CURRICULUM VITAE

Donna L. Korol
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Education

1978-1983	University of Wisconsin, B.S. in Zoology
1985-1991	University of Virginia, Ph.D. in Neuroscience
1991-1994	Postdoctoral Training, University of Arizona, Arizona Research Laboratories, Division of Neural Systems, Memory and Aging

Positions Held

1983-1985	Predoctoral Research Assistant, Department of Psychobiology, University of California, Irvine (PI: James McGaugh)
1991-1994	Postdoctoral Research Fellow, Department of Psychology, University of Arizona (PI: Carol Barnes)
1994-1998	Instructor, Department of Psychology, University of Virginia
1994-1998	Research Assistant Professor, Department of Psychology, University of Virginia
1998-1999	Visiting Assistant Professor, Department of Psychology, Washington and Lee University
1999-2000	Assistant Professor, Department of Psychology, Binghamton University, SUNY
2000-2002	Research Assistant Professor, College of Medicine and Department of Psychology, University of Illinois at Urbana-Champaign
2002-2008	Assistant Professor, Department of Psychology and College of Medicine, University of Illinois at Urbana-Champaign
2004-present	Affiliate, Institute for Genomic Biology, University of Illinois at Urbana-Champaign
2008-2012	Associate Professor, Department of Psychology, University of Illinois at Urbana-Champaign
2008-2012	Coordinator of outreach, Neuroscience Program, University of Illinois
2009-2012	Course Coordinator for Behavioral Sciences for M1, College of Medicine, University of Illinois at Urbana-Champaign.
2009-2012	Affiliate, Department of Molecular and Integrative Physiology, University of Illinois at Urbana-Champaign
2012-present	Associate Professor, Department of Biology, Syracuse University
2012-present	Affiliate, Department of Neuroscience & Physiology, Upstate Medical University
2012-present	Affiliate, Aging Studies Institute, Syracuse University
2013-present	Posse Foundation Mentor for Syracuse University LA Posse 2 Scholars

Awards, Honors, and Fellowships

1984	NIMH Predoctoral Training Fellowship
1986-1986	Dupont Fellowship
1987-1990	NICHD Predoctoral Training Fellowship in Neural and Behavioral Development:
1988	AChemS Travel Award
1989-1990	University of Virginia Graduate School of Arts and Sciences Dissertation Year Award
1991-1994	NIA National Research Service Award (post-doctoral, 3 yrs): Jan 1991-Jan 1994
1996	Kellogg *Insert of the Year Award* for scientific review on Breakfast and Performance

2002 University of Illinois, Initiative on Aging incentive research award
2003 Neurobiology of Lipids, Editors' Choice award for noteworthy presentation at Society for Neuroscience annual meeting
2004-2005 Mabel Kirkpatrick Hohenboken Teaching Enhancement Award, University of Illinois, Department of Psychology
2002-2006 Recognized on the students' List of Excellent Teachers, University of Illinois
2008-2011 Recognized on the students' List of Excellent Teachers, University of Illinois
2008 University of Illinois, Campus Committee on Promotion and Tenure Outstanding Achievement Award
2009 Top Reviewer for Hormones and Behavior, Elsevier Press
2014 James K. Duah-Agyeman Faculty of the Year Award for the Center for Graduate Preparation and Achievement, Syracuse University
2014 Who's Who in Sciences Education

Professional Activities

Editorial Boards:

2006-present *Hormones and Behavior*, Elsevier
2009-present *Neurobiology of Learning and Memory*, Elsevier
2009-present *Frontiers in Aging Neuroscience,* Frontiers Journal Series
2012-present *Conference Papers in Science: Neuroscience,* Hindawi

Guest Editor:

2010-2011 Special issue of *Neurobiology of Learning and Memory*, titled, "Memory Impairment and Disease"

Ad-hoc manuscript reviewer:

Behavioral and Brain Functions; Behavioral Neuroscience; Behavioural Brain Research; Behavioural Processes; Brain Research; European Journal of Neuroscience; Experimental Neurology; Frontiers in Aging Neuroscience; Hippocampus; Hormones and Behavior; Journal of Neurochemistry; Journal of Neuroscience; Journal of Neuroscience Methods; Journal of Neuroscience Research; Learning and Memory; Molecular Therapy; Neurobiology of Aging; Neurobiology of Learning and Memory; NeuroImage; Neuroscience; Neuroscience Letters; Pharmacology, Biochemistry and Behavior; Physiology and Behavior; Proceedings of the National Academy of Sciences; PLoS One; Psychoneuroendocrinology; Reproduction; Reviews in the Neurosciences; Stress

Grant Review Boards:

2004, 2005 Member, NSF Advisory Panel for Neural Systems cluster/modulation programs (declined 2010; 2013; 2015)

Ad-hoc grant reviewer:

Alzheimer's Association; Virginia Center on Aging; U.S. Veterans Affairs;
National Science Foundation, PPP Foundation (UK); various university and state research awards; UIUC Campus Research Board

Membership:

Society for Neuroscience (SfN); Society for Behavioral Neuroendocrinology (SBN); Women in Neuroscience (WIN); Association of Women in Science (AWIS); Organization for the Study of Sex Differences (OSSD)

Committee and conference service:

<u>University and Departmental:</u>
1991-1994 Member, University of Arizona, Committee on Gerontology

1994-1998	Member, University of Virginia Center on Aging
2001-2006	Member, University of Illinois Initiative on Aging (final year, 2006)
2001-2003	Member, University of Illinois, Neuroscience Graduate Program, Admissions Committee
2005-2006	Chair, University of Illinois, Neuroscience Graduate Program, Admissions Committee
2002-2010	Member, Graduate Awards Committee/Graduate Education Committee, Department of Psychology, University of Illinois
2003-2005	University of Illinois, Neuroscience Graduate Program, Executive Committee
2006-2007	University of Illinois, Neuroscience Graduate Program, Executive Committee
2010-2012	University of Illinois, Neuroscience Graduate Program, Executive Committee
2003-2005	University of Illinois, Department of Psychology, Departmental Advisory Committee to Division of Animal Resources
2007-2008	Member, Committee to Evaluate the Teaching Plan, Department of Psychology
2008-2012	Member, Department of Psychology, Academic Disciplinary Committee
2009	Member, Department of Psychology search committee for Psych 100 coordinator
2009-2011	Course coordinator, Behavioral Sciences for Health Professionals, College of Medicine, University of Illinois at Urbana-Champaign
2010	Member, Department of Psychology Undergraduate Distinction Committee
2011	Member, Search Committee for Medical Scholars Program Coordinator
2011	Member, Search Committee for OLLI Director
2011-2012	Member, Independent Program of Study (IPS) Committee, College of LAS, University of Illinois at Urbana-Champaign
2011-2012	Member, Staff and Faculty Awards Committee, Department of Psychology, University of Illinois at Urbana-Champaign
2012	Planning committee for Central NY Neuroscience Website
2012-2013	Governance committee, Neuroscience Initiative, Syracuse University
2012-2013	Curriculum committee, Neuroscience Initiative, Syracuse University
2013-present	Curriculum committee, Neuroscience Program, Upstate Medical University
2013-2014	Member, Search Committee Biochemistry faculty position, Syracuse University
2014-present	Member, Faculty Advisory Board, LSAMP program, Syracuse University
2014-2015	Member, Search Committee Neuroscience faculty position, Syracuse University
2014-present	Member, Curriculum Committee, Department of Biology, Syracuse University
2015-present	Member, Graduate Committee, Department of Biology, Syracuse University

<u>Societies and Conferences:</u>

2002	Organizer (and speaker) for Bench to Bedside symposium on Menopause: Making Choices, Medical Scholars Program, School of Medicine, University of Illinois
2003	Invited Organizer and Program Chair for the XXVII Winter Conference on the Neurobiology of Learning and Memory, Park City, Utah, January 11-14
2003	Chair and speaker in session titled *Systems and cellular pathways of ovarian steroid actions on learning and memory*, at the XXVII Winter Conference on the Neurobiology of Learning and Memory, Park City, Utah, January 11-14
2003	Chair of Neuroscience Session, UIUC Initiative on Aging, First Annual Summer Conference, June 17-18
2007-2011	Member, Society for Behavioral Neuroendocrinology Education Committee
2009	Chaired session titled *Exercise, Physical Activity and Brain Function,* at the XXXIII Winter Conference on the Neurobiology of Learning and Memory, Park City, Utah, January 3-6
2012	Invited co-chair, Data Blitz Session, XXXVI Winter Conference on the Neurobiology of Learning and Memory, Park City, Utah, January 4-7

2014, 2015 Invited host, Society for Neuroscience professional development workshop titled, *Career Development Topics: A Networking Event*, November 15, 2014, Washington, D.C.; October 18, 2015, Chicago, IL.

Outreach and public engagement:

1993-1998 Leader for tutorials and debates on *Animal Rights v. Animal Research*, area schools, Charlottesville, VA

1994-1999 Developed and implemented project-based curricula (HOWS - Hands On With Science) for teaching neuroscience to 7-12 graders, Tandem Friends School, Charlottesville, VA and to 6-8 graders at Village Middle School for girls, Charlottesville, VA

1998-1999 Co-founder of Renaissance School, Charlottesville, VA

1998-2002 Mentor for pre-college science teachers through the Society for Neuroscience

1998-present Outreach Partner, Society for Neuroscience

2001 Developed and implemented GirlZone workshop on Bodacious Brains, Champaign-Urbana, October 20

2001-2002 Co-organizer and participant, Brain Awareness Week, Neuroscience Program, University of Illinois

2002 Invited presenter, Society for Neuroscience Hands-on Workshops for Educators

2003 Invited keynote speaker and workshop leader for Learning Brain Expo 2003, Brain workshop for educators, Chicago, IL, July 17

2003 Conducted tutorial on "Aging brain and its functional implications". Invited speaker at the Continuing Education colloquia: Geriatrics for Non-physicians, University of Illinois, Department of Family Medicine, Kankakee, IL, September 26

2003-2005; 2007-2009 Organizer and participant, Brain Awareness Week, Neuroscience Program, University of Illinois

2005-2006 Invited participant, Freeman Fellows program, UIUC. Facilitated roundtable discussions about academic integrity with Freeman Fellows

2007-2010 Invited participant, 1st ,2nd, and 4th annual Illinois Summer Neuroscience Institutes

2008 Invited participant, University of Illinois' Osher Life Long Learning Institute (OLLI)

2008 Co-organizer, exhibits for Chicago Science in the City, December 27-29

2009 Coordinator, OLLI course on Brains in Society

2010-2012 Co-developer of neuroscience curricula and S.T.A.R. program for Don Moyer Boys and Girls club

2010-2012 Senior Project Committee, University Laboratory High School, Urbana, IL

2011 Mentor for University of Illinois – University Laboratory High School iSTEM summer interns (Tahar Bowen-Pinto, Sunjay Koshy)

2011 Mentor for OLLI-NSP Citizen-Scientist program

2011-present Co-developer of F.I.N.D. (Faces in Neuroscience Discovery) series at Orpheum Children's Science Museum

2011-present Developer of FIND Orphy: Portable science for the public, collaborative museum exhibit with the Orpheum Children's Science Museum, Champaign, IL

2013-2014 Developer, in collaboration with Mark Morris Dance Group and SU Arts Engage, Dance for Parkinson's workshop titled, *Movement for Healthy Aging*. April 11-12, 2014.

Professional Development:

2008-2012 Co-developer and facilitator, annual summer Neuroscience Teacher Institutes

2009-2012 Co-developer and facilitator, Saturday Neuroscience Teacher Institutes

2013 Invited Speaker, WiSE panel on peer evaluation, October 29, 2013

2014 Participant, FUN Workshop, Ithaca College, August 1-3, 2014

2014 Speaker for SfN professional development workshop, *How to choose a post-doc*

Extramural Research Support

Current:

11/1/2009-10/31/2015
NIH 1 R25 RR024251-01A2 MAA, SEPA program
Project NEURON: Novel Education for Understanding Research on Neuroscience.
Role: CoPI (B. Hug, PI)

5/1/14-4/30/16
NIH/NINDS 5R21NS085502-02, Exercise recovers cholinergic dysfunction through neurotrophin modulation
Role: consultant (no direct costs; L. Savage (PI)

Completed:

9/1/2010-8/31/2015
NIH P50 AT006268 from ODS, NCCAM, and NCI Dietary Supplement Research Centers: Botanicals (P50 RFA-OD-09001; Helfrich PI)
Botanical Estrogens: Mechanisms, Dose and Target Tissues
Role: Project Co-leader (co-I, S. Schantz)

7/1/13-6/30/15
NIH P30 AG034464, Pilot project for Center for Aging and Policy Studies, Syracuse University
Use it and boost it: Enhancing cognition in elderly with prior mental activity
Role: PI (P. Gold, co-PI)

7/1/13-6/30/15
NIH P30 AG034464, Pilot project for Center for Aging and Policy Studies, Syracuse University
Energizing the aging brain for optimal learning and memory
Role: Co-PI (P. Gold, PI)

9/1/2009-8/31/2013
NSF IOS 0843175, ARRA
Neuroendocrine modulation of LTP durability
Role: PI (P. Gold, co-PI)

10/2011-9/2012
Supplement to NIH 1 R25 RR024251-01A2 MAA
Brain CASE (Computer Aided Student Exploration): development of a video game on traumatic brain injury
Role: CoPI (B. Hug, PI)

8/1/2005-7/31/2011
NSF IOB 0520876
Estrogen, learning strategy, and neural systems: Timing and cellular mechanisms.
Role: PI

3/10/2011-3/09/2012
NSF IOS 118414, Supplement to IOB 0520876
Estrogen, learning strategy, and neural systems: Timing and cellular mechanisms.
Role: PI

9/01/04-8/31/10
NIH P01 AG024387-04 (Helferich PI)
Phytoestrogens and Aging: Dose, Timing & Tissue
Role: CoPI of Project 3: Dietary estrogens and cognitive function during aging (Schantz, PI)

9/1/2000-8/31/2004
NSF IBN 0081061
Estrogen modulation of learning strategy: A neural systems approach
Role: PI

1994-1997
Mars Corporation
Glucose and nutritional effects on cognition in children,
Role: Co-PI

1998-1999
Austin Foundation Memorial Fund award
Development of innovative secondary school curriculum for Renaissance High School
Role: Co-I

1996-1999
Kellogg Company Research award
Breakfast and behavior in the elderly: Regulation by post-prandial glucose
Role: PI

10/2005-12/2005
Katrina relief award, Society for Neuroscience
Research support for displaced UNO students
Role: Mentor

Under review

- NIH: Effects of enriched environment on the influences of genetic, aging, and environmental risk factors in parkinsonism. CoPI (Smeyne, PI)
- NIH: Impact of sleep apnea exacerbation on brain cholinergic signaling and cognition. Consultant (Irina Topichy, UIC, PI).
- Gilead Sciences Research Scholars Program in Cardiovascular Disease: Resistance Exercise, Arterial Stiffness, and Cerebrovascular Health". Co-I (Heffernan, PI).
- American Heart Association: "Resistance Exercise and Cerebrovascular Health". Co-I (Heffernan, PI)

Extramural Training and Instructional Support

7/1/00-6/30/10
NIH 5 T32 ES007326-10
NIEHS: Research Training Program in Environmental Toxicology
PI: S.L. Schantz
Role: Preceptor

9/1/15-8/31/17
NIH R36
Curcumin Supplementation and Aging Skeletal Muscle
Candace Receno, PhD candidate
Role: Co-mentor (PI: K. DeRuisseau)

Intramural Research Support

2012-2013
Public Engagement grant, University of Illinois
FIND Orphy
Role: Co-PI (Barbara Hug, co-PI)
6/20/2003-6/19/2008
UIUC VCR and Initiative on Aging
Incentive funds
Role: Co-PI (of five)

2002-2012
University of Illinois, Initiative on Aging Incentive Award
Strategy Shifts in Aging Female Rats
Role: PI

Research Interests

My primary research interests aim to understand experience-dependent and experience-expectant brain changes that modulate learning and memory. My work focuses on how changes in brain state, e.g. through hormones, prior experience, and age, modulate the neural components of learning, memory and forgetting. We take a multiple-memory systems approach to understanding brain function and behavior. Overarching aims are to develop behavioral and neurobiological models of healthy and pathological aging. Ongoing projects include:

- Estrogenic modulation of neural plasticity, bioenergetics, and estrogen receptor-mediated cell signaling events;
- Neural mechanisms of the benefits of physical and cognitive activity across the adult lifespan, focusing on the roles of neurometabolism and trophic factor signaling.
- Cognitive, metabolic, and cell biological phenotypes of Parkinson's disease to identify pre-motor changes that provide early diagnostics for prevention and intervention of pathology;
- Modulation of neurophysiological models of memory and forgetting across the lifespan, using long-term potentiation (LTP) long-term depression (LTD) paradigms in rodents.

Teaching Interests and Experience

My teaching interests span a broad range of topics in Neuroscience and across undergraduate and graduate levels of instruction. Courses I have taught include Biology of Aging, Neurodegenerative Diseases, Neurobiology of Aging, Exercise and Brain Function, Metabolism and Brain function, Neuroendocrinology, Hormones and Behavior, Brain, Behavior and Gender, Animal Behavior, Synaptic Plasticity, Menopause and Mind, Physiological Psychology, Behavioral Sciences for medical students. I have developed, implemented, and taught the following laboratory courses: Laboratory in Neuroscience, Motivation, Current Behavioral Neuroscience Methods. My teaching is student-centered, integrates real-world contexts into academic content, and extends to mentees in my and my colleagues' laboratories.

Public Engagement

I am deeply committed to enhancing science literacy particularly in grade school children. One goal is to develop innovative science and teaching strategies for primary and secondary school curricula to reduce the relatively high attrition rate for female and other under-represented students entering basic science fields. Currently I am co-PI on an NIH-funded Science Education Partnership Award titled Project NEURON, designed to develop middle and high school neuroscience curriculum modules based on cutting-edge research at the University of Illinois. Moreover, as outreach coordinator for the Neuroscience Program, I developed and facilitated several programs that brought STEM content focused on neuroscience to the public, including an annual Brain Awareness Day event, collaborations with the local science museum, and programs for adult education through the Osher Lifelong Learning Institute (OLLI) and medical schools. I currently serve on the Faculty Advisory Board for the Louis Stokes Alliance for Minority Participation in STEM at Syracuse University. Finally, in collaboration with the Aging Studies Institute at Syracuse University, I have initiated a dance-through-exercise program called *Movement for Healthy Aging* with the aim to increase physical, psychological, and social well being of elders, particularly in underserved areas of the community.

Publications

Bibliography of peer reviewed journal articles and book chapters can be found at: http://www.ncbi.nlm.nih.gov/sites/myncbi/donna.korol.1/bibliography/48131287/public/?sort=date&direction=ascending

Peer reviewed and solicited chapters

1. Sternberg, D.B., Korol, D., Novack, G.D. and McGaugh, J.L. (1986). Epinephrine-induced memory facilitation: Attenuation by adrenoceptor antagonists. *European Journal of Pharmacology*, 129, 189-193.

2. Steward, O., White, G., Korol, D., and Levy, W.B. (1988). Cellular events underlying long-term potentiation and depression in hippocampal pathways: Temporal and spatial constraints. In: P.W. Landfield and S.A. Deadwyler (Eds), *Long-Term Potentiation: From Biophysics to Behavior.* Alan R. Liss, Inc., New York, pp. 139-166. [Solicited chapter]

3. Brunjes, P.C., Korol, D.L., and Stern, K.G. (1989). Prenatal neurogenesis in the telencephalon of the precocial mouse *Acomys cahirinus*. *Neuroscience Letters*, 107, 114-119.

4. Korol, D.L., and Brunjes, P.C. (1990). Rapid changes in 2-DG uptake and amino acid incorporation following unilateral odor deprivation: A laminar analysis. *Developmental Brain Research*, 52, 75-84.

5. Brunjes, P.C., Caggiano, A.O., Korol, D.L., and Stewart, J.S. (1991). Unilateral olfactory deprivation: Effects on succinate dehydrogenase histochemistry and ^{3}H-leucine incorporation in the olfactory mucosa. *Developmental Brain Research*, 62, 239-244.

6. Korol, D.L., and Brunjes, P.C. (1992). Unilateral naris closure and vascular development in the rat olfactory bulb. *Neuroscience*, 46, 631-641.

7. Korol, D.L., Abel, T.W., Church, L.T., Barnes, C.A. and McNaughton, B.L. (1993). Hippocampal synaptic enhancement and spatial learning in the Morris swim task. *Hippocampus*, 3, 127-132.

8. Barnes, C.A., Jung, M.W, McNaughton, B.L., Korol, D.L., Andreasson, K. and Worley, P.F. (1994). LTP saturation and spatial learning disruption: Effects of task variables and saturation levels. *Journal of Neuroscience*, 14, 5793-5806.

9. Korol, D.L. (1996). Breakfast and Performance. *Journal of American Dietetic Association*, 96, A993-A996.

10. Norris, C.M., Korol, D.L. and Foster, T.C. (1996). Increased susceptibility to induction of long-term depression and long-term potentiation reversal during aging. *Journal of Neuroscience*, 16, 5382-5392.

11. Wilkniss, S.M., Jones, M.G., Korol, D.L., Gold, P.E. and Manning, C.A. (1997). Age-related differences in an ecologically based study of route learning. *Psychology and Aging*, 12, 372-375.

12. Wilkniss, S.M., Jones, M.G., Korol, D.L., and Manning, C.A. (1997). Visuospatial recall in cortical and subcortical dementias. *Brain and Cognition* 35, 356-359.

13. Korol, D.L. and Gold, P.E. (1998). Glucose, memory, and aging. *American Journal of Clinical Nutrition*, 67, 764S-771S.

14. Manning, C.A., Stone, W.S., Korol, D.L. and Gold, P.E. (1998). Glucose enhancement of 24-h memory retrieval in healthy elderly humans. *Behavioural Brain Research*, 93, 71-76.

15. Gold, P.E., McIntyre, C. K., McNay, E., Stefani, M. and Korol, D.L. (2001). Neurochemical referees of dueling memory systems. In: P.E. Gold and W. Greenough (Eds), *Memory Consolidation: Essays in Honor of James L. McGaugh, A Time to Remember.* American Psychological Association Book Publishers, Washington D.C. pp. 219-248. [Conference proceedings]

16. Korol, D.L. and Manning, C.A. (2001). Effects of estrogen on cognition: Implications for menopause. In: M.E. Carroll and J.B. Overmier (Eds), *Animal Research and Human Health: Advancing Human Welfare Through Behavioral Science.* American Psychological Association Book Publishers, Washington D.C., pp. 305-322. [Solicited chapter]

17. Korol, D.L. and Kolo, L.L. (2002). Estrogen-induced changes in place and response learning in young adult female rats. *Behavioral Neuroscience*, 116, 411-420.

18. Korol, D.L. (2002). Enhancing cognitive function across the life span. In: D. Harman (ed) *Increasing the Healthy Life Span: Conventional Measures and Slowing the Innate Aging Process.* Annals of the New York Academy of Sciences, 959, 167-179. [Conference proceedings]

19. Marriott, L.K. and Korol, D.L. (2003). Short-term estrogen treatment in ovariectomized rats augments hippocampal acetylcholine release during place learning. *Neurobiology of Learning and Memory*, 80, 315-322.

20. Allred, C.D., Allred, K.J., Ju, Y.H, Clausen, L.M., Doerge, D.R., Schantz, S.L., Korol, D.L., Wallig, M.W., and Helferich, W.G. (2004). Dietary genistein results in larger MNU-induced, estrogen-dependent mammary tumors following ovariectomy of Sprague-Dawley rats. *Carcinogenesis*, 25, 211-218.

21. Korol, D.L., Malin, E.L., Borden, K.A., Busby, R.A., and Couper-Leo, J.M. (2004). Shifts in preferred learning strategy across the estrous cycle in female rats. *Hormones and Behavior*, 45, 330-338.

22. Conrad, C.D., Jackson, J.L., Wieczorek, L., Baran, S.E., Harman, J., Wright, R.L., and Korol, D.L. (2004). Acute stress impairs spatial memory in male but not female rats: Influence of estrous cycle. *Pharmacology, Biochemistry, and Behavior*, 78, 569-579.

23. Korol, D.L. (2004). Role of estrogen in balancing contributions from multiple memory systems. *Neurobiology of Learning and Memory*, 82, 309-323. [Evaluated by Faculty *of* 1000:] http://www.f1000biology.com/article/15464412/evaluation

24. McElroy, M.W. and Korol, D.L. (2005). Intrahippocampal muscimol shifts learning strategy in gonadally intact young adult female rats. *Learning and Memory*, 12, 150-158. [see commentary by T. Shors, same issue.]

25. Erickson, K.I., Colcombe, S.J., Raz, N., Korol, D.L., Scalf, P., Webb, A., Cohen, N.J., McAuley, E., and Kramer, A.F. (2005). Selective sparing of brain tissue in

postmenopausal women receiving hormone replacement therapy. *Neurobiology of Aging*, 26, 1205-1213.

26. Zurkovsky, L., Brown, S.L., and Korol, D.L. (2006). Estrogen modulates place learning through estrogen receptors in the hippocampus. *Neurobiology of Learning and Memory*, 86, 336-343.

27. Zurkovsky, L., Brown, S.L., Boyd, S.E., Fell, J.A., and Korol, D.L. (2007). Estrogen modulates learning in female rats by acting directly at distinct memory systems. *Neuroscience,* 144, 26-37.

28. Korol, D.L. and Gold, P.E. (2007). Modulation of learning and memory by adrenal and ovarian hormones, In: R.P. Kesner and J.L. Martinez (Eds), *Neurobiology of Learning and Memory*, 2nd Edition, Elsevier, New York, NY, 243-268. [Solicited chapter]

29. Erickson, K.I., Colcombe, S.J., Elavsky, S., McAuley, E., Korol, D.L., Scalf, P., Kramer A.F. (2007). Interactive effects of fitness and hormone treatment on brain health in post-menopausal women. *Neurobiology of Aging*, 28, 179-185.

30. Korol, D.L. and Gold, P.E. (2008). Epinephrine converts LTP from transient to durable form in awake rats. *Hippocampus,* 18, 81-91.

31. Wang, V.C., Sable, H.J.K., Ju, Y.H., Allred, C.DHelferich, H.G., Korol, D.L., and Schantz, S.L. (2008). Effects of chronic estradiol treatment on delayed spatial alternation and differential reinforcement of low rates of responding. *Behavioral Neuroscience, 122, 794-804.*

32. Dohanich, G.P., Korol, D.L., and Shors, T.J. (2009). Steroids and Cognition, In: D. Pfaff, A. Arnold, R. Rubin, S. Fahrbach, and A. Etgen (Eds), *Hormones, Brain and Behavior*, 2nd edition, Academic Press, New York, NY, 539-576. [Invited author]

33. Erickson, K.I. and Korol, D.L. (2009). The effects of hormone replacement therapy on the brains of postmenopausal women: A review of human neuroimaging studies. In: W. J. Chodzko-Zajko, A.F. Kramer, and L. Poon (Eds), Enhancing Cognitive Functioning and Brain Plasticity, Human Kinetics, Champaign, IL. 133-158. [Solicited chapter; Invited author].

34. Wang, V.C., Neese, S.L., Korol, D.L., and Schantz, S.L. (2009). Chronic estradiol replacement impairs performance on an operant delayed spatial alternation task in young, middle-aged, and old rats. *Hormones and Behavior,* 56, 382-390.

35. McLaughlin, K.J., Wilson, J.O., Harman, J. Wright, R.L., Wieczorek, L.A., Gomez, J., Korol, D.L., and Conrad, C.D. (2010). Chronic 17β-estradiol or cholesterol prevents stress-induced hippocampal CA3 dendritic retraction in ovariectomized female rats: Possible correspondence between CA1 spine properties and spatial acquisition. *Hippocampus*, 20, 768-786.

36. Neese, S.L., Wang, V.C., Doerge, D.R., Woodling, K.A., Andrade, J.E., Helferich, W.G., Korol, D.L., and Schantz, S.L. (2010). Impact of dietary genistein and aging on executive function in rats. *Neurotoxicology and Teratology*, 32, 200-211.

37. Gold, P.E. and Korol, D.L. (2010). Hormones and Memory. In: G.F. Koob, M. Le Moal, and R. F. Thompson (Eds), *Encyclopedia of Behavioral Neuroscience*, Volume 2, (R.

Dantzer, section Ed), pp. 57-64, Oxford: Academic Press. [Solicited chapter, Invited Author]

38. Neese, S.L., Korol, D.L., Katzenellenbogen, J.A., and Schantz, S.L. (2010). Impact of estrogen receptor alpha and beta agonists on delayed alternation in middle-aged rats. *Hormones and Behavior*, 58, 878-890.

39. Wang, V.C., Neese, S.L., Korol, D.L., and Schantz, S.L. (2011). Estradiol impairs response inhibition in young and middle-aged, but not old rats. *Neurotoxicology and Teratology*, 33, 405-414.

40. Zurkovsky, L., Serio, S.J., and Korol, D.L. (2011). Intrastriatal estradiol in female rats impairs response learning within two hours of treatment. *Hormones and Behavior*, 60, 470-477.

41. Frick, K.M. and Korol, D.L. (2011). Introduction to the special issue of Neurobiology of Learning and Memory on memory impairment and disease. *Neurobiology of Learning and Memory*, 96, 505-506.

42. Newman, L.A., Korol, D.L., and Gold, P.E. (2011). Lactate produced by glycogenolysis in astrocytes regulates memory processing. *PLoS ONE*, 6(12), e28427.

43. Neese, S.L., Bandara, S.B., Doerge, D.R., Helferich, W.G., Korol, D.L., and Schantz, S.L. (2012). Effects of multiple daily genistein treatments on delayed alternation and a differential reinforcement of low rates of responding task in middle-aged rats. *Neurotoxicology and Teratology*, 34, 187-195.

44. Wnuk, A., Korol, D.L., and Erickson, K.I. (2012). Estrogens, hormone therapy, and hippocampal volume in postmenopausal women, *Maturitas*, 73, 186-190.

45. Sepehr, E., Lebl-Rinnova, M., Mann, M.K., Pisani, S.L., Churchwell, M.I., Korol, D.L., Katzenellenbogen, J.A., and Doerge, D.R. (2012). Pharmacokinetics of the estrogen receptor subtype-selective ligands, PPT and DPN: Quantification using UPLC-ES/MS/MS. *Journal of Pharmaceutical and Biomedical Analysis*, 71, 119-126.

46. Pisani, S.L., Neese, S.L., Doerge, D.R., Helferich, W.G., Schantz, S.L, and Korol, D.L. (2012). Acute genistein treatment mimics the effects of estradiol by enhancing place learning and impairing response learning in young adult female rats. *Hormones and Behavior*, 62, 491-499. [NIHMS 407660]

47. Gold, P.E. and Korol, D.L. (2012). Making memories matter, In: Special issue of Frontiers in Integrative Neuroscience, "Impact of Emotion on Cognition", *Frontiers in Integrative Neuroscience*, 6:116, Dec 18, 2012. doi: 10.3389/fnint.2012.00116

48. Gold, P.E., Newman, L.A., Scavuzzo, C.J., and Korol, D.L. (2013). Modulation of multiple memory systems: From neurotransmitters to metabolic substrates. *Hippocampus*, 23, 1053-1065. doi: 10.1002/hipo.22182

49. Korol, D.L., Gold, P.E., and Scavuzzo, C.S (2013). Use it and boost it with physical and mental activity. *Hippocampus*, 23, 1125-1135. doi:10.1002/hipo.22197

50. Neese, S.L., Korol, D.L., and Schantz, S.L. (2013). Voluntary exercise impairs initial delayed spatial alternation performance in estradiol treated ovariectomized middle-aged rats. *Hormones and Behavior*, 64, 579-588.

51. Neese, S.L., Pisani, S.L, Doerge, D.R., Helferich, W.G., Sepehr, E., Chittiboyina, A.G., Rotte, S.C.K., Smillie, T.J., Khan, I.A., Korol, D.L., and Schantz, S.L. (2014). The effects of dietary treatment with S-equol on learning and memory processes in middle-aged ovariectomized rats. *Neurotoxicology and Teratology*, 41, 80-88. doi: 10.1016/j.ntt.2013.12.004

52. Finy, M.S., Bresin, K., Korol, D.L., and Verona, E. (2014). Impulsivity, risk taking, and cortisol reactivity as a function of psychosocial stress and personality in adolescents. *Development and Psychopathology*, 1-19, doi: 10.1017/S0954579414000212.

53. Gold, P.E. and Korol, D.L. (2014). Forgetfulness during aging: An integrated biology. In Special Issue: Stress and the regulation of memory: From basic mechanisms to clinical implications. Eds: D. de Quervain, J.L. McGaugh, *Neurobiology of Learning and Memory*, 112, 130-138.

54. Korol, D.L. and Pisani, S.L. (2015). Estrogens and cognition: Friends or Foes? Special Issue on Estradiol and Cognition. *Hormones and Behavior,* 74, 105-115.

55. Pisani, S.L., Neese, S.L., Katzenellenbogen, J.A., Schantz, S.L., and Korol, D.L. (2015). Estrogen receptor selective agonists modulate learning in female rats in a dose- and task-specific manner. In press, *Endocrinology.*

56. Korol, D.L., Morris, K.A., Gold, P.E., Mitterling, K.L., Rocha-Cabrero, F. (2015). Bilateral intrastriatal infusions of 6-OHDA improve spatial working memory in rats: implications for Parkinson's disease. *Under revision*.

57. Korol, D.L. (2015). Multiple memory systems under modulatory control. Invited article for Frontiers in Systems Neuroscience special issue on Augmentation of Brain Function: Facts, Fiction, and Controversy, *in preparation*.

Opinion Pieces and Peer Reviewed Science Education Publications

1. Korol, D.L. (1997). Glucose effects on cognition in school children, young adults and elderly. White paper for Asia Pacific Nutrition Advisory Panel proceedings.

2. Stevens, H., Payton, J., and Korol, D. (2002). Bodacious Brains Workshop for Girls (feature article). *Women in Neuroscience Newsletter*, January, pp. 4, 12-14.

3. Blattner, M., Hug, B, Watson, P, and Korol, D. (2012). The Guppy Game: Understanding the big ideas of natural and sexual selection. *The Science Teacher* 79(5), 32-37.

4. Blattner, M., Hug, B., Ogrodnik, J., & Korol, D. (2013). What color do you see? A color-sorting activity in which students collect data and articulate scientific explanations. *The Science Teacher*, 80(3), 62-65.

5. Pollack, A.E. and Korol, D.L. (2013). The use of haiku to convey complex concepts in neuroscience. Journal of Undergraduate Neuroscience Education (JUNE), Fall, 12(1), A42-A48*.*

In final preparation (manuscript available upon request)

Gold, P.E., Scavuzzo, C.J., Newman, L.A., and Korol, D.L. Long-term plasticity of astrocytes: task-specific priming of hippocampal and striatal glycogen concentrations and lactate production during later cognitive testing. To be submitted to *Nature Neuroscience*.

Scavuzzo, C.J., Gold, P.E., and Korol, D.L. A novel method of in vivo microdialysis to measure extracellular BDNF levels across memory systems during learning. To be submitted to *Journal of Neuroscience*.

Zurkovsky, L., Serio, S.S., Decker, L.A., Grinberg, Y., Fell, J.A., and Korol, D.L. Task difficulty and age interact with the modulating effects of estradiol on learning strategy. To be submitted to *Neurobiology of Aging*.

Scavuzzo, C.J., Gold, P.E., and Korol, D.L. Engagement in a spatial working memory task enhances place and response learning: a role for BDNF-TRKB signaling. To be submitted to *Journal of Neuroscience*.

Scavuzzo, C.J., Erickson, K.I., Epstein, D.E., Grinberg, Y., and Collier, R. and Korol, D.L. Exercise boosts learning through BDNF signaling in rats. To be submitted to *Journal of Neuroscience*.

Korol, D.L, Kent, M.H., Zurkovsky, L., and Fornelli, D.C. Intrastriatal antiestrogen ICI 182,780 blocks estradiol-induced impairments in response learning in young adult female rats. To be submitted to *Hormones and Behavior*.

Tunur, T. and Korol, D.L. Estrous cycle modulates pattern separation in young adult rats. To be submitted to *Hormones and Behavior*.

Scavuzzo, C.J. and Korol, D.L. Intrahippocampal infusions of estradiol enhance or impair place learning depending on timing of treatment. To be submitted to *Neurobiology of Learning and Memory*.

Mitterling, K.L., and Korol, D.L. CREB signaling following estradiol treatment is confined to specific time points across memory systems. To be submitted to *Neuroscience*.

Korol, D.L., Pruis, T.A., Exercise and estradiol have opposing effects on learning strategies and synergistic effects on learning speed in middle-aged female rats. To be submitted to *Hormones and Behavior*.

Korol, D.L. Richards, J., Williams, C.M. Post-training estradiol impairs memory for social transmission of food preference in young adult ovariectomized rats. To be submitted to *Neurobiology of Learning and Memory*.

Invited Addresses

Extramural

Korol, D.L. and Brunjes, P.C. (1990). Experience and the developing olfactory bulb. Presented at the XIV conference on the Neurobiology of Learning and Memory, Park City, Utah.

Korol, D.L. (1992). Experience and the Brain: The Neurobiology of Memory Function and Dysfunction. Presented at Mount St. Mary's College, Emmitsburg, MD.

Korol, D.L. (1995). Effects of gonadal steroid fluctuations on learning in the swim task and on hippocampal primed burst potentiation in female rats. Presented at the XIX conference on the Neurobiology of Learning and Memory, Park City, Utah.

Korol, D.L. (1995). Glucose and memory function across the life span. Presented at the Symposium on School Breakfast and Learning, Napa, California.

Korol, D.L. (1995). The Aging Brain: Mechanisms for Changes in Learning and Memory. Presented at Mount St. Mary's College, Emmitsburg, Maryland.

Korol, D.L. (1997). Glucose effects on cognitive performance in school children, young adults and the elderly. Presented at the Kellogg Asia Pacific Nutrition Advisory Panel (KAPNAP) Symposium, Bangkok, Thailand.

Korol, D.L. (1997). Enhanced LTD in the aged brain: A model for forgetting. Presented at Mahidol University, Bangkok, Thailand.

Korol, D.L. (1998). Estrogen and learning strategy in rats. Presented at the XXII conference on the Neurobiology of Learning and Memory, Park City, Utah.

Korol, D.L. (1998). Glucose effects on cognition in young and elderly humans: A question of task difficulty. Presented at the 7th Annual meeting for the International Behavioral Neuroscience Society, Richmond, VA.

Korol, D.L. (1999). Memory, aging and estrogen: Shifts in neural processing. Presented March 5, 1999 at Psychology Department colloquium series, Binghamton University, Binghamton, NY.

Korol, D.L. (2000). Memory, estrogen and aging: Shifts in neural processing. Presented April 6, 2000 at the Research Seminar in Biopsychology series, University of Connecticut, Storrs, CT.

Korol, D.L. (2001). Estrogen-dependent shifts in learning strategy depend on length of hormone deprivation. Presented at the XXV conference on the Neurobiology of Learning and Memory, Park City, Utah.

Korol, D.L. (2001). Enhancing cognitive functions across the life span. Presented at the 9th Congress of the International Association of Behavioral Gerontology, Vancouver, British Columbia, June 27-30, 2001.

Korol, D.L. (2003). Sweet Memories: Glucose consumption and cognition in humans. Session: Nutrients, Neurotransmitters, and Mental Performance, Martine Orosco, Organizer. European Winter Conference on Brain Research, March, 2003, Les Arcs, France. UNABLE TO ATTEND.

Korol, D.L. (2003). Estrogen shifts learning strategy through actions on specific neural systems. Presented at the XXVII Winter Conference on the Neurobiology of Learning and Memory, Park City, Utah, January, 2003.

Korol, D.L. (2003). Learning and Memory: What's hormones got to do with it? Presentation at the Learning Brain Expo, conference for educators, July 17-19, 2003, Chicago, IL.

Korol, D.L. (2003). State of the brain in 2003: A synthesis. Presentation and workshop at the Learning Brain Expo, conference for educators, July 17-19, 2003, Chicago, IL.

Korol, D.L. (2003). Aging brain and its functional implications. Presentation at Continuing Education colloquia: Geriatrics for Non-physicians, University of Illinois, Department of Family Medicine, September 26, Kankakee, IL.

Korol, D.L. (2003). Ovarian steroids orchestrate learning strategy through modulation of memory systems. Satellite symposium titled, *Independence and Interaction among Multiple Memory Systems*, Society for Neuroscience 33rd Annual Meeting, November 7, 2003, New Orleans, LA.

Korol, D.L. (2004). Independent actions of estrogen on memory systems. Presented at the XXVIII conference on the Neurobiology of Learning and Memory, Park City, Utah, January, 8-11, 2004.

Korol, D.L. (2004). Making sense out of mixed results: Estradiol enhances and impairs cognitive function depending upon the neural system tapped by the task. Presented at Behavioral Neuroscience weekly seminar series, Department of Psychology, Arizona State University, February 25, 2004.

Korol, D.L. (2005). Making sense out of mixed results: Deciphering the cognitive effects of estradiol through a memory systems approach. Presented at the Department of Zoology seminar series, Miami University, Oxford, OH, March 3, 2005.

Korol, D.L. (2005). Estrogen and memory: A neural systems approach. Presented at the Program in Neuroscience seminar series, Marquette University, December 12, 2005.

Korol, D.L. (2006). Estrogen modulates learning and memory through estrogen receptors in hippocampus and dorsal striatum. Presented at the XXX anniversary conference on the Neurobiology of Learning and Memory, Park City, Utah, January 5-8, 2006.

Korol, D.L. (2006). Deciphering the cognitive effects of estradiol through a memory systems approach. Presented in the session, Estrogen effects on the hippocampus across the life span, Winter Conference on Neural Plasticity, Barbados, February 19-25, 2006.

Korol, D.L. (2007). Effects of ovarian steroids on learning and memory: Deciphering mixed results. Presented at the University of Massachusetts-Amherst Neuroscience and Behavior colloquium series, April 11, 2007.

Korol, D.L. (2007). Viewing the cognitive effects of estradiol through a memory systems lens. Presented at the Neuroscience Program Colloquium Series, Tulane University, New Orleans, LA, September 28, 2007.

Korol, D.L. (2008). Estradiol and exercise interact to modulate BDNF. Data blitz presented at the XXXII conference on the Neurobiology of Learning and Memory, Park City, Utah, January 3-6, 2008.

Korol, D.L. (2008). Colloquium: Viewing the cognitive effects of estradiol through a memory systems lens. Seminar: Jog your memory, stretch your brain: Aging, exercise, and estradiol effects on learning and memory. Presented at the Center for Studies in Behavioral Neurobiology, Concordia University, Montreal, Canada, April 4-5, 2008.

Korol, D.L. and Scavuzzo, C. (2009). Effects of exercise on response learning and brain BDNF levels. Data blitz presented at the XXXIII conference on the Neurobiology of Learning and Memory, Park City, Utah, January 3-6.

Korol, D.L. (2009). Spinning science into sound-bites: Exercise and learning and memory – what do hormones got to do with it? Two presentations to discuss brain function for scientists and science writers. Science writers' workshop, Wesleyan University, Middletown, Connecticut, November 17.

Korol, D.L. (2010). Viewing the cognitive effects of estrogens through a memory systems lens. In the symposium: Sugar, Sex, and Stress: Hormone Modulation of Memory Processes. American Psychological Association annual meeting, August 12, 2010 San Diego, CA.

Korol, D.L. (2011). Women are from Venus except when they are from Mars: Effects of estrogens on brain function. University of Wisconsin Neuroscience Program seminar series, April 21.

Korol, D.L. (2011). Jog your memory, stretch your brain. Keynote speaker, University of Wisconsin undergraduate neuroscience annual Neuro Night, April 21.

Korol, D.L. (2011). Women are from Venus except when they are from Mars: Effects of estrogens on brain function. Syracuse University, Departments of Biology and Psychology, June 3.

Korol, D.L. (2011). Jog your memory, stretch your brain. 4th Annual Christopher Comer Undergraduate Neuroscience Seminar, UIC Laboratory of Integrative Neuroscience, September 28.

Korol, D.L. (2011). Metamodulation: Neural mechanisms of learning, memory, and plasticity. Syracuse University, Biology Department, Oct. 31.

Korol, D.L. (2012). Jog your memory: How physical and mental activity modulate subsequent cognition. SIU chapter of SfN, Southern Illinois University, Feb.13, 2012.

Korol, D.L. (2012). Jog Your (multiple) Memory (systems). Satellite Symposium at Society for Neuroscience: Independence and Interaction of Multiple Memory Systems, October 12, 2012.

Korol, D.L. (2012). Jog Your Memory: Implications for Parkinson's Disease. Neuroscience Program Seminar, Upstate Medical University, November 13, 2012.

Korol, D.L. (2013). Jog Your Memory: Metamodulation through physical and mental activity, Binghamton University, Departments of Psychology and Biology, May 30, 2013.

Korol, D.L. (2014). Use it and Boost it with Cognitive and Physical activity. Presented at Hamilton College, April 10, 2014.

Korol, D.L. (2015). Use it and Boost it with Mental and Physical Activity: A role for BDNF. Presented at University of Pittsburgh Medical Center, Basic Biology of Aging work group, March 9, 2015.

Korol, D.L. (2015). Jog your memory with physical and mental activity. University of Connecticut, Department of Psychology seminar series, October 7, 2015.

Intramural

Korol, D.L. (2000). Shifts in neural plasticity as a model for age-related changes in forgetting. Presented September 26, 2000 at the Neuroscience Program Seminar series, University of Illinois, Urbana-Champaign.

Korol, D.L. (2000). Ovarian control of the mind: Steroidal selector of learning strategy. Presented at the Developmental division Brown Bag seminar series, Department of Psychology, University of Illinois, Urbana-Champaign, October 13, 2000.

Korol, D.L. (2002). Strategy shifts with estrogen. Presented at the University of Illinois Medical Scholars program Bench to Bedside symposium, Menopause: Making choices, January 28, 2002.

Korol, D.L. (2002). Forgetting to Remember: Synaptic Mechanisms of Age-Related Memory Changes. Presented at the University of Illinois, Initiative on Aging, Spring Seminar Series, April 22, 2002.

Korol, D.L. (2002). Estrogen and Memory: Friend or Foe? Presented at VCHP divisional Brown Bag Seminar series, Department of Psychology, UIUC, December 4, 2002.

Korol, D.L. (2003). Ovarian steroids orchestrate learning strategy through modulation of memory systems. Presented at Cognitive Division Brown Bag Seminar Series, Department of Psychology, UIUC, November, 21, 2003.

Korol, D.L. (2004). Making room for memories: A synaptic approach. Presented at Brain and Cognition division weekly Brown Bag series, Department of Psychology, UIUC, February 9, 2004.

Korol, D.L. (2007). Viewing shifts in learning strategy through a neural systems lens: Estradiol, exercise, and elderly rats. To be presented at the Advances in Sensory and Developmental Neuroscience Training Program weekly seminar series, March 9.

Korol, D.L. (2007). Learning and memory: What's hormones got to do with it? Keynote address at the first annual Illinois Summer Neuroscience Institute, May 20, 2007.

Korol, D.L. (2008). Women are from Venus – except when they are from Mars. Keynote dinner address, annual Neuroscience Program open house, February 8, 2008.

Korol, D.L. (2008). You and Your Brain on Steroids. UIUC NSP sponsored course, Your Brain and You, Osher Life Long Learning Institute, February 11.

Korol, D.L. (2008). Jog Your Memory, Stretch Your Brain: Building a Model of Menopause. Keynote address at the second annual Illinois Summer Neuroscience Institute, May 18, 2008.

Korol, D.L. (2008). Women are from Venus – except when they are from Mars: Lessons from rats. Reproductive Biology Seminar series, September 17.

Korol, D.L. (2008). Women are from Venus – except when they are from Mars: Lessons learned from rats. VCHP brown bag lunch series, Dept of Psychology, September 24.

Korol, D.L. (2009). Estrogens Dictate Cognitive Strategy: A Tale of Two (Neural) Systems. To be presented at the weekly colloquium series, Molecular and Integrative Physiology, February 26.

Korol, D.L. (2009). Jog your Memory. Presented at the Advances in Sensory and Developmental Neuroscience Training Program weekly seminar series, April 3.

Korol, D.L. (2010). Neural mechanisms of learning, memory, and forgetting. Presented at "From models to molecules", Illinois Summer Neuroscience Institute, May 20, 2010.

Korol, D.L. (2013). Shifting systems with age: Implications for Parkinson's disease. Aging Studies Institute, Inclusive Design Challenge. February 1, 2013.

Korol, D.L. (2013). Research presentation to visiting LSAMP students from University of Texas-Permian Basin, March 13, 2013.

Korol, D.L. (2013). Research and professional development presentation to summer LSAMP fellows, June 14, 2013.

Korol, D.L. (2014). Preparing the Perfect Poster Presentation. Presentation to Summer Research UG, Department of Biology.

Korol, D.L. (2015). Writing the research report: Create your own narrative. Presentation to Spring LSAMP scholars, February 20, 2015.

Presentations at Professional Societies

Lipton, P. and Korol, D. (1981). Evidence that decreases in intracellular pH rapidly inhibit transmission in the guinea-pig hippocampal slice. *Society for Neuroscience Abstracts* 7:440.

Korol, D.L. and Steward, O. (1986). An evaluation of whether LTP undergoes time-dependent consolidation. *Society for Neuroscience Abstracts* 12:505.

Korol, D.L. and Brunjes, P.C. (1987). Unilateral odor deprivation: Rapid effects on glucose metabolism. *International Society for Developmental Psychobiology*, New Orleans, LA.

Korol, D.L. and Brunjes, P.C. (1988). Unilateral odor deprivation: Rapid effects on cellular regulatory events. Paper presented at *Association for Chemoreception Sciences*, 10th Annual Meeting, Sarasota, Florida.

Korol, D.L. and Brunjes, P.C. (1988). Unilateral odor deprivation: Rapid effects on protein synthesis. *Society for Neuroscience Abstracts* 14:423.

Korol, D.L. and Brunjes, P.C. (1989). Angiogenesis in the olfactory bulbs of normal and unilaterally odor deprived rats. *Association for Chemoreception Sciences*, 11th Annual Meeting, Sarasota, Florida.

Brunjes, P.C., Korol, D.L. and Stern, K.G. (1989). Prenatal neurogenesis in the telencephalon of the precocial mouse *Acomys cahirinus*. *Society for Neuroscience Abstracts* 15:589.

Korol, D.L. and Brunjes, P.C. (1989). Angiogenesis in normal and deprived olfactory bulbs. *Society for Neuroscience Abstracts* 15:589.

Korol, D.L., Rao, A., Steward, O. and Brunjes, P.C. (1990). Unilateral naris closure and protein synthesis in olfactory bulbs. *Society for Neuroscience Abstracts* 16:830.

Stewart, J.S., Korol, D.L. and Brunjes, P.C. (1990). Unilateral naris closure and protein synthesis in olfactory mucosa. *Society for Neuroscience Abstracts* 16:830.

Korol, D.L., Leonard, B.W., McNaughton, B.L. and Barnes, C.A. (1991). Effects of dorsal neocortical stimulation on perforant path evoked field potentials in the dentate gyrus of the rat. *Society for Neuroscience Abstracts* 17:1394.

Korol, D.L., Abel, T.W., Church, L.T., Barnes, C.A. and McNaughton, B.L. (1992). Does saturation of long-term enhancement of perforant path synapses impair spatial learning in the Morris water task? A failure to replicate. *Society for Neuroscience Abstracts*, 18:1217.

Erickson, C.A., Korol, D.L., Barnes, C.A. and McNaughton, B.L. (1992). Exploration-induced changes in synaptic strength in hippocampus can predict spatial memory in the Morris water task. *Society for Neuroscience Abstracts*, 18:1217.

Korol, D.L., Jung, M.W., Barnes, C.A. and McNaughton, B.L. (1993). How widespread is LTE "saturation" at perforant path-granule cell synapses? *Society for Neuroscience Abstracts*, 19:794.

Stevenson, G.D., Korol, D.L., Galganski, M., Abel, T., McNaughton, B.L. and Barnes, C.A. (1993). "Saturation" of perforant path granule cell LTE/LTP does disrupt some spatial tasks. *Society for Neuroscience Abstracts*, 19:794.

Korol, D.L., Unick, K., Goosens, K., Crane, C., Gold, P.E. and Foster, T.C. (1994). Estrogen effects on spatial performance and hippocampal physiology in female rats. *Society for Neuroscience Abstracts*, 20:1436.

Korol, D.L., Lexcen, F.J., Parent, M., Ragozzino, M.E., Manning, C.A. and Gold, P.E. (1995). Effects of glucose on cognitive performance in college students. *Society for Neuroscience Abstracts*, 21:2085.

Wilkniss, S.M., Manning, C.A., Jones, M.G. and Korol, D.L. (1996). Aging effects on contextual spatial memory. Presented at the 24th Annual meeting for the International Neuropsychological Society, Chicago, IL.

Korol, D.L., Couper, J.M., McIntyre, C.K. and Gold, P.E. (1996). Learning strategies across the estrous cycle in female rats. *Society for Neuroscience Abstracts*, 22:1386.

Lichtenvoort, J.M., Korol, D.L., and Gold, P.E. (1997). Peripherally injected epinephrine retards LTP decay in freely moving rats. *Society for Neuroscience Abstracts*, 23:224.

Korol, D.L., Clark, L.L. and Gold, P.E. (1998). Shifts in preferred learning strategies used by female rats with and without estrogen. *Society for Neuroscience Abstracts,* 24:682.

Willingham, D.B., Peterson, M.E. and Korol, D.L. (1998). Facilitation of cognition by glucose and cereal in healthy elderly humans: Dependence on task difficulty? *Society for Neuroscience Abstracts,* 24:2117. [PRESS BOOK REQUEST]

Malin, E.L., Borden, K.A., and Korol, D.L. (1999). Estrous cycle and selection of learning strategy in female rats: Dueling neural systems. Paper presented at the 77th Annual Meeting of the Virginia Academy of Sciences, May 26-28.

Coulthurst, D.L., Titus, J.A. and Korol, D.L. (1999). The effects of ovariectomy and estrogen replacement on spatial vs non-spatial performance. Paper presented at the 77th Annual Meeting of the Virginia Academy of Sciences, May 26-28.

Marriott, L.K., Gold, P.E. and Korol, D.L. (1999). Estradiol effects on acetylcholine output in the hippocampus during spatial learning in female rats. *Society for Neuroscience Abstracts,* 25, 863.1.

Korol, D.L. (2000). Duration of ovariectomy interacts with estrogen effects on learning strategy in young adult female rats. *Society for Neuroscience Abstracts*, 26, 651.11. [PRESS BOOK REQUEST]

McElroy, M.W., Thomas, D.L., and Korol, D.L. (2001). Glial changes in the hippocampus and striatum during chronic estrogen deprivation and replacement in the female rat. *Society for Neuroscience Abstracts*, 27, 534.1.

Thomas, D.L., McElroy, M.W. and Korol, D.L. (2001). Learning strategy in the female rat shifts with chronic estradiol deprivation and replacement. *Society for Neuroscience Abstracts*, 27, 534.2.

McElroy, M.W., Thomas, D.L., and Korol, D.L. (2001). Glial changes in the hippocampus and striatum during chronic estrogen deprivation and replacement in the female rat. *Seventh Conference on the Neurobiology of Learning and Memory,* November 7-9, CNLM, UC-Irvine, Irvine, CA.

Thomas, D.L., McElroy, M.W. and Korol, D.L. (2001). Learning strategy in the female rat shifts with chronic estradiol deprivation and replacement. *Seventh Conference on the Neurobiology of Learning and Memory,* November 7-9, CNLM, UC-Irvine, Irvine, CA.

Thomas, D.L., McElroy, M.W. and Korol, D.L. (2002). Chronic estradiol replacement in ovariectomized female rats shifts learning strategy in a time-dependent manner. *Sixth Annual Meeting of the Society for Behavioral Neuroendocrinology*, June 26-30, 2002, Amherst, Massachusetts.

Zorn, T., Gold, P.E. and Korol, D.L. (2002). Peripheral epinephrine given post-tetanus prevents LTP decay. *Society for Neuroscience Abstracts,* 28, 80.8.

McElroy, M.W. and Korol, D.L. (2002). Intrahippocampal muscimol shifts learning strategy in intact adult female rats. *Society for Neuroscience Abstracts,* 28, 375.6.

Zurkovsky, L. and Korol, D.L. (2002). Intrahippocampal estrogen enhances place learning in ovariectomized female rats. *Society for Neuroscience Abstracts*, 28, 375.7.

Korol, M.S., Korol, R.L., and Korol, D.L. (2002). Attack on America: Initial Reactions, Memory, and PTSD symptoms. Eighteenth Annual Meeting of the *International Society for Traumatic Stress Studies, (ISTSS)*, November 7-10, 2002, Baltimore, Maryland.

Wieczorek, L.A., Zurkovsky, L., McElroy, M.W., and Korol, D.L. (2002). The relationship of dopamine and estrogen on cognition in adult female rats. *Annual summer Howard Hughes Undergraduate Research Fellowship research symposium,* Urbana-Champaign, Illinois.

Wang, V., Ju, Y., Allred, C. Korol, D., Helfereich, W., and Schantz, S. (2003). Effects of chronic estrogen replacement on cognitive flexibility, spatial working memory and response inhibition. *Environmental Council Expo*, April 14, 2003, University of Illinois, Urbana-Champaign.

McElroy, M.W. and Korol, D.L. (2003). Emergence of learning strategy bias during training: effects of estrous cycle in young adult rats. *Society for Neuroscience Abstracts*, 29, 115.5.

Wang, V., Ju, Y., Allred, C. Korol, D., Helfereich, W., and Schantz, S. (2003). Effects of chronic estrogen replacement on cognitive flexibility, spatial learning and memory and response inhibition. 33rd Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 29, 115.14 [NOTABLE ABSTRACT FROM Neurobiology of Lipids]

Erickson, K.I., Colcombe, S.J., Korol, D.L., Scalf, P., Raz, N., Cohen, N.J., Webb, A., and Kramer, A.F. (2003). Hormone replacement therapy spares brain tissue in postmenopausal women. Biannual Cognitive Aging Conference, Atlanta, GA.

Wieczorek, L. A., Korol, D.L., and Conrad, C.D. (2004). The effect of acute and chronic stress and ovarian hormone levels on cognition. 11th Annual Undergraduate Research Poster Symposium, ASU.

Baran, S.E., Jackson, J.L., Harman, J.S., Wright, R.L., Lightner, E.N., McLaughlin, K.J., Korol, D.L., and Conrad, C.D. (2004). Spatial memory is impaired in male, but not female, rats following acute stress: influence of estrous cycle. 34th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 30, 193.1

Wieczorek, L.A., Korol, D.L., Kim, J., Kleen, J.K., McLaughlin, K.J., and Conrad, C.D. (2004). The effects of chronic stress and the estrous cycle on cognition in female rats. 34th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 30, 193.10.

Zurkovsky, L., Brown, S.L., and Korol, D.L. (2004). Intrahippocampal antiestrogen ICI 182,780 blocks enhancement of place learning by systemic estradiol in young adult ovariectomized rats. 34th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 30, 770.4.

Korol, D.L. and Pruis, T.A. (2004). Estrogen and exercise modulate learning strategy in middle-aged female rats. 34th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 30, 770.7. [PRESS BOOK REQUEST]

Erickson, K.I., Colcombe, S.J., Elavsky, S., Korol, D.L., Scalf, P., McAuley, E., Kramer, A.F. Mind your body, spare your brain: interactive effects of fitness and estrogen treatment on

brain and cognitive health. Presented at the Cognitive Neuroscience Society, April, 2005, New York, NY.

Kent, M.H., Zurkovsky, L., Fornelli, D.C., Fell, J.A., and Korol, D.L. (2005). Intra-striatal antiestrogen ICI 182,780 attenuates the impairing effects of peripheral estradiol treatment on response learning in young adult ovariectomized rats. 35th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 31, 883.3.

McElroy, M.W., Harney, A.N., and Korol, D.L. (2005). Effects of scopolamine on learning in young adult female rats: Estrous cycle interactions. 35th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 31, 887.17.

McLaughlin, K.J., Wieczorek, L.A., Kleen, J.A., Korol, D.L. and Conrad, C.D. (2005). Chronic stress and estrous cycle effects on hippocampal morphology in the female rat. 35th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 31, 889.2.

Zurkovsky, L., Fell, J.A., and Korol, D.L. (2005). Age-dependent patterns of estrogen effects on place and response learning in 12- and 24-month-old female rats. 35th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 31, 417.13.

Kent, M.H., Fornelli, D.C., and Korol, D.L. (2006). Intra-striatal antiestrogen ICI 182,780 attenuates the impairing effects of peripheral estradiol treatment on response learning in young adult ovariectomized rats. Presented at the annual meeting for the Society for Behavioral Neuroendocrinology, June 18-21, Pittsburgh, PA.

Zurkovsky, L., Fell, J.A., and Korol, D.L. (2006). Age-dependent patterns of estrogen effects on place and response learning in 12- and 24-month-old female rats. Presented at the annual meeting for the Society for Behavioral Neuroendocrinology, June 18-21, Pittsburgh, PA.

Erickson, K.I., Pruis, T.A., Debrey, S.M., Bohacek, J., and Korol, D.L. (2006). Estrogen and exercise interact to up-regulate BDNF levels in the hippocampus but not striatum of middle-aged female Brown-Norway rats. 36th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 32, 266.17. [PRESS BOOK REQUEST]

Zurkovsky, L. and Korol, D.L. (2006). Slow vs. rapid effects of intrastriatal estrogen on response learning. 36th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 32, 266.18.

Zurkovsky, L. and Korol, D.L. (2007). Slow vs. rapid effects of intrastriatal estradiol on response learning. Presented at the annual meeting for the Society for Behavioral Neuroendocrinology, June 21-24, Asilomar, CA.

Kent, M.H., Scavuzzo, C.A., and Korol, D.L. (2007). Effects of systemic treatment with selective estrogen receptor modulators on response learning in young adult ovariectomized rats. Presented at the annual meeting for the Society for Behavioral Neuroendocrinology, June 21-24, Asilomar, CA.

Korol, D.L., Zurkovsky, L., Serio, S.J., Decker, L.A., and Gold, P.E. (2007). Effects of age and task difficulty on estradiol enhancement of place learning. 37th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*,*33,* 95.20

Kent, M.H., Scavuzzo, C., and Korol, D.L. (2007). Peripheral treatment with estrogen receptor α agonist impairs response learning in young adult ovariectomized rats. 37th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*,33, 309.7

Zurkovsky, L. and Korol, D.L. (2007). Short duration intrastriatal estradiol treatment impairs response learning. 37th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 33, 309.8*.*

Erickson, K.I., Epstein, D.E., Malkowski, E.J., Warraich, Z. and Korol, D.L. (2007). Voluntary exercise enhances place learning in young adult male rats. 37th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, *33,* 528.10*.* [PRESS BOOK REQUEST]

Kent, M.H., Scavuzzo, C.J., Katzenellenbogen, J.A., and Korol, D.L. (2008). Effects of selective estrogen receptor agonists on place learning in young adult ovariectomized rats. 38th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 34, 794.18*.*

Neese, S.L., Wang, V.C., Katzenellenbogen, J.A., Korol, D.L., and Schantz, S.L. (2008). Specific estrogen receptor α and β agonists impair delayed spatial alternation in Long-Evans rats. 38th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 34, 794.16.

Wang, V.C., Neese, S.L., Helferich, W.G., Doerge, D., Korol, D.L., and Schantz, S.L. (2008). Cognitive effects of dietary phytoestrogen genistein in rodents using an operant battery. 38th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 34, 593.8.

Pisani, S.L., Ginsberg, A.D., and Korol, D.L. (2009). Estrogen effects on brain mechanisms of learning. Presented at the University of Illinois College of Medicine Student Research Symposium, April 23, 2009.

Neese, S.L., Bandara, S.B., Helferich, W.G., Doerge, D.R., Korol, D.L., and Schantz, S.L. (2009). Impaired executive function in rodents consuming multiple daily genistein doses. 39th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 35*,* 579.5.

Pisani, S.L., Ginsberg, A.D., Helferich, W.G., Neese, S.L., Schantz, S.L. and Korol, D.L. (2009). Low doses of estradiol enhance place learning and impair response learning in Long-Evans rats in the absence of dietary phytoestrogens. 39th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 35*,* 774.7.

Richards, J. R. and Korol, D.L. (2009). Rapidly metabolized estradiol impaired long-term memory of a socially transmitted food preference in young adult female rats. 39th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 35, 774.8.

Scavuzzo, C.J., Mitterling, K.A., and Korol, D.L. (2009). Voluntary exercise enhances response learning in young adult male Sprague-Dawley rats: A role for BDNF. 39th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 35, 97.16.

Pisani, S.L., Doerge, D.R., Helferich, W.G., Neese, S.L., Schantz, S.L., and Korol, D.L. (2010). Acute treatment with the phytoestrogen genistein mimics estradiol-induced shifts in place

and response learning. 14th annual meeting for the *Society for Behavioral Neuroendocrinology*, Toronto, Canada, P1.44.

Mitterling, K.L, Komperda, L. and Korol, D.L. (2010). Effects of different estradiol injection protocols on CREB phosphorylation in the dorsal hippocampus. 14th annual meeting for the *Society for Behavioral Neuroendocrinology*, Toronto, Canada, P2.10.

Scavuzzo, C.J., Collier, R.L., and Korol, D.L. (2010). Intrahippocampal estradiol enhances or impairs place learning depending on timing of infusions. 14th annual meeting for the *Society for Behavioral Neuroendocrinology*, Toronto, Canada, P3.25.

Mitterling, K.L. and Korol, D.L (2010). Acute exposure to estradiol in vivo enhances CREB activation in the hippocampus. 40th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 36, 296.14.

Pisani, S.L., Ginsberg, A.D., Zhang, J., Doerge, D.R., Helferich, W.G., Neese, S.L., Schantz, S.L., and Korol, D.L. (2010). Acute treatment with the phytoestrogen genistein enhances place and impairs response learning in female rats. 40th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 36, 296.13.

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Scavuzzo, C.J., Park, S.L., Collier, R.L., and Korol, D.L (2010). Blockade of TrkB receptor signaling impairs learning in physically active but not sedentary male rats. 40th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 36, 202.11.

Gold, P.E., Korol, D.L., and Scavuzzo, C.J. (2010). Physical and cognitive activity induce changes in brain and liver glycogen levels in young adult male Sprague-Dawley rats. 40th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 36, 407.16.

Pisani, S.L., Huffman, J.C., Katzenellenbogen, J.A., Neese, S.L., Schantz, S.L., and Korol, D.L. (2011). Acute administration of ERα- and ERβ-selective agonists impairs response learning in ovariectomized young adult rats. 41st Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 37, 282.06.

Gold, P.E., Scavuzzo, C.S., Korol, D.L., and Newman, L.A. (2011). Hippocampal extracellular lactate increases during learning: a role for astrocytes in learning and memory. 41st Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 37, 823.14.

Scavuzzo, C.J., Korol, D.L.., and Gold, P.E. (2011). Training-induced changes in brain glycogen levels are task- and brain region-specific. 41st Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 37, 823.16.

Pisani, S.L., Katzenellenbogen, J.A., and Korol, D.L. (2012). Effects of acute administration of ER-selective agonists on place and response learning in ovariectomized young adult rats. 16th annual meeting for the Society for Behavioral Neuroendocrinology, Madison, WI.

Tunur, T., Zendeli, L., and Korol, D.L. (2012). Effects of ovarian hormones on pattern separation in female rats. 16th annual meeting for the Society for Behavioral Neuroendocrinology, Madison, WI.

Tunur, T., Zendeli, L., and Korol, D.L. (2012). Nuances of pattern separation determine modulation by estradiol. 42nd Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 38, 92.08.

Morris, K.A., Mitterling, K.L., Rocha-Cabrero, F., Gold, P.E., and Korol, D.L. (2012). Bilateral injection of 6-OHDA into the dorsolateral striatum improves spatial working memory in rats: implications for Parkinson's Disease. 42nd Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 38, 756.03.

Korol, D.L., Gold, P.E., and Scavuzzo, C.J. (2012). Extracellular levels of BDNF in the hippocampus measured with microdialysis change differentially during and after place and response learning. 42nd Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 38, 916.15.

Scavuzzo, C.J., Korol, D.L., and Gold, P.E. (2012). Engagement in a spatial working memory task enhances subsequent place and response learning through BDNF signaling. 42nd Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 38, 916.16.

Mitterling, K.L., Anderson, K., and Korol, D.L. (2012). The effects of exercise on learning and hippocampal succinate dehydrogenase histochemistry: Sex differences and the interaction of estradiol. 42nd Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 38, 916.17.

Gold, P.E., Newman,L.A., Scavuzzo, C.J., and Korol, D.L. (2012). A role for astrocytes in metamodulation of memory: Working memory and hippocampal extracellular lactate levels vary based on prior training. 42nd Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 38, 916.18.

Pisani, S.L., Jung, V.E., and Korol, D.L. (2012). Site- and task-specific ERK activation following genistein treatment corresponds to temporal aspects of learning. 42nd Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 38, 916.19.

Pisani, S.L., Neese, S.L., Schantz, S.L., and Korol, D.L. (2013). Estradiol but not equol enhances place learning in middle-aged female rats: Relationship to site-specific ERK activation. 17th Annual Meeting for the Society for Behavioral Neuroendocrinology.

Pisani, S.L., Neese, S.L., Schantz, S.L., and Korol, D.L. (2013). Activation of the membrane estrogen receptor GPER regulates place and response learning in ovariectomized young adult rats according to dose and timing. Annual conference on Rapid Responses to Steroid Hormones, September, 2013.

Korol, D.L. and Gold, P.E. (2014). To eat, to drink, perchance to think: Bioenergetics of hippocampus and striatum dissociate by cognitive strategy and reward type. Presented at the 11th International Conference on Brain Energy Metabolism, *How energy metabolism shapes brain function".* Copenhagen, Denmark. May 11-14, 2014.

Gold, P.E. and Korol, D.L. (2014). Use it and boost it: Learning induces long-term adaptations in brain glycogen and lactate concentrations. Presented at the 11th International Conference on Brain Energy Metabolism, *How energy metabolism shapes brain function".* Copenhagen, Denmark. May 11-14, 2014.

Dash, M.B., Ajayi, S. Folsom, L., Gold, P.E., and Korol, D.L. (2014). Hippocampal evoked response variability associated with spontaneous infraslow fluctuations in EEG activity. 44th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 40, 303.18.

Pisani, S.L. and Korol, D.L. (2014). The ERα agonist PPT enhances place learning but impairs response learning in ovariectomized young adult rats: Viewing the role of ERK activation through a multiple memory systems lens. 44th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 40, 451.07.

Wang, W., Yuhan, B., Korol, D.L., and Gold, P.E. Bioenergetics and memory: Regulation by estradiol. Society for Neuroscience, 44th Annual Meeting, *Society for Neuroscience Abstracts* 40, 451.09.

Scavuzzo, C.J., Gold, P.E., and Korol, D.L. (2014). GSK3B inhibition in the hippocampus and striatum is task-specific. 44th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 40, 464.07.

Korol, D.L., Newman, L.A., and Gold, P.E. (2014). Senile or sage? Improved memory and sensitivity to cognitive priming accompany aging in male rats. 44th Annual meeting for the Society for Neuroscience,

Newman, L.A., Korol, D.L., and Gold, P.E. (2014). Memory deficits in Alzheimer's disease model mice coincide with appearance of amyloid plaques and are preceded by insensitivity to glucose enhancement of memory44th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 40, 690.16.

Tunur, T., Castelan, L., Hawley, W.R., Gold, P.E., and Korol, D.L. (2014). A tale of two memory systems: Differential involvement in two pattern separation tasks. 44th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 40, 749.05.

Wang, W., Gold, P.E., and Korol, D.L. (2015). Estradiol increases extracellular glucose concentration in hippocampus of young adult female rats. 19th Annual meeting of the Society for Behavioral Neuroendocrinology, Pacific Grove, CA 2015.

Newman, L.A., Gardner, R.S., Hamling, B.V., Korol, D.L., and Gold, P.E. (2015). Aging in rats leads to task-dependent impairments and improvements in learning that are accompanied by changes in markers of brain energetics. 45th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 41, 179.21.

Zigmond, M.J., Ambrosio, R., Castro, S.L., Jaumotte, J.D., Korol, D.L., Newman, L.A., Sanders, L.H., Smeyne, R.J., and Vallejo, A.D. (2015). An enriched environment modulates factors associated with healthy brain aging in rats. 45th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 41, 205.26.

Wang, W., Gold, P.E., and Korol, D.L. (2015). Estradiol increases extracellular glucose concentration in the hippocampus of young adult female rats. 45th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 41, 614.03.

Kundu, P., Tunur, T., Korol, D., Bandara, S., Monaikul, S., Helferich, W.G., and Schantz, S. (2015). The effects of the botanical estrogen isoliquiritigenin on cognition in young adult female rats. 45th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 41, 614.05.

Science Education and Outreach Presentations

Whalen, C. J., Nelson, M. E., Korol, D. L., and Beshers, S. N. (2006). Brain Awareness Day at the University of Illinois Urbana-Champaign: Promoting neuroscience in the community. 36th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 32, 23.13.

Shah, S.M., Blattner, M., Beshers, S., Hug, B., and Korol, D.L. (2008). Brain power: Branching out, forming connections, and building networks through community outreach at the University of Illinois. 38th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 34, 227.16.

Brown, J.W., Blattner, M.S., Mitterling, K.L., Morrisette, S., Ogrodnik, J.M., Watson, P.D.K., Zengin Bolatkale, H., Reese, G.C., Korol, D.L., Hug, B. (2011). The cutting edge: integrating contemporary neuroscience and molecular biology to teach about regeneration and the nervous system. 41st Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 37, 22.06SU.

Blattner, M.S., Allen, J.R., Allen, A., Brown, J., Lauren, H., Mitterling, K.L., Ogrodnik, J. Planey, J., Zengin Bolatkale, H., Korol, D.L., and Hug, B. (2011). From the classroom to the community: taking neuroscience into diverse community settings. 41st Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 37, 22.10SU.

Mitterling, K.L., Allen, A., Allen, J., Blattner, M.S., Brown, J.W., Lauren, H., Morrisette, S., Ogrodnik, J.M., Planey, J., Wathson, P.D.K., Zangin Bolatkale, H., Korol, D.L., and Hug, B. (2011). Do you see what I see? A novel secondary school curriculum for guiding explorations on the evolution of visual perception. 41st Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 37, 22.12SU.

Lutz, C.C., Blattner, M., Jasti, C., Lauren, H., Mazur, K., Naeger, N., Planey, J., Prathap, S., Stengele, A., Talbot, K., Wolfe, T., Korol, D.L., and Hug, B. (2012). Changing student minds: neuroscience as a bridge between science and society. 42nd Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 28, 27.18SA

Hug, B., Jarosewich, T., and Korol, D. (2012). Educative curriculum materials that allow for learned adaptations: Ensuring quality of implementation. Paper presented at NARST, Indianapolis, IN.

Talbot, K., Jasti, C., Hug, B., & Korol, D. (2013). *Using a Project Based Science Unit, What changes our minds? to Link Next Generation Science Standards, Common Core Standards and Student Engagement*, NSTA Teacher workshop, San Antonio, TX.

Wallon, R., Planey, J., Talbot, K., Jasti, C., Hug, B., & Korol, D. (2013). Using a project-based science unit, *What changes our minds?,* to link Next Generation Science Standards, common core standards and student engagement. Teacher workshop at the NSTA National Conference on Science Education, San Antonio, TX.

Scavuzzo, C.J., Lutz, C., Wallon, R., Patterson, S., Hug, B., & Korol, D. (2014). Using real scientific research to develop students' ability to analyze and interpret data: Making connections to the scientific practices. Workshop at the NSTA National Conference on Science Education, Boston, MA.

Scientific and Popular Press

2015 – present:

SU Magazine, Spring 2015 Orange Matters:
http://sumagazine.syr.edu/2015spring/orangematters/movementforhealthyaging.html

2010-2014:

Team to study health effects of botanical estrogens
http://news.illinois.edu/news/10/0907botanicals_helferich.html

Science museum event launches neuroscience education program
http://news.illinois.edu/news/12/0307orphy_BarbaraHug_DonnaKorol.html

Project NEURON receives funding for new computer game
http://illinois.edu/lb/article/32/55367

At Brain Awareness Day, Project NEURON Challenges Children's Color Perception
http://education.illinois.edu/news/2010/brain-awareness-day

Educator resources are meant to give access to information and teaching tools about the nervous system and related health issues.
http://www.brainfacts.org/Educators/Educator-Resources/Educator-Resources/Project-NEURON

Project NEURON highlighted in the Neuroscience For Kids Newsletter as the site of the month, September, 2013
http://faculty.washington.edu/chudler/sites.html

Published research highlighted:
Hussain et al., 2014. Estrogen and Memory System Bias in Females Across the Lifespan. *Translational Neuroscience*, 5, 35-50. http://link.springer.com/article/10.2478%2Fs13380-014-0209-7#page-1

WCNY TV Cycle of Health piece:
http://www.wcny.org/television/cycleofhealth/

Coverage of workshop, Movement for Healthy Aging, April 11-12, 2014
http://www.localsyr.com/bridge-street/video/d/video/dance-and-parkinsons-bridge-street-4814/5034000
http://www.syracuse.com/news/index.ssf/2014/03/syracuse_university_and_mark_morris_dance_group_to_offer_parkinsons_disease_move.html
https://www.facebook.com/thecollegesu/posts/628481957233692
http://news.syr.edu/community-workshop-about-dance-and-parkinsons-planned-36888/
http://asnews.syr.edu/newsevents_2014/releases/parkinsons_dance.html

2005-2009:

Conference Press Releases:

Erickson, K.I., Pruis, T.A., Debrey, S.M., Bohacek, J., and Korol, D.L. (2006). Estrogen and exercise interact to up-regulate BDNF levels in the hippocampus but not striatum of middle-aged female Brown-Norway rats. 36th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, 32, 266.17. (PRESS BOOK REQUEST)

Erickson, K.I., Epstein, D.E., Malkowski, E.J., Warraich, Z. and Korol, D.L. (2007). Voluntary exercise enhances place learning in young adult male rats. 37th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts*, *33,* 528.10. [PRESS BOOK REQUEST]

McElroy, M.W. and Korol, D.L. (2005). Intrahippocampal muscimol shifts learning strategy in gonadally intact young adult female rats. *Learning and Memory*, 12, 150-158. [see commentary by T. Shors, same issue.]

Research highlighted
Cahill, 2006. Why sex matters for neuroscience. *Nature Reviews Neuroscience*, 7, 477-484.
http://www.nature.com/nrn/journal/v7/n6/full/nrn1909.html

Faculty Friendly
http://www.las.illinois.edu/news/2008/jrfaculty/
http://news.illinois.edu/ii/08/0207/facultyfriendly.html

Good Memories
http://www.las.illinois.edu/alumni/magazine/articles/2008/memories/

Fitness counteracts cognitive decline from hormone-replacement therapy
http://news.illinois.edu/news/06/0124estrogen.html

2000-2004:
Estrogen may dictate what problem-solving strategy brain uses
http://news.illinois.edu/ii/02/0620/0620.pdf

Flashbulb Memories of 9/11
http://www.las.illinois.edu/alumni/magazine/articles/2004/flashbulb/

Evaluated by Faculty of 1000 as a must read
http://www.f1000biology.com/article/15464412/evaluation
Korol, D.L. (2004). *Neurobiology of Learning and Memory*, 82, 309-323.

Korol, D.L. (2000). Duration of ovariectomy interacts with estrogen effects on learning strategy in young adult female rats. *Society for Neuroscience Abstracts*, 26, 651.11. [PRESS BOOK REQUEST]

Korol, D.L. and Pruis, T.A. (2004). Estrogen and exercise modulate learning strategy in middle-aged female rats. 34th Annual meeting for the Society for Neuroscience, [PRESS BOOK REQUEST]

1995-1999:
Conference Press Releases:
Willingham, D.B., Peterson, M.E. and Korol, D.L. (1998). Facilitation of cognition by glucose and cereal in healthy elderly humans: Dependence on task difficulty? *Society for Neuroscience Abstracts,* 24:2117. [PRESS BOOK REQUEST]

Trainees

[+]identifies with underrepresented group. *pursued education or careers in STEM fields.

Post-doctoral

Current:

Lori Newman, Ph.D. University of New Hampshire (Co-mentor with Paul Gold, Ph.D.)
Robert Gardner, Ph.D. George Mason University (Co-mentor with Paul Gold, Ph.D.)

Former:

Kirk Erickson, Ph.D. May 2005-May 2008. Currently Associate Professor, Department of Psychology, University of Pittsburgh
Ramkumar Kuruba, Ph.D. November 2009 to August 2010
Steven Neese, Ph.D. Southern Illinois University (Co-mentor with PI Susan Schantz, Ph.D.); currently Assistant Professor at Baldwin Wallace University.
Wayne Hawley, Ph.D. Tulane University, June 2013-May 2014, currently Assistant Professor at Franklin and Marshall College.
Michael Dash, Ph.D. University of Wisconsin (Co-mentor with Paul Gold, Ph.D.); currently Assistant Professor at Middlebury College.
Tumay Tunur, Ph.D. Tulane University, July 2011-August 2015. Currently post-doctoral instructor, Exercise Science, Syracuse University.

Graduate Students

Current:

Wei Wang, Department of Biology, Syracuse University, Summer 2013 to present, co-mentor with Paul Gold
Roxanne Crouch, Department of Biology, Syracuse University, Fall 2015-present.

Former:

Molly McElroy, Ph.D., Neuroscience Graduate Program, University of Illinois: September, 2000 to March, 2007. Dissertation title: *Ovarian Hormone Modulation of Learning Strategy Preferences: A Role for Hippocampal Disinhibition.* Currently science writer, Press Office at University of Washington, Seattle, WA.
Lilia Zurkovsky, Ph.D., Neuroscience Graduate Program, University of Illinois: August, 2001 to April, 2008. Dissertation title: *Estradiol has distinct effects on the hippocampal and striatal memory systems*. Post-doctoral research, Vanderbilt University (PI Paul Newhouse); currently at Medical Affairs Company, Nashville, TN.
Claire Scavuzzo, Ph.D., Neuroscience Graduate Program, University of Illinois: August, 2009 to June 2014, co-mentor. Dissertation title: *Use it and Boost it with Physical and Cognitive Activity.* Currently post-doctoral researcher (PI Clayton Dickson) and lecturer at University of Alberta.
Samantha Pisani, Ph.D., Medical Scholars Program, Neuroscience Program, University of Illinois: August, 2008 to September, 2014. Dissertation title: *Estrogenic modulation of place and response learning via specific receptor-mediated mechanisms*. Currently M3 student, Medical Scholars Program, UIUC.
[+]Cynthia Colon-Rivera, Neuroscience Graduate Program, University of Illinois, Minority Fellow, 2004-2006 (co-mentor); Currently RN in Nashville, TN
Timothy Zorn, MS. Neuroscience Graduate Program, University of Illinois, 2001 to 2004, Master's in Biology, August, 2004; Currently high school biology teacher, Champaign, IL.
Katherine Mitterling, MS. Department of Biology, Syracuse University, August 2008 to August, 2015.

Rotation and visiting students:

Johannes Bohacek, visiting student from University of New Orleans, Neuroscience Graduate Program, September 2005-December, 2005

[+]Luis Aguerrevere, visiting student from University of New Orleans, Neuroscience Graduate Program, September 2005-December, 2005

Jennifer Kim, Neuroscience Graduate Program, University of Illinois; completed rotation May 2003 to September 2003

[+]Maritza Alvarado, Medical Scholars Program, Neuroscience Graduate Program, University of Illinois, completed rotation January, 2003 to October, 2003

Robert Hoffman, medical student, UIUC College of Medicine, summer research assistant, 2007

Steven Beckoff, medical student, UIUC College of Medicine, summer research assistant, 2010

[+]Franklyn Rocha Cabrero, Medical Scholars Program, Neuroscience Graduate Program, University of Illinois, completed rotation January 2011 to January 2012

Livia Andrzejczuk, Department of Biology, Syracuse University, March – July, 2013

[+]Nycole Maza, Neuroscience, Upstate University, March – June, 2013

Megan Gribble, Neuroscience, Upstate University, March – June, 2013

[+]Deion Burks, Department of Biology, Syracuse University, October – January, 2013

Spandita Dutta, Department of Biology, Syracuse University, Spring, 2014

Jeremy Sloane, Department of Biology, Syracuse University, Spring, 2014

Geoffrey Eill, Neuroscience, Upstate University, Spring-Summer, 2014

William Haws, Department of Biology, Syracuse University, Fall, 2014

Rachel Sager, Neuroscience, Upstate University, Fall, 2014

Undergraduate Honors and Distinction Students:

At University of Virginia:

[+]*Ki Goosens, PhD: Howard Hughes Fellow, Department of Biology (1995), University of Virginia [currently Assistant Professor at MIT, Dept of Psychology]

*Katherine Ragozzino, MS, Distinguished Majors Thesis (1995), Department of Psychology, University of Virginia; Recipient of the Frank Finger Award for Excellence in Research

*Lacy Kolo, PhD, JD: Distinguished Majors Thesis (1998), Interdisciplinary Studies in Neuroscience, University of Virginia; [currently researcher for patent law office].

*Lisa Marriott, PhD: Distinguished Majors Thesis (1999), Interdisciplinary Studies, University of Virginia; [currently, coordinator of SEPA at OHSU]

At Washington and Lee University:

*John Boothby, Senior Thesis (1999), Department of Psychology, Washington and Lee University

At University of Illinois:

*Diana Thomas (2000-2002), Distinguished major, Honors program, Department of Biology, University of Illinois; [Currently MD student in MD/PhD program, UIUC]

*Kelly Gallagher (2001-2002), Distinguished major, Department of Biology and Psychology, University of Illinois; [currently in R & D at Abbott Laboratories]

Stephanie Brown (May 2002-Aug 2004), Department of Psychology Honors Program, University of Illinois; [currently vet technician, New Zealand]

*Lindsay Wieczorek (summer 2002, 2003), UIUC Howard Hughes Fellow, Recipient of Ernest Lindholm Outstanding Undergraduate Student in Behavioral Neuroscience Award, Department of Biology, Honors program, Arizona State University; [currently, post-doc, UNC]

*Trisha Pruis (2002-2005), Distinguished major, Department of Biology and Psychology Honors Program, University of Illinois; [PhD OHSU; currently case manager for organ transplant]

*Laura Pignotti (2003-2004), Distinguished major, Department of Biology, University of Illinois; [medical student, University of Missouri]

*Jenny Fell (May 2004-2006), Department of Psychology Honors Program, University of Illinois [currently RN in Baltimore, MD]

*Sarah Debrey (2004-2005), IPS-Neuroscience, Department of Psychology Distinguished thesis, University of Illinois; [Public Health, Johns Hopkins, Fall, 2007, Rush Medical College, currently resident at Emory]
*Steve Serio (2004-2007), Department of Psychology, Honors Program, University of Illinois [medical student, Rush Medical College]
*Yelena Grinberg (2005-2008), Molecular and Cell Biology and Psychology, University of Illinois [PhD program in neurobiology, Univ. of Chicago, fall 2008]
*Deanne Fornelli (2005-2006), Department of Psychology, Distinguished Major, University of Illinois; [PA, Rush Hospital]
*Dawn Epstein (2006-2007), Department of Psychology, Distinguished honors thesis, University of Illinois [PhD program, clinical psychology, Duke Univ., fall, 2008]
*Lauren (Thurlwell) Decker (2006-2008), Distinguished major, Molecular and Cell Biology, Psychology, Chemistry, University of Illinois [medical school, UIC, fall 2008].
*Claire Scavuzzo (2006-2008), Molecular and Cell Biology, Psychology Distinguished Major, University of Illinois [PhD program, UIUC Neuroscience, 2009]
*Sarah Stone (2007-2009), Molecular and Cell Biology, Distinguished Honors thesis, University of Illinois [Rosalind Franklin University of Medicine and Science, currently resident at Stanford University].
*Stephany Park (Fall 2009-Spring 2011). Molecular and Cellular Biology, University of Illinois.
*Jessie Zhang (summer 2009-Spring 2011). Molecular and Cellular Biology, University of Illinois.
Katherine Anderson (Fall 2010-Spring 2012). Psychology Honors Program, University of Illinois. [Gap year before going to Law School].
*Carolyn Draus (Fall 2011-present). Biochemistry, University of Illinois.

At Syracuse University:
*Georgia Bascaglia (Fall 2012-May 2014), ILM Neuroscience, Biology, Renee Crown Scholar / WiSE honors
[+]Luis Castelan (Fall 2012-present), Distinction in Biology, Philosophy, LSAMP scholar, Honors,
Sam Lauffer (Fall 2012-present). Distinction in Biology
Brooke Hamling (Fall 2012-present). Biology
Margaret Blasi (Fall 2013-present). Distinction in Biology
Ella D'Amico (Fall 2013-present), Biology, Coronat Scholar, Renee Crown Honors, Distinction in Biology
Luke Loftus (Summer 2014-present). Biochemistry and Neuroscience ILM
[+]Amber Barrow (Fall 2014-present), Biology, Chinese studies; LSAMP scholar
Elizabeth Reynolds (Fall 2014-present), Biology
Erin Dickey (Fall 2014-present), Biology
Caitlin White (Spring 2015-present), Biology

Undergraduate Research Assistants:
University of Virginia:
Paul Grinwald: Department of Psychology (1994), University of Virginia
*Rachel Smith (Busby), Cognitive Studies (1997), University of Virginia
Whitney Wallace, Department of Psychology (1998), University of Virginia

Washington and Lee University:
*Emily Malin, PhD (1999), Department of Psychology, Washington and Lee University; Recipient of the first annual Oliver Award for Intellectual Curiosity in Psychology, 1999; [PhD Neurobiology, UC-Irvine, post-doc Colorado Health Sciences]
*Kristine Borden (1999), Department of Psychology, Washington and Lee University
[+]Dawn Coulthurst (1999), Department of Biology, Washington and Lee University

Binghamton University:
Jodi-Ann Gravina (2000), Department of Psychology
Carrie Joseph (2000), Department of Psychology

University of Illinois:
*Meghann Hennelly (2001-2002), Department of Psychology and Biology [entered medical school 2002, University of Chicago]
*Krista Anderson (2001-2003), Department of Psychology, James Scholar
Ila Englof (2002), Department of Biology
*Niamh Condon (May 2002-May 2004), Department of Psychology [2005-2009, medical student, Michigan State University]
*Sara Boyd (summer 2002), Department of Psychology [MS student, University of Kentucky]
Kathy Hagman (2002-2003), Department of Psychology
*Bengi Altinbilek (2003), exchange student from Bogazici University, Istanbul, Turkey Department of Psychology [currently, PhD student, Rutgers University]
*Diana Greyz (2003), Department of Psychology
*Christopher Hanson (2003-2004), Departments of Biochemistry and Psychology
*Michael Boyd (2003-2004), Department of Psychology [entered medical school, 2004, UIC]
*John Kenny (2003-2004), Departments of Psychology and AeroEngineering [entered medical school UIC, Fall 2008]
*Abigail Galle (2003-2004), Department of Psychology
Bobby Oestreicher (Jan 2004-Jan 2005), Department of Psychology [entered law school, University of Cincinnati, Fall 2005]
*Astha Agarwal (2004-2005), Department of Psychology
*Soumya Venkiteswaran (2004-2005), Department of Psychology
*Adrien Harney (2004-2006), Department of Psychology
Arpit Agarwal (2005) undeclared major
*Michael Moenk (2005), Department of Psychology
*Bryan Kolberg (2005-2006), Department of Psychology [PhD student]
+*Tobi Adelaja (2006), UIUC Howard Hughes Fellow, Integrative Biology
*Blake Spindler (2006-2007), Molecular and Cell Biology [medical student, UIC]
*Zuha Warraich (2006-2007), Molecular and Cell Biology [PhD student in neuroscience, University of Florida, fall, 2008]
Shruti Gupta (2006-2007), Psychology and Spanish
+Edward Malkowski (2006-2007), Psychology Honors
*Sarah Dalton (2007-2008), Psychology, [PhD, University of Southern California]
+Lauren Lilly (summer 2007), SROP fellow, Reproductive Biology Training Program
*Elizabeth Katta (2007-2009), Molecular and Cellular Biology
+*Raquel Collier (2008-2009), Molecular and Cellular Biology
Robin Smith (2008-2009), Molecular and Cellular Biology
Gianna Gross (summer 2008). Political Science, University of Wisconsin-Madison
*Ashley Ginsberg (2008-2010). Psychology
*Jeremy Schlake (2008-2010). Molecular and Cellular Biology, and Psychology
*Leigh Komperda (2009-Spring 2010). Molecular and Cellular Biology
Hilarie Carhill (2009-Spring 2010). Psychology
Charles O'Connor (Fall 2009-Spring 2010). Molecular and Cellular Biology
*Colin Therriault (summer 2009-Spring 2011). Molecular and Cellular Biology
Martina Gabra (Spring 2010-Summer 2010). Molecular and Cellular Biology
*Jack Huffman (Summer 2010-Fall 2011). Psychology
*Daniel Wickland (Fall 2010-Spring 2011). Independent Program of Study, Neuroscience
*Vivian Jung (Fall 2010-Spring 2012). Molecular and Cellular Biology
*Timothy Weng (Spring 2011). Psychology

*Stephen Burbick (Fall 2011). Molecular and Cellular Biology
Ishwer Patel (Fall 2011-2012). Molecular and Cellular Biology
*Liridon Zendeli (Fall 2011-2012). Molecular and Cellular Biology
*Erin Gunderson (Fall 2011-2012). Molecular and Cellular Biology
Parth Patel (Spring 2012). Molecular and Cellular Biology
Anna Jones (Spring 2012). Molecular and Cellular Biology
*David Lee (Spring 2012). Molecular and Cellular Biology
Andrew Sheriff (Spring 2012). Psychology and Molecular and Cellular Biology

***At Syracuse University*:**
*Frances Batarse (Fall 2012-Spring 2013). Psychology, ILM Neuroscience
*Madison Davis (Fall 2012-Spring 2014). Biology
Sydney Zagger (Fall 2012-Spring 2014). Biology, ILM Neuroscience
Dean Phillips (Fall 2012-Fall 2013). Biology
Lynde Folsom (Fall 2012-Spring 2014). Philosophy and Biology
*Brian Yuhan (Fall 2012-Spring 2014). Biology
*Dan Guerra (Fall 2012-Spring 2013). Biology
*Amanda Audesse (Spring 2013-Spring 2014). Psychology, ILM Neuroscience
+Alejandro Mercato Capote (Spring 2013). Psychology, ILM Neuroscience
+Rosa Leon (Spring 2013). Biology
+Stephen Ajayi (Spring 2013-present). Biochemistry
Katelyn Edel (Fall 2012-Spring 2014). Linguistics, ILM Neuroscience
Umar Mahmood (Spring 2014-Spring 2015), Biochemistry
Shirley Gao (Spring 2014-present), Biology
Nicholas Frangella (Spring 2014-present), Biology
Bilal Milak (Spring 2014-present), Biology
Ashley Sterpka (Summer 2014-Summer 2015), Biology
Kathryn Lanza (Summer 2014-Spring 2015), Psychology, ILM Neuroscience
+Raychel Lewis (Fall 2014-present), Biology
+Jonathan Cotto (Fall 2015-present), Biology
+Stephanie Morales (Fall 2015-present)
+Kennedy Ukelegharanya (Fall 2015-present), Biology
+Giavanni Pacheco (Fall 2015-present), Biology, ILM Neuroscience, LSAMP

High School Students:
Sarah Pfander (Summer 2004; 2005), University High Laboratory School, Urbana, IL; attending Middlebury College (2009-2013).
*Arielle Gross (summer 2006, 2007), Central High School, Champaign, IL; BS, Engineering, University of Illinois. [Proctor and Gamble intern, summer 2008, 2009.]
*Emily Rosengren (summer 2007, 2008), University High Laboratory School, Urbana, IL; attended Honors College, University of Michigan (2007-2011).
*Emma Anselin (summer 2007), University High Laboratory School, Urbana, IL; attending Brown University BS and Medical School (2007-2014).
+*Claire Williams (2008-2010), Urbana High School, Urbana, IL; BS, Chemistry Grinnell College (2009-2013).
*Jasper Maniates-Selvin (summer 2009-summer 2010), University High Laboratory School, Urbana, IL; attending Washington University (2011-2015).
*John Vaughen (Fall 2009-Dec 2010), University High Laboratory School, Urbana, IL; attended University of Chicago (2011-2015).
*Fiona Weingartner (Summer 2010-Spring2011), University High Laboratory School, Urbana, IL; attending University of Illinois (2011-2015).
*Sydney Muchnik, (Summer 2010-present), University High Laboratory School, Urbana, IL; attending Oberlin College (2012-2016).

*Heather Lin (Summer 2010-present), University High Laboratory School, Urbana, IL; attended Brandeis University (2011-2015).
+Kenneth Ballom (Summer 2010), Centennial High School, Champaign, IL.
Marie Lilly (Summer 2011), University High Laboratory School, Urbana, IL.
Hoda Sayegh (Summer 2011), University High Laboratory School, Urbana, IL.
Joseph Song (Summer 2011), University High Laboratory School, Urbana, IL.
+Tahar Bowen-Pinto (Summer 2011), University High Laboratory School, Urbana, IL.
Sunjay Koshy (Summer 2011), University High Laboratory School, Urbana, IL.
*Shruti Vaidya (Summer 2012), University High Laboratory School, Urbana, IL; attending University of Illinois (2012-2016).
Sarah Vaughen (Summer 2012), University High Laboratory School, Urbana, IL.
Vickie Chang (Summer 2012). University High Laboratory School, Urbana, IL.
Dan Frank (Summer 2015). James-DeWitt High School, Dewitt, NY.

Awards and honors won by trainees

Graduate Students

Molly McElroy:
AAAS Mass Media Science and Engineering Fellows program, 2006

Lilia Zurkovsky:
Society for Neuroscience travel award, 2006
UIUC Initiative on Aging conference travel award for graduate students, 2005
NIHHD Developmental Psychobiology & Neurobiology Training Grant, Predoctoral award, 2004-2006

Claire Scavuzzo:
Society for Behavioral Neuroendocrinology travel award, 2010.

Samantha Pisani:
UIUC College of Medicine Buetow Memorial Travel award, 2010, 2013
UIUC College of Medicine Hazel I. Craig Summer Research Assistanceship, University of Illinois College of Medicine, 2011.
NIH Office of Dietary Supplements Research Practicum and Travel Stipend, June 2012
Graduate College Travel award, 2012
OLLI-NSP citizen scientist liaison, 2014-2015

Undergraduates

Emily Malin: First annual Oliver Award for Intellectual Curiosity in Psychology, Washington and Lee University, 1999.
Claire Scavuzzo: Honorable mention (tied for 4th place) for undergraduate poster competition, Chicago chapter, Society for Neuroscience, 2008
Trisha Pruis: University of Illinois, undergraduate travel award, 2004
+Luis Castelan: Ruth Meyer summer research fellowship, 2013 (declined); Louis Stokes Alliance for Minority Participation fellowship, summer 2013; SU College of Arts and Science Honors Travel award; SU Department of Biology Senior Award for Research, May 2015;
+Stephen Ajayi: Ruth Meyer summer research fellowship, 2013; Department of Biology Senior Award for Research, May 2015;
Amanda Audesse: Ruth Meyer summer research fellowship, 2013
Brian Yuhan: Ruth Meyer summer research fellowship, 2013;
Georgia Buscaglia: Ruth Meyer summer research fellowship, 2013
Lynde Folsom: Ruth Meyer summer research fellowship, 2013
Brooke Hamling: Ruth Meyer summer research fellowship, 2013
Brian Yuhan: Department of Biology Award for Academics and Scholarship, May, 2014.
Margaret Blasi: Ruth Meyer summer research fellowship (2014, declined) and Department of Biology Award for Research and Scholarship, May, 2015.
Sam Lauffer: Department of Biology Award for Research and Scholarship, May, 2015.
Ella D'Amico: Coronat Scholarship for summer research, Summer, 2015

Masters and PhD Thesis Committee Member (program, role)

In progress:

Deion Burks (MS Biology, SU; member)
Candace Receno (PhD Exercise Science, SU; member)
Jeremy Sloane (PhD Biology, SU; member)

Completed:

Lisa Henry, MS (Binghamton University, external member)
Jennifer Tropp, PhD (U. Conn. external member)
Julie Markham PhD (Psych, UIUC)
Kirk Erickson PhD (Psych, UIUC)
Clint Canal PhD (NSP, UIUC)
Jason Pych PhD (Psych, UIUC)
Victor Wang PhD (NSP, UIUC)
Carol Curtis PhD (MIP, UIUC)
Darien Hall PhD (NSP, UIUC)
Georgina Aldridge PhD (MSP/NSP, UIUC)
Maggie Blattner PhD (MSP/NSP, UIUC)
Ken Morris PhD (MSP, Neuroscience, UIUC)
Claudia Lutz PhD (NSP, UIUC)
Jennifer Provyn PhD (Psychology, SU; Chair)
Melissa Morales PhD (Psychology, Binghamton University, outside examiner)
Corinne Ostock PhD (Behavioral Neuroscience, Binghamton University, outside examiner)
Amanda Hoffman PhD (Chemistry, SU; Chair)
Luis Flores PhD (Psychology, UIUC, Member)
Yu Ho Kim PhD (Exercise Science, SU; member)

Diagnostic / Qualifying exam committee member

Diana Thomas (NSP, UIUC)
Patty Kandalepas (NSP, UIUC)
Jonathon House (NSP, UIUC)
Jenny Kim (NSP, UIUC)
Margaret Ferris (MSP/NSP, UIUC)
Cynthia Colon-Rivera (NSP, UIUC)
Carrie Brumback (Psych, UIUC)
Gloria Chapa (NSP, UIUC)
Darien Hall (NSP, UIUC)
Jessica Stanis (NSP, UIUC)
Claudia Lutz (NSP, UIUC)
Ken Morris (NSP, UIUC)
Zhenghan Qi (NSP, UIUC)
Renee Haag (NSP, UIUC)
Suren Bandara (NSP, UIUC)
Maggie Blattner (NSP, UIUC)
Laura Chaddock (Psych, UIUC)
Martina Mustroph (NSP, UIUC)
Paven Aujli (NSP, UIUC)
Franklyn Rocha Cabrero (NSP/MSP, UIUC)
Dawn Lammert (Neuroscience, Upstate Medical University)
Geoffrey Eill (Neuroscience, Upstate Medical University)