

CURRICULUM VITAE**A) NAME:**

SLACK, RUTH S., Full Professor, tenured
Member of the Faculty of Graduate and Postdoctoral Studies

B) DEGREES:

Ph.D.	Biochemistry, University of Ottawa, Ottawa, Ontario	1991
B.Sc. (Hons)	Biology, Carleton University, Ottawa, Ontario	1979
Fellow	ELAM (Executive Leadership Academic Medicine) Drexel University, Philadelphia	2006
Fellow	Royal Society of Canada	2017

C) EMPLOYMENT HISTORY:

2017-present	Interim Vice-Dean, Research, Faculty of Medicine, University of Ottawa
2008-present	Professor, Dept Cellular and Molecular Medicine, University of Ottawa
2004-2013	Assistant Dean, Faculty of Graduate and Postdoctoral Studies University of Ottawa
2002-2008	Senior Scientist, Ottawa Health Research Institute
2001-2008	Associate Professor, Dept. of Medicine, Neuroscience Group, University of Ottawa
1996-2001	Assistant Professor, Dept. of Medicine, Neuroscience Group, University of Ottawa
1996-2008	Cross-Appointment, Dept. of Cellular Molecular Medicine
1994-1996	Post-doctoral Fellowship, Montreal Neurological Institute, McGill University
1991-1994	Post-doctoral Fellowship, Dept. of Medicine, University of Ottawa
1991-1993	Task Force on Gender Issues, Faculty of Medicine, University of Ottawa, "Post-doctoral Trainee Questionnaire Report" coauthor
1986-1991	Graduate Student, Dept. of Biochemistry, University of Ottawa

D) HONOURS:

2017	Fellow of the Royal Society of Canada
2013-2017	University Research Chair (renewal)
2015	UVIC Distinguished Women's Scholar Lecture
2009	Award of Excellence in Advancing Gender Equity
2008-2013	University Research Chair (renewal)
2008	Faculty of Medicine Award of Excellence
2008	Governor General's Gold Medal for best PhD Thesis to Eric CC Cheung
2007	Researcher of the Year, Ottawa Health Research Institute
2003-2008	University Research Chair, University of Ottawa, Canada
2002	Faculty Award of Excellence, University of Ottawa, Faculty of Medicine
1998-2003	Canadian Institute of Health Research, New Investigator
1999	Premier's Research Excellence Award
1999	Canadian Foundation for Innovation, New Opportunities Program - Adenovirus Vector Core Facility
1994-1996	Neuroscience Network Fellowship
1991-1994	Medical Research Council of Canada Fellowship
1990-1991	Ontario Graduate Scholarship

1988-1990	Natural Science and Engineering Research Council of Canada Scholarship
1985-1989	University of Ottawa Research Excellence Scholarship
1986-1986	University of Ottawa Entrance Scholarship (Ph.D. Program)
1986	Dean's Honor List, University of Ottawa

E) SCHOLARLY AND PROFESSIONAL ACTIVITIES: (Past 8 years only)

1. COMMITTEE MEMBERSHIPS:

Funding Agencies

2016 - present	Stem Cell Network Research Management Committee
2018 - present	CIHR Foundation Grants Committee Member
2015 - present	Virtual Chair, CIHR Foundation Grants (Stage 1,2 and final face to face meeting)
2009 - 2015	Chair – CIHR Committee – Developmental Biology
2008	Scientific Officer, CIHR Committee – Neurosciences B
2007	CIHR Committee – Neurosciences A
2006	Heart and Stroke Foundation Ontario – Budget Allocation Committee

University/Institute Committees

2017	TMM curriculum committee
2017 -	Executive Leadership Team
2017 -	Faculty of Medicine Research Committee (Chair)
2017 -	Research Resource Operations Committee (Chair)
2017 -	Space Allocation Committee
2017 -	Research Commission
2017 -	OHRI Faculty Appointments Committee
2015 - 2017	Faculty of Medicine Teaching Personnel Committee
2013 - present	uOBMRI Scientific Council
2014 - present	uOBMRI CRC Committee
2013 – 2016	Research Advisory Committee for Prizes and Awards (VP Research, Chair)
2013 - 2017	TMM Undergraduate Program Committee (NSC Program representative)
2011 - 2013	Leadership Team
2011 - 2013	Cross Functional Team
2011 - 2013	Finance Committee, Faculty of Medicine
2010 - 2013	Co-chair, Task Force, Graduate Program Structure/Harmonization
2010	APUO --University of Ottawa Research Excellence Award—Selection Committee
2010	MPhD Interview Screening Committee
2009	University of Ottawa Cardiology Research Endowment Fund
2009	Selection Committee – Vice Dean Research
2009	Selection Committee - Research Office Manager
2009	Faculty of Medicine Accreditation Committee (P.Wells Chair)
2009	Selection Committee - Assistant Dean Research
2008	Selection Committee - Associate Vice President Research
2007	Selection Committee - Associate Dean Professional Affairs
2005 - 2013	CMM Selection Committee
2005 - 2006	Setting Directions “Commitment to Equity” (Chair)
2005 - 2013	CRC Chairs Committee (University)
2005 - 2013	OHRI Trainee Committee
2004 - 2006	Member Graduate Program, Medical Education Committee
2004 - 2013	Faculty of Medicine Advisory Committee
2004 - 2006	Extended Dean's Group
2004 - 2013	Chair, Faculty of Medicine Graduate Studies Committee
2004 - 2013	Faculty Council, FGPS

2004 - 2013 Faculty Council, Faculty of Medicine
2004 - 2013 Faculty of Medicine Advisor Committee on Postdoctoral Studies
2002 - 2008 DTPC Committee, Department of Medicine
2002 - 2013 Graduate Studies Committee – Neuroscience Program

Memberships / Organizations / Networks

2016 – present Ottawa Centre for Epigenetics Research (OCER)
2013 - 2014 Board of Directors, Canadian Stroke Network
2012 - 2015 Board of Directors, Elizabeth Bruyère Research Institute
2011 - present Ontario Stem Cell Initiative
2004 - present Parkinson's Research Consortium
2002 - present Centre for Stroke Recovery (Ontario Stroke Network)
2002 - 2014 Canadian Stroke Network
2005 - 2009 Board of Directors, Canadian Association of Neuroscience
2001 - 2009 Canadian Stem Cell Network
1990 - present Society for Neuroscience

Editorships

2016 - present Senior Editor, *Journal of Neuroscience*
2016 - present Review Editor, *Frontiers in Neuroscience*
2013 - 2016 Reviewing Editor, *Journal of Neuroscience*
2016 - present Associate Editor, *Biology Direct*
2005 - 2010 Associate Editor, *Journal of Neuroscience*

Meeting Organizer

2015-2016 Co-organizer, *Forebrain Neurogenesis; from Embryo to Adult*
Canadian Developmental Biology Conference Satellite Symposium
Banff, Alberta, Canada (March 16-17, 2016)

2017 Till & McCulloch Meeting - Program Committee Member
Mont-Tremblant, QC, Canada (November 6-8, 2017)

2. EXTERNAL REVIEWER:

Journal:

- Cell Death and Differentiation (3 per year)
- EMBO J (2 per year)
- Stem Cell (2-3 per year)
- EMBO Reports (1-2 per year)

3. Invited Presentations: * local invitations excluded

1. Mitochondrial Dynamics in the Regulation of Neural Stem Cell Fate. Royal Society of Canada AGM, Winnipeg, Manitoba Nov 2017.

2. Mitochondrial Reconfiguration to Treat Parkinson's Disease. Canadian Association Neuroscience, Montreal, Quebec, May 2017.
3. Mitochondrial dynamics in the regulation of stem cell self-renewal and cell fate decisions. Lady Davis Institute, McGill University, Montreal, QC, May 15th, 2017
4. Mitochondrial dynamics in the regulation of stem cell self-renewal and cell fate decisions. Gladstone Institutes, University of California, San Francisco, California April 27th, 2017.
5. A Novel Approach to Treat Parkinson's Disease. Keynote speaker at Ottawa Parlour Event hosted by Brain Canada and RBC Foundation. Ottawa, ON, February 9th, 2017.
6. Metabolic failure in neurodegenerative and psychiatric disorders: Impact, mechanisms and emerging treatments. Canadian College of Neuropharmacology Annual Meeting 2016, Halifax, NS June 2016.
7. Role of Rb family proteins in neural stem and progenitor cell regulation. 4th International Cardiometabolic Disease Meeting. Wuhan, China. May 12-14, 2016.
8. Role of Rb family proteins in neural stem and progenitor cell regulation. 8th Canadian Developmental Biology Conference - Satellite symposium on Forebrain Development. Banff, AB, March 2016.
9. Mitochondrial dynamics in the regulation of stem cell self-renewal and cell fate decisions. 2015 Canadian Neuroscience Meeting. Vancouver, BC, May 2015
10. Mitochondrial Dynamics in the Regulation of Stem Cell Self-Renewal. Distinguished Women's Scholar Lecture, University of Victoria, April 2015.
11. Acidosis overrides oxygen deprivation to maintain mitochondrial function and cell survival. 3rd International Conference on Cardiovascular Science. Wuhan, China. October 12-15, 2014.
12. Role of Rb family proteins in neural stem and progenitor cell regulation. 3rd China-Canada Symposium for Systems Biology. Shanghai, China. May 18-21, 2014.
13. Role of Rb family proteins in neural stem and progenitor cell regulation. Ontario Stem Cell Initiative, University of Toronto. February 5th, 2014
14. Opposing Regulation of Sox2 by Cell Cycle Effectors E2f3a&b in Neural Stem Cells. The 3rd International Rb meeting. Monterey, CA. October 7-10, 2013
15. The Role of Rb/E2F pathway in adult neurogenesis. McGill University, Department of Biology, Montreal, Quebec. April 5th, 2013
16. The Role of Rb/E2F pathway in adult neurogenesis. University of British Columbia, Department of Neuroscience. April 25th, 2013
17. Mitochondria respond to stress conditions by modulating their architecture. University of Montreal, Montreal, Quebec. March 8th, 2012
18. Mitochondrial Dynamics in the regulation of neuronal survival and death. Mitochondrial Dynamics: from Mechanism to Disease. Sardina, Italy. Sept. 11-15, 2011.
19. Rb/E2F Pathway in the regulation of neurogenesis. International Society for Neurochemistry 23rd Biennial Meeting. Athens, Greece Aug. 28-Sept. 1 2011
20. The Role of Rb/E2F pathway in adult neurogenesis. University of Alberta, Department of Oncology, Edmonton, Alberta. February 16th, 2011
21. Rb/E2F Pathway in the regulation of neurogenesis through Dix homeodomain proteins. The first International Retinoblastoma Tumor Suppressor Symposium, Toronto, Ontario. Nov 18-21, 2009.
22. Mitochondrial dynamics in the regulation of neuronal cell death. Neurex Network (www.Neurex.org) Workshop on Mitochondrial function. Basel Switzerland May 11 2009.

23. AIF and Opa1 interactions in the regulation of mitochondrial function. McGill University, Dept of Psychiatry, Douglas Mental Health University Institute, April 2009.
24. AIF and Opa1 interactions in the regulation of mitochondrial function. "Progress in Systems Biology" Symposium, Ottawa NRC Sussex Dr, Apr 23-24, 2009.
25. AIF is a metabolic sensor that links mitochondrial structure to apoptosis signaling. The Burke Medical Research Institute, Cornell University, White Plains, NY October 2008
26. AIF and Opa1 interactions in mitochondrial function. Laval University, Quebec City April 2008
27. Regulation of mitochondrial function in acute neuronal injury. Dept Physiology, Queen's University, Kingston, Ontario. (Jan. 2008)
28. Rb/E2F Pathway in nervous system development. Canadian Developmental Biology Association. Banff Alta, March 2, 2008.
29. A novel role for Rb in neurogenesis and migration, Presentation for Symposium "Novel Functions for Cell Cycle Proteins", Lloyd Greene and Karl Herrup, org. Society for Neuroscience 37th Annual Meeting, San Diego, CA . Nov. 2007.
30. University of Toronto, Dept Biochemistry, Toronto, ON. "Dual roles of AIF in neuronal injury". April 2007.
31. UNC Neuroscience Centre, Chapel Hill, N.C. "The role of Rb in the Regulation of Neuronal Migration". (Nov. 2006)
32. 14th Euroconference on Apoptosis – Sardinia, Italy – "Dissociating the dual roles of AIF in maintaining mitochondrial structure and apoptosis". (September 2006).
33. 2005 Canadian Congress of Neurological Science, Ottawa – "The Mitochondria: Central Relaying stations for Apoptotic Signals in Neuronal Injury". (June 14th, 2005).
34. University of Calgary, Developmental Biology Group "Rb Family proteins in the regulation of Neurogenesis". (Jan. 2005)
35. Maine Medical Centre, Portland. "The Role of family proteins in neurogenesis". Maine (April 2004).
36. University of Montreal, Dept Neurobiology "P107 regulates Stem Cell numbering in the mammalian brain." (March 2004).
37. Brain Research Centre, University of British Columbia, Vancouver "The role of Cell Cycle Proteins in Brain Regeneration" (Sept/18/2003)
38. Alzheimer's Society of Canada, 25th National Conference, Ottawa, ON. – "Stem Cells: A potential therapy for Alzheimer's Disease. (April 2003).
39. Roberts Research Institute University of Western Ontario, London, Ontario. (April 2002).
40. Museum of Science and Technology, Ottawa, Ontario - "Mechanisms by which neurons commit suicide" (April 2002).
41. Queen's University, Kingston, Ontario - "The role of cell cycle proteins in forebrain development" (March 2002).
42. Montreal General Hospital, Montreal, PQ - "p53 - in neuronal cell death" (March 2001).
43. 34th Annual Winter Conference on Brain Research (Steamboat Springs, Colorado) - "Cell cycle regulation in neurogenesis and apoptosis".
44. 2000 Canadian Congress of Neurological Science, Ottawa - "Molecular mechanisms of neuronal cell death".
45. NGF 2000: Nerve Growth Factor and Related Molecules, Montreal, PQ - "The role of p53 in neuronal cell death" (May 26-30, 2000).

46. University of Western Ontario, Dept. of Anatomy, London, ON - "The role of p53 in neuronal cell death" (May 2000).
47. Montreal Neurological Institute, McGill University - "The Rb signaling pathway is a key regulator of neuronal precursor cell proliferation/survival" (1999).
48. Canadian College of Neuropsychopharmacology (CCNP) - "Neural precursor cells differentiating in the absence of Rb exhibit delayed terminal mitosis" (June 1998).

F) SUPERVISORY ACTIVITIES (Undergraduate and Graduate Student)

Completed: 12 BSc, 12 MSc, 12 PhD, 8 Postdoctoral

In Progress: 4 MSc, 2 PhD, 3 Postdoctoral

Students - Completed						
Student Name	Degree Status	Degree Start Date	Degree End Date	Project Description	Awards	Current Position
Gemae, Raghda (MSc)	Completed	2014/01	2016/11	The Role of E2F1/3 in neurogenesis		Pharmacist Assistant
Dugal-Tessier, Delphie (PhD)	Completed	2008/9	2015/10	The Role of E2F3b in neurogenesis	<ul style="list-style-type: none"> • Ontario Graduate Scholarship in Science and Technology (OGSST) • Ontario Graduate Scholarship (OGS) • Taichman Award • Graduate Studies Leadership Award of Excellence - Faculty of Medicine, Univ. of Ottawa 	Postdoctoral fellow, Staterra Inc.
Bastasic, Joseph (BSc)	Completed	2015/9	2016/4	Pocket proteins in maintenance of stem cell quiescence		Graduate Student, Univ. of Ottawa
Svoboda, Devon (PhD)	Completed	2009/9	2015/07	Rb/E2F pathway in neuronal precursor regulation	<ul style="list-style-type: none"> • Queen Elizabeth II graduate scholarship in science and technology (QEII - GSST) • Heart and Stroke Foundation Focus on Stroke Scholarship 	Postdoctoral Fellow, Whitehead Institute
Patten, David (PhD)	Completed	2009/9	2015/07	Role of Opa1 in Neuronal Survival	<ul style="list-style-type: none"> • Ontario Graduate Scholarship (OGS) • Neurodegenerative Lipidomics Scholarship - CIHR • Shelby Hayter Pass the Baton Graduate Scholarship • Parkinson's Society of Ottawa • Heart and Stroke Foundation Focus on Stroke Scholarship 	Postdoctoral Fellow, Chalk River Laboratories
Stevens, Kristen (BSc)	Completed	2014/09	2015/5	Role of p130/p107 in the proliferation and differentiation of cortical neural precursors		Graduate student, University of Manitoba

Duivesteyn, Ruthann Petra (BSc)	Completed	2014/09	2015/5	The role of activator E2Fs in embryonic cortical development		Government of Canada - Research Assistant
Ahmady, Nastaran (BSc)	Completed	2013/9	2014/5	Role of E2F1 and E2F3 in Neurogenesis		Medical School
Meghaizel, Cynthia (MSc)	Withdrawn	2014/01	2015/01	Role of MFN2 in Neuronal Cell Death		
Wong, Jacob (MSc)	Completed	2011/9	2014/4	The Role of Opa1 in Neuronal Cell Death	<ul style="list-style-type: none"> • Ontario Graduate Scholarship (OGS) • Graduate Studies Leadership Award of Excellence - Faculty of Medicine, Univ. of Ottawa 	Medical School, University of Toronto
Julian, Lisa (PhD)	Completed	2006/9	2013/07	Role of E2F3a&b in Neuronal Development	<ul style="list-style-type: none"> • Canadian Graduate Scholarship - CIHR • Stem Cell Network Training Award • Ontario Graduate Scholarship (OGS) • Brain Star Award - CIHR 	Postdoctoral Fellow, The Ottawa Hospital Research Institute Dr. W. Stanford
Andrusiak, Matthew (PhD)	Completed	2008/5	2013/04	Role of pRb in the regulation of neural stem cell fate	<ul style="list-style-type: none"> • Ontario Graduate Scholarship (OGS) • Canadian Student Health Research Forum Honourable Mention • Fisher Scientific Award of Excellence in Graduate Studies • Ontario Heart and Stroke Masters Studentship • Ontario Graduate Scholarship in Science and Technology (OGSST) 	Postdoctoral Fellow, University of California San Diego
Clarke, Alysén (MSc)	Completed	2010/9	2012/11	The Role of Rb/E2F Pathway in Neurogenesis	<ul style="list-style-type: none"> • Ontario Graduate Scholarship (OGS) • Graduate Studies Leadership Award of Excellence - Faculty of Medicine, Univ. of Ottawa 	President/Co-owner Sterra Inc.
Pakenham, Catherine (MSc)	Completed	2009/9	2012/12	E2F pathway in the regulation of polycomb proteins	<ul style="list-style-type: none"> • Ontario Graduate Scholarship (OGS) 	Physiotherapist Ottawa, ON
Romanova, Larisa (MSc)	Withdrawn	2010/1	2013/5	Regulation of Autophagy by Mcl1	<ul style="list-style-type: none"> • Frederick Banting and Charles Best Canada Graduate Scholarship - CIHR 	
McCloskey, Curtis (BSc)	Completed	2011/9	2012/5	Regulation of Mitofusins to treat stroke	<ul style="list-style-type: none"> • Canadian Stroke Network Summer Studentship 	PhD student, Barbara Vanderhyden Univ. of Ottawa
Tarabay, Michelle (BSc)	Completed	2011/9	2012/5	The Role of AIF in Cell Death		Pharmacy Tech.

Hamze, Carmen (MSc)	Completed	2009/1	2011/9	Mitochondrial Dynamics In Neuronal Injury		Senior Consultant, Ernst and Young
Miredin, Kim (BSc)	Completed	2009/9	2010/5	Regulation of Mcl-1 to treat stroke		
Jahani-Asl, Arezu (PhD)	Completed	2005/9	2009/9	Mitochondria Fission in Neuronal Injury	• CIHR Doctoral Research Award	Assistant Professor, Lady Davis Institute, McGill University
Pilon Larose, Karine (MSc)	Completed	2007/7	2009/8	The Role of Opa1 in Neuronal Cell Death		Physician, Ottawa, ON
LeGrand, Jaclyn Nicole (MSc)	Completed	2006/9	2008/12	Regulation of Mc1-1 to Treat Stroke	• Heart and Stroke Foundation of Ontario Master's Studentship	Scientific Coordinator, University of Luxembourg
Yelle, Dominique (BSc)	Completed	2007/9	2008/5	The Role of LHX6 in Neuronal Development	• John D. Schultz Science Student Scholarship - HSFO	Physician
Nehme, Jak (MSc)	Withdrawn	2007/9	2008/8	The Role of DLX genes in Neurogenesis		Physician
McClellan, Kelly (PhD)	Completed	2003/9	2008/8	Role of Rb/E2F in Neuronal Development	<ul style="list-style-type: none"> • Canada Graduate Scholarship - CIHR • Ron Worton OHRI Researcher in Training Award • Senior Women Academic Administrators of Canada- Graduate Student Award of Merit • Fisher Scientific- Faculty of Medicine- University of Ottawa Graduate Student Award of Excellence • CIHR IA Recognition Prize in Research in Aging • Heart and Stroke Foundation- Doctoral Research Award • Ontario Graduate Scholarship (OGS) • Stem Cell Network Studentship 	Associate Director, Bureau of Pharmaceutical Sciences, Therapeutic Products Directorate, Health Canada
Cheung, Eric (PhD)	Completed	2002/9	2008/4	P53 - mediated cell death	<ul style="list-style-type: none"> • CIHR Doctoral Research Award • HFSC Doctoral Research Award • Ontario Graduate Scholarship • Travel Award for the National Research Form for Young Investigators in Circulatory and Respiratory Health • CIHR Brain Star Award • Fisher Scientific- Faculty of Medicine- University of Ottawa Graduate Student Award of Excellence 	Associate Scientist, The Beatson Institute for Cancer Research

Governor General's Gold Medal for best PhD Thesis

Ruzhynsky, Vladimir (PhD)	Completed	2002/9	2007/12	The Role of E2F4/5 in Neurogenesis	<ul style="list-style-type: none"> Ontario Graduate Scholarship (OGS) SCN Studentship 	Medical resident, Division of Urology, McMaster University
Douda, David (MSc)	Completed	2005/9	2007/9	Role of E2F1 in Stem Cell Regulation		Postdoctoral Fellow, Brigham and Women's Hospital and Harvard Medical School
Arbour, Nicole (PhD)	Completed	2001/9	2007/9	The Role of BH3 Family Members in Neuronal Apoptosis	<ul style="list-style-type: none"> Ontario Neurotrauma Foundation Studentship Canadian Graduate Scholarship – CIHR Ontario Graduate Scholarship (OGS) Gemini Canada Inc. Post Secondary Education Bursary Canadian Millennium Scholarship 	Senior International Advisor, Government and International Relations at National Research Council Canada
Wylie, Crystal (MSc)	Completed	2003/9	2006/9	P107 in Brain Regeneration		Study Director, Charles River Laboratories
Xu, William (BSc)	Completed	2005/6	2006/5	The Role of Mitochondrial Fusion in cell death		IT Performance Auditor, Auditor General of Canada
Fortin, Andre (PhD)	Completed	1999/9	2006/5	The role of APAF1 in Neuronal death	<ul style="list-style-type: none"> Canada Graduate Scholarship - CIHR Brain Star Award - CIHR Canadian Stroke Network Graduate Scholarship 	Lead, Funding Opportunity Management and Meritorious Applications, CIHR
McNamara, Stephen (BSc)	Completed	2004/1	2005/5	Characterizing a novel protein interaction with AIF during neuronal apoptosis	<ul style="list-style-type: none"> Canadian Stroke Network Summer Studentship Heart and Stroke Foundation of Ontario John D. Schultz Science Student Scholarship 	Sr. Business Consultant, Siemens Enterprise Communications
Ferguson, Kerry L. (PhD)	Completed	1998/9	2004/3	The role of Rb in forebrain development	<ul style="list-style-type: none"> Ontario Graduate Scholarship (OGS) CIHR Doctoral Research Award 	Patent Examiner Industry Canada
Simpson, Matthew (MSc)	Completed	1999/9	2001/9	The role of caspase 3 in neuronal cell death		Physician, Canadian Armed Forces
McBride, Dharma (BSc)	Completed	2000/9	2001/5	The role of p53 in excitotoxicity		
Michaud, Valerie (BSc)	Completed	1999/9	2000/5	The role of p27 in neurogenesis		High school teacher
Guberman, Daniel (BSc)	Completed	1999/9	2000/5	Molecular mechanism of p53 induced apoptosis		Cosmetic / Plastic Surgeon

Current Students - In progress

Student Name	Degree Status	Degree	Degree End	Project Description	Awards
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		Start Date	Date		
Daniel O'Neil (MSc)	In Progress	2017/09		Pocket proteins in maintenance of stem cell quiescence	
Iqbal, Mohamed Ariff (PhD)	In Progress	2016/9		Role of Mitochondrial Dynamics in Stem Cell Identity	
Bastasic, Joseph (MSc)	In Progress	2016/9		Pocket proteins in maintenance of stem cell quiescence	
Larionov, Nikita (MSc)	In Progress	2016/05		Pocket proteins in maintenance of stem cell quiescence	
Yakubovich, Edward (MSc)	In Progress	2015/05		The Role of Activator E2F's in Neurogenesis	
Azzi, Joelle (MSc)	In Progress	2014/09		Role of p130/DREAM in silencing self-renewal genes	
Fong, Bensun (PhD)	In Progress	2013/08		Pocket proteins in maintenance of stem cell quiescence	

2. SUPERVISORY ACTIVITIES (Postdoctoral Fellows)

Name	Start Date	End Date	Project Description	Present Position	Awards
Cregan, Sean	1998/09	2003/09	p53-Mediated Neuronal Cell Death	Associate Professor - Univ. of Western Ontario	<ul style="list-style-type: none"> • CIHR Postdoctoral Fellowship • CIHR Brain Star Award • HSFO Postdoctoral Fellowship • CIHR New Investigator (Present)
Vanderluit, Jacqueline	2001/04	2007/12	P107 in the regulation of Stem Cells	Associate Professor - Memorial University	<ul style="list-style-type: none"> • CSN Postdoctoral Fellowship • HSFO Postdoctoral Fellowship • Stem Cell Network – Transition award • CIHR New Investigator (Present)
Kelly, Melissa	2007/05	2010/12	Mitochondrial Dynamics in Neuronal Injury	Sales Manager at Life Technologies	<ul style="list-style-type: none"> • HSFO Postdoctoral Fellowship
Ghanem, Noel	2006/09	2009/08	The Role of Rb in Forebrain Development	Assistant Professor - American University Beirut	<ul style="list-style-type: none"> • HSFO Postdoctoral Fellowship
Germain, Marc	2008/01	2012/12	MCL-1, a regulator of autophagic cell death after stroke	Assistant Professor – Université du Québec à Trois-Rivières	<ul style="list-style-type: none"> • HSFO Postdoctoral Fellowship • Parkinson Society of Canada Fellowship
Vandenbosch, Renaud	2009/04	2013/09	Neural precursor cell mediated regeneration in the brain following stroke	FNRS Postdoctoral Researcher - University of Liège, Belgium	<ul style="list-style-type: none"> • University of Ottawa Vision 2010 Postdoctoral Fellowship • Alzheimer Society of Canada Fellowship • HSFO Postdoctoral Fellowship

Khacho, Mireille	2010/04		Mitochondrial dynamics and neuronal cell death		<ul style="list-style-type: none"> • HSFO Postdoctoral Fellowship • Parkinson Society of Canada Fellowship • Shelby Hayter Pass the Baton Fellowship • Center for Stroke Recovery Fellowship • University of Ottawa, Faculty of Medicine Postdoctoral Award of Excellence • CPSR Martin Rothstein Post-Doctoral Fellowship
Yazdankhah, Meysam	2015/01	2015/08	Mitochondrial dynamics and neuronal cell death	Postdoctoral Fellow, John Hopkins University	
Kumar, Ujval	2014/09		Mitochondrial dynamics and neuronal cell death		
Svoboda, Devon	2015/08	2017/02	Role of p130/DREAM in silencing self-renewal genes	Postdoctoral Fellow, Whitehead Institute	
Harris, Richard	2017/03		Mitochondrial Dynamics in Neuronal Injury		<ul style="list-style-type: none"> • Parkinson Research Consortium Crabtree Family Fellowship

3. NAME OF STUDENTS (on advisory committee):

Student Name	Degree Type	Supervisor	Institution	Department	Date
Rachael Derrane	MSc	Dr. Henry Fliss	University of Ottawa	Cellular and Molecular Medicine	1997-2001
Loubaba Belbaraka	PhD	Dr. Leonard Kleine	University of Ottawa	Biochemistry	1997-2001
Yifang Wang	PhD	Dr. Ben Tsang	University of Ottawa	Cellular and Molecular Medicine	1997-2001
Chris Lee	MSc	Dr. George Robertson	University of Ottawa	Cellular and Molecular Medicine	1998-2000
Ian Sutcliff	MSc	Drs. Stanimirovic and Hutchinson	University of Ottawa	Cellular and Molecular Medicine	1999-2001
Amy Peaire	PhD	Drs. Staines and Krantis	University of Ottawa	Cellular and Molecular Medicine	1999-2002
Sandy Beyko	MSc	Dr. Steffany Bennett	University of Ottawa	Biochemistry	2001-2002
Mario Rios	PhD	Dr. David Park	University of Ottawa	Cellular and Molecular Medicine	2002-2003
Fanny Bonnin	MSc	Dr. Steffany Bennett	University of Ottawa	Biochemistry	2002-2003
David Banner	PhD	Dr. A. Hakim	University of Ottawa	Cellular and Molecular Medicine	2001-2004
Rosamund Dunkley	MSc	Dr. Alex Mackenzie	University of Ottawa	Cellular and Molecular Medicine	2002-2004
Leah Musakare	MSc	Drs. Griffith and Wallace	University of Ottawa	Cellular and Molecular Medicine	2000-2005
Michael O'Hare	PhD	Dr. David Park	University of Ottawa	Cellular and Molecular Medicine	1998-2006
Tania Gendron	PhD	Dr. Paul Morley	University of Ottawa	Cellular and Molecular Medicine	1999-2005
Kambiz Mousavi	PhD	Dr. David Parry	University of Ottawa	Cellular and Molecular Medicine	1999-2005
Michael Huh	PhD	Dr. Michael Rudnicki	University of Ottawa	Cellular and Molecular Medicine	2000-2006
Melissa Morely	MSc	Dr. S. Lee	University of Ottawa	Cellular and Molecular Medicine	2002-2004
Monika Sklepowicz	MSc	Dr. Hebert	University of Ottawa	Cellular and Molecular Medicine	2003-2005
Xaeton Sun	MSc	Dr. Sonnenfeld	University of Ottawa	Cellular and Molecular Medicine	2003-2007

Noel Ghanem	PhD	Dr. Marc Ekker	University of Ottawa	Cellular and Molecular Medicine	2003-2006
Pearl Campbell	PhD	Dr. Michael Rudnicki	University of Ottawa	Cellular and Molecular Medicine	2003-2008
Brian Larsen	PhD	Dr. Lynn Megeney	University of Ottawa	Cellular and Molecular Medicine	2004-2011
Aleksandra Franovic	PhD	Dr. Stephen Lee	University of Ottawa	Cellular and Molecular Medicine	2004-2008
Hossein Aleyasin	PhD	Dr. David Park	University of Ottawa	Cellular and Molecular Medicine	2004-2009
Lianne Gauvin	MSc	Dr. Steffany Bennett	University of Ottawa	Biochemistry	2005-2007
Dana Walls	PhD	Dr. Valerie Wallace	University of Ottawa	Cellular and Molecular Medicine	2004-2009
Lucas Bronicki	PhD	Dr. Bernard Jasmin	University of Ottawa	Cellular and Molecular Medicine	2005-2012
Ben Laliberte	PhD	Dr. Paul Albert	University of Ottawa	Cellular and Molecular Medicine	2006-2008
Emma Goodall	PhD	Dr. David Picketts	University of Ottawa	Cellular and Molecular Medicine	2006-2008
Stephen Yu	PhD	Dr. Marc Ekker	University of Ottawa	Cellular and Molecular Medicine	2006-2008
Jill Chat	MSc	Dr. Lynn Megeney	University of Ottawa	Cellular and Molecular Medicine	2007-2010
Nermine Youssef	PhD	Dr. Marc Ekker	University of Ottawa	Cellular and Molecular Medicine	2007-2009
Jean-Paul Michalski	PhD	Dr. Rashmi Kothary	University of Ottawa	Cellular and Molecular Medicine	2007-present
Kheira Jolin-Dahel	MSc	Dr. Bill Staines	University of Ottawa	Cellular and Molecular Medicine	2008-2009
Isabelle Robert	PhD	Dr. Stephane Lee	University of Ottawa	Cellular and Molecular Medicine	2008-2009
Alexandre Blanchard	PhD	Dr. Steffany Bennett	University of Ottawa	Biochemistry	2009-2015
Philippe Duquette	MSc	Dr. Hsiao-Huei Chen	University of Ottawa	Cellular and Molecular Medicine	2009-2011
Matthew Cwinn	MSc	Dr. Valerie Wallace	University of Ottawa	Cellular and Molecular Medicine	2007-2009
Piotr Koledjesi	PhD	Dr. Michael Schlossmacher	University of Ottawa	Cellular and Molecular Medicine	2008-2009
Sarah Hewitt	PhD	Dr. David Park	University of Ottawa	Cellular and Molecular Medicine	2009-2015
Farzanah Safarpour	PhD	Dr. David Park	University of Ottawa	Cellular and Molecular Medicine	2010-2015
Randy Riquette	PhD	Dr. Valerie Wallace	University of Ottawa	Cellular and Molecular Medicine	2010-2015
Jagroop Dhaliwal	PhD	Dr. Diane Lagace	University of Ottawa	Cellular and Molecular Medicine	2010-present
Andy Ng	MSc	Dr. Rob Screatton	University of Ottawa	Cellular and Molecular Medicine	2009-2011
Brett Hawley	MSc	Dr. Daniel Figeys	University of Ottawa	Cellular and Molecular Medicine	2009-2012
Catherine Guérin	MSc	Dr. Laura Trinkle-Mulcahy	University of Ottawa	Cellular and Molecular Medicine	2010-2011
Ghadi Antoun	MD/PhD	Dr. Mary-ellen Harper	University of Ottawa	Biochemistry	2010-2015
Crystal Esau	MSc	Dr. Marc Ekker	University of Ottawa	Biology	2011-2014
Matthew Seegobin	MSc	Dr. David Park	University of Ottawa	Cellular and Molecular Medicine	2011-2014
Mariana Gomez-Smith	PhD	Dr. Dale Corbett	University of Ottawa	Neuroscience	2011-present
Nicolay Hristozov	PhD	Dr. Dale Corbett	University of Ottawa	Cellular and Molecular Medicine	2015-present
Ahmad Galuta	MSc	Dr. Eve Tsai	University of Ottawa	Neuroscience	2015-present
Ayden Gouveia	PhD	Dr. Jing Wang	University of Ottawa	Neuroscience	2014-present
Marrisa Lithopoulos	PhD	Dr. Bernard Thebaud	University of Ottawa	Neuroscience	2014-present
Paulo de Tarso de Oliveira Leme Junior	MSc	Dr. Eve Tsai	University of Ottawa	Cellular and Molecular Medicine	2015-present

Shannon Thompson	MSc	Dr. Steffany Bennett	University of Ottawa	Biochemistry	2016-present
Alexanne Cuillierier	MSc	Dr. Yan Burelle	University of Ottawa	Cellular and Molecular Medicine	2016-present

4. NAME OF STUDENTS (Thesis Examiner):

Student Name	Degree Type	Institution	Department	Date
Craig A. Crippen	MSc	University of Ottawa	Cellular and Molecular Medicine	1997
Michael Kilcup	MSc	University of Ottawa	Biochemistry	1998
Lindsay Angus	MSc	University of Ottawa	Cellular and Molecular Medicine	1998
Sandra Milligan	MSc	University of Ottawa	Anatomy and Neurobiology	1998
Christine Texiera	PhD	University of Ottawa	Cellular and Molecular Medicine	1999
Danielle Schneiderman	MSc	University of Ottawa	Cellular and Molecular Medicine	1999
Hilary Gibson	MSc	University of Ottawa	Biochemistry, Microbiology & Immunology	1999
Fuhu Wang	PhD	University of Ottawa	Cellular and Molecular Medicine	2000
Xinhin Li	PhD	University of Ottawa	Cellular and Molecular Medicine	2000
Paula Blanchette	PhD	University of Ottawa	Biochemistry, Microbiology & Immunology	2000
Amie Pearie	PhD	University of Ottawa	Cellular and Molecular Medicine	2000
Neena Kushwaha	MSc	University of Ottawa	Cellular and Molecular Medicine	2001
Vanessa Scanga	MSc	University of Ottawa	Cellular and Molecular Medicine	2003
Fanny Bonin	MSc	University of Ottawa	Biochemistry, Microbiology & Immunology	2003
Laura Ann Craig	MSc	McGill University	Neurology	2003
Sarai Hannila	PhD	Queens University	Anatomy and Cell Biology	2004
Jaigi Mathai	PhD	McGill University		2005
Karim Mikhael	PhD	University of Ottawa	Cellular and Molecular Medicine	2006
Tania Gendron	PhD	University of Ottawa	Cellular and Molecular Medicine	2006
Mellone Marchong	PhD	University of Toronto	Medical Biophysics	2007
Barbara Murdoch	PhD	University of British Columbia	Dept Zoology	2008
Matthew Warr	PhD	McGill University	Dept Biochemistry	2008
Deirdre Jansson	MSc	University of Ottawa	Biochemistry, Microbiology & Immunology	2008
Juliette Rashidan	PhD	University of Ottawa	Neuroscience Program	2009
Chinosa Okenwa	PhD	University of Ottawa	Microbiology (Defence Chair)	2009
Deirdre Jansson	MSc	University of Ottawa	Biochemistry, Microbiology & Immunology (Revised submission)	2009
Wafa Juma	MSc	University of Ottawa	Neuroscience program	2009
Wafa Juma	MSc	University of Ottawa	Neuroscience program (revised submission)	2009
Annie Paquin	PhD	University of Toronto	Dept Neuroscience	2009
Aleksandra Franovic	PhD	University of Ottawa	Cellular and Molecular Medicine	2009
Carolyne Cleroux	PhD	University of Ottawa	Cellular and Molecular Medicine	2009
Giovanni Ciavarra	PhD	University of Toronto	Department of Medical Genetics (E.Zachsenhaus)	2010
Tina Gao	PhD	University of Alberta	Medical Oncology	2011
Jiu Jinno	PhD	University of Toronto		2012
Bruce McNeil	PhD	University of Ottawa	Biochemistry, Microbiology & Immunology (V. Wallace – Supervisor)	2012

Christopher J Yong- Kee	PhD	University of Toronto	Dept Biochemistry	2012
Ruoyang Shi	PhD	University of Manitoba	Department of Human Anatomy and Cell Science	2014
Skye McBride	MSc	University of Ottawa	Department of Biochemistry (M.E. Harper – Supervisor)	2014
Mabel Ao	MSc	University of Ottawa	Dept CMM, Neuroscience Program (P.Albert)	2014
Samineh Deheshi	PhD	Simon Fraser University	Biological Sciences	2015
Laura Ashley Watson	PhD	University of Western Ontario	Biochemistry	2015
Kristen Nicole Heard	PhD	McGill University	Neuroscience	2015
Pamela Khacho	PhD	University of Ottawa	Cellular and Molecular Medicine	2015
Sarah Hewitt	PhD	University of Ottawa	Cellular and Molecular Medicine	2016
Mabel Ao (2 nd & 3 rd revision)	MSc	University of Ottawa	Neuroscience	2016
Charles Campbell	PhD	University of Ottawa	Cellular and Molecular Medicine	2016
Maneka Chitiprolu	PhD	University of Ottawa	Cellular Molecular Medicine	2015

5. COMPREHENSIVE EXAMINER:

Student Name		Program	Date
Diane Ghinda	University of Ottawa	Neuroscience	2017
Marisa Lithopoulos	University of Ottawa	Neuroscience	2015
Maneka Chitiprolu	University of Ottawa	Cellular Molecular Medicine	2015
Faranak Vahid-Ansari	University of Ottawa	Neuroscience Program	2015
Jargroop Dhaliwal	University of Ottawa	Neuroscience Program	2013
Kevin Lee	University of Ottawa	Neuroscience Program	2012
Farzaneh Safapour	University of Ottawa	Neuroscience Program	2012
Sarah Hewitt	University of Ottawa	Neuroscience Program	2012
Nina Alskhog	University of Ottawa	Neuroscience	2012
Jean Paul Michalski	University of Ottawa	Neuroscience	2011
Alexandre Blanchard	University of Ottawa	Biochemistry	2011
Ann Miller	University of Ottawa	Neuroscience	2009
Tammy Porter	University of Ottawa	Biochemistry	2009
Margaret Czesak	University of Ottawa	Cellular Molecular Medicine	2009
Mahmoud Hajighassem	University of Ottawa	Cellular Molecular Medicine (Repeat)	2007
Hanan Abramovici	University of Ottawa	Cellular Molecular Medicine	2006
Mahmoud Hajighassem	University of Ottawa	Cellular Molecular Medicine	2006
Margaret Neuspeil	University of Ottawa	Biochemistry	2006
Jamie Blais	University of Ottawa	Human Molecular Genetics	2004
Julie Deschene	University of Ottawa	Cellular Molecular Medicine	2004
Alison Hunter	University of Ottawa	Microbiology and Immunology	2004
Bo Cui	University of Ottawa	Biochemistry	2002
David Barnes	University of Ottawa	Biochemistry	2000
Johannes Meier	University of Ottawa	Biochemistry	1999
Celine Boudreau-Larivière	University of Ottawa	Cellular and Molecular Medicine	1999
Christine Texiera	University of Ottawa	Cellular and Molecular Medicine	1998
Loubaba Belbaraka	University of Ottawa	Biochemistry	1998

Rubina Ismail	University of Ottawa	Physiology	1997
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G) 1. GRADUATE COURSES: (Past 8 years only)

2007	NSC	8103	Course Coordinator: Development Neuroscience (26 hrs)
2007	NSC	5402	Fundamentals of Neurobiology (3 hrs)
2007	BCH	8109	Apoptosis (3hrs)
2008	NSC	5402	Fundamentals of Neurobiology (3hrs)
2008	CMM		4 th year student seminars (3 hrs)
2009	NSC	8103	Course Coordinator: Developmental Neuroscience (42 hrs)
2009	NSC	5102	Cellular and Molecular Neuroscience (3 hrs)
2010	NSC	8324/5	Poster Session/Seminars
2011	NSC	8324/5	Poster Session/Seminars
2011	NSC	8103	Course Coordinator: Developmental Neuroscience (42 hrs)
2011	CMM	5304	Developmental Biology (3 hrs)
2011	NSC	5102	Cellular and Molecular Neurobiology (3 hrs)
2012	CMM	4326	Honours Student Seminar
2012	CMM/NSC	8324/5	Poster Session/Seminars (16 hrs)
2012	NSC	5102	Cellular and Molecular Neurobiology (3 hrs)
2012	CMM/BIO	5304	Developmental Biology (3 hrs)
2012	MED	8167	Professionalism/Professional Skills - Course coordinator (12 hrs)
2013	NSC	8103	Developmental Neuroscience (3hrs + assignments)
2013	NSC	5102	Cellular and Molecular Neurobiology -Course coordinator (42 hrs)
2013	CMM/BIO	5304	Developmental Biology (3 hrs)
2013	CMM/NSC	8324/5	Poster Session/Seminars
2013	MED	8167	Professionalism/Professional Skills - Course coordinator (12 hrs)
2014	NSC	8103	Developmental Neuroscience (3hrs + assignments)
2014	NSC	5102	Cellular and Molecular Neurobiology -Course coordinator (42 hrs)
2014	CMM/BIO	5304	Developmental Biology (3 hrs)
2014	CMM/NSC	8324/5	Poster Session/Seminars (16 hrs)
2014	MED	8166	Professionalism/Professional Skills - Course coordinator (12 hrs)
2015	NSC	8103	Course Coordinator: Developmental Neuroscience (42 hrs)
2015	NSC	5102	Course Coordinator: Molecular and Cellular Neuroscience(36hrs)
2015	CMM	5304	Developmental Biology (3 hrs)
2016	NSC	5102	Course Coordinator: Molecular and Cellular Neuroscience(36hrs)
2016	CMM	5304	Developmental Biology (3 hrs)
2017	NSC	8103	Course Coordinator: Developmental Neuroscience (42 hrs)

2. UNDERGRADUATE COURSES: (Past 8 years only)

2017	TMM	3106	Principles of Neurobiology (42 hrs)
2016	BIO	4109	Advanced Topics in Developmental Biology (3hrs)
2013	CMM	4350	Principles of Neurobiology (3hrs)
2012	CMM	4350	Principles of Neurobiology (3hrs)
2010	BIO	4134	Advanced Topics in Developmental Biology (3hrs)
2010	CMM/BIO	4350	Principles of Neurobiology (3hrs)
2009	BCH	4040	3hrs poster 26 hrs supervision

2009	CMM	4219	3hrs seminar/poster; 26 hrs supervision
2009	BIO/CMM	4350	Neuroscience (1.5 hrs)
2007	BIO/CMM	4350	Neuroscience (3 hrs.)
2007	BCH	4219	Honours Research Projects (1 student)
2006	BCH	4219	Honours Research Projects (1 student)

3. OTHER POST-GRADUATE TEACHING

Graduate Studies Orientation Session – Faculty of Medicine, University of Ottawa (2006-2007)

Graduate Studies in Medical and Life Sciences Open House of Medicine, University of Ottawa (2006-2007)

Graduate Studies Orientation Session – Faculty of Medicine, University of Ottawa (2008)

Faculty of Medicine, New Faculty Orientation – Graduate and Postdoctoral Studies. Every year (2-3 hrs)

H) EXTERNAL RESEARCH FUNDING: (Career total: \$12,279,000)

Funds Currently Held:

Year	Source	Type ¹	Amount Per Year	Title	Purpose ²
2018-2021	CIHR -EU Joint Program - Neurodegenerative Disease Research	C	\$166,666/yr R.S. Slack Co Applicants	Systems Analysis of novel small non-coding RNA in Stress-Induced Alterations in Transcription and Protein Translation	Operating
2017-2024	CIHR – Foundation Grant	C	\$382,000/yr R.S. Slack Principle Investigator	Enhancing Mitochondrial Integrity to Promote Brain Regeneration and Repair	Operating
2017-2020	Heart and Stroke Foundation	F	\$90,000/yr R.S. Slack Principle Investigator	Regulation of Opa1 to maintain mitochondrial energy metabolism and survival after stroke	Operating
2016-2018	Parkinson's Research Consortium (PRC) / Partners Investing in Parkinson Research (PIPR)	F	\$50,000/yr R.S. Slack Principle Investigator	A high throughput pharmacological screen to enhance mitochondrial efficiency in Parkinson's Disease	Operating
2016-2019	Brain Canada / Krembil Foundation (Team Grant)	F	\$500,000/yr R.S. Slack Principle Investigator	Reshaping Mitochondrial Efficiency and Integrity to Treat Parkinson's Disease	Operating
2014-2018	Ontario Brain Institute	C	\$47,000 R.S. Slack Co Applicants	Generation and analyses of novel preclinical models of Parkinsons disease	Operating

¹ Type: C-granting councils; G-Government; F-Foundations; O-Other

² Purpose: research, travel, publication, etc.

Funding Currently Under Review:

Year	Source	Amount Per Year	Title	Purpose ²
2018-2021	CIHR – Project grant	\$166,000/yr R.S. Slack Co-Applicant	Creation of a novel biomaterial to repair the brain and recover function after stroke	Operating

Funds Previously Held: (Past 10 years only)

Year	Source	Type ¹	Amount Per Year	Purpose ²
2013-2018	CIHR	C	\$174,000 R.S. Slack Principle Investigator	Operating
2012-2017	CIHR	C	\$185,695 R.S. Slack Principle Investigator	Operating
2014-2017	Heart and Stroke Foundation	F	\$90,705 R.S. Slack Principle Investigator	Operating
2016	CIHR - Planning and Dissemination Grant	C	\$10,000 R.S. Slack Co Applicant	Conference
2011-2014	Brain Canada / Krembil Foundation	F	\$102,000 R.S. Slack Co-Applicants	Operating
2013-2014	Heart and Stroke Foundation Centre for Stroke Recovery	C	\$85,000 R.S. Slack Co-Applicant	Operating
2011-2014	Heart and Stroke Foundation	C	\$125,000 R.S. Slack Principle Investigator	Operating
2007-2013	CIHR	C	\$187,000 R.S. Slack Principle Investigator Renewed 2013-2018	Operating
2010-2013	Heart and Stroke Foundation	C	\$109,000 R.S. Slack Principle Investigator	Operating
2010-2013	Canadian Stroke Network	C	\$33,333 R.S. Slack Co-Applicant	Operating
2007-2012	CIHR	C	\$190,000 R.S. Slack Principle Investigator Renewed 2012-2017	Operating
2008-2010	Canadian Stroke Network	C	\$35,715 R.S. Slack Co-Applicant	Operating
2009-2010	Heart and Stroke Foundation Centre for Stroke Recovery	C	\$20,000 R.S. Slack Principle Investigator	Operating
2007-2010	Heart and Stroke Foundation	C	\$109,000 R.S. Slack Principle Investigator Renewed 2010-2013	Operating
2006-2011	Heart and Stroke Foundation	C	\$98,632 R.S. Slack Principle Investigator	Operating
2008-2009	Heart and Stroke Foundation Centre for Stroke Recovery	C	\$20,000 R.S. Slack	Operating

			Principle Investigator	
2006-2008	Canadian Stroke Network	C	\$135,000 R.S. Slack and D. Park – Co Applicants (Adenovirus Core Facility)	Operating
2005-2008	Canadian Stroke Network	C	\$35,715 R.S. Slack Co-Applicant	Operating
2006-2007	Heart and Stroke Foundation Centre for Stroke Recovery	C	\$35,000 R.S. Slack Principle Investigator	Operating
2006-2007	Stem Cell Network	C	\$20,000 R.S. Slack Principle Investigator	Operating
2004-2007	CIHR	C	\$109,862 R.S. Slack Principle Investigator	Operating
2002-2007	CIHR	C	\$139,000 R.S. Slack Principle Investigator	Operating

¹ Type: C-granting councils; G-Government; F-Foundations; O-Other

² Purpose: research, travel, publication, etc.

I) INTERNAL RESEARCH FUNDING:

2003-2008	University Research Chair	\$75,000
2008-2013	University Research Chair	\$75,000
2013-2018	University Research Chair	\$75,000
2013-2015	uOBMRI Grant	\$40,000

MOST SIGNIFICANT RESEARCH CONTRIBUTIONS

1. We show that changes in mitochondrial function signal to the nucleus to modify the transcriptional program to alter stem cell fate decisions, impacting learning and memory.

Khacho M, Clark A, Svoboda DS, MacLaurin JG, Meghaizel C, Sesaki H, Lagace D, Germain M, Park DS, **Slack RS**. Mitochondrial dynamics directs the identity and self-renewal capacity of stem cells by regulating a nuclear transcriptional program. *Cell Stem Cell* 2016 4;19(2):232-47.

We discover a novel signaling pathway whereby changes in mitochondrial metabolism or architecture can redirect that fate of neural stem cells, impacting adult neurogenesis and cognitive function.

2. We show that mitochondrial dysfunction impairs neurogenesis and the functional integration of newborn neurons, having a major impact on cognitive function.

Khacho M, Clark A, Svoboda DS, MacLaurin JG, Lagace D, Park DS, **Slack RS**. Mitochondrial dysfunction underlies cognitive defects as a result of neural stem cell depletion and impaired neurogenesis. *Human Molecular Genetics*. 2017 Sep 1;26(17):3327-3341.

We show that disruption of mitochondrial function within the neurogenic niche results in defects in neurogenesis, manifesting as major impairments in cognitive function. These data place stem cell dysfunction and loss of neurogenesis as an underlying etiological factor leading to cognitive impairments in many mitochondria-related disorders.

3. We show that mitochondria can undergo molecular and structural reconfiguration to enhance bioenergetic efficiency and adaptation to stress.

Khacho M, Tarabay M, Patten D, Khacho P, MacLaurin JG, Guadagno J, Bergeron R, Cregan SP, Harper ME, Park DS, **Slack RS**. Acidosis overrides oxygen deprivation to maintain mitochondrial function and cell survival. *Nature Comm* 2014 1;5:3550.

Through a mechanism involving Opa1, we show that mitochondria can reconfigure their architecture as an adaptive response to enhance efficiency of oxidative phosphorylation and resistance to stress. These findings pertain not only to the fundamentals of cell biology, but also in the context of many human diseases such as brain ischemia/reperfusion injury and neurodegenerative diseases.

Patten DA, Wong J, Khacho M, Soubannier V, Mailloux RJ, Pilon-Larose K, MacLaurin JG, Park DS, McBride HM, Trinkle-Mulcahy L, Harper ME, Germain M, **Slack RS**. Opa1-dependent cristae regulation is essential for cellular adaptation to metabolic demand. *EMBO J*. 2014 18;33(22):2676-91.

We reveal that Opa1 function is essential to enable cells to adapt to metabolic stress. During starvation, Opa1 oligomerization is essential to modify cristae structure and promote assembly of the ETC complexes and survival under metabolic stress.

4. We reveal a novel mechanism by which stem cell self –renewal commitment decisions are regulated.

Julian LM, Vandenbosch R, Pakenham C, Andrusiak M, Nguyen AP, McClellan KA, Svoboda D, Lagace DC, Park DS, Leone GE, Blais A and **Slack RS**. Opposing Regulation of Sox2 by Cell Cycle Effectors E2f3a&b in Neural Stem Cells. *Cell Stem Cell* 2013 4;12(4):440-52.

We link for the first time the pRb/E2F tumor suppressor pathway to the regulation of the pluripotency factor, Sox2. We demonstrate that two distinct E2f3 isoforms transcriptionally regulate the gene encoding Sox2 in an antagonistic manner to balance cell fate decisions. We show that disrupting E2F3 isoforms has a long-term consequence leading to a reduction in adult neurogenesis and defects in learning and memory.

J) PUBLICATIONS: (Career total)

• Books authored	0
• Books edited	0
• Chapters in books	2
• Papers in refereed journals	160
• Papers in Press	0
• Papers Submitted	4
• Papers in Revision	2
• Papers in refereed conference proceedings	0
• Major invited contributions and/or technical reports	3
• Abstracts	116
• Invited presentations	48
• Patents	1

Papers in Refereed Journals (submitted for publication): h-index: 61 Citations: 15648 (Sept 2017)

* Papers directly arising from Slack laboratory.

Staff and trainees employed by Dr. Slack are underlined

1. Thrush AB, Antoun G, Nikpay M, Mauger JF, Patten D, Beauchamp BL, Lau P, Doucet E, Imbeault P, Boushel R, Hager J, Valsesia A, **Slack RS**, Al-Dirbashi OY, Dent R, McPherson R and Harper ME. Diet-

resistant obesity is characterized by a distinct plasma proteomic signature and impaired muscle energetics. *International Journal of Obesity* (Accepted, October 30th, 2017).

2. Giguère N, Pacelli C, Bourque M, Lévesque D, **Slack RS**, Trudeau L. Parkin but not Pink1 or DJ-1 deficient dopamine neurons show altered survival, bioenergetics and axon growth. *Journal of Biological Chemistry* (Submitted, Manuscript # JBC/2016/751610).

List of Peer Reviewed Publications

1. Khacho M and **Slack RS**. Mitochondrial activity in the regulation of stem cell self-renewal and differentiation. *Current Opinion in Cell Biology*. 2017 Nov 22;49:1-9.
2. Huang E, Qu D, Huang T, Boonying W, Krolak D, Ciana P, Woulfe J, Klein C, **Slack RS**, Figeys D and Park DS. PINK1-mediated phosphorylation of LETM1 regulates mitochondrial calcium transport and protects neurons in Parkinson disease models. *Nature Communications* 2017 Nov9;8(1):1399.
3. Laaper M, Haque T, **Slack RS**, Jahani-Asl A. Modeling Neuronal Death and Degeneration in Mouse Primary Cerebellar Granule Neurons. *Journal of Visualized Experiments*. 2017 Nov 6; (129)
4. Khacho M, Clark A, Svoboda DS, MacLaurin JG, Lagace D, Park DS, **Slack RS**. Mitochondrial dysfunction underlies cognitive defects as a result of neural stem cell depletion and impaired neurogenesis. *Human Molecular Genetics*. 2017 Sep 1;26(17):3327-3341.
5. Iyirhiaro GO, Soon Im D, Boonying W, Callaghan SM, During MJ, **Slack RS**, Park DS. Cdc25A is a critical mediator of ischemic neuronal death in vitro and in vivo. *Journal of Neuroscience* 2017 Jun 12. pii: 3017-16.
6. Khacho M and **Slack RS**. Mitochondrial dynamics in the regulation of neurogenesis: from development to the adult brain. *Developmental Dynamics*. 2017 Jun 23. doi: 10.1002/dvdy.24538.
7. Khacho M and **Slack RS**. Mitochondrial and ROS signalling coordinate stem cell fate decisions and life-long maintenance. *Antioxidants & Redox Signaling*. 2017 July 31. doi: 10.1089/ars.2017.7228.
8. Marcogliese PC, Abuaish S, Kabbach G, Abdel-Messih E, Seang S, Li G, **Slack RS**, Haque ME, Venderova K, Park DS. LRRK2(I2020T) Functional Genetic Interactors that Modify Eye Degeneration and Dopaminergic Cell Loss in Drosophila. *Human Molecular Genetics*. 2017 Apr 1;26(7):1247-1257.
9. Fong BC and **Slack RS**. Vital Functions for Rb during Adult Neurogenesis. *Neurogenesis*. 2017 Feb 7;4(1):e1270382
10. Dennis D, Picketts D, **Slack RS**, Schuurmans C. Forebrain Neurogenesis: From Embryo to Adult. *Trends in Developmental Biology*. 2016 Aug (9): 77-90.
11. Vandenbosch R, Clark A, Fong BC, Omais S, Dugal-Tessier D, Dhaliwal J, Lagace DC, Park DS, **Slack RS**. RB regulates the production and the survival of newborn neurons in the embryonic and adult dentate. *Hippocampus* 2016 Nov;26(11):1379-1392.
12. Khacho M, Clark A, Svoboda DS, MacLaurin JG, Meghaizel C, Sesaki H, Lagace D, Germain M, Park DS, **Slack RS**. Mitochondrial dynamics directs the identity and self-renewal capacity of stem cells by regulating a nuclear transcriptional program. *Cell Stem Cell* 2016 Aug 4;19(2):232-47. **Highlighted by Faculty 1000.**

13. Klionsky DJ, ...Germain M, **Slack RS**,... Zuckerbraun B. Guidelines for the Use and Interpretation of Assays for Monitoring Autophagy (2nd Edition). Autophagy 2016; 12(1):1-222.
14. Antoun G, McMurray F, Thrush AB, Patten DA, Peixoto AC, **Slack RS**, McPherson R, Dent R, Harper ME. Impaired Mitochondrial Oxidative Phosphorylation and Supercomplex Assembly in *Rectus Abdominis* of Diabetic Obese Individuals. Diabetologia 2015 Dec;58(12):2861-6.
15. Qu D, Hage Ali, Don-Carolis K, Huang En, Joselin A, Safarpour F, Marcogliese PC, Rousseaux MWC, Hewitt S, Huang T, Doo-Soo IM, Callaghan S, Dewar-Darch D, Figeys D, **Slack RS**, Park DS. Bag2 Mediated Regulation of Pink1 is Critical for Mitochondrial Translocation of Parkin and Neuronal Survival. Journal of Biological Chemistry 2015 Dec 18;290(51):30441-52.
16. Pacelli C, Giguere N, Bourque MJ, **Slack RS**, Trudeau LE. Axonal arborization and mitochondrial metabolism as key contributors to the selective vulnerability of substantia nigra dopamine neurons. Current Biology 2015 Sep 21;25(18):2349-60.
17. Jahani-Asl A, Huang E, Irrcher I, Rashidian J, Ishihara N, Lagace DC, **Slack RS**, Park DS. CDK5 phosphorylates DRP1 and Drives Mitochondrial Defects in NMDA-Induced Neuronal Death. Human Molecular Genetics 2015 Aug 15;24(16):4573-83. ***co-corresponding author**
18. Khacho M, **Slack RS**. Mitochondrial dynamics in neurodegeneration: from cell death to energetic states. AIMS Molecular Science. 2015 May 7; 2(2):161-174.
19. Svoboda DS, Clark A, Park DS, **Slack RS**. Induction of Protein Deletion Through In Utero Electroporation to Define Deficits in Neuronal Migration in transgenic models. Journal of Visualized Experiments. 2015. Jan 95:e51983.
20. Julian LM, Liu Y, Pakenham CA, Ruzhynsky V, Bae S, Tsai S, Leone G, Dugal-Tessier D, **Slack RS***, Blais A. Tissue-specific Targeting of Cell Fate Regulatory Genes by E2f Factors in Neural Precursor Cells. Cell Death and Differentiation 2016 Apr;23(4):565-75. **Highlighted by Faculty 1000.**
***co-corresponding author**
21. Patten DA, Germain M, Wong J, Khacho M, Soubannier V, Mailloux RJ, Pilon-Larose K, MacLaurin JG, Park DS, McBride H, Trinkle-Mulcahy L, Harper ME, **Slack RS**. OPA1-dependent cristae modulation is essential for cellular adaptation to metabolic demand EMBO Journal 2014 Nov 18;33(22):2676-91.
22. Parsanejad M, Zhang Y, Qu D, Irrcher I, Rousseaux MC, Aleyasin H, Callaghan S, **Slack RS**, Mak TW, Lee S, Figeys D, Park DS. DJ-1 interacts with and regulates PON2, an enzyme critical for neuronal survival in response to oxidative stress. PLOS ONE 2014 Sep 11;9(9):e106601.
23. Iyirhiaro GO, Yi Z, Estey C, O'Hare M, Safarpour F, Parsanejad M, Wang S, Abdel-Messih E, Callaghan S, During MJ, **Slack RS**, Park DS. Regulation of Ischemic Neuronal Death by E2F4/p130 Complexes. Journal of Biological Chemistry 2014 May 14 [epub ahead of print]
24. Parsanejad M, Zhang Y, Qu D, Irrcher I, Rousseaux MC, Aleyasin H, Kamkar F, Callaghan S, **Slack RS**, Mak TW, Lee S, Figeys D, Park DS. Regulation of the VHL/HIF-1 pathway by DJ-1. Journal of Neuroscience 2014 Jun 4;34(23):8043-50
25. Khacho M, Tarabay M, Patten D, Khacho P, MacLaurin JG, Guadagno J, Bergeron R, Cregan SP, Harper ME, Park DS, **Slack RS**. Acidosis overrides oxygen deprivation to maintain mitochondrial function and cell survival. Nature Communications 2014 Apr 1;5:3550.
26. Svoboda DS, Paquin A, Park DS and **Slack RS**. Pocket proteins pRb and p107 play a cell autonomous role in radial migration independent of apoptosis. Developmental Biology 2013 Dec 1;384(1):101-13.

27. Methot L, Hermann R, Tang Y, Lo R, Al-Jehani H, Jhas S, Svoboda D, **Slack RS**, Barker PA, Stifani S. Interaction and Antagonistic Roles of NF-kappaB and Hes6 in the Regulation of Cortical Neurogenesis. Molecular and Cellular Biology 2013 Jul;33(14):2797-808.
28. Andrusiak MG, Vandenbosch R, Dick FA, Park DS, **Slack RS**. LXCXE-independent chromatin remodeling by Rb/E2f mediates neuronal quiescence. Cell Cycle 2013 Apr 9;12(9).
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Patents and Copyrights

1. "Induction of apoptosis via adenovirus-mediated gene transfer"
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