

Curriculum Vitae

Geert J. de Vries

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Positions

- **Professor of Neuroscience**, Neuroscience Institute, Georgia State University, '12 – Present
- **Professor**, Dept. Psychology, University of Massachusetts, Amherst, '95-'12
- **Visiting Scholar**, Dept. Integrative Biology and Physiology, UCLA, '10
- **Associate Professor**, Dept. Psychology, University of Massachusetts, Amherst, '91- 95
- **Assistant Professor**, Dept. of Psychology, University of Massachusetts, Amherst, '87 -'91
- **Lecturer**, Dept. Psychobiology, University of California, Irvine, '87

Administration

At Georgia State University

- **Director** of the Neuroscience Institute, '14 - Present

At the University of Massachusetts

- **Director** of the Center for Neuroendocrine Studies, '01- '12
- **Director** Training Program in Neuroendocrinology, '00-'12
- **Head** of the Behavioral Neuroscience Division of the Department of Psychology, '98-'04

Nationally and Internationally

- **President**, Organization for the Study of Sex Differences (OSSD), '10 – Present (6 year stint, 2 years each for President-Elect, President, Past President)
- **Chair**, 9th World Congress of Neurohypophysial Hormones
- **Chair**, Theme E (Homeostatic and Neuroendocrine Systems), Program Committee, Society for Neuroscience, '08-'10
- **President**, Society for Behavioral Neuroendocrinology, '03-'09 (6 year stint, 2 years each for President-Elect, President, Past President)

Education

- **Postdoctoral Fellow**, '85-'87, Dept. Psychobiology, University of California, Irvine.
- **Ph.D.**, '85, University of Amsterdam, School of Medicine
- **Doktoraal Examen**, '80, Free University, Amsterdam, *cum laude*. Major: Neurobiology, Minor: Biochemistry
- **Kandidaats Examen**, '76, Free University, Amsterdam, *cum laude*. Majors: Biology and Medicine, Minors: Chemistry and Physics

Honors

- **Advisory Board Member**, Institute of Gender and Health, Canadian Institutes for Health Research, '14-present
- **Exceptional Merit Award**, University of Massachusetts, '12
- **Outstanding Research Award**, College of Natural Sciences, University of Massachusetts, '11
- **Distinguished Editorial Panel member**, National Institutes of Health, '09
- **Fellow** of the International Behavioral Neuroscience Society, '00
- **Independent Scientist Award**, NIH, MH01497, '03-'08 and '98-'03
- **Lilly Teaching Fellow**, University of Massachusetts, '92-'93

Affiliations

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

RESEARCH

Research support

Federal Funding

Program Director

- *NIH institutional training grant*, T32 MH020051 (06-10), Training in Neuroendocrinology, \$935,649. Jul '06 -Jun '11.
- *NIH institutional training grant*, T32 MH020051 (01-05), Training in Neuroendocrinology, \$768,675. Jul '00 -Jun '05.

Principal Investigator

- *NIH research grant*, RO1 MH047538 (14-18), The Neural Basis of Sexually Dimorphic Brain Function. \$1,739,247. Jun '09-Jul '15.
- *NSF research grant*, IBN 9421658, Neural Basis of Social Behavior. \$360,000. Aug '08-Jul'11.
- *NIH Independent Scientist Award*, KO2 MH01497-06-10, The Neural Basis of Sexually Dimorphic Brain Function. \$610,900. Jun '03-May '08. (also listed under Honors)
- *NIH research grant*, RO1 MH047538 (09-13), The Neural Basis of Sexually Dimorphic Brain Function (included supplement to fund underrepresented minorities). \$1,365,897. Jun '02-May '07.
- *Subcontract of NIMH grant RO1 MH59268*, Genetic Determinants of Brain Sexual Differentiation, PI: Arthur P. Arnold, UCLA, to Univ. Massachusetts. \$314,623. Jan '99-Dec '02.
- *NIH Independent Scientist Award*, KO2 MH01497-01-05, The Neural Basis of Sexually Dimorphic Brain Function. Projected total costs \$521,653. Jun '98-May '03. (also listed under Honors)
- *NIH research grant*, RO1 MH047538 (04-08), The Neural Basis of Sexually Dimorphic Brain Function, (included supplement to fund underrepresented minorities). \$1,018,151. Mar '95-Apr '01.
- *NSF research grant*, IBN 9421658, Neuropeptide Control of Steroid Hormone Sensitive Functions and Behaviors, \$323,734. Apr '95-Mar '98.
- *NSF supplement to grant*, IBN 9421658, for Research Experience for Undergraduates Students, \$5,000. Summer '97.
- *NIH research grant*, RO1 MH047538 (01-03), Neural Basis of Sexual Differentiation of Brain Function, \$454,544. Mar '91-Feb '95.
- *NSF research grant*, BNS 8809799, Neural Circuitry Mediating Steroid Effects on Behavior, \$240,000. Aug '88-Jul '91.
- *NIH Postdoctoral Fellowship*, MH09470-01, Hormone Effects on Brain Structure and Function. Jul '86-Jun '88. (also mentioned under Honors)

Co-Investigator

- *NIH educational grant*, R25 MH095735-01A1, ION/Teach: The Institute On Neuroscience for High School Students and Teachers, \$543,240. Jul '12-Apr '17, PI: Kyle Frantz.
- *NIH research grant* MH068482-01, Cell Death and Sexual Differentiation, 1,645,413. Jun '09-May '15, PI: Nancy Forger.
- *NIH research grant*, R01 MH068482-01, Cell Death and Sexual Differentiation, 1,645,413. Jun '09-May '14, Research Grant, PI: Nancy Forger.
- *NSF research grant*, IOS-0642050 "Social Control of CNS Morphology in a Eusocial Mammal", \$365,991. August '07- July '11, PI: Nancy Forger.
- *NSF Small Grant for Exploratory Research*, IOS 0809914 (2008-2009) "SGER: Support of research involving captive spotted hyenas" \$200,000. All funds are used to maintain hyena colony at UC Berkeley Campus. Dec 2007-Nov 2009, Resources Grant, PI: Stephen E. Glickman.
- *NIH research grant*, R01 MH068482-01, Cell Death and Sexual Differentiation, \$1,002,121. Apr '04-Mar '08, Research Grant, PI: Nancy Forger.
- *NSF research grant*, IOS-0344312, Sexual Differentiation in Eusocial Mammals, \$402,491. Apr'04-Mar'08, PI: Nancy Forger.
- *NIH instrumentation grant S15 MH50998-01*, with Jerrold S. Meyer, Small Instrument. Grant \$21,446. direct costs, Sep '92-Aug '93.

Sponsor

- *NIH grant F31 MH63603*, Neural Basis of Parental Behavior. \$50,028. Predoctoral grant to Benjamin Rood, Feb '02 –Jan '04.
- *NIH grant F31 MH11686*, Sexual Differentiation of Vasopressin Expression. \$52,962. Predoctoral grant to Tina M. Han, Aug '98-Jul '01.
- *NIH grant F32 HD08392*, Neural Control of Social Behaviors in Prairie Voles. Total cost final year \$81,336. Postdoctoral grant to Joseph S. Lonstein. Dec '97-Nov '00.

Intramural Funds and Foundations

- *Brains and Behavior Seed Grant*, Sexually Dimorphic Effects of Immune Challenge on Development of Social Behavior, \$30,000, Jul '13-Jun '14.
- *Faculty Research Grant*, Neural Basis of Parental Behavior, \$4800, Dec '92-Dec '93.
- *BRSG, RR07048-24*, Role of lineage in determining neurotransmitter content and specific connections of developing neurons, \$5,000, Apr '89-Mar '90.
- *BRSG, RR07048-22*, Neural Basis of Sex Steroid Action on Brain Function and Behavior, \$5,000, Nov '87-Apr '88.
- *Van Houtenfonds and Adriaan Remmert van der Laan Fonds*, both to support publication thesis, Jan '85.
- *Twinning Grant of the European Training Program in Brain and Behavioral Research (TW/84311)*, together with Per Södersten, Karolinska Institutet, Huddinge, Sweden, Jun '84.

Book / Special Issues edited

- World Congress on Neurohypophysial Hormones 2011, GJ de Vries, AH Veenema and CH Brown (eds.) Special Issue of Journal of Neuroendocrinology, Vol. 24 (4), 197pp.
- Translational Topics in Behavioral Neuroendocrinology, GJ de Vries and MM McCarthy (eds.) Special Issue of Hormones and Behavior, Vol. 50 (4), 152 pp.
- Sex Differences in the Brain. Relation between Structure and Function, GJ De Vries, JPC De Bruin, HBM Uylings, MA Corner (eds.) Progress in Brain Res., Vol. 61, Elsevier, Amsterdam (1984), 517pp.

Publications

Papers in Refereed Journals

1. *De Vries GJ, Forger NG. 2015.* Sex differences in the brain: a whole body perspective. Biol Sex Diff 6: 15.
2. Klein SL, Schiebinger L, Stefanick ML, Cahill L, Danska JS, *de Vries GJ*, Kibbe MR, McCarthy MM, Mogil JS, Woodruff TK, Zucker I. **2015.** Opinion: Sex inclusion in basic research drives discovery. Proc Nat Acad Sci USA 112: 5257-5258
3. McCullough LD, *de Vries GJ*, Miller VM, Becker JB, Sandberg KL, McCarthy MM. **2014.** NIH initiative to balance sex of animals in preclinical studies: Generative questions to guide policy implementation and metrics. Biol Sex Diff 5:15.
4. 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. Exp Neurol. 268: 21-29
5. Ghahramani NM, Ngun TC, Chen P.-Y, 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 brain DNA methylome of the mouse brain are late-emerging. Biol Sex Diff 5:8
6. Paul MJ, Terranova JI, Probst CK, Ismail NI, *De Vries GJ*. **2014.** Sexually dimorphic role for vasopressin in the development of social play. Front Behav Neurosci 8: 58.
7. Veenema AH, Bredewold R, De Vries GJ. **2013.** Sex-specific modulation of juvenile social play by vasopressin. Psychoneuroendocrinology 38: 2554-2561.
8. Ahern TH, Krug S, Carr AV, Murray EK, 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 Comp Neurol 521: 2551-2569.

9. Rood BD, Stott RT, You S, Smith CJ, Woodbury ME, *de Vries GJ*. **2013**. Site of origin of and sex differences in the vasopressin innervation of the mouse (*Mus musculus*) brain. J Comp Neurol 521: 2321-2358.
10. Taylor PV, Veenema AH, Paul MJ, Bredewold R, Isaacs S, *De Vries GJ*. **2012**. Sexually dimorphic effects of a prenatal immune challenge on social play and vasopressin expression in juvenile rats. Biol Sex Diff 3:15.
11. *De Vries GJ*, Veenema AH, Brown CH, **2012**. Vasopressin and oxytocin: Keys to understanding neural control of physiology and behavior. J Neuroendocrinol 24:527.
12. McCarthy MM, Arnold AP, Ball GF, Blaustein JD, *De Vries GJ* **2012**. Sex Differences in the Brain: The Not So Inconvenient Truth. J Neurosci 32: 2241-2247.
13. Veenema AH, Bredewold R, *De Vries GJ*, **2012**. Vasopressin regulates social recognition in juvenile and adult rats of both sexes, but in sex- and age-specific ways. Hormones and Behavior 61: 50-56.
14. 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 23: 906-914.
15. Rood BD, *De Vries GJ*. **2011**. Vasopressin innervation of the mouse (*Mus musculus*) brain. J Comp Neurol 519: 2434-2474.
16. Forger NG, *De Vries GJ*. **2010**. Cell Death and the Sexual Differentiation of Behavior: Worms, Flies, and Mammals. Curr Opin Neurobio 20: 776-778.
17. 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. J Neurosci 29: 12815-12823.
18. Murray EK, Hien A, *De Vries GJ*, Forger NG. **2009**. Epigenetic control of sexual differentiation of the BNSTp of mice. Endocrinology 150: 4241-4247.
19. *De Vries GJ*, Södersten P. **2009**. Sex differences in the brain: The relation between structure and function. Horm Behav 55: 589-596.
20. 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.
21. *De Vries GJ*, Jardon D, 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.
22. Rood BD, Murray EK, Laroche J, Yang MK, Blaustein JD, *De Vries GJ*. **2008**. Absence of progesterin receptors alters distribution of vasopressin fibers but not sexual differentiation of vasopressin system in mice. Neuroscience 154: 911-921.
23. Holmes MM, Rosen GJ, Jordan CL, *De Vries GJ*, Goldman BD, Forger NG. **2007**. Social control of brain morphology in a eusocial mammal. Proc Nat Acad Sci USA, 104: 10548-10552.
24. Hayes UL, *De Vries GJ*. **2007**. Role of pregnancy and parturition in induction of maternal behavior in prairie voles (*Microtus ochrogaster*). Hormones and Behavior, 51: 265-272.
25. Rosen GJ, *De Vries GJ*, Goldman SL, Goldman BD, Forger NG. **2007**. Distribution of vasopressin in the brain of the eusocial naked mole-rat. J Comp Neurol, 500: 1093-1105.
26. *De Vries GJ*, McCarthy MM. **2006**. Translational research in Behavioral Neuroendocrinology. Horm Behav 50: 503.
27. 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.
28. *De Vries GJ*, Panzica GC. **2006**. Sexual differentiation of central vasopressin and vasotocin systems in vertebrates: different mechanisms, similar endpoints. Neuroscience 138: 947-955.
29. *De Vries GJ*. **2005**. Sex steroids and sex chromosomes at odds? Endocrinology 146: 3277-3279.
30. Lonstein JS, Rood BD, *De Vries GJ*. **2005**. Unexpected effects of perinatal gonadal hormone manipulations on sexual differentiation of the extrahypothalamic arginine-vasopressin system in prairie voles. Endocrinology 146: 1559-1567.
31. 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 Nat Acad Sci USA 101:13666-13671.
32. *De Vries GJ*. **2004**. Sex differences in adult and developing brains; compensation, compensation, compensation. Endocrinology, 145: 1063-1068.

33. Wagner CK, Xu J, Pfau JL, Quadros PS, *De Vries GJ*, Arnold AP. **2004**. Neonatal mice possessing an Sry transgene show a masculinized pattern of progesterone receptor expression in the brain independent of sex chromosome status. *Endocrinology*, 145: 1046-1049.
34. Lonstein JS, Dominguez JM, Putnam SK, *De Vries GJ*, Hull EM. **2003**. Intracellular preoptic and striatal monoamines in pregnant and lactating rats: possible role in maternal behavior. *Brain Res* 970: 149-158.
35. Markham JA, Jurgens HA, Auger CJ, *De Vries GJ*, Arnold AP, Juraska JM. **2003**. Sex differences in mouse cortical thickness are independent of the complement of sex chromosomes. *Neuroscience* 116: 71-75.
36. Han TM, De Vries GJ. **2003**. Organizational effects of testosterone, estradiol, and dihydrotestosterone on vasopressin mRNA expression in the bed nucleus of the stria terminalis. *J Neurobiol.* 54: 502-510.
37. *De Vries GJ*, Rissman EF, Simerly RB, Yang LY, Scordalakes EM, Auger CJ, Swain A, Lovell-Badge R, Burgoyne PS, Arnold AP. **2002**. A model system for study of sex chromosome effects on sexually dimorphic neural and behavioral traits. *J Neurosci* 22: 9005-9014.
38. Quadros PS, Goldstein AYN, *De Vries GJ*, Wagner CK. **2002**. Regulation of sex differences in progesterone receptor expression in the medial preoptic nucleus of postnatal rats. *J Neuroendocrinol* 14:761-767.
39. Auger CA, De Vries GJ. **2002**. Progesterone receptor immunoreactivity within steroid-responsive vasopressin-immunoreactive cells in the male and female rat brain. *J Neuroend*, 14: 561-567.
40. Quadros PS, Pfau JL, Goldstein AYN, *De Vries GJ*, Wagner CK. **2002**. Sex differences in progesterone receptor expression: A potential mechanism for estradiol-mediated sexual differentiation. *Endocrinology* 143:3727-3739.
41. Quadros PS, Lopez V, *De Vries GJ*, Chung WCJ, Wagner CK. **2002**. Progesterone receptors and the sexual differentiation of the medial preoptic nucleus. *J Neurobiol* 51: 24-32.
42. Lonstein JS, Rood BD, *De Vries GJ*. **2002**. Parental responsiveness is feminized after neonatal castration in virgin male prairie voles, but is not masculinized by perinatal testosterone in virgin females. *Horm Behav* 41: 80-87.
43. Chung WCJ, De Vries GJ, Swaab DF. **2002**. Sexual differentiation of the bed nucleus of the stria terminalis in humans may extend into adulthood *J Neurosci* 22: 1027-1033.
44. Wagner CK, Pfau JL, De Vries GJ, Merchenthaler IJ. **2001**. Sex differences in progesterone receptor immunoreactivity in neonatal mouse brain depend on estrogen receptor alpha expression. *J Neurobiol* 47: 176-182.
45. Lonstein JS, *De Vries GJ*. **2001**. Social influences on parental and nonparental responses toward pups in virgin female prairie voles (*Microtus ochrogaster*). *J Comp Psychol* 115: 53-61.
46. Lonstein JS, *De Vries GJ*. **2000**. Sex differences in the parental behavior of rodents. *Neurosci Biobehav Rev*, 24: 669-686.
47. Lonstein JS, Greco B, *De Vries GJ*, Stern JM, Blaustein JD. **2000**. Maternal behavior stimulates *c-fos* activity with estrogen receptor alpha-containing neurons in lactating rats. *Neuroendocrinology*, 72: 91-101.
48. Lonstein JS, *De Vries GJ*. **2000**. Maternal behaviour stimulates *c-fos* in glutamate decarboxylase-synthesizing neurons of the medial preoptic area, ventral bed nucleus of the stria terminalis, and ventrocaudal periaqueductal gray. *Neuroscience*, 100: 557-568.
49. Lonstein JS, *De Vries GJ*. **2000**. Influence of gonadal hormones on the development of parental behavior in adult virgin prairie voles (*Microtus ochrogaster*). *Behav Brain Res*, 114: 79-87.
50. Delville Y, De Vries GJ, Ferris CF. **2000**. Neural connections of the anterior hypothalamus and agonistic behavior in golden hamsters. *Brain Behav Evol* 55: 53-76.
51. Chung WCJ, Swaab DF, De Vries GJ. **2000**. Apoptosis during sexual differentiation of the bed nucleus of the stria terminalis in the rat brain. *J Neurobiol* 43: 234-243.
52. Lonstein JS, Wagner CK, *De Vries GJ*. **1999**. Comparison of the "nursing" behaviors of maternal virgin and postpartum lactating female rats. *Horm Behav* 36: 242-251.
53. Villalba C, Auger CL, *De Vries GJ*. **1999**. Androstenedione effects on the vasopressin innervation of the rat brain. *Endocrinology* 140: 3383-3386.
54. Jin X, Shearman LP, Weaver DR, Zylka MJ, *De Vries GJ*, Reppert SM. **1999**. A molecular mechanism regulating rhythmic output from the suprachiasmatic circadian clock. *Cell* 96: 57-68.

55. Lonstein JS, *De Vries GJ*. **1999**. Sex differences in the parental behavior of adult virgin prairie voles: independence from gonadal hormones and vasopressin. J Neuroendocrinol 11: 441-449.
56. Han TM, *De Vries GJ*. **1999**. Neurogenesis of galanin cells in the bed nucleus of the stria terminalis and centromedial amygdala: A model for sexual differentiation of neuronal phenotype. J Neurobiol 38: 491-498.
57. Lonstein JS, *De Vries GJ*. **1999**. Comparison of the parental behavior of pairbonded female and male prairie voles (*Microtus ochrogaster*). Physiol Behav 66:33-40.
58. Wagner CK, Nakayama AY, *De Vries GJ*. **1998**. Potential role of maternal progesterone in the sexual differentiation of the brain. Endocrinology 139: 3658-3661.
59. Huang L, *De Vries GJ*, Bittman EL. **1998**. Photoperiod regulates neuronal bromodeoxyuridine labeling in the brain of a seasonally breeding mammal. J Neurobiol 36: 410-420.
60. Delville Y, *De Vries GJ*, Roche JP, Schwartz WJ, and Ferris CF. **1998**. Flank marking behavior and the neural distribution of vasopressin innervation in golden hamsters with suprachiasmatic lesions. Behav Neurosci 112: 1486-1501.
61. *De Vries GJ*, Boyle PA. **1998**. Double duty for sex differences in the brain. Behav Brain Res 92: 205-213.
62. Villalba C, Boyle PA, *De Vries GJ*. **1997**. Effects of the selective serotonin reuptake inhibitor, fluoxetine, on social behaviors in male and female prairie voles (*Microtus ochrogaster*). Horm Behav 32: 184-191.
63. Wersinger SR, Sannen K, Villalba C, Lubahn DB, Rissman EF, *De Vries GJ*. **1997**. Masculine sexual behavior is disrupted in male and female mice lacking a functional estrogen receptor alpha gene. Horm Behav 32: 176-183.
64. Ricciardi KHN, Turcotte JC, *De Vries GJ*, Blaustein JD. **1996**. Efferent projections from the ovarian steroid receptor-containing area of the ventrolateral hypothalamus in female guinea pigs. J Neuroendocrin 8: 673-685.
65. Bittman EL, Jetton AE, Villalba C, *De Vries GJ*. **1996**. Effects of photoperiod and androgen on pituitary function and neuropeptide staining in Siberian hamsters Am J Physiol 271: R64-R72.
66. Al-Shamma HA, *De Vries GJ*. **1996**. Neurogenesis of the sexually dimorphic vasopressin cells of the bed nucleus of the stria terminalis and amygdala of rats. J Neurobiol 29:91-98.
67. Wang ZX, *De Vries GJ*. **1995**. Differences in androgen and estrogen actions on vasopressin mRNA expression in the medial amygdaloid nucleus in male and female rats. J Neuroendocrinol 7:827-831.
68. Ferris CF, Delville Y, Miller MA, Dorsa DM, *De Vries GJ*. **1995**. Distribution of small vasopressinergic neurons in golden hamsters. J Comp Neurol 360:589-598.
69. Tyler CJ, Fite KV, *De Vries GJ*. **1995**. Distribution of GAD-like immunoreactivity in the retina and central visual system of *Rana pipiens* J Comp Neurol 353: 439-450.
70. Wang ZX, Smith W, Major DE, *De Vries GJ*. **1994**. Sex and species differences in the effects of cohabitation on vasopressin messenger RNA expression in the bed nucleus of the stria terminalis in prairie voles (*Microtus ochrogaster*) and meadow voles (*Microtus pennsylvanicus*). Brain Res 650: 212-218.
71. Bamshad M, Novak MA, *De Vries GJ*. **1994**. Cohabitation alters vasopressin innervation and paternal behavior in Prairie voles, *Microtus Ochrogaster*. Physiol Behav, 56:751-758.
72. Zhou L, Blaustein JD, *De Vries GJ*. **1994**. Distribution of androgen receptor immunoreactivity in vasopressin-immunoreactive and oxytocin-immunoreactive neurons in the male rat brain. Endocrinology134: 2622-2627.
73. Wang ZX, Ferris CF, *De Vries GJ*. **1994**. The role of septal vasopressin innervation in paternal behavior in prairie voles (*Microtus ochrogaster*). Proc Nat Acad Sci USA 91: 400-404.
74. *De Vries GJ*, Wang ZX, Bullock NA, Numan S. **1994**. Sex differences in the effects of testosterone and its metabolites on vasopressin messenger RNA levels in the bed nucleus of the stria terminalis of rats. J Neurosci 14: 1789-1794.
75. Finn PD, *De Vries GJ*, Yahr P. **1993**. Efferent projections of the sexually dimorphic area of the gerbil hypothalamus: anterograde identification and retrograde verification in males and females. J Comp Neurol 338: 491-520.
76. Wang ZX, *De Vries GJ*. **1993**. Testosterone effects on paternal behavior and vasopressin immunoreactive projections in prairie voles (*Microtus ochrogaster*). Brain Res 631:156-160.

77. Li HY, Blaustein JD, *De Vries GJ*, Wade GN. **1993**. Estrogen receptor-immunoreactivity in hamster brain: preoptic area, hypothalamus and amygdala. *Brain Res* 631: 304-312.
78. Brot MD, *De Vries GJ*, Dorsa DM. **1993**. Local implants of testosterone metabolites regulate vasopressin mRNA in sexually dimorphic nuclei of the rat brain. *Peptides* 14: 933-941.
79. Wang ZX, Bullock NA, *De Vries GJ*. **1993**. Sexual differentiation of vasopressin projections of the bed nucleus of the stria terminalis and medial amygdaloid nucleus in rats. *Endocrinology*, 132: 2299-2306.
80. Albeck D, Bullock NA, Mars K, Cooper R, Smock T, *De Vries GJ*. **1993**. Antidromic activation of a peptidergic pathway in the limbic system of the male rat. *Brain Res* 606:171-174.
81. Bamshad M, Novak MA, *De Vries GJ*. **1993**. Sex and species differences in the vasopressin innervation of sexually naive and parental prairie voles, *Microtus ochrogaster* and meadow voles, *Microtus Pennsylvanicus*. *J Neuroend* 5: 247-255.
82. Boyd SK, Tyler CJ, *De Vries GJ*. **1992**. Sexual dimorphism in the vasotocin system of the bullfrog (*Rana catesbeiana*). *J Comp Neurol* 325:313-325.
83. Crenshaw BJ, *De Vries GJ*, Yahr PI. **1992**. Vasopressin innervation of sexually dimorphic structures of the gerbil forebrain under various hormonal conditions. *J Comp Neurol* 322: 589-598.
84. Miller MA, *De Vries GJ*, Al-Shamma HA, Dorsa DM. **1992**. Decline of vasopressin immunoreactivity and messenger RNA levels in the bed nucleus of the stria terminalis following castration. *J Neurosci* 12: 2881-2887.
85. Al-Shamma HA, *De Vries GJ*. **1991**. Fiber outgrowth from fetal vasopressin neurons of the suprachiasmatic nucleus, bed nucleus of the stria terminalis and medial amygdaloid nucleus, transplanted into adult Brattleboro rats. *Dev Brain Res* 64: 200-204.
86. Bittman EL, Bartness TJ, Goldman BD, *De Vries GJ*. **1991**. Suprachiasmatic and paraventricular control of photoperiodism in Siberian hamsters. *Amer J Physiol* 260 R90-R101.
87. *De Vries GJ*, Al-Shamma, HA. **1990**. Sex differences in hormone sensitivity of vasopressin pathways in the rat brain. *J Neurobiol* 21: 686-693.
88. Ferris EL, Gold L, *De Vries GJ*, Potegal M. **1990**. Evidence for a functional and anatomical relationship between the lateral septum and the hypothalamus in the control of flank marking behavior in golden hamsters. *J Comp Neurol*. 293: 476-485.
89. *De Vries GJ*. **1990**. Sex differences in neurotransmitters in the brain. *J Neuroendocrinol* 2: 1-13.
90. *De Vries GJ*, Gonzales CL, Yahr P. **1988**. Afferent connections of the sexually dimorphic area of the hypothalamus of male and female gerbils. *J Comp Neurol* 271: 91-105.
91. *De Vries GJ*, Duetz W, Van Heerikhuizen J, Buijs RM, Vreeburg JTM. **1986**. Androgen and estrogen influences on the vasopressinergic innervation of the rat brain. *Brain Res* 399: 296-302.
92. Södersten P, Boer GJ, *De Vries GJ*, Buijs RM, Melin P. **1986**. Effects of vasopressin on female sexual behavior in male rats. *Neurosci Lett* 69: 188-191.
93. Buijs RM, Pevet P, Pool CW, *De Vries GJ*, Canguilhem B, Vivien-Roels B. **1986**. Seasonal variation in vasopressin innervation in the brain of the European hamsters. *Brain Res* 371: 193-196.
94. Fliers E, *De Vries GJ*, Swaab DF. **1985**. Changes with aging in the vasopressinergic and oxytocinergic innervation of the brain. *Brain Res* 348: 1-8.
95. Caffé AR, Van Leeuwen FW, Buijs RM, *De Vries GJ*, Geffard M. **1985**. Coexistence of vasopressin, neurophysin and noradrenaline immunoreactivity in medium-sized cells of the locus coeruleus and subcoeruleus of the rat. *Brain Res* 338: 160-164.
96. Södersten P, *De Vries GJ*, Buijs RM, Melin P. **1985**. A daily rhythm in behavioural vasopressin sensitivity and brain vasopressin concentrations. *Neurosci Lett* 58: 37-41.
97. *De Vries GJ*, Buijs RM, Van Leeuwen FW, Caffé AR, Swaab DF. **1985**. The vasopressinergic innervation of the brain in normal and castrated rats. *J Comp Neurol* 233: 236-254.
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100. *De Vries GJ*, Buijs RM. **1983**. The origin of the vasopressinergic and oxytocinergic innervation of the rat brain; with special reference to the lateral septum. *Brain Res* 273: 307-317.
101. *De Vries GJ*, Best W, Sluiter AA. **1983**. The influence of androgens on the development of a sex difference in the vasopressinergic innervation of the rat lateral septum. *Dev Brain Res* 8: 377-380.

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103. *De Vries GJ*, Buijs RM, Swaab DF. **1981**. Ontogeny of the vasopressinergic neurons of the suprachiasmatic nucleus and their extrahypothalamic projections in the rat brain - presence of a sex difference in the lateral septum. Brain Res 218: 67-78.
104. Boer GJ, Buijs RM, Swaab DF, *De Vries GJ*. **1980**. Vasopressin and the developing rat brain. Peptides 1, Suppl 1: 203-209.
105. Van Minnen J, *De Vries GJ*. **1980**. Effects of extirpation of one lateral lobe of the pond snail *Lymnea stagnalis* on the neurosecretory activities of the canopy cell and the droplet cells in the remaining lobe. Proc Kon Ned Akad Wet, Series C, 83: 187-193.

Chapters in Books and Book Series

106. Forger NG, *De Vries GJ*, Breedlove SM. **2015**. Sexual Differentiation of Brain and Behavior. Knobil and Neill's Physiology of Reproduction, Fourth Edition. Amsterdam, Elsevier, pp. 2109-2155.
107. *De Vries GJ*, Fields CT, Peters NV, Whylings J, Paul MJ. **2013**. Sensitive Periods for Hormonal Programming of the Brain. Current Topics in Behavioral Neuroscience 16: 79-10.
108. Miller V, *De Vries G*, Arnold A. **2010**. Sex and gender matters in drug development and life cycle management. Global Forum 2: 82-83.
109. *De Vries GJ*. **2010**. The neural basis of gender. In: George Koob, Michel Le Moal and Richard Thompson (Editors-in-Chief) Atkins-Regan E (Section Editor) Encyclopedia of Behavioral Neuroscience pp. 320-326
110. McCarthy MM, *De Vries GJ*, and Forger NG. **2009**. Sexual Differentiation of the Brain: Mode, Mechanisms, and Meaning. In: DW Pfaff, AP Arnold, AM Etgen, SE Fahrback, RT Rubin (eds.) Hormones, Brain and Behavior, 2nd edition, Vol 3. San Diego: Academic Press; 2009. pp. 1707-1744.
111. *De Vries GJ*. **2008**. Sex differences in vasopressin and oxytocin innervation of the brain. In: Neumann ID, Landgraf R (eds.) Progress in Brain Research, Vol 170. pp. 17-27.
112. *De Vries GJ*. **2006**. Sex Differences in Neurotransmitter Innervation; Vasopressin as an Example. In: Abel Lajtha (Editor-in-Chief), Blaustein JD (Section Editor), Handbook of Neurochemistry and Molecular Neurobiology, Behavioral Neurochemistry and Neuroendocrinology, 3rd Edition, Springer Verlag, pp. 487-512.
113. Arnold AP, Rissman EF, *De Vries GJ*. **2003**. Two Perspectives on the Origin of Sex Differences in the Brain. Ann NY Acad Sci 1007: 177-188.
114. *De Vries GJ*, Simerly RB. **2002**. Anatomy, Development, and Function of Sexually Dimorphic Neural Circuits in the Mammalian Brain. In: Hormones, Brain, and Behavior. Volume IV. Development of Hormone-Dependent Neuronal Systems. (DW Pfaff, AP Arnold, AM Etgen, SE Fahrback, RL Moss, and RT Rubin, eds). Academic Press, San Diego, pp. 137-191.
115. Wang Z, Young LJ, *De Vries GJ*, Insel TR. **1998**. Voles and vasopressin: a review of molecular, cellular and behavioral studies of pair bonding and paternal behaviors. In: Urban IJA, Burbach, JPH, De Wied D (eds.) Prog Brain Res 119: 483-499.
116. *De Vries GJ*, Miller MA. **1998**. Anatomy and function of extrahypothalamic vasopressin systems in the brain. In: Urban IJA, Burbach, JPH, De Wied D (eds.) Progress in Brain Research, 119: 3-20.
117. *De Vries GJ*, Villalba C. **1997**. Brain sexual dimorphism and sex differences in parental and other social behaviors. In: Carter CS, Kirkpatrick B, Lederhendler II (eds.) The Integrative Neurobiology of Affiliation. Ann NY Acad Sci pp. 273-286.
118. Ferris CF, *De Vries GJ*. **1997**. Ethological models for examining the neurobiology of aggressive and affiliative behaviors. In: Stoff DM, Breiling J, Maser JD (eds.) Handbook of Antisocial Behavior, John Wiley and Sons. pp. 255-268.
119. *De Vries GJ*. **1995**. Studying neurotransmitter systems to understand development and function of sex differences in the brain; the case of vasopressin. In: Micevych P, and Hammer RP (eds.) Neurobiological Effects of Sex Steroid Hormones Cambridge University Press. pp. 254-278.
120. *De Vries GJ*, Al-Shamma HA, Zhou L. **1994**. The sexually dimorphic vasopressin innervation of the brain as a model for steroid modulation of neuropeptide transmission. In: Luine VN and Harding CF (eds.) Hormonal Restructuring of the Adult Brain. Basic and Clinical Perspectives Ann NY Acad Sci 743: 95-120.

121. *De Vries GJ, Crenshaw BD, Al-Shamma HA. 1992.* Gonadal steroid modulation of vasopressin pathways. In: Pedersen C et al. (eds.) *Oxytocin in Maternal, Sexual, and Social Behaviors.* Ann NY Acad Sci 652: 387-396.
122. *De Vries GJ, Al-Shamma SA, Goodness TP, Brewer J. 1990.* Gradual effects of steroids on brain function and vasopressin pathways. In: Balthazart TJ (ed.), *Hormones, Brain and Behavior. Comparative Physiology*, Karger Berlin, Vol. 8. pp 180-190.
123. Van Leeuwen FW, *De Vries GJ. 1985.* Vasopressin and oxytocin binding sites in the rat brain, kidney and mammary gland as demonstrated by light microscopic autoradiography. In: Kobayashi et al. (eds.) *Neurosecretion and Biology of Neuropeptides*, Japan Scientific Society Press, Tokyo and Springer Verlag, Berlin. pp. 287-294.
124. Buijs RM, *De Vries GJ, Van Leeuwen FW. 1985.* The distribution and synaptic release of oxytocin in the central nervous system. In: J.A. Amico (ed.) *Oxytocin: Clinical and Laboratory Aspects.* Elsevier, Amsterdam.
125. *De Vries GJ, Buijs RM, Van Leeuwen FW. 1984.* Sex differences in vasopressin and other neurotransmitter systems in the brain. Prog Brain Res 61: 185-203.
126. Pevet P, *De Vries GJ. 1984.* Pijnappelklier, daglengte en voortplanting in zoogdieren. Vakl voor Biol 64: 65-69.
127. Van Leeuwen FW, *De Vries GJ. 1983.* Enkephalin-glia interaction and its consequence for vasopressin and oxytocin release from the rat neural lobe. Prog Brain Res 60: 343-351.
128. Buijs RM, *De Vries GJ, Van Leeuwen FW, Swaab DF. 1983.* Vasopressin and oxytocin: distribution and putative functions in the brain. Prog Brain Res 60: 115-122.
129. *De Vries GJ, Best W. 1983.* Gonadal steroids and the development of a sex difference in the vasopressinergic innervation of the brain. In: Endroszi et al. (eds.) *Neuropeptides, Neurotransmitters and Regulation of Endocrine Processes*, Akademiai Kiado, Budapest. pp. 135-143.

Letters / Invited book reviews

130. McCullough LD, McCarthy MM, *de Vries GJ. 2014.* NIH policy: Status quo is also costly. *Nature* 510: 340
131. *De Vries GJ. 2014.* "Oxytocin, Vasopressin and Related Peptides in the Regulation of Behavior" edited by Elena Choleris, Donald W. Pfaff, and Martin Kavaliers. ix + 393 pp. Cambridge, UK: Cambridge University Press. 2013. \$110.00 (cloth), \$88.00 (ebook). Am J Human Biol, In Press.
132. *De Vries GJ. 1994.* "Hormones and behavior" Review of Behavioral Endocrinology, edited by Jill B. Becker, S. Marc Breedlove, and David Crews. Contemp Psychol 39: 752-754.

Invited Presentations

- *8th International Meeting Steroids and Nervous System*, Torino, Italy, Feb 15, '15
- *North Carolina State Univ*, Dept of Biological Sciences, Raleigh, NC, Dec 4, '14
- *Experimental Design: Integrating Sex & Gender into the Rodent Model*, Gendered Innovations Workshop, Stanford Univ, Sep 19, '14
- *Gender-Specific Medicine & Women's Health Symposium*, Laura W. Bush Institute for Women's Health, Texas Tech University Health Sciences Center, Lubbock, TX, Oct 24, '14
- *8th Conference of Hormones, Brain, and Behavior*, Liege, Belgium, Jun 25, '14
- *Tulane Univ.*, Neuroscience Program, New Orleans, LA, Oct 31, '13
- *10th World Congress on Neurohypophysial Hormones*, Bristol, UK, Jul 18, '13
- *Emory Univ.*, Frontiers in Neuroscience Seminar Series, Atlanta, GA, Mar 8, '13
- *Emory Univ.*, Department of Physiology, Atlanta, GA, Nov 8, '12
- *Genes, Drugs and Gender*, Univ. Sassari, Sassari, It, Sep 23, '11
- *Epigenetics, Behavior and Reproduction*, Univ. Virginia, Charlottesville, VA, Apr 22, '11
- *Univ. Maryland School of Medicine*, Dept of Pharmacology, Baltimore, MD, Apr 12, '11
- *Netherlands Institute for Brain Research*, Amsterdam, Jun 18, '10
- *International Conference of Endocrinology*, Kyoto, Japan, Mar 27, '10
- *RIKEN Brain Institute*, Wako City, Saitama, Japan, Mar 25, '10
- *UCLA*, LNE Program, Dept of Integrative Biology and Physiology, Feb 5, '10
- *7th Symposium Neuroendocrinology, 'De Neuroendocrinologie van Eten en Drinken'*, Utrecht, The Netherlands, Nov 11, '09

- *Workshop on Sex Differences Caused by Direct Sex Chromosome Effects vs. Hormones: Designing and Interpreting Studies from Mouse and Human Models. 13th Meeting of the Society for Behavioral Neuroendocrinology*, East Lansing, MI, Jun 24, '09.
- *7th Conference of Hormones, Brain, and Behavior*, Torino, Italy, Feb 13, '09
- *13th Meeting of the European NeuroEndocrine Association*, Antalya, Turkey, Oct 18, '08
- *Sapporo Medical Univ.*, Deptment of Urology, September 13, '08
- *BIRCWH Program*, Harvard Univ., Brigham and Women's Hospital, Boston, MA, May 15, '08
- *Animal Behavior Month*, Dept Biological Sciences, Miami Univ., Oxford, OH, Apr17, '08
- *'08 Workshop on Steroid Hormones and Brain Function*, Key Largo, FL, Apr 11, '08
- *Plenary Lecture at 7th World Congress on Neurohypophysial Hormones*, Regensburg, Germany, Sep 19, '07
- *Annual Meeting of the International Academy of Sex Research*, Vancouver, CA, Aug 9, '07
- *12th European Neuroendocrine Association*, Athens, Greece, Oct 23, '06
- *88th Annual Meeting of the Endocrine Society*, Endo '06, Boston, MA, June 25, '06
- *36th Annual Conference of Behavior Genetics Association*, Storrs, CT, June 23, '06
- *Michigan State Univ.*, Neuroscience Program, April 21, '06
- *31st Annual Meeting of the American Society for Andrology*, Chicago, IL, April 11, '06
- *Emory Univ.*, Frontiers in Neuroscience Seminar Series, Mar 9, '06
- *Karolinska Institutet*, Postgraduate Course in Neuroendocrinology, Stockholm, Nov 7, '05
- *Harvard Univ.*, Radcliffe Institute for Advanced Study Exploratory Seminar; Understanding the Genetics of Sex Effects in Clinical Medicine, Cambridge, MA, Sep 19, '05
- *National Science Foundation Workshop*, Rodents as Integrative Models in Animal Behavior, Arlington, VA, Aug 14, '05
- *15th International Congress on Comparative Endocrinology*, Boston, May 27, '05
- *3rd Intl Meeting on Steroids and Nervous System*, Villa Gualino, Torino, IT, Feb 17, '05
- *Concordia Univ.*, Ctr for Studies in Behavioral Neurobiology, Montreal, CA, Nov 18, '04
- *Northwestern Univ.*, Ctr for Reproductive Science, Evanston, IL, Nov 8, '04
- *Harvard Univ.*, Brigham and Women's Hospital, Boston, MA, Oct 13, '04
- *Café Scientifique*, Organized by "New Scientist" Red Line Bar, Boston, MA, Sep 28, '04
- *Symposium on Neural Basis of Social Behavior*, XIX International Congress of Zoology, Beijing, Aug 23, '04
- *Workshop on Steroid Hormones*, Breckenridge, CO, Mar 31, '04
- *Fifth Annual Meeting on Sex and Gene Expression*, Society for Women's Health Research, Winston Salem, NC, Mar 26, '04
- *Cornell Univ.*, Dept Neurobiology & Behavior, Ithaca, NY, Mar 11, '04
- *Dalhousie Univ.*, Halifax, NS, Aug 7, '03
- *American Neuroendocrine Society*, Workshop on the Neuroendocrinology of Development, Philadelphia, Jun 16, '03
- *Netherlands Institute for Brain Research*, Jan 16, '03
- *Skidmore College*, Biology Dept, Saratoga Springs, NY, Apr 4, '02
- *Workshop on Steroid Hormones*, Breckenridge, CO, Mar 22, '02
- *Baker Research Seminar, Florida State Univ.*, Tallahassee, FL, Nov 8, '01, *Florida State Univ.*, Tallahassee, FL, Nov 7, '01
- *Univ. California, Berkeley*, Neuroscience Program, Berkeley, CA, Aug 31, '01
- *American Neuroendocrine Society Meeting, Neuroendocrine Workshop on Hormones, Mood and Behavior*, Breckenridge, CO, Jun 17, '01
- *Winter Conference on Brain Research*, Steamboat Springs, CO, Jan 21, '01
- *Arizona State Univ.*, Dept Biology, Tempe, AZ, Dec 1, '00
- *Shriver Center for Mental Retardation*, Waltham, MA, Nov 28, '00.
- *Tufts Univ.*, Dept of Biomedical Sciences, North Grafton, MA, Sep 7, '00
- *Emory Univ.*, 1st Colloquium of the Ctr for Behavioral Neuroscience, Atlanta, GA, Feb 15, '00
- *Univ. Connecticut*, Dept Physiology and Neuroscience, Storrs, CT, Nov 10, '99.
- *Univ. Maryland*, Dept Biology, College Park, MD, Nov 18, '99.
- *Univ. Virginia*, Neuroscience Program, Charlottesville, VA, Sep 21, '99

- *Third Conference of Society for Behavioral Neuroendocrinology, Presidential Symposium*, Charlottesville, VA, Jun 28, '99
- *51^o Congresso Nazionale della Societa Italiana de Antomia*. Torino, Sep 28- Oct 2, '97
- *Neural Systems and Behavior Course*, Marine Biological Laboratory, Woods Hole MA. Aug 14, '96
- *Behavioral and Cognitive Neuroscience Summerschool*, Groningen, The Netherlands, Jul 1-5, '96
- *Conference on Reproductive Behavior*, Montreal, Canada, Jun 15-18, '96
- *Univ. Pennsylvania*, Institute for Neurological Sciences, Philadelphia, PA Jan. 24, '96
- *N.Y. Acad. Sci. Conf. on 'The Integrative Neurobiology of Affiliation.'* March 14-17, Washington, DC, '96
- *Loyola Univ., College of Medicine Dept. Cell Biol, Neurobiol. & Anat.*, Maywood, IL, Sept. 25, '95
- *Boston College*, Dept Psychology, Chestnut Hill, MA, Mar, '95
- *Winter Conference on Brain Research*, Steamboat Springs, CO, Jan 21-28, '95
- *Harvard Medical School*, New England Regional Primate Research Center, Southboro, MA, Sep 16, '94
- *Conference in Reproductive Behavior*, Workshop on Neuroanatomical Techniques, Lehigh Univ., June 18-22, '94
- *Neuropeptide Summer Conference*, Martha's Vineyard, June 5-9, '94
- *European Winter Conference for Brain Research*, Aime la Plagne, France, Mar 17, '94
- *Netherlands Institute for Brain Research*, Amsterdam, NL, Mar 11, '94
- *Univ. Massachusetts, Medical School*, Dept Psychiatry, Worcester, MA, Feb 3, '94
- *Rutgers Univ.*, Institute of Animal Behavior, Newark, NJ, Oct 27, '93
- *5th Annual Convention of the American Psychological Society*, Invited symposium on the Proximate Causes of Parental Care, Chicago, IL, Jun 28, '93
- *Boston Area Behavioral Neuroscience Study Group*, Key note address, Holy Cross College, Worcester, MA, Apr 15, '93
- *Lilly Research Laboratories*, Lilly Corporate Center, Indianapolis, Nov 6, '92
- *Great Lake Fishery Committee Workshop on Sexual Differentiation*, Chicago, Ill, Mar 29, '92
- *Yale Univ.*, Dept. Obstetrics and Gynecology, New Haven, CT, Nov 1, '91
- *N.Y. Acad. Sci. Conf. on 'Oxytocin in Maternal, Sexual and Social Behaviors'*. May 20-22, Arlington, VA, '91
- *Lehigh Univ.*, Dept. Psychol, Bethlehem, PA, Jan 25, '91
- *Univ. Kentucky*, Dept. Anatomy, Lexington, KY, Mar 14, '91
- *H.F. Guggenheim Foundation Workshop on "The Neural Basis of Aggressive Behaviors; Appraisal of our Current Insights and Methods"*, Seville, Spain, Nov 12-16, '90
- *Michigan State Univ.*, Neuroscience Program, East Lansing, MI, Oct. 4, '90
- *Univ. Connecticut*, Dept. Physiol. and Neuoscience, Storrs, CT, Oct. 3, '90
- *22nd Meeting of European Neuroscience Association*, Stockholm, Sweden, Sept. 11, '90
- *Georgia State Univ.*, Dept. of Biology, Atlanta, GA, Jan 12, '89
- *International Symposium on Hormones, Brain and Development*, Liege, Belgium, Aug 17, '89
- *21st Int. Meeting of the Soc. Develop. Psychobiol.*, Symp. on Steroid Effects on Brain Dev., Toronto, Nov. 12, '88
- *Boston Univ.*, Dept. of Biology, Boston, MA, Mar 30, '88
- *Smith College*, Dept. of Psychology, Northampton, MA, Feb 11, '88
- *California Institute of Technology*, Div. of Technology, Pasadena, Jun 2, '87
- *Northwestern Univ.*, Dept. of Neurobiology and Physiology, Evanston, IL, Apr 16, '87
- *Rutgers Univ.*, Dept. of Biological Sciences, Piscataway, NJ, Mar 25, '87
- *Univ. Maryland*, Dept. of Zoology, College Park, Mar 24, '87
- *Univ. Massachusetts*, Dept. of Psychology, Amherst, Mar 9, '87
- *Oregon State Univ.*, Dept. of Zoology, Corvallis, Mar 5, '87
- *Univ. California at Berkeley*, Dept. of Psychology, Mar 4, '87
- *National Institute of Mental Health*, Bethesda, MD, Jan 29, '87
- *Univ. California at Los Angeles*, Depts of Anatomy and Psychology, Apr 18, '86
- *Rutgers Univ.*, Institute of Animal Behavior, Newark, NJ, Feb 25, '86
- *Loma Linda Univ.*, Dept. of Physiology, Loma Linda, CA, Oct 3, '85
- *Cornell Univ.*, Depts. of Veterinary Medicine and Psychology, Ithaca, NY, Oct 17, '84

- Rockefeller Univ., New York, Oct 2, '84
- *Univ. Groningen*, Dept. of Zoology, The Netherlands, Feb 21, '84
- *13th International Summer School of Brain Research*, Amsterdam, The Netherlands, Aug 23, '83
- *Erasmus U.*, Dept. of Endocrinology, Growth and Development, Rotterdam, The Netherlands, Jul 21, '83
- *Univ. California at Los Angeles*, Dept. of Anatomy, Mar 25, '83
- *The Salk Institute*, La Jolla, California, Mar 24, '83
- *International Symposium on Sexual Differentiation*, Carmel, CA, Mar 24, '83
- *Congress on Integrative Neurohumoral Mechanisms*, Budapest, Hungary, Mar 25, '82
- *Univ. Bristol*, Dept. of Pharmacology, UK, Feb 2, '82
- *Dutch Society for Endocrinology*, Utrecht, The Netherlands, Oct 18, '80

TEACHING AND MENTORING

Postdocs advised

- Zuoxin Wang, Jun '91-Nov '93, *Professor*, Florida State U.
- Christine Wagner, Jun '96-Sep '97, *Professor*, U Albany.
- Joseph Lonstein, Jun '97-'00, *Professor*, Michigan State U (Winner Frank A. Beach Award).
- Unja Hayes, Jun '03-'05, *Health Research and Technology Advisor*, United State Agency International Development.
- Thomas Mennella, Jan '06-Aug '08, *Associate Professor*, Bay Path Coll, Springfield, MA.
- Alexa F. Veenema, Jan '09- Jul '10, *Assistant Professor*, Boston Coll.
- Matthew P. Paul, Jun '10 – Aug '14, *Assistant Professorship*, U Buffalo.
- Nafissa Ismail, Jan '11 – June '12, *Assistant Professor*, U Ottawa.
- Mary C. Holder, August '14 – Present.

Ph.D. dissertations directed

- Bradley J. Crenshaw, Dec '92, *Neuropsychologist, Adjunct Assistant Professor*, U Massachusetts.
- Maryam Bamshad, Mar '93, *Assistant Professor*, Lehman Coll (after postdoc at Georgia State U).
- Hussien A. Al-Shamma, Apr '93, *Senior Director of Pharmacology*, Arena Pharmaceuticals, San Diego, California Research Scientist, (after postdoc at UCLA, VP of Research, Maxia Pharmaceuticals, San Diego, CA).
- Thomas P. Goodness, Sep '94, *Assistant Director*, Intellectual Property Development & Technology Transfer Office, U Kentucky, (after postdoc and Law School at Univ. Kentucky).
- Catherine J. Auger, Mar '99, *Assistant Professor*, U Wisconsin (after postdoc at Johns Hopkins).
- Constanza Villalba, Oct '99, *Medical Writer and Editor*, Health Dialog, Inc. Boston, MA.
- Patricia A. Boyle, Apr '00, *Assistant Professor*, Rush U Medical Center in Chicago (after postdoc at Brown Univ. and assistant professorship at Boston U
- Tina M. Han, Oct '01, *Molecular Applications Scientist* at Ibis Biosciences/Abbott Molecular (after postdoc at U California, Berkeley).
- Wilson C.J. Chung, July, '02, *Assistant Professor*, Kent State Univ., Kent, OH.
- Benjamin D. Rood, Dec '09, *Postdoctoral Researcher*, Harvard U, Cambridge, MA
- Elaine K. Murray, Mar '10, *Lecturer*, U Ulster, Belfast, Northern Ireland.
- Christopher T Fields, Current graduate student.
- Nicole V. Peters, Current graduate student.
- Jack Whylings, Current graduate student.

Courses taught

At Georgia State University

- Graduate Courses: NEUR 8710 -Topics in Neuroscience, Neuroimmunology, Fall '12; NEUR 8790 - Concepts in Neurobiology, Sexual Differentiation of the Brain – a Whole Body Perspective, Fall 2013; NEUR 8790 – Topics in Neuroscience, Neuroimmunology, Spring '14.

At the University of Massachusetts

- Graduate Courses: Core Class of the Neuroscience and Behavior Program on Anatomy, Physiology, and Behavior (includes lab)*; Neuroanatomical Basis of Behavior (includes lab)
 - Graduate/Undergraduate Seminars: On variety of topics, for example: Neuroimmunology, Stress, Epigenetics & Behavior*; Epigenetic Control of Brain Development*; Cell Death and Differentiation*; Landmark Papers in Sexual Differentiation*; Landmark Papers in Neuroendocrinology, Neuropeptides and Cytokines
 - Undergraduate Lecture Courses: Behavioral Neuroscience*; Emotion and Motivation
 - Undergraduate Laboratory Courses: Laboratory in Physiological Psychology; Laboratory in Neuroanatomical Methods
 - Workshop on Grant writing*; independent study/honors thesis supervision; modules in ethics courses
- *) Courses taught in the past ten years.

At Smith College

- Undergraduate Seminar: Psychobiology

At UC Irvine

- Undergraduate lecture courses: Physiological Basis of Behavior; Animal Behavior.

ADMINISTRATION AND SERVICE

Interdepartmental Administration at the University of Massachusetts

- **Director** of Center for Neuroendocrine Studies, '01- '12 (also listed under Administration).
- **Director** Training Program in Neuroendocrinology, '00-'12 (also listed under Administration).
- **Head** of Behavioral Neuroscience Division of the Department of Psychology, '98-'04 (also listed under Administration).

Membership in:

- Executive Committee of Department of Psychology, '98-'04.
- Steering Committee of Graduate Program in Neuroscience and Behavior, '98-00 and 02-'06.
- Steering Committee of Graduate Program in Molecular and Cellular Biology, '92-95.
- Steering Committee UMass Genomics Facility, '03-'06.

Interdepartmental Administration at Georgia State University

- **Director** of the Brains and Behavior Area of Focus, '14 - Present
- Senior Leadership Committee of the Center for Behavioral Neuroscience, '12 – Present.

Departmental Service at the University of Massachusetts

- **Chair** of faculty Search Committees '04-'05, '02-03.

Membership in:

- Personnel Committee, '07-'09, '98-'99, '95-'97, '92-'94.
- Undergraduate Advising Staff, '91-'93.
- Graduate Admissions Committee for Division 1, '90-'93.
- Graduate Affairs, '89-'90.
- Research Trust Fund Committee, '88-'89 and '90-91.

Departmental Service at Georgia State University

- **Director** Neuroscience Institute, '14-Present
- Neuroscience Institute Graduate Program Council, '12 –'14
- Individual Faculty Promotion and Tenure Ct, '12 and '13.

Interdepartmental Service at the University of Massachusetts

- **Chair** NSB Colloquium Committee, '87-'90, '98-'99.
- **Chair** NSB Graduate Student Admissions Committee, '91-'94.

Membership in:

- Neuroscience and Behavior Graduate Program Admissions Committee, '07-'08.
- IACUC committee '04-'06.
- Research Council SBS '04-'05.
- NSB Curriculum Committee, '98-'99.
- Senate Committee on Teaching Evaluation and Improvement, '88-'91.
- NSB Curriculum Committee, '88.

Interdepartmental Service at Georgia State University

- Grants and Contracts Officer III Search Ct, '12.

National and International Service

- **President**, Organization for the Study of Sex Differences (OSSD), '10 – Present.*
- **Chair**, 9th World Congress of Neurohypophysial Hormones.*
- **Chair**, Theme E (Homeostatic and Neuroendocrine Systems), Program Committee, Society for Neuroscience, '08-'10.*
- **President**, Society for Behavioral Neuroendocrinology, '03-'09.*
- **Chair**, of Inaugural Nominations Committee of Organization for the Study of Sex Differences (OSSD), 05-'06.
- *Ad hoc* Reviewer for National Institute of Mental Health Board of Scientific Counselors (BSC), Feb 3-4, '15.
- International Advisory Committee for the 10th World Congress on Neurohypophysial Hormones, '12-'13.
- National Institute of Mental Health, Research Domain Criteria Project Workshop on Systems for Social Processes, Feb 26-28, '12.
- Program Committee, 6th annual meeting of OSSD, '11-'12.
- *Ad hoc* Reviewer for National Institute of Mental Health Board of Scientific Counselors (BSC), May 9-10, '11.
- Program Committee, Society for Neuroscience, '07-'10.
- International Advisory Committee for 8th World Congress on Neurohypophysial Hormones, '08-'09.
- *Ad hoc* Reviewer for National Institute of Mental Health Board of Scientific Counselors (BSC), Nov 7-8, '06.
- Inaugural OSSD Conference Program Committee, 05-'06.
- Program Committee, Sex and Gene Expression (SAGE VI) Meeting, Society for Women's Health Research, '04-'05.
- Conference Program Committee, Society for Behavioral Neuroendocrinology, '97-'99.
- Steering Committee North East Undergraduate/Graduate Research Organization for Neuroscience (N.E.U.R.O.N.), '97-'99.
- International Behavioral Neuroscience Society, Public Relations Committee, '94-'96.
* also listed under Administration.

Meetings organized and chaired

- Presidential Symposium on Sex Differences in the Brain, a Whole Body Perspective, Apr 24, 2014.
- 9th World Congress on Neurohypophysial Hormones, Boston, MA, Jul 27-30, '11 (also listed under Administration).
- 7th Conference of Hormones, Brain, and Behavior, Torino, Italy, Feb 13, '09.
- 1st, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th and 11th Annual Symposium of the Center for Neuroendocrine Studies, Amherst, MA, Oct 9, '98, Oct 6, '00, Oct 5, '01, Oct 4, '02, Oct 3, '03, Oct 8, '04, Oct 7, '05, Oct 6, '06, Oct 5, '07, Oct 10, '08, and Oct 22, '10.
- Symposium on Neural Control of Social Behavior. Annual Conference of the Society for Behavioral Neuroendocrinology, Groningen, The Netherlands, Jul 9, '08.

- Presidential Symposium on “Sex Differences in the Brain; When Different becomes the Same”, Annual Conference of the Society for Behavioral Neuroendocrinology, Pittsburgh, PA, Jun 18, '06.
- Symposium on ‘Neural Control of Social Behaviours,’ at the XIXth International Congress of Zoology, Beijing, Aug 23, '04.
- 6th Annual Meeting of the Society for Behavioral Neuroendocrinology, Amherst, MA, Jun 26-29, '02 (local host together with Nancy Forger).
- Session on ‘Four Pillars of Sexual Differentiation,’ Workshop on Steroid Hormones, Breckenridge, CO, Mar 27, '02.
- Symposium on Cellular and Molecular Mechanisms of Sexual Differentiation of the Brain. Annual Conference of the Society for Behavioral Neuroendocrinology, Tempe, AZ, Jun 29, '01.
- 13th International Summer School of Brain Research on Sex Differences in the Brain. Relation between Structure and Function. Amsterdam, NL, Aug 22-26, '83.

Grant review

- Neuroendocrinology, Neuroimmunology, Rhythms and Sleep (NNRS) Study Section Member, *National Institutes of Health*. (Panel convenes three times per year.) 07/01/12 – Present .
- RO1 / RO3 / R23 Grant Review, NNRS panel, *National Institutes of Health*, 10/5-6/11
- Training Grant (T32) review panel, NIMH ZMH 1 ERB-S (01), *National Institutes of Health*, 10/20/10
- Training Grant (T32) review panel, NIMH ZMH 1 ERB C-01, *National Institutes of Health*, 11/16/09 and 12/11/09
- Review panel, Modulation Panel, Neural Systems Cluster, *National Science Foundation*, 10/5-7/09
- Distinguished Editorial Panel, ZRG1 ETTN-A (58), *National Institutes of Health*, 07/20/09 – 07/21/09
- RO1 Grant Review, Special Emphasis Panel, ZRG1 IFCN-E (04) M, *National Institutes of Health*, 07/16/09 – 07/17/09
- Special Emphasis Panel ZRG1 F02A, F31 and F32 Grant Review, *National Institutes of Health* 5/02, 11/02, 3/03, 6/03, 10/03, 3/04, 6/04, 11/05, 6/05, 07/06, 11/06, 10/07, and 3/08
- Neurogenetics/Genomics Scientific Review Group, *National Institutes of Health*, July 11, 2007
- Review of Specialized Centers of Interdisciplinary Research (SCOR) On Sex and Gender Factors Affecting Women's Health, *National Institutes of Health*, March 22-23, 07
- Review panel, 10745BNS05, *National Science Foundation*, 10/10-12/2005
- RO1 Grant Review, Special Emphasis Panel, NIMH, ZRG1 IFCN-D 03, 08/03/06
- RO1 Grant Review, Special Emphasis Panel, NIMH, ZRG1 IFCN-D 03, 10/07/05
- RO1 Grant Review, ZRG1 IFCN-D 02, *National Institutes of Health*, 03/15/2005
- RO1 Grant Review, ZRG1 IFCN-D 02, and Panel Chair, *National Institutes of Health*, 11/16/04
- RO1, Special Emphasis Panel, NMB (S), *National Institutes of Health*, 10/18/04-10/19/04.
- RO1 Grant Review, ZRG1 IFCNA NIH, *National Institutes of Health*, 06/11/04
- PO1 Grant Review, ZHD1 DSR-A CS 1, NICHD , *National Institutes of Health*, 06/30/04
- Review panel, 10745BNS04, *National Science Foundation*, 04/21-23/04
- MDCN-6 panel, RO1 Grant Review, *National Institutes of Health*, 06/19/03
- Special Emphasis Panel, RO1 Grant Review, *National Institutes of Health* Mar 7, 02.
- Special Emphasis Panel, F31 and F32 Grant Review, *National Institutes of Health* Mar 5, 02.
- Special Emphasis Panel, T32 Grant Review, *National Institutes of Health* Nov 20-21, '00.
- IFCN1 Study Section, *National Institute of Health*, Feb 9-10, '00.
- Special Emphasis Panel, Program Project Grant Site Visit, *National Institutes of Health* Jul 26-27, '99.
- Special Emphasis Panel, T32 Grant Review, *National Institutes of Health* Dec 2, '98.
- Special Emphasis Panel, *NIH/NINDS Site Visit*, Jun 19, '97.
- Neuroscience and Behavior Study Section, *National Institutes of Health*, Jun 13-14, '96.
- Mentored Awardees Meeting, *National Institutes of Health*, Jun 23, '94.
- Advisory Panel, Brain and Behavioral Sciences, *National Science Foundation*, May '90.
- External Grant Review for the *Medical Research Council of Canada*.
- External Grant Review for the *National Science Foundation*.

Papers/Books/Conference Proposal Review

- *Editorial Board*
Hormones and Behavior, '98 – Present
Endocrinology, '00-'03
- *Referee for*
Annual Review of Psychology, Behavioral Neuroscience, Biological Psychiatry, Brain Research, Brain Research Bulletin, Comparative Biochemistry and Physiology, Experimental Brain Research, Endocrinology, Hormones and Behavior, Journal of Chemical Neuroanatomy, Journal of Comparative Neurology, Journal of Neurobiology, Journal of Neuroendocrinology, Journal of Neuroscience, Molecular and Cellular Endocrinology, Nature, Nature Neuroscience Reviews, Neuroendocrinology, Neuropsychopharmacology, Peptides, Physiology and Behavior, Proceedings of the National Academy of Sciences, U.S.A.
- *Book proposal reviews for*
Elsevier Publishers, Chapman & Hall Publishers, West Educational Publishing, Harper Collins Publishers, Allyn & Bacon Publishers, Appleton & Lange.
- *Conference proposals reviewed for*
N.Y. Academy of Sciences, National Science Foundation