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, Department of Psychology and College of Medicine, 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
2009-2011	Behavioral Sciences for Medicine course coordinator, 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.

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 Campus Committee on Promotion and Tenure Outstanding Achievement Award
2009 Top Reviewer for Hormones and Behavior, Elsevier Press

Professional Activities

Ad-hoc manuscript reviewer: Behavioral and Brain Functions; Behavioral Neuroscience; Behavioural Brain Research; Behavioural Processes; Brain Research; European Journal of Neuroscience; Experimental Neurology; Hippocampus; Hormones and Behavior; 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; Psychobiology; Psychoneuroendocrinology; Reproduction; Stress

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)

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
2010-present Guest editor for special issue of *Neurobiology of Learning and Memory*, titled, "Memory Impairment and Disease"

Grant Review Boards:
2004, 2005 Member, NSF Advisory Panel for Behavioral Neuroscience and Neuroendocrinology programs

Committee memberships and conference service:
University and Departmental:
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
2008-2012 Appointed outreach coordinator, Neuroscience Program, University of Illinois
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 Independent Program of Study (IPS) Committee, College of LAS, University of Illinois at Urbana-Champaign
2011-2012 Staff and Faculty Awards Committee, Department of Psychology, University of Illinois at Urbana-Champaign

Societies and conferences:

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 Society for Behavioral Neuroendocrinology Education Committee Member
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

Other:

1998-1999 Co-founder of Renaissance School, Charlottesville, VA
2010-2012 Senior Project Committee, University Laboratory High School, Urbana, IL

Outreach and public engagement:

1993-1998 Leader for tutorial and debates on *Animal Rights v. Animal Research*, area schools, Charlottesville, VA
1997-1999 Developed and implemented project-based curricula (HOWS - Hands On With Science) for teaching neuroscience to 7-12 graders, Tandem Friends School, Charlottesville, VA 1994-1997 and to 6-8 graders at Village Middle School for girls, Charlottesville, VA
1998-present 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
2003-2005 Organizer and participant, Brain Awareness Week, Neuroscience Program, University of Illinois

2007-2009 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
2005-2006 Invited participant, Freeman Fellows program, UIUC. Facilitated roundtable discussions about academic integrity with Freeman Fellows
2007-10 Invited participant, 1st ,2nd, and 4th annual Illinois Summer Neuroscience Institutes
2008 Invited participant, University of Illinois' Osher Life Long Learning Institute (OLLI)
2008-2012 Co-coordinator, annual Neuroscience Teacher Institute
2008 Co-organizer, exhibits for Chicago Science in the City, December 27-29
2009 Coordinator, OLLI course on Brains in Society
2010-present Co-developer of neuroscience curricula and S.T.A.R. program for Don Moyer Boys and Girls club
2011-present Co-developer of F.I.N.D. (Faces in Neuroscience Discovery) series at Orpheum Children's Science Museum
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 Developer for FIND Orphy: Portable science for the public, collaborative museum exhibit with the Orpheum Children's Science Museum, Champaign, IL

Extramural Research Support

Current:

IOS 0843175 ARRA (Gold, CoPI) 9/1/2009-8/31/2013
NSF $568,471 total costs; $358,657 total direct costs
Neuroendocrine modulation of LTP durability: Experiments examine the role and site-specificity of neuromodulator activity in the durability of synaptic plasticity in the hippocampus
Role: PI

1 R25 RR024251-01A2 MAA (Hug, PI) 11/1/2009-10/31/2014
NIH SEPA $1,249,800 total costs
Project NEURON: Novel Education for Understanding Research on Neuroscience.
The goal of this project is to develop and to conduct class-room activities, projects and experiments based on cutting-edge brain research to enhance science literacy in K-12 school children.
Role: CoPI

Supplement to SEPA for Brain CASE (Computer Aided Student Exploration): development of a video game on traumatic brain injury 10/2011-9/2012
Role: CoPI

P50 AT006268 from ODS, NCAAM, and NCI Dietary Supplement Research Centers: Botanicals (P50 RFA-OD-09001) (Helfrich PI)
NIH $7,496,624 total costs; 5,000,000 total direct costs
Botanical Estrogens: Mechanisms, Dose and Target Tissues

The goal of this research center is to test the efficacy, safety and mechanisms of action of botanical estrogens currently being consumed by women. Focus will be on actions in uterus, mammary gland and bone, brain and behavior, and in a model of metastatic breast cancer.
Role: Project Co-leader

Completed:

IOB 0520876 8/1/2005-7/31/2011 (no cost extension)
NSF $528,197 total costs; $357,344 total direct costs
Estrogen, learning strategy, and neural systems: Timing and cellular mechanisms.

IOS 118414
Supplement 3/10/2011-3/09/2012
NSF $4,725 (direct), $7,229 (total)
Estrogen, learning strategy, and neural systems: Timing and cellular mechanisms.
Role: PI

P01 AG024387-04 (Helferich PI) 09/01/04-08/31/10 (no cost extension)
NIA $887,164 Project direct costs $5,473,328 total direct costs
Phytoestrogens and Aging: Dose, Timing & Tissue
Role: CoPI of Project 3: Dietary estrogens and cognitive function during aging (Schantz, PI)

IBN 0081061 2000-2004
NSF $240,000, direct costs
Estrogen modulation of learning strategy: A neural systems approach
Role: PI

Private Donor: $70,000, direct costs 1994-1997
Glucose and nutritional effects on cognition in children,
Role: CoPI

Austin Foundation Memorial Fund award $60,000 direct costs 1998-1999
Development of innovative secondary school curriculum for Renaissance High School
Role: CoPI

Kellogg Company Research award 190,000, direct costs 1996-1999
Breakfast and behavior in the elderly: Regulation by post-prandial glucose
Role: PI

Katrina relief award 10/2005-12/2005
SFN $5,000 total costs
Research support for displaced UNO students
Role: Mentor

In Preparation / Under Review:

Estrogens and learning strategy: Bidirectional effects of estrogens on learning: Dissociation through receptor-mediated cell-signaling pathways
Cognitive gains from physical and mental activity: The role of TrkB signaling.
Alignment of the cognitive profile and biomarkers of Parkinson's disease.

Extramural Training and Instructional Support

5 T32 ES007326-10 7/1/00-6/30/10
NIEHS: Research Training Program in Environmental Toxicology

PI: S.L. Schantz
The major goal is the education of pre- and postdoctoral candidates in the molecular, cellular and neurobehavioral aspects of reproductive, developmental and endocrine toxicology.
Role: Preceptor

Intramural Research Support

University of Illinois, Initiative on Aging Incentive Award: Strategy Shifts in Aging Female Rats, 2002. ($10,000)

UIUC Vice Chancellor for Research and Initiative on Aging Incentive funds. Co-PI (of five). 6/20/03-present; $75,000 direct costs.

University of Illinois, Public Engagement grant, 2011-2012. Co-PI (Barbara Hug, co-PI): FIND Orphy, $8,500.

Research

My primary research interests are directed at understanding the neural mechanisms of learning and memory, specifically, how changes in signaling and metabolic state influence the neural components of memory and forgetting across the lifespan. My research has a particular emphasis on hormonal regulation of these components, with one aim to develop behavioral and neurobiological models of menopause. Ongoing work addressing these issues includes the following strands of research:

- Estrogenic modulation of neural plasticity and the role of selective estrogen receptor-mediated cell signaling events.
- Hormonal modulation of neurophysiological models of memory and forgetting across the lifespan, using long-term potentiation (LTP) long-term depression (LTD) paradigms in rodents.
- Neural mechanisms for the effects of physical and cognitive activity on learning and memory, focusing on shifting metabolic profiles and the roles of trophic factor signaling.
- The cognitive, metabolic, and cell biological phenotypes of Parkinson's disease. The goal is to identify pre-motor changes in brain and behavior that may provide an early diagnostic tool that would allow interventions that may prevent or attenuate disease progression.

Teaching

My teaching interests span a broad range of topics in the fields of Neuroscience and across undergraduate and graduate levels of instruction. Courses I have taught or currently teach include 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; Laboratory in Neuroscience, Laboratory in Motivation, Behavioral Sciences for medical students (M1). My teaching is student centered and integrates real-world contexts into academic content.

Outreach

I am dedicated to enhancing science literacy particularly in school children. One goal is to develop innovative science and teaching strategies for primary and secondary school curricula in attempt to reduce the relatively high attrition rate seen in numbers of female and minority students entering basic science fields. Currently I am outreach coordinator for the Neuroscience Program and 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.

Publications

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 effects on learning and memory across the lifespan. *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 B 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 functions 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. *Psychoneuroendocrinology*, 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 administration of 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., Korol, D.L., Scalf, P., Raz, N., Cohen, N.J., Webb, A., and Kramer, A.F. (2005). Hormone replacement therapy spares brain tissue in postmenopausal women. *Neurobiology of Aging*, 26, 1205-1213.

26. Zurkovsky, L., Brown, S.L., and Korol, D.L. (2006). Estrogen enhances 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). Hormones and Behavior, 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, 175-189.

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.D, Korol, D.L., Helferich, H.G., and Schantz, S.L. (2008). Effects of chronic estradiol treatment on delayed spatial alternation and differential reinforcement of low rates, *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 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 females: Possible correspondence between CA1 spine properties and spatial acquisition, *Hippocampus*, 20, 768-786.

36. Neese, S.L., Wang, V.C., Doerge, D.R., 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 treatment 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. Blattner, M., Hug, B, Watson, P, and Korol, D. (2012). The Guppy Game: Understanding the big ideas of natural and sexual selection, *NSTA Science Teacher (*Summer), 79, 32-37.

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

46. 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). Pharmacokinetic 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.

47. 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.

48. Gold, P.E. and Korol, D.L. (2012). Making memories matter, special issue of *Frontiers in Integrative Neuroscience, Impact of Emotion on Cognition*, *accepted with minor revisions*.

49. Morris, K.A., Mitterling, K.L., Rocha-Cabrero, F., Gold, P.E., and Korol, D.L. (2012). Bilateral intrastriatal infusions of 6-OHDA improve spatial working memory in rats: implications for Parkinson's disease. Special section on Motor and Non-Motor Dysfunctions in Parkinson's Disease: Advances and Controversies in *Behavioral Neuroscience*, *under revision*.

In final preparation

Scavuzzo, C.J., Erickson, K.I., Epstein, D.E., Grinberg, Y., and Collier, R. and Korol, D.L. Effects of exercise on brain and cognition are not limited to the hippocampus.

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.

Scavuzzo, C.J. and Korol, D.L. Intrahippocampal infusions of estradiol enhance or impair place learning depending on timing of treatment.

Scavuzzo, C.J., Korol, D.L., and Gold, P.E. Long lasting training-induced changes in hippocampal and striatal glycogen levels dissociate by task attribute.

Mitterling, K.L., and Korol, D.L. CREB signaling following estradiol treatment is confined to specific time points.

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

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.

Korol, D.L. Richards, J., Williams, C.M. Post-training estradiol impairs memory for social transmission of food preference in young adult ovariectomized rats.

Thomas, D.L., Wieczorek, L. A., Grinberg, Y. McElroy, M.W., and Korol, D.L. Chronic estradiol replacement in ovariectomized young adult female rats shifts learning strategy in a time- and dose-dependent manner.

McElroy, M.W. and Korol, D.L. Effects of cholinergic muscarinic blockade on learning in young adult female rats: Estrous cycle interactions.

McElroy, M.W. and Korol, D.L. Training-induced activation of c-Fos is resistant to fluctuations in hormones across the estrous cycle in rats.

Ancillary publications

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

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

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 Training 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, Neuroscience program, 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.

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, UIUC, 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.

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.

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.

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.

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.

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.

Korol, D.L., Scavuzzo, C.J., and Collier, R.L. (2010). Intrahippocampal infusions of estradiol can enhance or impair place learning depending on timing of treatment. 40th Annual meeting for the Society for Neuroscience, *Society for Neuroscience Abstracts* 36, *296.12*.

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. Society for Behavioral Neuroendocrinology, annual meeting.

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

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.

Science Outreach Presentations

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

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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

Trainees

+ identifies with underrepresented group.

Post-doctoral

Current:

Tumay Tunur, Ph.D. Tulane University

Co-mentor:

Michael Dash, Ph.D. University of Wisconsin (with Paul Gold, Ph.D.)
Lori Newman, Ph.D. University of New Hampshire (with Paul Gold, Ph.D.)
Steven Neese, Ph.D. Southern Illinois University (with Susan Schantz, Ph.D.)

Former:

Kirk Erickson, Ph.D. May 2005-May 2008. Currently Assistant Professor, Department of Psychology, University of Pittsburgh

Ramkumar Kuruba, Ph.D. November 2009 to August 2010

Graduate Students

Current:

Katherine Mitterling, Department of Biology, Syracuse University, Fall 2008 to present

Samantha Pisani, Medical Scholars Program, Neuroscience Program, University of Illinois, Fall, 2008 to present

Claire Scavuzzo, Neuroscience Program, University of Illinois, Fall 2009 to present, co-mentor

Former:

Molly McElroy, Department of Psychology, Program in Behavioral Neuroscience, Binghamton University and Neuroscience Graduate Program, University of Illinois, September, 1999 to March, 2007. Dissertation title: *Ovarian Hormone Modulation of Learning Strategy Preferences: A Role for Hippocampal Disinhibition.* Currently, science writer in press office at University of Washington.

Lilia Zurkovsky, Neuroscience Graduate Program, University of Illinois, 2001 to 2008 Dissertation title: *Estradiol has distinct effects on the hippocampal and striatal memory systems*. Currently post-doctoral researcher, Vanderbilt University

Molly Kent, Neuroscience Graduate Program, University of Illinois, 2004 to 2008

Bengi Altinbilek, Neuroscience Graduate Program, University of Illinois, 2006 to 2007

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

+Cynthia Colon-Rivera, Neuroscience Graduate Program, University of Illinois, Minority Fellow, 2004-2006 (co-mentor)

Timothy Zorn, Neuroscience Graduate Program, University of Illinois, 2001 to 2004, Master's in Biology, August, 2004

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

Undergraduate Honors and Distinction Students:

*Indicates students that have pursued graduate education or careers in STEM fields.

+*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]

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

*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, neuroscience PhD student, Washington University]

*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 [Nursing school, Johns Hopkins, Fall 2007]

*Sarah Debrey (2004-2005), IPS-Neuroscience, Department of Psychology Distinguished thesis, University of Illinois; [Public Health, Johns Hopkins, Fall, 2007]

*Steve Serio (2004-2007), Department of Psychology, Honors Program, University of Illinois [medical student, Rush University]

*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 [medical school].

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].

Undergraduate Research Assistants:

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
*Emily Malin, PhD (1999), Department of Psychology, Washington and Lee University; Recipient of the first annual Oliver Award for Intellectual Curiosity in Psychology, 1999; [currently, 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
Jodi-Ann Gravina (2000), Department of Psychology, Binghamton University
Carrie Joseph (2000), Department of Psychology, Binghamton University
*Meghann Hennelly (2001-2002), Department of Psychology and BIology, University of Illinois; [entered medical school 2002, University of Chicago]
*Krista Anderson (2001-2003), Department of Psychology, James Scholar, University of Illinois
Ila Englof (2002), Department of Biology, University of Illinois
*Niamh Condon (May 2002-May 2004), Department of Psychology, University of Illinois; [2005-2009, medical student, Michigan State University]
*Sara Boyd (summer 2002), Department of Psychology, University of Illinois; [MS student, University of Kentucky]
Kathy Hagman (2002-2003), Department of Psychology, University of Illinois
*Bengi Altinbilek (2003), exchange student from Bogazici University, Istanbul, Turkey; Department of Psychology, University of Illinois; [currently, PhD student, Rutgers University]
*Diana Greyz (2003), Department of Psychology, University of Illinois
*Christopher Hanson (2003-2004), Departments of Biochemistry and Psychology, University of Illinois
*Michael Boyd (2003-2004), Department of Psychology, University of Illinois; [entered medical school, 2004, UIC]
*John Kenny (2003-2004), Departments of Psychology and AeroEngineering, University of Illinois [entered medical school UIC, Fall 2008]
*Abigail Galle (2003-2004), Department of Psychology, University of Illinois
Bobby Oestreicher (Jan 2004-Jan 2005), Department of Psychology, University of Illinois; [entering law school, University of Cincinnati, Fall 2005]
*Astha Agarwal (2004-2005), Department of Psychology, University of Illinois
*Soumya Venkiteswaran (2004-2005), Department of Psychology, University of Illinois
*Adrien Harney (2004-2006), Department of Psychology, University of Illinois
Arpit Agarwal (2005), University of Illinois, undeclared major
*Michael Moenk (2005), Department of Psychology, University of Illinois
*Bryan Kolberg (2005-2006), Department of Psychology, University of Illinois [PhD student]
+*Tobi Adelaja (2006), UIUC Howard Hughes Fellow, Integrative Biology, University of Illinois
*Blake Spindler (2006-2007), Molecular and Cell Biology, University of Illinois [medical student, UIC]
*Zuha Warraich (2006-2007), Molecular and Cell Biology, University of Illinois [PhD student in neuroscience, University of Florida, fall, 2008]
Shruti Gupta (2006-2007), Psychology and Spanish, University of Illinois
+Edward Malkowski (2006-2007), Psychology Honors, University of Illinois
*Sarah Dalton (2007-2008), Psychology, University of Illinois [graduate school at University of Southern California]
+Lauren Lilly (summer 2007), SROP fellow, Reproductive Biology Training Program, University of Illinois
*Elizabeth Katta (2007-2009), Molecular and Cellular Biology, University of Illinois
+Raquel Collier (2008-2009), Molecular and Cellular Biology, University of Illinois.

Robin Smith (2008-2009), Molecular and Cellular Biology, University of Illinois
Gianna Gross (summer 2008). Political Science, University of Wisconsin-Madison.
*Ashley Ginsberg (2008-2010). Psychology, University of Illinois
Jeremy Schlake (2008-2010). Molecular and Cellular Biology, and Psychology, University of Illinois.
*Leigh Komperda (2009-Spring 2010). Molecular and Cellular Biology, University of Illinois.
Hilarie Carhill (2009-Spring 2010). Psychology, University of Illinois.
Charles O'Connor (Fall 2009-Spring 2010). Molecular and Cellular Biology, University of Illinois.
Colin Therriault (summer 2009-Spring 2011). Molecular and Cellular Biology, University of Illinois
Martina Gabra (Spring 2010-Summer 2010). Molecular and Cellular Biology, University of Illinois.
Jack Huffman (Summer 2010-Fall 2011). Psychology, University of Illinois.
Daniel Wickland (Fall 2010-Spring 2011). Independent Program of Study, Neuroscience, University of Illinois
Vivian Jung (Fall 2010-Spring 2012). Molecular and Cellular Biology, University of Illinois.
Timothy Weng (Spring 2011). Psychology, University of Illinois.
Stephen Burbick (Fall 2011). Molecular and Cellular Biology, University of Illinois.
Ishwer Patel (Fall 2011-present). Molecular and Cellular Biology, University of Illinois.
Liridon Zendeli (Fall 2011-present). Molecular and Cellular Biology, University of Illinois.
Carolyn Draus (Fall 2011-present). Biochemistry, University of Illinois.
Erin Gunderson (Fall 2011-present). Molecular and Cellular Biology, University of Illinois.
Parth Patel (Spring 2012-present). Molecular and Cellular Biology, University of Illinois.
Anna Jones (Spring 2012-present). Molecular and Cellular Biology, University of Illinois.
David Lee (Spring 2012-present). Molecular and Cellular Biology, University of Illinois.
At Syracuse University:
Frances Batarse (Fall 2012-present). ILM Neuroscience, Psychology, Syracuse University.
Sydney Zaggar (Fall 2012-present). ILM Neuroscience, Biology, Syracuse University.
Brooke Hamling (Fall 2012-present). ILM Neuroscience, Syracuse University.
+Luis Castelan (Fall 2012-present). Biology, Syracuse University.
Dean Phillips (Fall 2012-present). Biology, Syracuse University.
Sam Lauffer (Fall 2012-present). Biology, Syracuse University.
Georgia Buscaglia (Fall 2012-present). ILM Neuroscience, Biology, Syracuse University.

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; attending University of Illinois. [Proctor and Gamble intern, summer 2008, 2009.
Emily Rosengren (summer 2007, 2008), University High Laboratory School, Urbana, IL; attending Honors College, University of Michigan (2007-2011).a
Emma Anselin (summer 2007), University High Laboratory School, Urbana, IL; attending Brown University (2007-2011).
Claire Williams (2008-2010), Urbana High School, Urbana, IL; attending Grinnell College (2009-2013).
Jasper Maniates-Selvin (summer 2009-summer 2010), University High Laboratory School, Urbana, IL.
John Vaughen (Fall 2009-Dec 2010), University High Laboratory School, Urbana, IL.
Fiona Weingartner (Summer 2010-Spring2011), University High Laboratory School, Urbana, IL.
Sydney Muchnik, (Summer 2010-present), University High Laboratory School, Urbana, IL.
Heather Lin (Summer 2010-present), University High Laboratory School, Urbana, IL.
+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.
Sarah Vaughen (Summer 2012), University High Laboratory School, Urbana, IL.
Vickie Chang (Summer 2012). University High Laboratory School, Urbana, IL.

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:
- 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

Undergraduates

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

PhD Thesis committee member

Completed:

Molly McElroy (Chair, NSP, UIUC)
Lily Zurkovsky (Chair, NSP, DNPTG fellow, UIUC)
Jennifer Tropp (U. Conn. external member)
Julie Markham (Psych, UIUC)
Kirk Erickson (Psych, UIUC)
Clint Canal (NSP, UIUC)
Jason Pych (Psych, UIUC)
Victor Wang (NSP, UIUC)
Carol Curtis (MIP, UIUC)
Darien Hall (NSP, UIUC)
Georgina Aldridge (MSP/NSP, UIUC)
Maggie Blattner (MSP/NSP, UIUC)
Ken Morris (MSP, Neuroscience, UIUC)

In progress:

Katherine Mitterling (Chair, NSP, UIUC)
Samantha Pisani (Chair, NSP/MSP, UIUC)
Claire Scavuzzo (CoChair, NSP, UIUC)
Jenny Kim (NSP, UIUC)
Paven Aujla (NSP, UIUC)
Claudia Lutz (NSP, UIUC)

Masters thesis committee member:
Tim Zorn (Chair, NSP, UIUC; MS 8/2004)
Lisa Henry (Binghamton U., external member)

Diagnostic / Qualifying exam committee member (non chair):
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)
Molly Kent (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)
Kevin Stebbings (NSP, UIUC)
Benjamin Zimmerman (NSP, UIUC)
Franklyn Rocha Cabrero (NSP/MSP, UIUC)