Rotman Research Institute,

Baycrest Centre for Geriatric Care 3560 Bathurst St. Toronto, Ontario Canada M6A 2E1

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E-mail: msekeres@research.baycrest.org

1. EDUCATION

2008 - 2012

PhD, Department of Physiology, University of Toronto, Toronto, ON, Canada

Supervisor: Dr. Sheena A. Josselyn

Thesis Title: CREB-mediated enhancement of hippocampus-dependent memory consolidation and

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reconsolidation

2006 - 2008

MSc (transfer), Department of Physiology, University of Toronto, Toronto, ON, Canada

Supervisor: Dr. Sheena A. Josselyn

Thesis Title: Dorsal hippocampal CREB is both necessary and sufficient for spatial memory

1998 - 2002

BSc, Department of Psychology, Trent University, Peterborough, ON, Canada

2. FUNDING AND AWARDS

2013-2015	CIHR Fellowship (post-doctoral) CIHR	\$135,000
2013	Governor General's Academic Gold Medal Award nominee Governor General of Canada	
2012-2013	Early Researcher Award Ontario Research Coalition	\$ 2750
2012	Jack Kraicer Doctoral Award Department of Physiology, University of Toronto	\$1000
2011 - 2012	Doctoral Completion Award University of Toronto	\$ 18,000
2011-2012	Dr. Joe A. Connolly Memorial Award Faculty of Medicine, University of Toronto	\$ 6000
2011-2012	Hayden Hantho Award Faculty of Medicine, University of Toronto	\$ 5000

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2011-2012	Margaret & Howard Gamble Research Grant Faculty of Medicine, University of Toronto (declined)	\$ 5000	
2011-2012	SCACE Graduate Fellowship in Alzheimer's Research Faculty of Medicine, University of Toronto (declined)	\$ 5000	
2011	University of Toronto Neuroscience Program Travel Award (Society for Neuroscience) University of Toronto	\$ 500	
2011	Restracomp Travel Award, The Hospital for Sick Children	\$ 1,000	
2011	School of Graduate Studies Conference Grant University of Toronto	\$ 150	
2008 - 2011	CIHR Frederick Banting and Charles Best Canada Graduate Scholarships - Doctoral Award, CIHR	\$ 105, 000	
2010	Restracomp Travel Award, The Hospital for Sick Children	\$ 1,000	
2010	Exceptional Trainee Award, Program in Neurosciences & Mental Hea The Hospital for Sick Children	lth \$ 500	
2010	University of Toronto Neuroscience Program Travel Award (Canadian Association for Neuroscience) University of Toronto	\$ 500	
2009	Restracomp Travel Award, The Hospital for Sick Children	\$ 1,000	
2009	BRAIN Research Symposium, winner (oral presentation) Department of Physiology, University of Toronto	\$ 200	
2008	Restracomp Travel Award, The Hospital for Sick Children	\$ 1,000	
2008 - 2009	Ontario Graduate Scholarship (declined)	\$ 15,000	
2007 - 2008	Restracomp Award, The Hospital for Sick Children	\$ 20,000	
2007 - 2008	Peterborough K.M. Hunter Graduate Studentship Award (declined)	\$ 20,000	
2007 - 2008	University of Toronto Fellowship, University of Toronto	\$ 2,000	
2006 - 2007	CIHR Frederick Banting and Charles Best Canada Graduate Scholarships - Master's Award, CIHR	\$ 17,500	
2006 - 2007	University of Toronto Fellowship, University of Toronto	\$ 2,000	
2006	Research Training Competition Tuition Bursary The Hospital for Sick Children	\$ 2,000	
2002	Trent University President's Honour Roll, Trent University		
1999 - 2001	Trent University Dean's Honour Roll, Trent University		
1999 - 2001	Trent University Scholarship, Trent University	\$ 1,000	
1999	John Pettigrew Award (for English 100), Trent University	\$ 200	

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1998

\$ 850

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3. PEER REVIEWED PUBLICATIONS

Winocur, G., Moscovitch, M., **Sekeres, M**. (2013) Factors Affecting Graded and Ungraded Memory Loss Following Hippocampal lesions (under review; *Neurobiology of Learning and Memory*)

Winocur, G., **Sekeres, M**., Binns, M. Moscovitch, M. (2013) Hippocampal lesions produce both non-graded and temporally-graded retrograde amnesia in the same rats. *Hippocampus*, 23(5):330-41.

Sekeres, M., Sargin, D., Mercaldo, V., Frankland, P.W., Josselyn, S.A. (2012). Increasing CRTC1 function in the dentate gyrus during memory formation or reactivation increases memory strength without compromising memory quality. *Journal of Neuroscience*, 32(49):17857-68.

Cole CJ, Mercaldo V, Restivo L, Yiu AP, **Sekeres MJ**, Han JH, Vetere G, Pekar T, Ross PJ, Neve RL, Frankland PW, Josselyn SA. (2012). MEF2 negatively regulates learning-induced structural plasticity and memory formation. *Nature Neuroscience* 15:1255 - 64.

Sekeres, M., Sargin, D., Ross, P.J., Josselyn, S.A. (2012). The role of CREB and CREB co-activators in memory formation. In K.P. Giese (Ed.), The Memory Mechanisms in Health and Disease: Mechanistic Basis of Memory. *World Scientific Publishing*.

Rochon, P., **Sekeres, M**., Hoey, J., Lexchin, J., Ferris, LE., Moher, D., Wu, W., Kalkar, S., Van Laethem, M., Gruneir, A., Gold, J., Maskalyk, J., Streiner, D.L., Tabak, N., Chan, AW. (2011). Investigator experiences with financial conflicts of interest in clinical trials. *Trials, 12:9.*

Sekeres, M.J., Neve, R., Frankland, P.W., Josselyn, S.A. (2010). Dorsal hippocampal CREB is both necessary and sufficient for spatial memory. *Learning & Memory, 17(6): 280-3.*

Winocur, G., Moscovitch, M., Rosenbaum, R. S., **Sekeres, M** (2010). Investigation of the effects of hippocampal lesions in rats on pre- and post-operatively acquired spatial memory in a complex environment. *Hippocampus*, *20* (12): 1350-65.

Rochon, P., **Sekeres, M.**, Lexchin, J., Moher, D, Wu, W., Kalkar, S., Van Laethem, M., Hoey, J., Chan, AW., Gruneir, A., Gold, J., Maskalyk, J., Streiner, D.L., Tabak, N., Ferris, LE. (2010). Institutional financial conflicts of interest at Canadian academic health science centres: A national survey. *Open Medicine*, *4*(3): 134-8.

Rochon, P., Hoey, J., Chan, AW., Ferris, LE., Lexchin, J., , Kalkar, S., **Sekeres, M**., Wu, W., Van Laethem, M., Gruneir, A., Maskalyk, J., Streiner, D.L., Gold, J., Moher, D (2010). Financial Conflicts of Interest Checklist 2010 for clinical research studies. *Open Medicine*, 4(1): 69-9.

Winocur, G, Moscovitch, M., Rosenbaum, R.S., **Sekeres, M.** (2010). A study of remote spatial memory in aged rats. *Neurobiology of Aging* (1):143-50.

Winocur, G, Frankland, P.W., **Sekeres, M**., Fogel, S., Moscovitch, M. (2009). Manipulating context-specificity in a memory reconsolidation paradigm: Selective effects of hippocampal lesions. *Learning & Memory* 16(11):722-9.

Sekeres, M., Gold, J., Chan, AW, Lexchin, J., Moher, D., Maskalyk, J., Ferris, L., Taback, N., Van Laethem, M., Rochon, P. (2008). Poor reporting of scientific leadership information in clinical trial registers. *PLoS One*, *3:2*, e.1610.

Lexchin, J., **Sekeres, M**., Van Laethem, M., Ferris, L., Chan, AW, Moher, D., Gold, J., Maskalyk, J., Taback, N., Rochon, P. (2008). National evaluation of policies on individual financial conflicts of interest in Canadian academic health science centres. *Journal of General Internal Medicine*, 23(11):1896-903.

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Winocur, G, Moscovitch, M., **Sekeres, M.** (2007). Memory consolidation or transformation: Context manipulation and hippocampal representations of memory. *Nature Neuroscience*, 10, 555-557.

Winocur, G., Wojtowicz, J.M., **Sekeres, M**., Snyder, J.S., Wang, S. (2006). Inhibition of neurogenesis interferes with hippocampus-dependent memory function. *Hippocampus*, 16: 296–304.

Winocur, G, Moscovitch, M., Fogel, S., Rosenbaum, R.S., **Sekeres, M**. (2005). Preserved spatial memory after hippocampal lesions: effects of extensive experience in a complex environment. *Nature Neuroscience*, 8, 273 – 275.

4. NON-PEER REVIEWED PUBLICATIONS AND PUBLISHED CONFERENCE PROCEEDINGS

Sekeres MJ, Neve RL, Josselyn SA (2009). Increasing CREB in the dorsal hippocampus is sufficient to induce spatial memory. **Frontiers in Neuroscience. Conference Abstract: B.R.A.I.N. platform in Physiology poster day 2009**. doi: 10.3389/conf.neuro.03.2009.17.051

5. RESEARCH, TEACHING AND EMPLOYMENT

October 2012 – Present

Post-Doctoral Fellow, Rotman Research Institute, Baycrest

Supervisor: Dr. Cheryl Grady

September 2006 – August 2012

Graduate Student, Dept. of Physiology, University of Toronto

Program in Neurosciences & Mental Health, The Hospital for Sick Children

Supervisor: Dr. Sheena Josselyn

September 2005 – August 2006

Research Assistant, Kunin Lunenfeld Applied Research Unit, Baycrest

Supervisor: Dr. Paula Rochon

May 2002 – August 2005

Research Assistant, Psychology Department, Trent University.

Supervisor: Dr. Gordon Winocur

2002

Teaching Assistant, Trent University

PS379 Aging and Cognition and PS375 Neuropsychology

Supervisor: Dr. Jocelyn Aubrey

6. PRESENTATIONS

Canadian Association for Neuroscience (CAN) Annual Conference (Toronto, ON, Canada) *May 24, 2013* (poster)

Ontario Research Coalition 2013 Research Day (Toronto, ON, Canada) February 14, 2013 (speaker)

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Ontario Long-term Care Association (OLTCA) Applied Research Education Day (Toronto, ON, Canada) *February 13, 2013* (poster)

Frontiers in Physiology Symposium (University of Toronto, Department of Physiology) April 13, 2012 (poster)

Society for Neuroscience Annual Conference (Washington, DC, USA) November 14, 2011 (poster)

Molecular and Cellular Cognition Society Meeting (Washington, DC, USA) November 11, 2011 (poster)

The Hospital for Sick Children Research Institute Research Retreat (Toronto, ON, Canada) *November 1, 2011* (poster)

Canadian Association for Neuroscience (CAN) Annual Conference (Quebec City, QC, Canada) *May 16, 2011* (poster)

Frontiers in Physiology Symposium (University of Toronto, Department of Physiology) *April 8, 2011* (poster)

Brain Research and Integrated Neurophysiology Platform Research Day (University of Toronto, Department of Physiology) *December 16, 2010* (poster)

Society for Neuroscience Annual Conference (San Diego, CA, USA) November 16, 2010 (poster)

Molecular and Cellular Cognition Society Meeting (San Diego, CA, USA) November 11, 2010 (poster)

Canadian Association for Neuroscience (CAN) Annual Conference (Ottawa, ON, Canada) *May 16, 2010* (poster)

Frontiers in Physiology Symposium (University of Toronto, Department of Physiology) April 15, 2010 (poster)

University of Toronto Neuroscience Program (University of Toronto) April 14, 2010 (poster)

Brain Research and Integrated Neurophysiology Platform Research Day (University of Toronto, Department of Physiology) *December 16, 2009* (Winner of oral presentations)

Society for Neuroscience Annual Conference (Chicago, IL, USA) October, 2009 (poster)

Molecular and Cellular Cognition Society Meeting (Chicago, IL, USA) October, 2009 (poster)

Frontiers in Physiology Symposium (University of Toronto, Department of Physiology) April 22, 2009 (poster)

Brain Research and Integrated Neurophysiology Platform Research Day (University of Toronto, Department of Physiology) *December 10, 2008* (poster)

Society for Neuroscience Annual Conference (Washington, DC, USA) November 16, 2008 (poster)

CURRICULUM VITAE Melanie Jay Sekeres, PhD

Molecular and Cellular Cognition Society Meeting (Washington, DC, USA) November 13, 2008 (poster)

Updated: July 2013

Program in Neuroscience Research Day (University of Toronto) April 30, 2008 (poster)

Frontiers in Physiology Symposium (University of Toronto, Department of Physiology) April 24, 2008 (poster)

Brain Research and Integrated Neurophysiology Platform Research Day (University of Toronto, Department of Physiology) *December 17, 2007* (poster)

7. SOCIETY MEMBERSHIP, COMMITTEES AND OUTREACH

Frontiers in Physiology poster judge, University of Toronto, Department of Physiology (2013)

Alzheimer Knowledge Exchange (2012 - present)

Seniors Heath Knowledge Network (2012 - present)

Society for Neuroscience (2008 – present)

Molecular and Cellular Cognition Society (2008 – present)

Canadian Association for Neuroscience (2010 – present)

University of Toronto Neuroscience Program (2006 – present)

Animal Care Committee, The Hospital for Sick Children Research Institute (2009-2010)

Science Rendezvous volunteer (2009, 2011, 2012)

Supervise 4th year undergraduate students in University of Toronto's *Human Biology* Program, course HMB499Y:

2010-2011: Jane Wu (currently a 1st year graduate student, University of Toronto)

2009-2010: Daniel Corrazolla (currently a 2nd year medical school student, Queens University)

2008-2009: Colin Kwok (currently a 3rd year medical school student, China)