Inclusivity in STEM", Canadian Conference for Undergraduate Women in Physics (CCUWiP). McMaster University, Hamilton, Ontario, Canada. January 13<sup>th</sup>-15<sup>th</sup>.
- 2016 **Invited Speaker** "Diversity Day: From Diversity to equity & Equity to system change", Second annual Department of Paediatrics Diversity Day. Sick Kids, University of Toronto, Toronto, Ontario, Canada, November 30<sup>th</sup>.
- 2016 **Keynote Speaker** at the BGSA Department Day: A Conference for Diversity, Inclusion, and Interdisciplinary Collaboration. Biology Graduate Students Association, McGill University. Montreal, Quebec, Canada, November 29<sup>th</sup>.
- 2016 **Invited Speaker** "Gene-editing and gender equity: Connecting the consequences", at the RSC-Atlantic Symposium on the science of gene editing and its social, cultural, economic, and ethical implications. Dalhousie University. Halifax, Nova Scotia, Canada, November 28<sup>th</sup>.
- 2016 **Keynote Speaker** "The Ripple Effect, Investing in Women in STEM" at the Women4Women 2016 hosted by Crowe Soberman at the Toronto Reference Library. Toronto, Ontario, Canada, November 18<sup>th</sup>.
- 2016 **Invited Speaker** "Framework for international collaboration to improve institutions and accelerate change" at the Gender Summit 9, Europe. Brussels, Belgium, November 9<sup>th</sup>.
- 2016 **Chair of Symposium** "Achieving Diversity in STEM, Advancing Innovation", Chair of the Pre-Symposium and moderator of the "Post-Secondary and Beyond" panel. Canadian Science Policy Conference. Ottawa, Ontario, Canada, November 8<sup>th</sup>.
- 2016 **Invited Speaker** "#ChangeTheNumbers", Knowledge Connection at Holland Bloorview Kids Rehabilitation Hospital. Toronto, Ontario, Canada, October 26<sup>th</sup>.
- 2016 **Keynote Speaker** "'She did that': Celebrate International Ada Lovelace Day" at the Institute of Medical Science, University of Toronto. Toronto, Ontario, Canada, October 11<sup>th</sup>.
- 2016 **Invited Panelist** "Equality in Science" at the Laurier Biology Seminars at Wilfrid Laurier University. Waterloo, Ontario, Canada, September 23<sup>rd</sup>.
- 2016 **Invited Speaker** "All about STEMINISM" at the IEEE Regional Meeting, Women in Engineering. Mississauga, Ontario, Canada, September 17<sup>th</sup>.
- 2016 **Keynote Speaker** "#ChangetheNumbers: Diversity in STEM is essential for Canada's economic future", meeting of Society for Women Entering Ecology and Evolution Today held at Canadian Society for Ecology and Evolution Annual General Meeting (CSEE2016), Memorial University of Newfoundland. St. John's, Newfoundland and Labrador, Canada, July 7<sup>th</sup>.
- 2016 **Invited Speaker** "The Lexicon of Diversity, Equity and Inclusion: Knowing the enemy within". Invited speaker for *Filling the Gaps* (an organization focused on professional and personal career development for women in Toronto). Toronto, Ontario, Canada, June 23<sup>rd</sup>.
- 2016 **Invited Panel Chair** "Brilliant Minds: Young Women in Science, Technology, Engineering and Math (STEM) Changing the World", at the *International Women's Forum Canada Annual "Canada Connects"* Conference. Toronto, Ontario, Canada, June 10<sup>th</sup>.
- 2016 **Invited Table Host** "Change the Numbers", invited table host, *Royal Canadian Institute for Science, Gala Dinner, MaRS*. Toronto, Ontario, Canada, April 21<sup>st</sup>.
- 2016 **Invited Speaker** "The Lexicon of Diversity in Science, Technology, Engineering & Math", STEMinism Conference (invited speaker, student-run conference, Gr 9 – 12, GTA schools), *Ontario Institute for Studies in Education*, University of Toronto. Toronto, Ontario, Canada, April 20<sup>th</sup>.
- 2016 **Invited Panelist** "An Afternoon with Hedy Lamarr" at the Revue Theatre, Q&A following the presentation of the documentary *Calling Hedy Lamarr* as part of their *Extraordinary Women Documentary Series*. Toronto, Ontario, Canada, April 17<sup>th</sup>.

- 2016 **Invited Guest** at CBC Radio, *Cross-Country Checkup*, “New banknote should honour women in science” (<http://www.cbc.ca/radio/checkup/blog/new-banknote-should-honour-women-in-science-1.3530617>). Canada, April 10<sup>th</sup>.
- 2016 **Invited Speaker** “#ChangetheNumbers” at *Architech, Speakers Series*. Toronto, Ontario, Canada. April 8<sup>th</sup>.
- 2016 **Keynote Speaker** “The Lexicon of Diversity in Science, Technology, Engineering & Math” for the *Undergraduate Women in Science Ryerson*, Ryerson University. Toronto, Ontario, Canada, March 17<sup>th</sup>.
- 2015 **Invited Panelist** “Extraordinary Women: Ada Byron Lovelace, Mother of Tech” at the Revue Theatre, Q&A following presentation of the documentary “Ada Byron Lovelace: To Dream Tomorrow” as part of their *Extraordinary Women Documentary Series*. Toronto, Ontario, Canada, December 6<sup>th</sup>.
- 2015 **Invited Speaker** “SRSA Crosstalks Seminar: Women in Science” at St. Michael’s Hospital for their *Women in Science Series*. Toronto, Ontario, Canada, December 3<sup>rd</sup>.
- 2015 **Invited Speaker** “#ChangetheNumbers” Iconoclast, TEDxRyerson, The Design Exchange. Toronto, Ontario, Canada, November 14<sup>th</sup>.
- 2015 **Invited Guest** at Fresh Air with Mary Ito, CBC Radio, speaking about Ada Lovelace. Toronto, Ontario, Canada, November 28<sup>th</sup>.
- 2015 **Invited Radio Interview**, Women in STEM, and Diversity in Technology, Bianca Guzzo, (<https://soundcloud.com/biancaguzzo/women-in-stem-and-diversity-in-technology>).
- 2015 **Invited Speaker**, Inaugural Ada Lovelace Day lecture, “All about STEMinism” at York University. Toronto, Ontario, Canada, October 26<sup>th</sup>.
- 2015 **Invited Radio Interview** by Jason Osler “S.T.E.M. Toys” for CBC Radio, (<https://soundcloud.com/jasonosler/stem-toys>). Toronto, Ontario, Canada, August 12<sup>th</sup>.
- 2015 **Invited Speaker & Panelist** “The Art and Science of Creativity” Presentations and Panel discussion by artists (3) and scientists (2) hosted by Rick Miller (film-maker), The Grand Theatre MainStage. London, Ontario, Canada, September 9<sup>th</sup>.
- 2015 **Invited Speaker** “Addiction Biology” Days of Science at Ryerson University. Toronto, Ontario, Canada, May 12<sup>th</sup>.
- 2015 **Keynote Speaker** “STEAM-powered innovation” at the inaugural Ontario Organization of Secondary Students. Toronto, Ontario, Canada, April 18<sup>th</sup>.
- 2015 **Invited Speaker** “STEMinism Conference” St. Mildred’s School (presentation given twice in one day). Oakville, Ontario, Canada, April 8<sup>th</sup>.
- 2015 **Guest Lecturer** Gender, Communication and Science, Ryerson University, Professional Communication Program, Guest lecture (John Shiga, Course Director).

## INTERVIEWS

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### PRINT MEDIA

- 2016 CBC News “Battling a culture of sexism: Why diversity is essential in the tech sector”  
Author: Ramona Pringle. October 3<sup>rd</sup>.  
**Link to article:** <http://www.cbc.ca/news/technology/sexism-tech-industry-pringle-1.3786521>
- 2016 Canadian Science Publishing: Women in Science Series “Women in Science: Dr. Imogen Coe”.  
Author: Sarah Boon. February 17<sup>th</sup>.  
**Link to interview:** <http://www.cdnsiencepub.com/blog/women-in-science-dr-imogen-coe.aspx>

- 2016 Water Canada: The Complete Water Magazine "Interview: Imogen Coe, Dean of the Faculty of Science at Ryerson". February 15<sup>th</sup>.  
 Link to interview: <http://watercanada.net/2016/24329/>
- 2015 The Washington Post "Advice to young scientists: Don't worry about adviser peering down your shirt". Author: Susan Svrluga. June 3<sup>rd</sup>.  
 Link to article: <https://www.washingtonpost.com/news/grade-point/wp/2015/06/02/advice-to-young-scientists-dont-worry-about-adviser-peering-down-your-shirt/>
- 2015 HerVolution "#STEMSpark: Meet Dr. Imogen Coe, PhD, Dean Faculty of Science at Ryerson University". Author: Dorothy Nixon. June 1<sup>st</sup>.  
 Link to interview: <http://www.hervolution.org/2015/06/01/stemspark-meet-dr-imogen-coe-phd-dean-faculty-of-science-at-ryerson-university/>

## EXTERNAL RESEARCH FUNDING

### CURRENTLY HELD

#### Operating Grants

2011 – 2017 (Deferred renewal), \$280,000  
 Natural Sciences and Engineering Research Council (NSERC) of Canada  
 (Grant no. 203397-2011-RGPIN). "Regulation of a transport protein, ENT1"

NSERC DG Renewal application was submitted November 2016, results announced April/May 2017

### PREVIOUSLY AWARDED

2007 – 2012	Canadian Institutes for Health Research (CIHR) Role of Nucleoside Transporters in Cardiovascular Physiology	\$541,930
2004 – 2007	CIHR Adenosine Transporters in the Cardiovascular System	\$283,500
2004 – 2006	Heart and Stroke Foundation of Ontario Adenosine Transporters in the Cardiovascular System	\$130,402 (DECLINED)
2003 – 2010	NSERC Molecular Evolution of Nucleoside Transporters *Note that this grant was extended, without change in award amount, for the 3 years that I served on GSC 32.	\$210,400
2000 – 2005	PREA (now known as ERA) (trainee salary support)	\$150,000
2000 – 2003	National Cancer Institute of Canada, (NCIC) Mechanisms underlying PKC regulation of hENT1	\$289,272
2000 – 2003	CIHR Adenosine Transporters in the Cardiovascular System	\$201,567
1998 – 2002	NSERC Regulation and Evolution of Nucleoside Transporters,	\$120,974
1999	NSERC-IPM Group PKC epsilon regulation of hENT1	\$15,590
1998	Banting Research Foundation Biochem Pharma/Biochem Therapeutic Award, Hormonal regulation of human equilibrative nucleoside transporter, hENT1	\$20,000

#### Equipment Grants

2014 NSERC  
 Facility for Detection of Cellular Metabolites  
 (Co-applicant with 8 others, Dr. R. Botelho – principal applicant)

2012	NSERC	\$147,000
	Components in support of a new confocal spinning disk microscope	
2003	NSERC	\$19,543
	Detector Assembly Replacement Kit for Instant Imager (Co-applicant with 8 others, Dr. R. Pearlman – Principal applicant)	
2001	NSERC	\$20,148
	Equipment for Microbiological Culture (Co-applicant with 6 others, Dr. B. Coukell – principal applicant)	
2000	NSERC	\$65,564
	Beckman Coulter Optima Max Ultracentrifuge (Principal applicant with five others)	
1999	NSERC	\$18,065
	Cell Culture Facility	
1999	NSERC	\$18,020
	Large Capacity Autoclave (Co-applicant with 7 others, Dr. B. Colman - Principal applicant)	
1999	NSERC	\$7,819
	Hunter Thin Layer Electrophoresis System (Co-applicant with 3 others, Dr. D. Goring - Principal applicant)	
1998	NSERC	\$27,500
	Preparative Centrifuge (Co-applicant with 4 others, Dr. R. Pearlman - Principal applicant)	
<b>Multi-User Equipment and Maintenance Grants</b>		
2000 – 2003	MRC/CIHR	\$252,000
	Molecular Biology Core Facility, Department of Biology (Co-applicant with Drs. Bedard, Andrews (University of Toronto) and Pearlman – Principal applicant)	

## REFEREED PUBLICATIONS

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### 2016

53. Bicket, A. and Coe, I.R. N-linked glycosylation of N48 is required for Equilibrative Nucleoside Transporter 1 (ENT1) function. *Bioscience Reports*. 36(4): 1-8. 2016 Aug 31. DOI: 10.1042/BSR20160063.
52. Grañé-Boladeras, N., Spring, C.M. Hanna, W.J.B., Pastor-Anglada, M., and Coe, I.R. Novel Nuclear hENT2 Isoforms Regulate Cell Cycle Progression via Controlling Nucleoside Transport and Nuclear Reservoir. *Cellular and Molecular Life Sciences*. 2016 Jun 6. DOI: 10.1007/s00018-016-2288-9.
51. Zafar, M., Naydenova, Z. and Coe, I.R. Extended Exposure to Substrate Regulates the Human Equilibrative Nucleoside Transporter (hENT1). *Nucleosides, Nucleotides and Nucleic Acids*. 35(10-12):631-642. 2016 Dec 1. DOI: 10.1080/15257770.2016.1200074.

50. Bicket, A., Mehrabi, P., Naydenova, Z., Wong, V., Donaldson, L., Stagljar, I., and Coe, I.R. Novel regulation of Equilibrative Nucleoside Transporter 1 (ENT1) by receptor-stimulated Ca<sup>2+</sup>-dependent calmodulin binding. *Am J Physiol Cell Physiol*. 2016 Mar 23 doi: 10.1152/ajpcell.00243.2015.

## 2015

49. Console, L., Scalise, M., Tarmakova, Z., Coe, I.R. and Indiveri, C. 2015. N-linked Glycosylation of human SLC1A5 (ASCT2) transporter is critical for trafficking to membrane. *Biochim Biophys Acta*. 2015 Apr 7. 1853(7):1636-45.
48. Panigrahi, R., Chandra, P.K., Ferraris, P., Kurt, R., Song, K., Garry, R.F., Reiss, K., Coe, I.R., Furihata, T., Balart, L.A., Wu, T., and Dash, S. Persistent Hepatitis C Virus Infection Impairs Ribavirin Antiviral Activity through Clathrin-Mediated Trafficking of Equilibrative Nucleoside Transporter 1. *J Virol*. 2015 Jan. 89(1):626-42.

## 2014

47. Dos Santos Rodrigues, A., Grañé-Boladeras, N., Bicket, A. and Coe, I.R. Nucleoside Transporters in the Purinome. *Neurochemistry International*. 2014 Jul. 73:229-3746.
46. Kaneko, M., Hakuno, F., Kamei, H., Yamanaka, D., Chida, K., Mianami, S., Coe, I.R., Takahashi, S. 2014 Jan 10. Steroid hormones are novel nucleoside transport inhibitors by competition with nucleosides for their transporters. *BBRC*. 443:(2)505-510.
45. Ramadan, A., Naydenova, Z., Stevanovic, K., Rose, J.B., and Coe, I.R. 2014. The adenosine transporter, ENT1, in cardiomyocytes is sensitive to inhibition by ethanol in a kinase dependent manner: implications for ethanol-dependent cardioprotection and nucleoside analog drug cytotoxicity. *Purinergic Signaling* 10(2):305-12

## 2012

44. Grenz, A., Bauerle, J.D., Dalton, J.H., Ridyard, D., Badulak, A., Tak, E., McNamee, E.N., Clambey, E., Moldovan, R., Reyes, G., Klawitter, J., Ambler, K., Magee, K., Christians, U., Brodsky, K.S., Ravid, K., Choi, D.S., Wen, J., Lukashev, D., Blackburn, M.R., Osswald, H., Coe, I.R., Nürnberg, B., Haase, V.H., Xia, Y., Sitkovsky, M., and Eltzschig, H.K. 2012 Feb. Equilibrative nucleoside transporter1 (ENT1) regulates post-ischemic blood-flow during acute kidney injury in mice. *Journal of Clinical Investigation*, 122(2):693-710.

## 2011

43. Rose, J.B., Naydenova, Z., Bang, A., Ramadan, A., Klawitter, J., Schram, K., Sweeney, G., Grenz, A., Eltzschig, H., Hammond, J., Choi, D. S. and Coe, I.R. 2011 Oct 24. Absence of equilibrative nucleoside transporter 1 in ENT1 knockout mice leads to altered nucleoside levels following hypoxic challenge. *Life Sciences*. 89(17-18):621-30
42. Reyes, G., Nivillac, N.M., Karim, M.Z., DeSouza, L., Siu, K.W., and Coe, I.R. 2011 Sep. The Equilibrative Nucleoside Transporter (ENT1) can be phosphorylated at multiple sites by PKC and PKA. *Molecular Membrane Biology*, 28(6):412-26
41. Nivillac, N.M., Bacani, J., and Coe, I.R. 2011 Jul 1. The life cycle of the human equilibrative nucleoside transporter 1: From ER export to degradation. *Experimental Cell Research* 317(11):1567-79.

40. Reyes, G., Nivillac, N.M., Chalsev, M., and Coe, I.R. 2011 Apr. Analysis of recombinant tagged equilibrative nucleoside transporter 1 (ENT1) expressed in *E. coli*. *Biochem Cell Biol.* 89 (2):246-55.

## 2010 & EARLIER

39. Marvi, M., Rose, J.B., Bang, A., Moon, B.C., Pozeg, Z., Ibrahim, M., Peniston, C., and Coe, I.R. 2010 Dec 23. Nucleoside transporter expression profiles in human cardiac tissue show striking individual variability with overall predominance of hENT1. *European Journal of Pharmaceutical Sciences*, 41 (5):685-91
38. Bone, D.B., Choi, D.S., Coe, I.R., Hammond, J.R. 2010 Sep. Nucleoside/nucleobase transport and metabolism by microvascular endothelial cells isolated from ENT1 <sup>-/-</sup> mice. *Am J Physiol Heart Circ. Physiol.* 299 (3):H847-56.
37. Reyes, G., Naydenova, Z., Abdulla, P., Chalsev, M., Villani, A., Rose, J.B., Chaudary, N., DeSouza, L., Siu, K.W., Coe, I.R. Characterization of mammalian equilibrative nucleoside transporters (ENTs) by mass spectrometry. *Protein Expr Purif.* 2010 Sep; 73(1):1-9.
36. Rose, J.B., Naydenova, Z., Bang, A., Eguchi, M., Sweeney, G., Choi, D.S., Hammond, J.R., Coe I.R. 2010 Mar. Equilibrative nucleoside transporter 1 plays an essential role in cardioprotection. *Am J Physiol Heart Circ Physiol.* 298(3):H771-7.
35. Nivillac, N.I., Wasal, K., Villani, D.F., Naydenova, Z., Hanna, W.J.B., and Coe, I.R. 2009 Oct. Disrupted plasma membrane localization and loss of function reveal regions of human equilibrative nucleoside transporter 1 involved in structural integrity and activity. *BBA – Biomembranes* 1788(10): 2326-34
34. Morote-Garcia, J.C., Rosenberger, P., Nivillac, N.M., Coe, I.R., and Eltzschig, H.K. 2009 Feb. Hypoxia-inducible factor-dependent repression of equilibrative nucleoside transporter 2 attenuates mucosal inflammation during intestinal hypoxia. *Gastroenterology*, 136(2): 607-18.
33. Naydenova, Z., Rose, J.B. and Coe, I.R. 2008 Jun 1. Inosine and equilibrative nucleoside transporter 2 contribute to hypoxic preconditioning in the murine cardiomyocyte HL-1 cell line. *American Journal of Physiology - Heart and Circulatory Physiology*, 294: H2687-H2692.
32. Rose, J.B and Coe, I.R. 2008 Feb 11. The Physiology of Nucleoside Transporters: Back to the Future...(Invited, refereed review). *Physiology*, 23: 41-48
31. Löffler, M., Morote-Garcia, J.C., Eltzschig, S.A., Coe, I.R. and Eltzschig, H.K. 2007 Mar 1. Physiological Roles of Vascular Nucleoside Transporters. *Arteriosclerosis, Thrombosis and Vascular Biology.* 27(5):1004-13.
30. Machado, J., Abdulla, P., Hanna, B., Hilliker, A. and Coe, I.R. 2007 Feb 1. Genomic analysis of nucleoside transporters in Diptera and functional characterization of DmENT2, a *Drosophila* equilibrative nucleoside transporter. *Physiological Genomics* 28 (3): 337-347.
29. Mohajer- Maghari, B., Amini-Bavil-Olyaei, S., Webb, R.A., and Coe, I.R. 2007 Feb. Molecular cloning and characterization of *Hymenolepis diminuta* alpha-tubulin gene. *DNA Sequence*, 18 (1): 80-83.
28. Abdulla, P., and Coe, I.R. 2007. Characterization and functional analysis of the promoter for the human equilibrative nucleoside transporter gene, hENT1. *Nucleosides, Nucleotides and Nucleic Acids*, 26 (1): 99-110.
27. Palanivel, R., Eguchi, M., Shuralyova, I., Coe, I., and Sweeney, G. 2006 Aug. Distinct effects of short- and long-term leptin treatment on glucose and fatty acid uptake and metabolism in HL-1 cardiomyocytes. *Metabolism.* 55 (8):1067-75.

26. Eltzschig, H.K., Abdulla, P., Hoffman, E., Hamilton, K.E., Daniels, D., Schönfeld, C., Löffler, M., Reyes, G., Duszenko M., Karhausen, J., Robinson, A., Westerman, K., Coe, I.R., and Colgan, S.P. 2005 Dec 5. HIF-1-dependent repression of endothelial equilibrative nucleoside transporter (ENT) in hypoxia. *Journal of Experimental Medicine*, 202 (11):1493-505 (also subject of editorial comment).
25. Reyes, G., and Coe, I.R. Genomics and Proteomics of Nucleoside Transporters. 2005 Dec. *Current Pharmacogenomics* 3 (4); 281-290 (peer-reviewed, invited mini-review).
24. Chaudary, N., Naydenova, Z., Shuralyova, I., and Coe, I.R. 2004 Sep. The Adenosine Transporter, mENT1, Is a Target for Adenosine Receptor Signaling and Protein Kinase C $\epsilon$  in Hypoxic and Pharmacological Preconditioning in the Mouse Cardiomyocyte Cell Line, HL-1 *Journal of Pharmacology and Experimental Therapeutics*, 310 (3):1190-1198.
23. Tajmir, P., Ceddia, R. B., Li, R-K., Coe, I.R. and Sweeney, G. 2004 Apr. Leptin increases cardiomyocyte hyperplasia via extracellular signal-regulated kinase- and phosphatidylinositol 3-kinase-dependent signaling pathways. *Endocrinology* 145 (4): 1550-5.
22. Chaudary, N., Naydenova, Z., Shuralyova, I. and Coe, I.R. 2004 Mar. Hypoxia regulates the adenosine transporter, mENT1, in the murine cardiomyocyte cell line, HL-1. *Cardiovascular Research* 61 (4), 780-788.
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20. Acimovic, Y., and Coe, I.R. 2002 Dec. Molecular Evolution of the Equilibrative Nucleoside Transporter Family: Identification of Novel Family Members in Prokaryotes and Eukaryotes. *Molecular Biology and Evolution*. 19 (12), 2199-2210.
19. Sankar, N., Machado, J., Abdulla, P., Hilliker, A.J. and Coe, I.R. 2002 Oct 15. Comparative genomic analysis of equilibrative nucleoside transporters suggests conserved protein structure despite limited sequence identity. *Nucleic Acids Research*, 30 (20), 4339-4350.
18. Chaudary, N, Shuralyova, I., Liron, T., Sweeney, G. and Coe, I.R. 2002. Transport characteristics of HL-1 cells; a new model for the study of adenosine physiology in cardiomyocytes. *Biochem. Cell Biol.* 80, 655-665.
17. Coe, I., Zhang, Y., McKenzie, T., and Naydenova, Z. 2002 Apr 7. PKC regulation of the human equilibrative nucleoside transporter, hENT1. *FEBS Letters* 517, 201-205.
16. Pennycooke, M., Chaudary, N., Shuralyova, I., Zhang, Y., and Coe, I.R. 2001 Jan 26. Differential expression of human nucleoside transporters in normal and tumor tissue. *BBRC*. 280 (3) 951-959.
15. Graham, K.A., Leithoff, J., Coe, I.R., Mowles, D., Mackey, J.R., Young, J.D, and Cass, C.E. 2000 Jan - Feb. Differential transport of cytosine-containing nucleosides by recombinant human concentrative nucleoside transporter protein hCNT1. *Nucleosides and Nucleotides*, 19 (1&2), 415-434.
14. Gordon, A.S., Yao, L., Wu, Z-L., Coe, I.R., and Diamond, I. 1997 Oct. Ethanol alters the subcellular localization of delta- and epsilon protein kinase C in NG108-15 cells. *Mol. Pharm.* 52 (4), 554-9.
13. Coe, I.R., Griffiths, M., Young, J.D., Baldwin, S.A. and Cass, C.E. 1997 Oct 15. Assignment of the human equilibrative nucleoside transporter (hENT1) to 6p21.1-21.2. *Genomics* 45, 459-460.
12. Boleti, H., Coe, I.R., Baldwin, S., Young, J.D., Cass, C.E. 1997 Sep. Molecular identification of the equilibrative NBMPR-sensitive (es) nucleoside transporter and demonstration of an equilibrative NBMPR-insensitive (ei) transport activity in human erythroleukemia (K562) cells

- Neuropharmacology*, 36 (9), 1167-1179.
11. Griffiths, M., Beaumont, N., Yao, S.Y.M., Sundaram, M., Boumah, C.E., Davies, A., Kwong, F.Y.P., Coe, I.R., Cass, C.E., Young, J.D., and Baldwin, S.A. 1997. Cloning of a human nucleoside transporter implicated in the Cellular uptake of adenosine and chemotherapeutic drugs. *Nature-Medicine* 3 (1), 89-93.
  10. Coe, I.R., Yao, L., Diamond, I., and Gordon, A.S. 1996 Nov. The role of Protein Kinase C in cellular tolerance to ethanol. *J. Biol. Chem.* 271 (46), 29468-29482.
  9. Coe, I.R., Dohrman, D.P., Constantinescu, A., Diamond, I., and Gordon, A.S. 1996 Feb. Activation of cyclic AMP-dependent protein kinase reverses tolerance of a nucleoside transporter to ethanol. *J. Pharm. Exp. Ther.* 276 (2), 365-369.
  8. Coe, I.R., von Schalburg, K.R., and Sherwood, N.M. 1995 Nov. Characterization of the Pacific salmon gonadotropin-releasing hormone gene, copy number and transcription start site. *Mol. Cell. Endocrin.*, 115, 113-122.
  7. Parker, D.B., Coe, I.R., Dixon, G.H., and Sherwood, N.M. 1993 Jul. Two salmon neuropeptides coded in one brain cDNA are structurally related to members of the glucagon superfamily. *Eur. J. Biochem.*, 215 (2), 439-448.
  6. Sherwood, N.M., Lovejoy, D.L. and Coe, I.R. 1993 Apr. Origin of mammalian gonadotropin-releasing hormones. *Endocrine Reviews*, 4 (2), 241-254.
  5. Coe, I.R., Munro, R. and Sherwood, N.M. 1992. Isolation of different brain-specific isoforms of alpha-tubulins from chum salmon (*Oncorhynchus keta*). *DNA Sequence* 3 (4), 257-262.
  4. Lovejoy, D.A., Ashmead, B.J., Coe, I.R. and Sherwood, N.M. 1992 Sep 1. Presence of gonadotropin-releasing hormone immunoreactivity in dogfish and skate brains (*Squalus acanthias*) and black skate (*Bathyraja kincaidii*). *J. Exp. Zool.*, 263, 272-283.
  3. Coe, I.R., Grier, H.J. and Sherwood, N.M. 1992 Apr 26. Gonadotropin-releasing hormone in molly *Poecilia latipinna*: Molecular form, quantity and location. *J. Exp. Zool.*, 261, 414-423.
  2. Kelsall, R., Coe, I.R., and Sherwood, N.M. 1990 Jun. Phylogeny and ontogeny of gonadotropin-releasing hormone: comparison of guinea-pig, rat and a protochordate. *Gen. Comp. Endocrinol.* 78, 479-494.
  1. Heierhorst, J., Mahlmann, S.D., Morley, S.D., Coe, I.R., Sherwood, N.M. and Richter, D. 1990 Jan 29. Molecular cloning of two distinct vasotocin precursor cDNAs from chum salmon (*Oncorhynchus keta*) suggests ancient gene duplication. *FEBS Letts.*, 260, 301-304.

## POSTER PRESENTATIONS

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### 2015 ONLY

- Bicket et al. 16<sup>th</sup> International Symposium on Purines and Pyrimidine Metabolism in Man, Purine and Pyrimidine Society, June 6<sup>th</sup> to 9<sup>th</sup>, New York, USA.
- Zafar et al. 16<sup>th</sup> International Symposium on Purines and Pyrimidine Metabolism in Man, Purine and Pyrimidine Society, June 6<sup>th</sup> to 9<sup>th</sup>, New York, USA.
- Mariglia, J., Coe, I.R. and Karshafian, R. "Ultrasound and microbubble therapy enhances the cytotoxic effects of gemcitabine". ISTU Annual Meeting, April 15<sup>th</sup> to 18<sup>th</sup>, in Utrecht, The Netherlands.
- Grañe-Boladeras, N., Hanna, W.J.B., Pastor-Anglada, M., and Coe, I.R. "Contributions of novel nuclear nucleoside transporters, HNP36 and HNP32, to DNA synthesis during cell cycle." Poster #3788 AACR Philadelphia, Pennsylvania, US April 18<sup>th</sup> to 22<sup>nd</sup>.

## SELECTED PUBLISHED ABSTRACTS

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### 2014 & EARLIER

Grañe-Boladeras N, dos Santos Rodrigues, A., Villani, L., Williams, D., Siu K.W.M., Pastor-Anglada, M and Coe I.R. 2013. Understanding the physiological relevance of protein-protein interactions and PKC regulation of the nucleoside transporters, hENT1 and hENT2. Am. Soc. Cell Biol., New Orleans, Dec. 14-18. Published in MCB 24: p. 1097 #2435

Grañe-Boladeras, N, Hanna, WJ., Coe, IR., and Pastor-Anglada, M 2013. Identification and characterization of 3 novel nuclear splice variants of the human Equilibrative Nucleoside Transporter 2 (hENT2). Am. Soc. Cell Biol., New Orleans, Dec. 14-18. Published in MCB 24: p. 1098 #2436

Bicket, A., Mehrabi, P., Tarmakova, Z. and Coe, I.R. 2013. The drug transporter hENT1 is regulated by Ca<sup>2+</sup>/CaM: implications on the efficacy of therapeutic nucleoside analog drugs. Am. Soc. Cell Biol., New Orleans, Dec. 14-18. Published in MCB 24: p.

dos Santos-Rodrigues, A., Naydenova, Z., and Coe, I.R. 2012. Regulation of ENT1, a member of the SLC29 family of transporters, by various signaling pathways: a biochemical-proteomic approach to understanding membrane protein regulation. Canadian National Proteomics Network, 4th Annual Symposium, Proteomics: from protein structures to clinical applications April 23-25

Bicket, A., Mehrabi, P., Naydenova, Z., Donaldson, L., Stagljar, I., and Coe, I.R. 2012. Calcium-dependent regulation of ENT1 by CaM and the potential consequences on nucleoside analog drug delivery. Canadian National Proteomics Network, 4th Annual Symposium, Proteomics: from protein structures to clinical applications April 23-25

Grañe-Boladeras, N., Mehrabi, P., Williams, D., DeSouza, L. Siu, K.W.M., Pastor-Anglada, M. and Coe, I.R. 2012. Proteomic approaches to investigating the phosphorylation status of the drug transporters, ENT1 and ENT2. Canadian National Proteomics Network, 4th Annual Symposium, Proteomics: from protein structures to clinical applications April 23-25.

Nivillac, N.I., Villani, D.F., Wasal K., Hanna W.J.B., Naydenova,, Z., and Coe, I.R. 2008. The C-terminus of human equilibrative nucleoside transporter 1 is involved in correct localization and function. Gordon Research Conference, Membrane Transport Proteins, Il Ciocco Hotel and Resort, Italy, July 20 – July 25.

## HQP SUPERVISION

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### UNDERGRADUATE STUDENTS (Last 5 years only)

May 2016 – August 2016

Piragic, Nermin. NSERC USRA 2016 *The regulation of hENT1 at the plasma membrane by AMPK-dependent signaling.*

May 2015 – August 2015

Piragic, Nermin. NSERC USRA 2015. *Determination of the mechanistic relationship between hENT1 and AMPK.*

May 2013 – May 2015

Olejnik, Laura. NSERC USRA 2014 *Alteration of hENT1 membrane traffic by nucleoside transporter inhibitors.*

September 2012 – April 2013

Zafar, Maliha. Bachelor of Science, York University (Completed).

Honours Thesis Project: *Identification of novel interactors of Panx1: Determining the significance of the interaction between pannexin1(Panx1) and glutathione peroxidase 3 (Gpx3).*

July 2012 – June 2013

Stevanovic, Katarina. Bachelor of Science, York University (Completed).

Honours Thesis Project: *Do nucleoside transporters form oligomers?*

## **MASTER'S STUDENTS**

September 2014 – July 2016

Marigila, Julia. M.Sc., Biomedical Physics, Ryerson University (completed).

Thesis Project: *Investigating the effect of ultrasound and microbubble therapy in combination with Gemcitabine. (Co-supervised with Dr. Raffi Karshafian)*

September 2013 – October 2015

Zafar, Maliha. M.Sc., Molecular Science, Ryerson University (completed).

Thesis Project: *Regulation of ENT1 life cycle by nucleoside analog drugs.*

May 2011 – July 2012

Plastina, Maria Cristina. M.Sc., Biology, University of Calabria (Completed).

Thesis Project: *Characterization of the Amino Acid Transporter, ASCT2. (Co-supervised with Dr. Cesare Indiveri)*

September 2009 – November 2011

Mehrabi, Pedram. M.Sc., Biology, York University (Completed).

Thesis Project: *Identification of Protein Interactors of ENT1.*

September 2009 – December 2011

Ramadan, Azza. M.Sc., Biology, York University (Completed).

Thesis Project: *Role of ENT1 in mediating the purinergic effects of alcohol.*

September 2007 – October 2009

Marvi, Melissa. M.Sc., Biology, York University (Completed).

Thesis Project: *Nucleoside transporter expression profiles in human cardiac tissue show striking individual variability with overall predominance of hENT1.*

September 2005 – January 2008

Ashraf, Tamima. M.Sc., Biology, York University (Completed).

Thesis Project: *Molecular evolution of nucleoside transporters and characterization of a putative membrane transporter in human.*

September 2005 – February 2008

Nekooei-Dastjerdi, Fariba. M.Sc., Biology, York University (Completed).

Thesis Project: *Characterization of nucleoside transport in human skeletal muscle.*

September 2004 – August 2008

Nivillac, Nicole. M.Sc., Biology, York University (Completed).

Thesis Project: Regulation of ENT1 trafficking

2000 – April 2003

McKenzie, Tamara. M.Sc., Biology, York University (Completed).

2000 – August 2003

Reyes, German. M.Sc., Biology, York University (Completed).

1998 – April 2002

Mohajeer-Bezar, Behi. M.Sc., Biology, York University (Completed).

September 1998 – January 2001

Pennycooke, Micha. M.Sc., Biology, York University (Completed).

## DOCTORAL STUDENTS

September 2016 – August 2021

Scuric, Bianca. Ph.D. Molecular Science, Ryerson University (In progress).

Thesis Project: *Regulation of the nucleoside transporter, hENT1.*

September 2013 – October 2015

Bricket, Alex. Ph.D., Biology, York University. (completed)

Thesis Project: *Calcium Dependent Regulation of ENT1.*

July 2012 – July 2017

Plastina, Maria Cristina. Ph.D., Biology, York University (In progress).

Thesis Project: *Understanding the regulation of the amino acid transporter hASCT2.*

September 2011 – December 2013

Grañe Bolderas, Natalia. Ph.D., University of Barcelona (Completed).

Thesis Project: *Role and regulation of Equilibrative Nucleoside Transporter 2. (Co-supervised with Dr. Marcal Pastor-Anglada)*

September 2006 – November 2010

Nivillac, Nicole. Ph.D., Biology, York University (Completed).

Thesis Project: *Disrupted plasma membrane localization and loss of function reveal regions of human equilibrative nucleoside transporter 1 involved in structural integrity and activity.*

September 2005 – August 2010

Rose, Jennifer. Ph.D., Biology, York University (Completed).

Thesis Project: *Equilibrative nucleoside transporter 1 plays an essential role in cardioprotection.*

2003 – 2008

Reyes, German Ph.D., Biology, York University (Completed).

2001 – February 2004

Machado, Jerry Ph.D., Biology, York University (Completed).

## POST-DOCTORAL FELLOWS

February 2017 - present

Appak Baskoy, Sila. Ryerson University (co-supervised with Dr. M. Kolios)

Research Project: *Combination therapies (ultrasound + nucleoside analog drugs) plus advanced imaging techniques as innovative approaches to treatment and assessment of cancer*

January 2014 – July 2017

Grañe Bolderas, Natalia. Ryerson University (In progress).

Research project: *Novel Nuclear hENT2 Isoforms Regulate Cell Cycle Progression via Controlling Nucleoside Transport and Nuclear Reservoir.*

September 2012 – December 2013

Console, Lara. University of Calabria/University of Bari (Completed).

Research project: *Regulation of ASCT2 and over-expression of the protein in bacteria.*

December 2011 – July 2013

Dos Santos Rodrigues, Alexandre. York University (Completed).

Research Project: *Nucleoside Transporters in the Purinome.*

July 2009 – June 2010

Reyes, German. York University (Completed).

Research Project: *Overexpression and proteomic analysis of ENT1.*

## RESEARCH ASSOCIATE

January 2001 - present

Tarmakova, Zlatina. Ryerson University.

2001 – 2005

Abdulla, Parween. York University

## COURSES TAUGHT

---

Course Instructor, Faculty of Science and Engineering, York University

Course Title: Cell Biology and Biochemistry I

Course Code: SC/BIOLOG 2020.04

Course Level: Undergraduate

Course Director, Faculty of Science and Engineering, York University

Course Title: Research Honours Thesis

Course Code: SC/BIOLOG 4000.08

Course Level: Undergraduate

Course Instructor, Faculty of Science and Engineering, York University

Course Title: Neurobiology  
Course Code: SC/BIOL 4370.03  
Course Level: Undergraduate

**Invited Lecturer, Faculty of Science and Engineering, York University**

Course Title: Current Topics in Biological Research  
Course Code: SC/BIOL 3100.02  
Course Level: Undergraduate

**Course Instructor, Faculty of Science and Engineering, York University**

Course Title: Selected Readings in Biology  
Course Code: SC/BIOL 4200.03  
Course Level: Undergraduate

**Course Instructor, Faculty of Science and Engineering, York University**

Course Title: Regulatory Principles in Animal Biology-Homeostasis  
Course Code: SC/BIOL 5128 3.0  
Course Level: Graduate

**Course Instructor, Faculty of Science and Engineering, York University**

Course Title: Controversies in Modern Life Sciences  
Course Code: SC/BIOL 4305.03  
Course Level: Undergraduate

**Course Instructor, Faculty of Science and Engineering, York University**

Course Title: Biology  
Course Code: SC/BIOL 1010.06  
Course Level: Undergraduate

**Course Instructor, Faculty of Science and Engineering, York University**

Course Title: Cellular Regulation  
Course Code: SC/BIOL 4150.03  
Course Level: Undergraduate

**Course Instructor, Faculty of Science and Engineering, York University**

Course Title: Neurobiology  
Course Code: SC/BIOL 5129 3.0  
Course Level: Graduate

**Course Instructor, Faculty of Science and Engineering, York University**

Course Title: Topics in Molecular Biology III: Nucleic Acids  
Course Code: SC/BIOL 5029 1.5  
Course Level: Graduate

## GRADUATE EXAMINATION ACTIVITIES

---

- 2015 PhD External Examiner, Angela Li, Biochemistry, University of Toronto
- 2014 PhD Comprehensive Exam Committee Member, Leslie Bone, Molecular Science, Ryerson University
- 2011 PhD External Examiner, Sian Patterson, Biochemistry, University of Toronto

- 2011 Master's Oral Exam Member, Azadeh Nasirian, Biology, York University
- 2006 PhD Comprehensive Exam Committee Member, Naveen Vaidya, Mathematics and Statistics, York University
- 2006 PhD Comprehensive Exam Committee Member, Helen Chasiotis, Biology, York University
- 2006 PhD Comprehensive Exam Committee Member, Wi Kim, Biology, York University
- 2005 PhD Comprehensive Exam Committee Member, Mr Tetsuaki, York University
- 2003 PhD Comprehensive Exam Committee Member, Min Du, Biology, York University
- 2003 PhD Comprehensive Exam Committee Member, Katherine Terry, Biology, York University
- 2002 Master's Oral Exam Member, Elham Bagheri Majdi, Chemistry, York University
- 2002 Master's Oral Exam Member, Behi Mohajeer-Bezar, Biology, York University
- 2000 PhD External Examiner, Flanagan, Sheryl, Human Biology & Nutritional Sciences, University of Guelph

#### Editorial Member

September 2015 – August 2018

Editorial Board, FACETS Journal.

January 2011 – January 2017

Editorial Board, Frontiers in Chemistry, Journal.

## Science Policy – Knowledge Transfer

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October 17<sup>th</sup>, 2016

Submission to Canada's Fundamental Science Review, Halifax, Nova Scotia.

November 1<sup>st</sup> – 3<sup>rd</sup>, 2017

**Chair.** "2<sup>nd</sup> Annual National Pre-Conference Symposium: Achieving Diversity in STEM, Advancing Innovation" Symposium at the Canadian Science Policy Conference. Ottawa, Ontario, Canada.

November 8<sup>th</sup> – 10<sup>th</sup>, 2016

**Chair.** "1<sup>st</sup> Annual National Pre-Conference Symposium: Achieving Diversity in STEM, Advancing Innovation" Symposium at the Canadian Science Policy Conference., Ottawa, Ontario, Canada.