#### Eric P. Widmaier, Ph.D.

#### **ADDRESS:**

Dept. of Biology, 5 Cummington St., Boston University, Boston, MA 02215

Tel: 617-353-5563 widmaier@bu.edu

www.bu.edu/biology/faculty/widmaier

## **EDUCATION AND PROFESSIONAL APPOINTMENTS:**

2000	Professor of Biology, Boston University
1994	Associate Professor of Biology with tenure, Boston University
1988	Assistant Professor of Biology, Boston University
1986-88	Post-doctoral fellow, The Salk Institute (Advisor: Wylie Vale), La Jolla, CA
1984-86	Post-doctoral fellow (Advisor: Peter Hall), The Worcester Foundation for
	Experimental Biology, Shrewsbury, MA
1979-84	Ph.D. (Thesis advisor: Mary Dallman), Endocrinology, Univ. California, San Francisco
1975-79	Honors BA/MS, Biological Sciences, Northwestern University, Evanston, IL

#### **PROFESSIONAL ACTIVITIES:**

## Federal Advisory and Review Panels

NIH Study Section (ICP) 2002, 2003 NSF Advisory Panel (IAB) 2002

Ad-hoc Reviewer: National Science Foundation (Neuroendocrinology Division; Integrative Animal Biology Division 1992, 1994, 1998, 2000, 2004, 2005, 2007, 2008, 2010); Veteran's Administration (Endocrinology Board, ad-hoc, 1994, 1996); Minerva Fellowship Foundation (Germany/Israel) 2012

## **Editorial Board Member**

Endocrine (1999-2010)

Journal of Experimental Zoology (1997-2007)

Endocrinology (1992-2001)

Neuroendocrinology (1997-2001)

American Journal of Physiology (1992-94; 1994-96)

## **Society Memberships**

The Obesity Society (2009-2010)
The Endocrine Society (1985-2008)
The American Physiological Society (1989-2003)
Boston Obesity and Nutrition Research Center (1990-2000)
The American Neuroendocrinology Society (1998-2000)
The American Diabetes Association (1989-94)

## **HONORS:**

Metcalf Award for Excellence in Teaching, Boston University 2007 Faculty of 1000 Biology, 2005

Alumni Hall of Fame, Massapequa High Schools, NY, 2001

Gitner Award for Excellence in Teaching, College of Arts and Sciences, Boston University, 1999 American Library Association Choice Award for Outstanding Academic Book, 1999

Honorary member, Golden Key Honor Society 1993

Departmental Highest Honors, Northwestern University 1979

# SCIENTIFIC PUBLICATIONS IN PEER-REVIEWED JOURNALS, REVIEW ARTICLES, AND BOOK CHAPTERS (~100 abstracts not included):

- 1. Lynes MD, Narisawa S, Millán JL and **Widmaier EP**. 2011 Interactions between CD36 and global intestinal alkaline phosphatase in mouse small intestine and effects of high-fat diet. *Amer J Physiol- Regul Integr Comp Physiol* 301:R1738-1747.
- 2. Lynes MD and Widmaier EP. 2011 Involvement of CD36 and intestinal alkaline phosphatases in fatty acid transport in enterocytes, and the response to a high-fat diet. *Life Sci* 88:384-391. (*Review*)
- 3. Allen LC, Turmelle AS, **Widmaier EP**, Hristov NI, McCracken GF, and Kunz TH. 2011 Resiliency to Anthropogenic Disturbance in the Brazilian Free-tailed Bat: Comparing Roost-type Variation in Physiological Stress. *Conservation Biol* 25:374-381.
- 4. Reeder DM and **Widmaier EP**. 2009 Hormone analysis in bats. *In*: Kunz TH and Parsons S, eds., Ecological and Behavioral Methods for the Study of Bats. 2<sup>nd</sup> edition, The Johns Hopkins University Press. (*Book chapter*)
- 5. Richardson, CS, Heeren T, **Widmaier EP**, and Kunz TH. 2009 Macro and micro-geographic variation in metabolism and hormone correlates in the big brown bat (*Eptesicus fuscus*). *Physiol Biochem Zool* 82:798-811.
- 6. Schulz LC, **Widmaier EP**, Qui J and Roberts RM. 2009 Effect of leptin on mouse trophoblast giant cells. *Biol Reprod* 80:415-424.
- 7. Townsend KL, Lorenzi ML, and **Widmaier EP**. 2008 High-fat diet-induced changes in body mass and hypothalamic gene expression in wild-type and leptin-deficient mice. *Endocrine* 33:176-188
- 8. Townsend KL, Kunz TH and **Widmaier EP**. 2008 Changes in body mass, plasma leptin, and mRNA levels of leptin receptor isoforms during the premigration/prehibernation period in *Myotis lucifugus*. *J Comp Physiol B* 178(2):217-23.
- 9. Schulz LC, Townsend K, Kunz TH and **Widmaier EP.** 2007 Inhibition of trophoblast invasiveness in vitro by immunoneutralization of leptin in the bat, *Myotis lucifugus* (Chiroptera). *Gen Comp Endo* 150:59-65.
- 10. Bruder ED, Lee JJ, **Widmaier EP**, and Raff H. 2007 Microarray and real-time PCR analysis of adrenal gland gene expression in the 7-day-old rat: effects of hypoxia from birth. *Physiol Gen* 29:193-200.
- 11. Reeder DM, Raff H, Kunz TH, and **Widmaier EP**. 2006 Characterization of pituitary-adrenocortical activity in the Malayan flying fox (*Pteropus vampyrus*). *J Comp Physiol B* 176:512-519.
- 12. Reeder DM, Kosteczko NS, Kunz TH and **Widmaier EP**. 2006 The hormonal and behavioral response to group formation, seasonal changes and restraint stress in the highly social Malayan flying fox (*Pteropus vampyrus*) and the less social little golden-mantled flying fox (*P. pumilus*) (Chiroptera: Pteropodidae). *Horm Behav* 49:484-500.
- 13. Schulz LC and **Widmaier EP**. 2006 Leptin receptors. In: Henson MC and Castracane VD, eds., Leptin. Endocrinology Update Series, Springer Publishing Co., pp 11-31 (*Book chapter*)
- 14. Lee JJ and **Widmaier EP**. 2005 Gene array analysis of the effects of chronic adrenocorticotropic hormone *in vivo* on immature rat adrenal glands. *J Ster Biochem Mol Biol* 96:31-44.
- 15. Schulz LC and **Widmaier EP**. 2004 The effect of leptin on mouse trophoblast cell invasion. *Biol Reprod*, 71:1963-7.
- 16. Jeong H-K, Sakihara S, **Widmaier EP**, and Majzoub JA. 2004 Impaired leptin expression and abnormal response to fasting in corticotropin-releasing hormone-deficient mice. *Endocrinology* 145:3174-3181.
- 17. Reeder D, Kunz TH, and **Widmaier EP.** 2004 Pituitary-adrenocortical activity in captive male *Pteropus hypomelanus* in established breeding groups. *J Expt Zool Part A Comp Exp Biol* 301:682-690.

- 18. Lee J, Eisenberg PI, Papadopoulos V, Wang J, and **Widmaier EP**. 2004 Developmental changes in adrenal steroidogenesis and in expression of proteins associated with steroidogenesis in the postnatal rat. *Endocrinology* 145:2165-2173.
- 19. Reeder DM, Kosteczko NS, Kunz TH, and **Widmaier EP**. 2004 Changes in baseline and stress-induced glucocorticoid levels during the active period in free-ranging male and female little brown myotis, *Myotis lucifugus* (Chiroptera: Vespertilionidae). *Gen Comp Endo* 136:260-269.
- 20. Zhao J, Townsend K, Schulz LC, Kunz TH, Li C, and **Widmaier EP**. 2004 Leptin receptor expression increases in placenta, but not hypothalamus, during gestation in *Mus musculus* and *Myotis lucifugus*. *Placenta* 25:712-722.
- 21. Raff H, Lee JJ, Oaks M, **Widmaier EP**, and Engeland W. 2004 Basal and ACTH-stimulated corticosterone in the neonatal rat exposed to hypoxia from birth: modulation by chemical sympathectomy. *Endocrinology* 145:79-86.
- 22. Zhao J, Kunz TH, Tumba N, Schulz L, Li C, Reeves M, and **Widmaier EP**. 2003 Comparative analysis of placental leptin expression in mammals. *Am J Physiol Regul Integr Comp Physiol* 285:R438-R446.
- 23. Raff H, Hong JJ, Oaks MK, and **Widmaier EP**. 2003 Adrenocortical responses to ACTH in the neonatal rat: the effect of hypoxia from birth on corticosterone, StAR, and PBR. *Am J Physiol Regul Integr Comp Physiol* 284:R78-R85.
- 24. Kronfeld-Schor, N, Zhao, J, **Widmaier, EP,** Silvia, B A, Mathews, P, Zimmerman, S, and Kunz, T H. 2001 Placental contribution to hyperleptinemia in pregnant bats. *Endocrine* 14:225-233.
- 25. Kronfeld-Schor N, Richardson C., Silvia BA, Kunz TH, and **Widmaier EP** 2000 Dissociation of leptin secretion and adiposity during prehibernatory fattening in little brown bats. *Am J Physiol Regul Integr Comp Physiol* 279:R1277-R1281.
- 26. Kronfeld-Schor N, Zhao J, Silvia BA, Bicer E, Mathews P, Urban R, Zimmerman S, Kunz TH, and **Widmaier EP** 2000 Steroid-dependent up-regulation of adipose leptin secretion *in vitro* during pregnancy in mice. *Biol Reprod* 63:274-280.
- 27. Jeong K-H, Jacobson L, Pacak K, **Widmaier EP**, Goldstein DS and Majzoub JA. 2000 Impaired basal and restraint-induced epinephrine secretion in corticotropin-releasing hormone-deficient mice. *Endocrinology* 141:1142-1150.
- 28. Jeong K-H, Jacobson L, **Widmaier EP**, and Majzoub JA. 1999 Normal suppression of the reproductive axis following stress in corticotropin-releasing hormone-deficient mice. *Endocrinology* 140:1702-1708.
- 29. Brake P, Arai M, As-Sanie S, Jefcoate C, and **Widmaier EP** 1999 Developmental expression and regulation of adrenocortical cytochrome P4501B1 in the rat. *Endocrinology* 140:1672-1680.
- 30. Zilz A, Li H, Castello R, Papadopoulos V, and **Widmaier EP** 1999 Developmental expression of the peripheral-type benzodiazepine receptor and ACTH-responsiveness in neonatal rats. *Endocrinology* 140:859-864.
- 31. Kunz TH, Bicer E, Hood WR, Axtell MJ, Harrington WR, Silvia BA, and **Widmaier EP**. 1998 Plasma leptin decreases during lactation in insectivorous bats. *J Comp Physiol B* 169:61-66.
- 32. Papadopoulos V, **Widmaier EP**, Amri H, Zilz A, Li H, Culty M, Castello R, Philip GH, Sridaran R, and Drieu K 1998 *In vivo* studies on the role of the peripheral benzodiazepine receptor (PBR) in steroidogenesis. *Endocrine Res* 24:479-487. (*Review*)
- 33. Matthys LA, Castello R, Zilz AV, and **Widmaier EP**. 1998 Differential sensitivity of adrenocortical cells to ACTH, but not stress, in two sources of outbred Sprague-Dawley rats. *Neuroendocrinology* 67:403-411.
- 34. Matthys LA and **Widmaier EP** 1998 Fatty acids inhibit adrenocorticotropin-induced adrenal steroidogenesis. *Horm Met Res* 30:80-83.
- 35. **Widmaier EP**, Long JK, Cadigan B, Gurgel S, and Kunz TH 1997 Leptin, corticotropin releasing-hormone (CRH), and neuropeptide Y (NPY) in free-ranging pregnant bats. *Endocrine* 7:145-151.
- 36. **Widmaier EP** 1997 Fatty acid regulation of endocrine activity. *In*: Mostofsky D and Yehuda S, eds., *Handbook of Essential Fatty Acid Biology: Biochemistry, Physiology, and Behavioral Neurobiology.* Humana Press Inc., NJ, pp115-135. (*Book chapter*)

- 37. **Widmaier EP**, Gornstein ER, Hennessey JL, Bloss JM, Greenberg JA, and Kunz TH 1996 High plasma cholesterol, but low triglycerides and plaque-free arteries, in Mexican free-tailed bats. *Am J Physiol Regul Integr Comp Physiol* 271:R1101-R1106.
- 38. **Widmaier EP**, Margenthaler J, and Sarel I 1995 Regulation of pituitary-adrenocortical activity by free fatty acids *in vivo* and *in vitro*. *Prost Leuk Ess Fatty Acids* 52:179-183.
- 39. Sarel I and **Widmaier EP** 1995 Stimulation of steroidogenesis in cultured rat adrenocortical cells by unsaturated fatty acids. *Am J Physiol Regul Integr Comp Physiol* 268:R1484-R1490.
- 40. Nagaya M, Arai M and **Widmaier EP** 1995 Ontogeny of immunoreactive and bioactive microsomal steroidogenic enzymes during adrenocortical development in rats. *Mol Cell Endocrinol* 114:27-34.
- 41. **Widmaier EP,** Harmer T, Sulak A and Kunz TH 1994 Further characterization of the pitiuitary-adrenocortical responses to stress in Chiroptera. *J Exp Zool* 269:442-449.
- 42. Nagaya M and **Widmaier EP** 1993 ACTH and stress accelerate maturation of adrenocortical function in neonatal rats. *Endocrine* 1:247-252.
- 43. Nagaya M and **Widmaier EP** 1993 Twenty-four hour profiles of glucose, corticosterone, and ACTH during the first postnatal day in rats. *Biol Neonate* 64:261-268.
- 44. **Widmaier EP** and Kunz TF 1993 Basal, diurnal and stress-induced levels of glucose and glucocorticoids in captive bats. *J Exp Zool* 265:533-540.
- 45. Arai M and **Widmaier EP** 1993 Steroidogenesis in isolated adrenocortical cells during development in rats. *Mol Cell Endocrinol* 92:91-97.
- 46. **Widmaier EP**, Rosen K and Abbott B 1992 Free fatty acids activate the hypothalamic-pituitary-adrenocortical axis in rats. *Endocrinology* 131:2313-2318.
- 47. **Widmaier EP** 1992 Metabolic feedback in mammalian endocrine systems. *Horm Metab Res* 24:147-153. (*Review*)
- 48. Arai M and **Widmaier EP** 1991 Activation of the pituitary-adrenocortical axis of day-old rats by insulin-induced hypoglycemia. *Endocrinology* 129:1505-1512.
- 49. **Widmaier EP**, Shah PS and Lee G 1991 Interactions between oxytocin, glucagon and glucose in normal and streptozotocin-induced diabetic rats. *Reg Peptides* 34:235-249.
- 50. **Widmaier EP** 1991 Endocrine control of glucose homeostasis in mammals: food for thought. *Mol Cell Endocrinol* 75:C1-C6. (*Review*)
- 51. **Widmaier EP** 1990 Glucose homeostasis and the hypothalamic-pituitary-adrenocortical axis during development in the rat. *Am J Physiol Endo Met* 259:E601-E613. (*Review*)
- Widmaier EP 1990 Changes in responsiveness of the hypothalamic-pituitary-adrenocortical axis to 2-deoxy-D-glucose in developing rats. *Endocrinology* 126:3116-3123.
- 53. Papadopoulos V, **Widmaier EP**, and Hall PF 1990 The role of calmodulin in the responses to adrenocorticotropin of plasma membranes from adrenal cells. *Endocrinology* 126:2465-2473.
- 54. **Widmaier EP** 1989 Development in rats of the brain-pituitary-adrenal response to hypoglycemia *in vivo* and *in vitro*. *Am J Physiol Endo Met* 257:E757-E763.
- 55. Plotsky PM, Cunningham Jr ET, and **Widmaier EP** 1989 Catecholaminergic modulation of corticotropin-releasing factor and adrenocorticotropin secretion. *Endocrine Rev* 10:437-458. (*Review*)
- 56. **Widmaier EP**, Lim AT and Vale W 1989 Secretion of corticotropin-releasing factor from cultured rat hypothalamic cells: effects of catecholamines. *Endocrinology* 124:583-590.
- 57. **Widmaier EP**, Plotsky PM, Sutton S and Vale WW 1988 Regulation of corticotropin-releasing factor secretion in vitro by glucose. *Am J Physiol Endo Met* 255:E287-E292.
- 58. **Widmaier EP** and Hall PF 1987 Calmodulin-binding proteins in plasma membranes of adrenocortical cells. *Endocrinology* 121:914-923.
- 59. **Widmaier EP**, Iida S and Hall PF 1987 The effect of polymyxin B on steroidogenesis from adrenocortical cells. *Endocrinology* 121:290-297.
- 60. Iida S, **Widmaier EP** and Hall PF 1987 The influence of plasma membrane cholesterol on the response of adrenal cells to ACTH. *Endocrinology* 120:801-808.

- 61. **Widmaier EP**, Osawa S and Hall PF 1986 Phosphorylation of three proteins in the plasma membrane of Y-1 adrenal cells by a membrane-bound cyclic AMP dependent protein kinase. *Endocrinology* 118:701-708.
- 62. Iida S, **Widmaier EP** and Hall PF 1986 The phosphatidylinositide-Ca<sup>2+</sup> hypothesis does not apply to the steroidogenic action of corticotropin. *Biochem J* 236:53-59.
- 63. **Widmaier EP** and Hall PF 1985 Protein kinase C in adrenal cells: possible role in regulation of steroid synthesis. *Mol Cell Endocrinol* 43:181-188.
- 64. **Widmaier EP** and Dallman MF 1984 The effects of corticotropin-releasing factor on adrenocorticotropin secretion from perifused pituitaries in vitro: rapid inhibition by glucocorticoids. *Endocrinology* 115:2368-2374.
- 65. Johnson LK, Longenecker JP, Baxter JD, Dallman MF, **Widmaier EP**, and Eberhardt NL 1982 Glucocorticoid action: a mechanism involving nuclear and non-nuclear pathways. *Brit J Dermat* 107:6
- 66. **Widmaier EP** and Campbell CS 1981 The interaction of estradiol and daylength in modifying serum prolactin secretion in female hamsters. *Endocrinology* 108:371.
- 67. **Widmaier EP** and Campbell CS 1980 Interaction of estradiol and photoperiod on activity patterns in the female hamster. *Physiol Behav* 24:923.

#### **GENBANK SUBMISSIONS:**

- 1. Townsend KL, **Widmaier EP**. 2007 Partial mRNA sequence for *Myotis lucifugus* PIAS3 (protein inhibitor of activated STAT3) from cDNA. Accession # EU044719
- 2. Townsend KL, Widmaier EP. 2007 Partial mRNA sequence for *Myotis lucifugus* adiponectin from cDNA. Accession # EU044718
- 3. Schulz L, Townsend K, and **Widmaier EP.** 2004 *Myotis lucifugus* leptin receptor isoform-a mRNA. Accession # AY736326
- 4. Schulz L, Townsend K, and **Widmaier EP**. 2004 *Myotis lucifugus* leptin receptor long form. Accession # AY728075
- 5. Hong JJ and **Widmaier EP**. 2002 Rattus norvegicus adrenocorticotropic hormone receptor MC-2 mRNA. Accession # AF547168
- 6. Zhao J, Li C, Sorenson M, Kunz TH, and **Widmaier EP.** 2001 *Myotis lucifugus* leptin receptor. Accession # AY057101
- 7. **Widmaier EP**, Reeves M, Sorenson M, Kunz TH, and Li C. 2001 *Myotis lucifugus* leptin. Accession # AY055474

#### **TEXTBOOKS:**

**Widmaier EP**, Raff H, and Strang K. *Vander's Human Physiology: The Mechanisms of Body Function*, 9<sup>th</sup> through 14th editions, McGraw-Hill Publishers, 2003, 2005, 2007, 2011, 2013, 2016. Translations and foreign editions: Chinese, French, Korean, Italian, others.

Brooker R, **Widmaier EP**, Graham LK, and Stiling P. *Biology*. McGraw-Hill Publishers, 1<sup>st</sup> through 4th editions: 2007, 2010, 2013, 2016.

Brooker R, **Widmaier EP**, Graham LK, and Stiling P. *Principles of Biology*. 1<sup>st</sup> edition. McGraw-Hill Publishers, 2014.

## LABORATORY TEACHING MANUALS

Seliga A and **Widmaier EP** *Physiology Laboratory Manual*, 14th edition, McGraw-Hill Higher Education, 2011.

Seliga A and **Widmaier EP** *Physiology Laboratory Manual*, 13th edition, McGraw-Hill Higher Education, 2010.

**Widmaier EP,** Seliga A and Yang J. *Physiology Laboratory Manual*, 12th edition, McGraw-Hill Higher Education, 2009.

Cook PB and **Widmaier EP**. *Physiology Laboratory Manual*, 10<sup>th</sup> through 11<sup>th</sup> editions, McGraw-Hill Higher Education, 2006-2008.

**Widmaier EP** *Physiology Laboratory Manual*, 8<sup>th</sup> through 9<sup>th</sup> editions, Pearson Custom Publishing (2003-2005)

Erskine M and **Widmaier EP**, *Physiology Laboratory Manual* 5<sup>th</sup> through 7<sup>th</sup> editions, Pearson Custom Publishing, 2000-2002.

#### **SCIENCE TRADEBOOKS:**

Widmaier, EP: The Stuff of Life: Profiles of the Molecules That Make us Tick. Publisher: Henry Holt and Co., NY. 2002.

**Widmaier, EP**: Why Geese Don't Get Obese (and we do): How Evolution's Strategies for Survival Affect Our Everyday Lives. Publisher: W H Freeman and Co., NY. 1998. Awarded "Choice" award, 1999, for outstanding academic book by the American Library Association.

#### LAY PRESS PUBLICATIONS AND EDITORIALS:

Widmaier EP 1999 The cost of evolution. Northwestern University Magazine

Widmaier EP 1998 The evolution of obesity. Bostonia

Widmaier EP 1996 So you think this is the Age of Stress? *Psychology Today* 29:41-42.

Widmaier EP 1995 Free fatty acids: more than a source of ATP. Endocrine News 20:4.

## **RESEARCH FUNDING:**

Princinal	Investigator	Grants
1 I IIICIPAI	1111 CSUZATOI	Grants

Principal inv	estigator Grants
2005-2011	National Science Foundation, IBN 0446057 "Effects of leptin and its mechanisms of
	action on mammalian trophoblast cells." \$450,000 total costs
2006-2008	Oak Ridge Institute for Science and Education, U.S. Army Engineer and Research and
	Development Center. "Assessing stress in the endangered <i>Myotis sodalis</i> using fecal
	cortisol assays." \$100,000 total costs (6/01/06-12/31/08)
2002-2005	National Science Foundation, IBN 0131846 "Regulation of leptin synthesis and secretion
	in pregnant mammals." \$424,781 total costs
2002-2005	National Science Foundation, IBN 0131846 supplemental: Three REU Supplemental
	Awards between 2002-2005, \$18,000
2002-2004	National Science Foundation, IBN013846 Supplemental Award, \$53,881
1999-2004	National Institutes of Health, RO1 DK55793, "Benzodiazepine receptor and adrenal
	development." \$991,423 total costs
1999-2002	National Science Foundation, IBN 9875871, "Leptin and reproduction in free-
	ranging bats." \$200,000 total costs
1999-2000	National Science Foundation, Four REU supplements to IBN 9875871, \$20,000
1996-1999	National Science Foundation: "Regulatory roles of fatty acids in rat adrenal cortex."
	\$213,000 total costs.
1989-1994	National Institutes of Health, RO1 DK41263 "Control of Stress Responses in Rats by
	Energy Substrates." \$525,514 total costs.
1993	NIH DK41263-05S Competitive Supplement to DK41263-05, \$17,640
1991	Seed Grant, Boston University, \$3885
1990	Supplemental award to RO1 DK41263-02, \$3630
1986-1988	National Institutes of Health, RO1-DK07563 "The Role of Calmodulin in the Action of
	ACTH." \$51,000 total costs.

Principal Investigator on graduate student or postdoctoral fellow awards to my laboratory		
2005-2007	National Science Foundation, IOB 0507914. Doctoral Dissertation Improvement	
	Grant (to K. Townsend, PhD candidate). Total costs: \$12,000	
2004-2007	National Institutes of Health, "Effect of leptin on trophoblast invasiveness." Total	
	costs: \$161,181 (Postdoctoral NRSA to L. Schulz)	
2001-2004	National Institutes of Health, F32 HD41305, "Integrating Social Processes, Stress and	
	Reproduction." Total costs: \$161,181 (Postdoctoral NRSA to D. Reeder)	
2004	The Endocrine Society. Summer research fellowship to R. Trevino,	
	undergraduate at BU, \$4000	
2001	The Endocrine Society. Summer research fellowship to M. Reeves,	
	undergraduate at BU, \$4000	
1992	The Endocrine Society. Summer research fellowship to M. Arai, PhD candidate, \$3000	

# Co-PI or contributor to research grants

2004-2010	National Institutes of Health, R01-DK65089 (PI: D. Tolan, Boston University) "Metabolic
	Pathways and Defects in Fructose Metabolism"
2004-2007	National Science Foundation, EID040418, "Ecological influences on rabies infections
	in bats." Annual direct costs: \$123,475. (Widmaier, co-investigator, 0.5 summer month
	effort; G. McCracken, University of Tennessee, PI)
2003-2007	National Institutes of Health, RO1-DK54685, "Perinatal hypoxia: adrenocortical-
	metabolic adaptations." Annual direct costs: \$176,000 (5% effort; H. Raff, PI)

## **Educational Grants (Co-PI)**

1994-99	Howard Hughes Medical Institute Undergraduate Program in Biology Education
	\$1,200,000 (G. Jacobson, PI)
1992-97	Howard Hughes Medical Institute Undergraduate Program in Biology
	Education, \$1,000,000 (R. Tamarin, PI)

**Miscellaneous**: Contributor on two funded graduate student training grants (I. Callard, PI; D. Tolan, PI); Contributer on two National Science Foundation REU Site Awards (T. Kunz, PI)

#### **RESEARCH INTERESTS:**

Control of feeding behavior, energy balance, and the role of leptin in reproduction Control of brain/pituitary/adrenal activity
Chronic stress in free-ranging mammals

#### **COURSES TAUGHT AT BOSTON UNIVERSITY:**

Systems Physiology (BI 315), 1989-present; annual enrollment ~550 Comparative Physiology (BI 412/612), 1989-1999, annual enrollment ~45 General Endocrinology (BI 425/625), taught three times since 1989; enrollment 40-45

## MENTORED STUDENTS AND POSTDOCTORAL FELLOWS:

Postdoctoral (5): N. Kronfeld-Schor, D. Reeder, L. Schulz, E. Pride, C. Richardson

**Ph.D.** (8): First Reader: M. Arai, M. Nagaya, I. Sarel, K-H. Jeong, J. Lee, K. Townsend, J. Zhao, M. Lynes (2<sup>nd</sup> or Additional Reader on approximately 26 other theses)

MA (Research) (2): C. Edgar, J. Wang

**MA (Library) (19):** 1<sup>st</sup> Reader: R. Martinez, R. Rodriguez, L. Echarte, E. Petro, A. Kana, A. Hussein, K. Ellison, A. Parkinson; L. Dagher, P. Swerdloff, N. Shen, N. Freeman-Stover, B. Maclaughlin, G. Patsidopoulos; 2<sup>nd</sup> Reader: A. Herman, S. Weinstein, A. DeLuca, L. Hastie, E. Pietras

Undergraduate Work for Distinction or Undergraduate Research, First Reader (~80): Second or Additional Reader: ~25 others

## **UNIVERSITY SERVICE (SELECTED):**

Appeals Committee for Early Assurance Programs 2010-2015

UROP Symposium Judge 2013

Biology and Psychology Space Planning Committee, 2012

Science Liaison for Study Abroad Science Programs, 2012-present

BU Admissions Office Faculty Representative (Recruitment visits; Denver), 2012, 2013

Committee for Development of 4+1 Program in Forensic Science, 2012

Chairman, Institute Animal Care and Use Committee (IACUC) 2006-2009

Faculty Advisor, Nourish International BU Chapter, 2012-present

Co-Chairman, Oversight Committee on Accelerated Medical School Programs (1996-2007)

APT/UPT committee on senior level appointments 2007

CAS Awards, Promotion and Tenure (APT) Committee 2003, 2005

Accelerated Medical School Admissions Committee 1989-2006, 2009

Member, IACUC 1991-96, 2005

MMEDIC Admissions Committee 2003, 2004, 2005, 2010

Gitner Teaching Award, selection committee (2000)

Chairman, subcommittee on Accreditation and Undergraduate Degree Standards (1998-1999)

Chairman, search committee for Assistant Dean of Premedical Advising (1996)

Chairman, Case-Melville Award Selection Committee (1996)

Curriculum and Academic Policies Committee (1996-1998)

Freshman Fridays: periodically between 1990-2010

Evaluator, Statewide Biology exam, Massachusetts Teaching Certification Exam (1998)

Goldwater Award Selection Committee (1996)

Scholarships and Fellowships Committee (1996)

Searle Fellowship Selection Committee (1996)

Trustee Scholar Admission Committee (1994-1998)

Sophomore Trustee Fellowship Selection Committee (1995-1998)

Student Life Task Force (1995-97)

Research Activities and Library Services Committee (1992-94)

## DEPARTMENTAL SERVICE (SELECTED)

Director of Undergraduate Studies (2009-2015)

Academic Program Review Committee 2013-14

Program Student Outcomes Assessment Committee 2013-14

Chair, Curriculum Committee (2010-present)

Merit Review Committee (2011, 2012)

Biology Honors Development Committee (2012)

I. Alden Macchi Award Committee (1997, 2007-09)

Curriculum Committee (1999-2006)

Belamarich Committee (1999-2006)

Graduate Committee (1988-2000)

Howard Hughes Undergraduate Biology Program Steering Committee (1992-1998)

Ad-hoc Disciplinary Committee (1998; 1999, Chairman)

Chairman, search committee for Laboratory Curators (1995)

Chairman, committee on teaching laboratories (1995-1997)

Computer Committee (1996-1999)

Search Committee for Neurobiologist (1993)

Honors and Awards Committee (1992)

Spanish Language examiner (1988-2000)

Controlled substances license site manager, 2 Cummington St. (1989-1996)

## SELECTED MEDIA COVERAGE AND ACTIVITIES:

**Science education:** 

- •Lecturer and co-creator, *Frontiers of Biology* Program, WABU TV (Channel 68, Boston; 1994-1998). This was a distance-learning course targeted to Biology teachers at the high school, middle school, and junior college levels. It was designed to update teachers on modern aspects of biology. Participants included five current or former members of the Department of Biology at Boston University.
- •Producer and host of "World of Animals," MediaOne, New England Cablevision. This was an educational program created in 1996 targeted to the general public, but particularly K-12. It aired on an occasional basis in Dedham, Massachusetts.

## Selected cited works or interviews in popular press:

CAS Alumni Magazine, 2010 Bostonia, 2005 Ladies Home Journal, 1999 Booklist, 1999 Newsday, January, 1999 Self Magazine, Fall, 1998 NY Times Book Review, July, 1998 Healthline, July, 1998 Dedham Times, June, 1998 Library Journal, June, 1998 Cleveland Plain Dealer, June 21 and 28, 1998 Science News, May, 1998 BU Bridge, May, 1998 Publishers Weekly, April, 1998 Decatur Herald, June, 1997 Women's Health Magazine, (1997) Cosmopolitan Magazine, (1997) Psychology Today, (Jan/Feb 1996)

# Selected radio and television coverage of my research or books

WBZ Boston, MA, 2000

WKBN The Ron Verb Show, Youngstown, OH, December 14, 1999

WASN The Louis Free Show, Youngstown, OH, December 9, 1999

Strand Media Group, Los Angeles, CA, November, 1999

WJBC Ken Behrens Show, Illinois, February 18, 1999

KJHK Rachel Robson Show, Lawrence, KS, December 2, 1998

WRPT Health and Fitness Today, Boston, MA, November 25, 1998

WNTA Chris Bowman Show, Rockford, IL, November 25, 1998

CJAD Montreal, Canada, September 4, 1998

KPCC Science show, Pasadena, CA, August 8, 1998

WFYI Phoenix, AZ, July 25, 1998

WAPJ To Your Health, Torrington, CT, July 7, 1998

WAMC NPR, Albany, NY, June 8, 1998

KMOX St. Louis, MO, May 5, 1998

Media One Cable TV, Locke-on-Target, May, 1998