

CURRICULUM VITAE

Nancy G. Forger
Neuroscience Institute
Petit Science Center
Georgia State University
Atlanta, GA 30302
nforger@gsu.edu
404-413-5888

Positions:

- Professor, *Georgia State University* (2012-present), Neuroscience Institute
- Professor, *University of Massachusetts-Amherst* (2000-2012); Associate Professor (1994-1999) Department of Psychology, Center for Neuroendocrine Studies, Neuroscience and Behavior Program (Acting Director, 2007-2008), Molecular and Cellular Biology Program
- Visiting Scholar, *University of California, Los Angeles*, Department of Physiological Science, 2010
- Visiting Scholar, *Walter and Eliza Hall Research Institute*, Melbourne, Australia, 2001
- Assistant Research Psychologist & Instructor, *University of California, Berkeley* (1992-1994)
- Postdoctoral Associate, *University of California, Berkeley* (1986-1992)

Degrees:

- *Ph.D.*, 1986, Endocrinology, *University of California, Berkeley*
(*National Science Foundation Predoctoral Fellow, University of California Fellow*)
- *B.A.*, 1981, Mathematics and Psychology, *Dartmouth College*
(*Summa Cum Laude, Phi Beta Kappa, With Highest Distinction in the Major*)

Professional Honors:

- Samuel Conti Outstanding Faculty Research Award (*Univ. Mass.*), 2010-2011
- Independent Scientist Award, NIMH, 2005-2010
- Independent Scientist Award, NICHD, 1997-2002
- Lilly Teaching Fellow, 1996-1997

Affiliations:

- Society for Neuroscience
- Endocrine Society
- Organization for the Study of Sex Differences; Council (2010-present)
- Society for Behavioral Neuroendocrinology; Advisory Board (2001–2004 and 2009–present); Program Committee [2001-2002 and 2006(Chair)-2008]; Treasurer and Executive Committee (2013-present)

RESEARCH

Research Support (Dollar amounts are total costs unless otherwise indicated.)

Principal Investigator

- NIH R01, *Cell Death and Sexual Differentiation*
NIMH, 10/2009 – 5/2016, \$1,645,413.
- Administrative supplement to R01 listed above
NIMH, 7/2010 - 6/2013, \$345,959.
- National Science Foundation: *Social Control of Brain Morphology*,
IOB, 8/2007 – 7/2011, \$360,000.
- NIH K02: *Independent Scientist Award*
NIMH, 2/2005 – 1/2010, \$626,455.
- NIH R01: *Cell Death and Sexual Differentiation*
NIMH, 4/2004 – 3/2009, \$1,002,121.
- National Science Foundation: *Sexual Differentiation in Eusocial Mammals*
IOB, 3/2004 – 2/2008, \$402,491.
- NIH R01: *Mechanisms of Sexual Differentiation in Neural Systems*
NICHD, 6/2000 - 5/2005, \$1,017,000.
- The Whitehall Foundation: *Role of Trophic Factors in the Generation of Neural Sex Differences*, 6/1998 - 6/2000, \$88,000.
- NIH K02: *Independent Scientist Award*
NICHD, 7/1997 - 6/2003, \$359,316.
- The Whitehall Foundation: *Role of Trophic Factors in the Generation of Neural Sex Differences* 4/1995 – 4/1998, \$92,000.
- NIH FIRST Award, *Mechanisms of Sexual Differentiation in Neural Systems*
NICHD, 4/1995 - 5/2000, \$531,935.

Sponsor

- NIH F31: *Breeding Status & Delayed Motoneuron Maturation in a Eusocial Mammal*;
NINDS, 1/2007 – 1/2009, \$53,748.
To support dissertation work of graduate student Marianne Seney.
- NIH F31: *Neural Sex Differences: Role of Bcl-2 Family Members*
NINDS, 5/2000 – 4/30/02, \$33,376.
To support dissertation work of graduate student Susan Zup.

Co-Investigator

- National Science Foundation, *Support of Research Involving Captive Spotted Hyenas*

SGER, 12/15/2007 – 5/31/2010, \$200,000 (direct costs). (PI: S. Glickman, Univ. California)

- NIH institutional training grant, T32 MH020051, *Training in Neuroendocrinology* NIMH, 7/06 – 6/11, \$935,649. (PI: G. De Vries, Univ. Massachusetts)
- NIH institutional training grant, T32 NS007490, *Training in Neuroscience and Behavior* NINDS, 7/05 – 6/10, \$579,000. (PI: J. Meyer, Univ. Massachusetts)

Publications

De Vries GJ, Forger NG (2015) Sex differences in the brain: A whole body perspective. *Biology of Sex Differences* 6:15.

Shen EY, Ahern TH, Cheung I, Straubhaar J, Dincer A, Houston I, de Vries GJ, Akbarian S, Forger NG (2015) Epigenetics and sex differences in the brain: A Genome-Wide Comparison of Histone-3 Lysine-4 Trimethylation (H3K4me3) in Male and Female Mice. *Experimental Neurology* 268:21-29.

Bertone-Johnson ER, Hankinson SE, Forger NG, Powers SI, Willett WC, Johnson SR, Manson JE (2014) Plasma 25-hydroxyvitamin D and risk of premenstrual syndrome in a prospective cohort study. *BMC Womens Health* Apr 12;14:56.

Ghahramani NM, Ngun TC, Chen PY, Tian Y, Krishnan S, Muir S, Rubbi L, Arnold AP, de Vries GJ, Forger NG, Pellegrini M, Vilain E (2014) The effects of perinatal testosterone exposure on the DNA methylome of the mouse brain are late-emerging. *Biology of Sex Differences* Jun 13;5:8.

Kelly DA, Varnum MM, Krentzel AA, Krug S, Forger NG (2013) Differential control of sex differences in estrogen receptor α in the bed nucleus of the stria terminalis and anteroventral periventricular nucleus. *Endocrinology* 154:3836-3846.

Holmes MM, Van Mil S, Bulkowski C, Goldman SL, Goldman BD, Forger NG (2013) Androgen receptor distribution in the social decision-making network of eusocial naked mole-rats. *Behavioural Brain Research* 256:214-218.

Zhou S, Holmes MM, Forger NG, Goldman BD, Lovern MB, Caraty A, Kalló I, Faulkes CG, Coen CW (2013) Release from socially-induced suppression of reproductive development in eusocial naked mole-rats (*Heterocephalus glaber*): Analysis of GnRH-1 and kisspeptin neuronal systems. *J. Comparative Neurology* 521:3003-3029.

Ahern TH, Krug S, Carr AV, Murray E, Fitzpatrick E, Bengston L, McCutcheon J, De Vries GJ, Forger NG (2013) Cell death atlas of the postnatal mouse ventral forebrain and hypothalamus: Effects of age and sex. *J. Comparative Neurology* 521:2551-2569.

Gilmore RF, Varnum MM, Forger NG (2012) Effects of blocking developmental cell death on sexually dimorphic calbindin cell groups in the preoptic area and bed nucleus of the stria terminalis. *Biology of Sex Differences* 3:5.

- Holmes MM, Niel L, Anyan JJ, Griffith AT, Monks DA, Forger NG (2011) Effects of *Bax* gene deletion on social behaviors and response to olfactory cues in mice. *European J Neuroscience* 34:1492-1499..
- Murray EK, Varnum MM, Fernandez JL, de Vries GJ, Forger NG (2011) Effects of neonatal treatment with valproic acid on vasopressin immunoreactivity and olfactory behaviour in mice. *J Neuroendocrinol*, Jul 27 [Epub ahead of print].
- Anyan JJ, Seney ML, Holley A, Bengston L, Goldman BD, Forger NG, Holmes MM (2011) Social status and sex effects on neural morphology in Damaraland mole-rats, *Fukomys damarensis*. *Brain Behav Evol*. 2011 Jun 24. [Epub ahead of print]
- Holmes MM, Seney ML, Goldman BD, Forger NG (2010) Social and hormonal triggers of neural plasticity in naked mole-rats. *Behav Brain Research* 218:234-239.
- Forger NG and De Vries GJ (2010) Cell death and sexual differentiation of behavior: Worms, flies and mammals. *Current Opinion in Neurobiology* 20:776-783.
- Semaan SJ, Murray EK, Poling MC, Dhamija S, Forger NG, Kauffman AS (2010) BAX-dependent and BAX-independent regulation of *Kiss1* neuron development in mice. *Endocrinology*, 151:5807-5817.
- Hisasue S-I, Seney ML, Immerman E, Forger NG (2010) Control of cell number in the bed nucleus of the stria terminalis of mice: Role of testosterone metabolites and estrogen receptor subtypes. *Journal of Sexual Medicine* 7:1401-1409.
- McCarthy MM, Auger AP, Bale TL, De Vries GJ, Dunn GA, Forger NG, Murray EK, Nugent BM, Schwarz JM, Wilson ME (2009) The epigenetics of sex differences in the brain. *Journal of Neuroscience* 29:12815-12823.
- Seney ML, Kelly DA, Goldman BD, Šumbera R, Forger NG (2009) Social structure predicts genital morphology in African mole-rats. *PLoS ONE* 4:e7477.
- Seney ML and Forger NG (2009) Sexual differentiation of the nervous system: Where the action is. *Endocrinology* 150:2991-2993.[Commentary]
- Murray EK, Hien A, de Vries GJ, Forger NG (2009) Epigenetic control of sexual differentiation of the bed nucleus of the stria terminalis. *Endocrinology* 150:4241-4247.
- Holmes MM, Goldman BD, Goldman S, Seney ML, Forger NG (2009) Neuroendocrinology and sexual differentiation in eusocial mammals. *Frontiers in Neuroendocrinology* 30:519-533.
- Forger NG (2009) Control of cell number in the sexually dimorphic brain and spinal cord. *Journal of Neuroendocrinology* 21:393-399.
- Forger NG (2009) The organizational hypothesis and final common pathways: Sexual differentiation of the spinal cord and peripheral nervous system. *Hormones and Behavior* 55:605-610.
- Holmes MM, McCutcheon J, Forger NG (2009) Sex differences in NeuN- and androgen receptor-positive cells in the bed nucleus of the stria terminalis are due to Bax-

- dependent cell death. *Neuroscience*, 158:1251-1256.
- McCarthy MM, De Vries GJ, Forger NG (2009) Sexual differentiation of the brain: Mode, mechanisms and meaning. In, *Hormones, Brain and Behavior* (Pfaff, D., editor), Elsevier, 2009, 37 pp.
- Rosen GJ, De Vries GJ, Goldman SL, Goldman BD, Forger NG (2008) Distribution of oxytocin in the brain of a eusocial rodent. *Neuroscience* 155:809-817.
- Jacob DA, Ray T, Bengston L, Lindsten T, Wu J, Thompson CB, Forger NG (2008) The role of cell death in sexually dimorphic muscle development: Male-specific muscles are retained in female *bax/bak* knockout mice. *Developmental Neurobiology* 68:1303-1314.
- Holmes MM, Goldman BD, Forger NG (2008) Social status and sex independently influence androgen receptor expression in the eusocial naked mole-rat. *Hormones and Behavior* 54:278-285.
- De Vries GJ, Jardon M, Reza M, Rosen GJ, Immerman E, Forger NG (2008) Sexual differentiation of vasopressin innervation of the brain: Cell death versus phenotypic differentiation. *Endocrinology* 149:4632-4637.
- Sengelaub DL, Forger NG (2008) The spinal nucleus of the bulbocavernosus: Firsts in androgen-dependent sex differences. *Hormones and Behavior* 53:596-612.
- Holmes MM, Rosen GJ, Jordan CL, De Vries GJ, Goldman BD, Forger NG (2007) Social control of brain morphology in a eusocial mammal. *Proc. Natl. Acad. Sci. USA* 104:10548-10552.
- Jyotika J, McCutcheon J, Laroche J, Blaustein JD, Forger NG (2007) Deletion of the *Bax* gene disrupts sexual behavior and modestly impairs motor function in mice. *Dev. Neurobiology* 67:1511-1519.
- Gotsiridze T, Kang N, Jacob D, Forger NG (2007) The development of sex differences in the principal nucleus of the bed nucleus of the stria terminalis of mice: Role of *Bax*-dependent cell death. *Dev. Neurobiology*, 67:355-362.
- Rosen GJ, De Vries GJ, Goldman BD, Forger NG (2007) Distribution of vasopressin in the brain of the eusocial naked mole-rat. *J. Comp. Neurol.* 500:1093-1105.
- Seney M, Rosen GJ, Goldman BD, Forger NG (2006) Breeding status affects motoneuron number and muscle size in naked mole-rats: Recruitment of perineal motoneurons? *J. Neurobiology*, 66:1354-1364.
- Rosen GJ, De Vries GJ, Villalba C, Weldele ML, Place NJ, Coscia EM, Glickman SE, Forger NG (2006) The distribution of vasopressin in the forebrain of spotted hyenas. *J. Comp. Neurol.* 498:80-92.
- Goldman SL, Forger NG, Goldman BD (2006) Influence of gonadal sex hormones on behavioral components of the reproductive hierarchy in naked mole-rats. *Hormones & Behavior* 50:77-84.

- Forger NG (2006) Cell death and sexual differentiation of the nervous system. *Neuroscience* 138:929-938.
- Jacob DA, Bengston CL, Forger NG (2005) Effects of *Bax* gene deletion on muscle and motoneuron degeneration in a sexually dimorphic neuromuscular system. *Journal of Neuroscience* 25:5638-5644.
- Forger NG, Rosen GJ, Waters EM, Jacob D, Simerly RB, de Vries GJ (2004) Deletion of *Bax* eliminates sex differences in the mouse forebrain. *Proc. Natl. Acad. Sci.* 101:13666-13671.
- Forger NG, Prevetie D, deLapeyriere O, de Bovis B, Wang S, Bartlett P, Oppenheim RW (2003) Cardiotrophin-like cytokine / cytokine-like factor 1 (CDC/CLF) is an essential trophic factor for lumbar and facial motoneurons in vivo. *Journal of Neuroscience* 23:8854-8858.
- Zup SL, Carrier H, Waters, EM, Tabor A, Bengston L, Rosen GJ, Simerly RB, Forger NG (2003) Overexpression of Bcl-2 reduces sex differences in neuron number in the brain and spinal cord. *Journal of Neuroscience*, 23:2357-2362.
- Zup SL, Forger NG (2002) Testosterone regulates Bcl-2 immunoreactivity in a sexually-dimorphic motor pool of adult rats. *Brain Research*, 950:312-316.
- Park JJ, Zup, SL, Verhovshek, T, Sengelaub DR, Forger NG (2002) Castration reduces motoneuron soma size but not dendritic length in the spinal nucleus of the bulbocavernosus of wild-type and Bcl-2 overexpressing mice. *Journal of Neurobiology*, 53:403-412.
- Zup SL, and Forger NG (2002) Hormones and sexual differentiation. In: *Encyclopedia of the Human Brain*, V.S. Ramachandran, editor, Academic Press, pp 323-341.
- Peroulakis, ME, Goldman, B, and Forger, NG (2002) Perineal muscles and motoneurons are sexually monomorphic in the naked mole-rat (*Heterocephalus glaber*). *Journal of Neurobiology*, 51:33-42.
- Forger, NG (2001) The development of sex differences in the nervous system. In: The Handbook of Behavioral Neurobiology, Vol. 13: Developmental Psychobiology . E. Blass, editor, Plenum, New York, pp. 153-208.
- Xu J, Gingras KM, Bengston L, Di Marco A, and Forger NG (2001) Blockade of endogenous neurotrophic factors prevents the androgenic rescue of rat spinal motoneurons. *Journal of Neuroscience*. 21:4366-4372.
- Peroulakis, M.E., and Forger, N.G. (2000) Ciliary neurotrophic factor increases muscle fiber number in the developing levator ani muscle of female rats. *Neurosci. Letts.*, 296:73-76.
- Varela CR, Bengston L, Xu J, MacLennan AJ, and Forger NG (2000) Additive effects of ciliary neurotrophic factor and testosterone on motoneuron survival; Differential effects on motoneuron size and muscle morphology. *Experimental Neurology* 165:384-393.
- Fenstermaker SB, Zup SL, Frank LG, Glickman SE, and Forger NG (1999) A Sex difference in

- the hypothalamus of spotted hyenas. *Nature Neuroscience*, 2:943-945.
- Park JJ, Howell M, Winseck A, and Forger NG (1999) Effects of testosterone on the development of a sexually dimorphic neuromuscular system in ciliary neurotrophic factor receptor knockout mice. *J. Neurobiology*, 41:317-325.
- Forger NG (1999) Psychological Sexual Differentiation, in: *Encyclopedia of Reproduction*, E. Knobil and J. D. Neill, editors, Academic Press, pp. 421-430.
- Forger NG, Wagner CK, Contois M, Bengston L, and MacLennan AJ (1998) Ciliary neurotrophic factor receptor α (CNTFR α) in spinal motoneurons is regulated by gonadal hormones. *J. Neuroscience*, 18:8720-8729.
- Drea CM, Weldele ML, Forger NG, Coscia EM, Frank L, Licht P, and Glickman SE (1998) Androgens and masculinization of genitalia in the spotted hyaena (*Crocuta crocuta*): 2. Effects of prenatal anti-androgens. *J. Reprod. Fertil.*, 113:117-127.
- Xu J, and Forger NG (1998) Expression and androgen regulation of the ciliary neurotrophic factor receptor (CNTFR α) in muscles and spinal cord. *J. Neurobiol.*, 35:217-229.
- Forger NG, Howell ML, Bengston L, MacKenzie L, DeChiara TM, and Yancopoulos GD (1997) Sexual dimorphism in the spinal cord is absent in mice lacking the ciliary neurotrophic factor receptor. *J. Neuroscience*, 17:9605-9612.
- Forger NG, Frank L, Breedlove SM, and Glickman S (1996) Sexual dimorphism of perineal muscles and motoneurons in spotted hyenas. *J. Comp. Neurol.*, 375:333-343.
- Forger NG, Galef BG, and Clark MM (1996) Intrauterine position affects motoneuron number and muscle size in a sexually dimorphic neuromuscular system. *Brain Research*, 735:119-124.
- Bengston, L, Lopez, V, Watamura, S, and Forger, NG (1996) Short- and long-term effects of ciliary neurotrophic factor on androgen-sensitive motoneurons in the lumbar spinal cord. *J. Neurobiol.*, 31:263-273.
- Forger NG, Wong V, and Breedlove SM (1995) Ciliary neurotrophic factor arrests muscle and motoneuron degeneration in androgen-insensitive rats. *J. Neurobiology*, 26: 354-362.
- Forger NG, Roberts SL, Wong V, and Breedlove, S.M. (1993) Ciliary neurotrophic factor rescues rat motoneurons during developmental cell death. *J. Neuroscience*, 13:4720-4726.
- Forger NG, Hodges L, and Breedlove SM (1993). The ontogeny of calcitonin gene-related peptide immunoreactivity in rat lumbar motoneurons: Delayed appearance and sexual dimorphism in the spinal nucleus of the bulbocavernosus. *J. Comp. Neurol.* 330:514-520.
- Forger NG, Hodges LL, Roberts S, and Breedlove, S.M. (1992) Regulation of motoneuron death in the spinal nucleus of the bulbocavernosus. *J. Neurobiol.* 23:1192-1203.

- Forger NG and Breedlove SM (1992) Steroid influences on a mammalian neuromuscular system. *Seminars in the Neurosci.*, 3:459-468.
- Forger NG, Fishman RB, and Breedlove SM (1992) Differential effects of testosterone metabolites upon the size of sexually dimorphic motoneurons in adulthood. *Hormones and Behavior*, 26:204-213.
- Leslie M, Forger NG, and Breedlove SM (1991) Sexual dimorphism and androgen effects on spinal motoneurons innervating the rat flexor digitorum brevis. *Brain Res.* 561: 269-273.
- Leslie M, Forger NG, and Breedlove SM (1991) Does androgen affect axonal transport of cholera toxin HRP in spinal motoneurons? *Neurosci. Letts.* 126:199-202.
- Forger NG, Dark J, Stern JS, Wade GN, and Zucker I (1988) Lipectomy influences white adipose tissue lipoprotein lipase activity and plasma triglyceride levels in ground squirrels. *Metabolism* 37: 782-786.
- Forger NG and Breedlove SM (1987) Motoneuronal death during human fetal development. *J. Comp. Neurol.* 264: 118-122.
- Forger NG and Breedlove SM (1987) Seasonal variation in mammalian striated muscle mass and motoneuron morphology. *J. Neurobiol.* 18: 155-165.
- Dark J, Forger NG and Zucker I (1986) Regulation and function of lipid mass during the annual cycle of the golden-mantled ground squirrel, in *Living in the Cold*, Heller, H.C. et. al., eds., Elsevier Publishers.
- Forger NG and Breedlove SM (1986) Sexual dimorphism in human and canine spinal cord: Role of early androgen. *Proc. Natl. Acad. Sci.* 83:7527-7531.
- Forger NG, Dark J, Barnes BM, and Zucker I (1986) Fat ablation and food restriction influence reproductive development and hibernation in ground squirrels. *Biol. Reprod.* 34:831-840.
- Forger NG, Dark J, and Zucker I (1986) Recovery of white adipose tissue after lipectomy in female ground squirrels. *Can. J. Zool.* 64:128-131.
- Dark J, Forger N, Stern J, and Zucker I (1985) Recovery of lipid mass after removal of adipose tissue in ground squirrels. *Am. J. Physiol.* 249: R73-R78.
- Forger NG and Zucker I (1985) Photoperiodic regulation of reproductive development in male white-footed mice (*Peromyscus leucopus*) born at different phases of the breeding season. *J. Reprod. Fert.* 73 : 271-278.
- Dark J, Forger NG, and Zucker I (1984) Rapid recovery of body mass after surgical removal of adipose tissue in ground squirrels. *Proc. Natl. Acad. Sci.* 81: 2270-2272.
- Forger NG and Nelson RJ (1983) Rhythms of barbiturate-induced sleep time in deermice entrained to non-twentyfour hour photocycles. *Physiol. Behav.* 31: 379-383.

Morin LP and Forger NG (1981) Endocrine control of ethanol intake by rats or hamsters: relative contributions of the ovaries, adrenals and steroids. *Pharm. Biochem, & Behavior* 17: 529-537.

Forger NG and Morin LP (1981) Reproductive state modulates ethanol intake in rats: Effects of ovariectomy, ethanol concentration, estrous cycle and pregnancy. *Pharm. Biochem. & Behavior* 17: 323-331.

TEACHING

Courses Taught

Undergraduate

Behavioral Neuroscience
Neuroscience Laboratory
Sex Differences in Brain and Behavior
Brain Development and Behavior
Landmark Papers in Sexual Differentiation
Cytokines and Neuropeptides
Homosexuality
Statistics for the Behavioral Sciences
Design of Experiments in Neuroscience

Graduate

Neuroendocrinology
Epigenetics
Neuroanatomy, Physiology and Behavior (Core Course)
Cell Death and Differentiation of the Nervous System
Developmental Neurobiology
History of Neuroscience
Landmark Papers in Neuroendocrinology
Skills for Professional Neuroscientists

PhD Dissertations Directed

Jun Xu, 2000; Assistant Professor, Tufts University
Susan Zup, 2003; Assistant Professor, UMass-Boston
Dena Jacob, 2008; Postdoctoral Fellow, Thomas Jefferson University
Marianne Seney, 2009, Postdoctoral Fellow, University of Pittsburgh
Elaine Murray, 2010, Postdoctoral Fellow, University of Massachusetts
Jill Weathington, 2015
Alex Strahan, current
Morgan Mosley, current

Postdocs Advised

Christine Wagner, Associate Professor, SUNY Albany
Joong-Jean Park, Professor, Korea University College of Medicine (Korea),
Shin-ichi Hisasue, Associate Professor, Sapporo Medical University (Japan)
Greta Rosen, Lecturer, Suffolk Univeristy
Melissa Holmes, Assistant Professor, University of Toronto
Todd H. Ahern, Assistant Professor, Quinnipiac University

*Diane Kelly, Instructor, University of Massachusetts
Alexandra Castillo-Ruiz - current*

SERVICE

Georgia State University

- Neuroimaging faculty search committee (2013-2014)
- Chair, Neuroscience Institute Curriculum Committee (2014)
- College of Arts and Sciences Promotion and Tenure Committee (2014-present)
- Chair, Qualifying Exam Committee (2015-present)
- Executive Committee of the Neuroscience Institute

University of Massachusetts

Departmental

- Behavioral Neuroscience Division Head (2012)
- Research Committee (2009-2012)
- Junior Faculty Mentoring (2007/8 and 2008/9)
- Faculty Search Committees (numerous, including two as Chair)
- Faculty Personnel Committee (7 years)
- Honors Coordinator (1998)
- Honors Committee (1995/6, 1996/7, 1997/8)
- Undergraduate Studies Committee (1998/9 and 1999/2000)

Neuroscience and Behavior Graduate Program

- Director (interim), Neuroscience and Behavior Graduate Program (2007/8)
- Graduate Program Director, Neuroscience and Behavior Graduate Program (1999-2005 and 2006/7)
- Executive Committee of NSB Training Grant (2005-current)
- Steering Committee (7 years, including several as Chair)
- Faculty Search Committees, NSB Program Director (2006/7 and 2007/8)
- Comprehensive Exam Committee (2007/8)
- Graduate Admissions Committee (several terms, including current)
- Curriculum Revision Committee (1997/8)
- Colloquium Committee (1994/5, Chair: 1995/6 and 1996/7)

Other University Service

- Samuel Conti Faculty Research Award Selection Committee (current)
- Center for Neuroendocrine Studies, Chair or Co-Chair of Annual Symposium (5 years)
- Vice Chancellor's Committee for the Review of Animal Care (1999/2000)
- Pioneer Valley Life Science Institute Search Committees (2005/6 and 2006/7)
- Mentor, K01 Award to Prof. Elizabeth Bertone, School of Public Health (2005-current)
- Biology Department Faculty Search Committees (1996/7 and 1997/8)

- Neuroscience Focus Group reporting to Life Science Steering Committee (1997/8)
- Baystate Collaborative Biomedical Research Program Grant Reviewer (multiple years)

Service to Discipline

Editorial Board, *Hormones and Behavior* (2013-current)
Editorial Board, *Endocrinology* (2010-current)
NIH Grant Review Panel ZMH1 2015
NIH Grant Review Panel, Dissertations and Fellowships 2010
NIH Grant Review Panel IFCN-D 2007
NIH Grant Review Panel MCDN-6 2003
NIH Grant Review Panel IFCN-1 2002
NSF Grant Review Panel, Integrative Organismal Biology 2006
NSF Pre-proposal Grant Review Panel, Integrative Organismal Biology 2012
Natural Sciences and Engineering Research Council of Canada (outside reviews)
10-Year Comprehensive Review, Dept. Zoology, North Carolina State University, 2005-2006
Workshop on Steroid Hormones (co-organizer of national meeting, 2000)
Organization for the Study of Sex Differences, Council member and Education Committee (2010-present)

Society for Behavioral Neuroendocrinology

- Treasurer and Executive Committee (2013-present)
- Advisory Board (2001-2004 and 2009-2013)
- Program Committee (several years, including as Chair)
- Co-host of Annual Meeting in Amherst, June 26-30, 2002
- Young Investigator Award Selection Committee (several years)
- Nominations Committee

Manuscript reviewing for Journals (in alphabetical order):

Anatomical Record, Biology of Sex Differences, Brain Research, Developmental Brain Research, Developmental Neurobiology, Developmental Neuroscience, Endocrinology, European Journal of Neuroscience, Hormones and Behavior, Human Molecular Genetics, Journal of Neurobiology, Journal of Neuroscience, Journal of Neuroendocrinology, Journal of Comparative Neurology, Muscle and Nerve, Nature, Nature Neuroscience, Neurochemistry International, Neuroscience, Neuroscience Letters, PLoS ONE, Physiology and Behavior, Proceedings of the National Academy of Science (PNAS), Psychological Reviews, Zoological Science.

Reviewer of book proposals for Elsevier, MIT Press, Sinauer.