

CURRICULUM VITAE

Nancy G. Forger
Neuroscience Institute
Petit Science Center
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Positions:

- Director, Neuroscience Institute, Georgia State University (2017-present)
- 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, 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 Graduate 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 Fellowship, 1996-1997

Leadership Positions:

- Treasurer & Executive Board, Organization for the Study of Sex Differences (2018-present)
- Director, Neuroscience Institute, Georgia State University
- President, Atlanta Chapter of the Society for Neuroscience (2015-2018)
- Associate Director, Neuroscience Graduate Program (GSU; 2016-present)
- Treasurer & Executive Board, Society for Behavioral Neuroendocrinology (2012-2016)
- Head, Behavioral Neuroscience Division of the Department of Psychology (UMass; 2011)
- Director, Neuroscience and Behavior (UMass; 2007-2008)
- Graduate Program Director, Neuroscience and Behavior (UMass; 1999-2007)

Affiliations:

- Society for Neuroscience
- Organization for the Study of Sex Differences
- Society for Behavioral Neuroendocrinology

RESEARCH

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

As Principal Investigator

- National Science Foundation: The Role of Parturition in Brain Development
IOS-1557451, 3/2016 - 2/2020, \$658,740
- 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

As Co-PI

- NIH R21: Microbiota and neural circuits controlling social behavior
NIMH, 3/2016 - 2/2019, \$416,625. (PI: De Vries, GSU)
- National Science Foundation, Support of Research Involving Captive Spotted
Hyenas SGER, 12/15/2007 – 5/31/2010, \$200,000 (direct costs). (PI: Glickman,
Univ. California)

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

As Sponsor and Other

- National Science Foundation, Graduate Research Fellowship 6/2016-5/2021, \$138,000
Role: Sponsor. To support the dissertation work of graduate student Laura Cortes.
- National Science Foundation, The co-production of knowledge by reproductive justice advocates and molecular biologists.
NSF SES-1632660, 9/2016-8/2017, \$179,400 (PI: D. Roy, Emory)
Role: Subject and Collaborator. The Forger lab is one of two laboratories that are the focus of this project, which will result in a book and interactive website.
- American Heart Association: Neuronal DNA methyltransferase 1 regulates energy homeostasis and obesity
1/2016-12/2017, \$26,000
Role: Sponsor. To support the dissertation work of graduate student Emily Bruggeman.
- NIH F31: Breeding Status & Delayed Motoneuron Maturation in a Eusocial Mammal; NINDS, 1/2007 – 1/2009, \$53,748.
Role: Sponsor. To support the 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.
Role: Sponsor. To support the dissertation work of graduate student Susan Zup.

Publications

Cortes LR, Cisternas CD, Forger NG (2019) Does *gender* leave an epigenetic imprint on the brain? *Frontiers in Neuroscience*, 13:173.

Castillo-Ruiz A, Mosley M, Jacobs AJ, Hoffiz YC, Forger NG (2018) Birth delivery mode alters perinatal cell death in the mouse brain. *Proc. Natl. Acad. Sci. USA*, 115:11826-11831.

Forger NG, Ruszkowski E, Jacobs A, Wallen K (2018) Effects of sex and prenatal androgen manipulations on Onuf's nucleus of rhesus macaques. *Hormones & Behavior*, 100:39-46.

Castillo-Ruiz A, Mosley M, George AJ, Mussaji LF, Fullerton EF, Ruszkowski EM, Jacobs AJ, Gewirtz AT, Chassaing B, Forger NG (2018) The microbiota influences cell death and microglial colonization in the perinatal mouse brain. *Brain Behav Immun*. 67:218-229.

Forger NG (2018) Past, present and future of epigenetics in brain sexual differentiation. *J Neuroendocrinol*, 30:e12492.

- Mosley M, Shah C, Morse KA, Miloro SA, Holmes MM, Ahern TH, Forger NG (2017) Patterns of cell death in the perinatal mouse forebrain. *J Comp Neurol.* 525:47-64.
- Mosley M, Weathington J, Cortes LR, Bruggeman E, Castillo-Ruiz A, Xue B, Forger NG (2017) Neonatal inhibition of DNA methylation alters cell phenotype in sexually dimorphic regions of the mouse brain. *Endocrinol.* 158:1838-1848.
Editor's Choice; Chosen as "One of the 3 best articles of 2017" by the Endocrine Society which included an invitation to present orally at annual meeting of the Endocrinology Society in March, 2018; Published in "Best of 2017 Special Collection" by the Endocrine Society
(https://academic.oup.com/endocrinesociety/pages/best_of_2017).
- Strahan JA, Walker WH, Montgomery TR, Forger NG (2017) Minocycline causes widespread cell death and increases microglial labeling in the neonatal mouse brain. *Dev Neurobiol,* 77:753-766.
- Zup SL, Forger NG (2017) Hormones and sexual differentiation. *Neuroscience and Biobehavioral Psychology* (C. Byrne, S. Castelnovo, G. Tomalin and J. Williams, eds.), Elsevier, pp1-17.
- McCarthy MM, De Vries GJ, Forger NG (2016) Sexual differentiation of the brain: A fresh look at mode, mechanisms, and meaning. *Hormones, Brain and Behavior* (Pfaff, D., editor), Elsevier, in press.
- Forger NG (2016) Epigenetic mechanisms in sexual differentiation of the brain and behavior. *Phil. Trans. R. Soc. B.* 371:20150114.
- Forger NG, Strahan JA, Castillo-Ruiz A (2016) Cellular and molecular mechanisms of sexual differentiation in the mammalian nervous system. *Frontiers in Neuroendocrinol.* 40:67-86.
- 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.
- Forger NG, de Vries GJ, Breedlove, SM (2015) Sexual differentiation of brain and behavior. In: *Knobil and Neill's Physiology of Reproduction*, 4th edition (Plant & Zeleznik, editors-in- chief), pp 2109-2156.
- 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.* 77:291-298.
- 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, Prevette D, deLapeyriere O, de Bovis B, Wang S, Bartlett P, Oppenheim RW (2003) Cardiotrophin-like cytokine / cytokine-like factor 1 (CLC/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.
- Fenstemaker 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

- Scientific Method in Neuroscience
- Sex Differences in Brain and Behavior
- Behavioral Neuroscience
- Neuroscience Laboratory
- Brain Development and Behavior
- Landmark Papers in Sexual Differentiation
- Cytokines and Neuropeptides
- Homosexuality
- Statistics for the Behavioral Sciences

Graduate

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

PhD Dissertations Directed (last known position in parentheses)

Jun Xu, 2000 (Assistant Professor, Washington State University)
Susan Zup, 2003 (Associate Professor, UMass-Boston)
Dena Jacob, 2008 (Postdoctoral Fellow, Thomas Jefferson University)
Marianne Seney, 2010 (Assistant Professor, University of Pittsburgh)
Elaine Murray, 2011 (Lecturer, University of Ulster, Ireland)
Jill Weathington, 2015 (self employed)
Yarely Davila-Vazquez (current)
Laura Cortes (current)

Postdocs Advised (last known position in parentheses)

Dr. Christine Wagner (Professor and Chair, SUNY Albany)
Dr. Joong-Jean Park (Professor, Korea University College of Medicine)
Dr. Shin-ichi Hisasue (Associate Professor, Sapporo Medical University)
Dr. Greta Rosen (Lecturer, Suffolk University)
Dr. Melissa Holmes (Associate Professor, University of Toronto)
Dr. Todd H. Ahern (Assistant Professor, Quinnipiac University)
Dr. Diane Kelly (Instructor, University of Massachusetts)
Dr. Alexandra Castillo-Ruiz (Georgia State University)
Dr. Carla Cisternas (current)

SERVICE

Georgia State University

Departmental

- Director, Neuroscience Institute (2017-current)
- Director, Neuroscience Dual Degree Program (2016-2018)
- Neuroscience Institute Faculty Search Committee (2016-2017)
- Neuroscience Institute Executive Committee (2015-present)
- Qualifying Exam Committee, Chair (2015, 2016, 2017)
- Promotion and Tenure Document Revision Committee (2015)
- Curriculum and Milestones Committee, Chair (2014)
- Junior Faculty Mentoring (2016-present)

College Level

- College of Arts and Sciences Strategic Planning Process, Graduate Working Group (2017)
- Associate Director, Neuroscience Graduate Program (2016-present)
- Neuroscience Graduate Program Committee (2013-present)
- College of Arts and Sciences Promotion and Tenure Committee (2014-2017)

- Neuroscience Institute Ambassador to Brains and Behavior Program (2013-2017)
- College of Arts and Sciences New Faculty Orientation panelist (2015)
- Neuroimaging Faculty Search Committee (2012-2014)

University of Massachusetts

Department of Psychology

Behavioral Neuroscience Division Head (2011)
 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

Acting Director (2007-2008)
 Graduate Program Director (1999-2005 and 2006-2007)
 Executive Committee of Training Grant (2005-2010)
 Steering Committee (7 years, including several as Chair)
 Faculty Search Committee for NSB Program Director (2006-2007 & 2007-2008)
 Comprehensive Exam Committee (2007-2008)
 Graduate Admissions Committee (several terms)
 Curriculum Revision Committee (1997-1998)
 Colloquium Committee (1994/5, Chair: 1995/6 and 1996/7)

Other University Service

Samuel Conti Faculty Research Award Selection Committee (2011-2012)
 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 (2005-2010)
 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

Atlanta Chapter of the Society for Neuroscience, President (2015-2018)

Editorial Board, Hormones and Behavior (2013-current)
 Editorial Board, Endocrinology (2010-2015)

NIH Grant Review Panel ZRG1 CB-R	2017
Israeli Ministry of Science, Technology and Space, Grant Review	2016
NIH Grant Review Panel ZMH1 ERB-M	2015
NSF Grant Review Panel, IOB	2012
NIH Grant Review Panel, Dissertations & Fellowships	2010

NIH Grant Review Panel IFCN-D 2007
NSF Grant Review Panel, IOB 2006
NIH Grant Review Panel MCDN-6 2003
NIH Grant Review Panel IFCN-1 2002
Natural Sciences and Engineering Research Council of Canada (multiple outside reviews)

10-Year Comprehensive Review, Dept. Zoology, North Carolina State University, 2005-2006

Workshop on Steroid Hormones, Breckenridge Colorado (Co-organizer of National Meeting, 2000)

Society for Behavioral Neuroendocrinology

Treasurer and Executive Committee (2013-2016)

Nominations Committee (2008 and 2016)

Advisory Board (2001-2004 and 2009-2013)

Annual Meeting Program Committee (several years, including as Chair in 2006)

Co-host of Annual Meeting (2002)

Young Investigator Award Selection Committee (several years)

Organization for the Study of Sex Differences

Treasurer and Executive Committee (2018-present)

Council Member, 2010-2015

Program Committee, 2015

Manuscript reviewing for Journals (in alphabetical order):

Anatomical Record, Biology of Sex Differences, Brain Research, Developmental Brain Research, Developmental Neurobiology, Developmental Neuroscience, eNeuro, 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 Communications, Nature Neuroscience, Nature Reviews Neuroscience, Neurochemistry International, Neuroscience, Neuroscience Letters, Philosophical Transactions of the Royal Academy of Sciences, PLOS ONE, Physiology and Behavior, Proceedings of the National Academy of Science (PNAS), Psychological Reviews, Psychoneuroendocrinology, Scientific Reports, Zoological Science.

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