

# Eric S. Corp

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## ADDRESSES

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### Residence

1193 South East Street  
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## EDUCATION

California State University, Los Angeles, CA  
(BA Psychology, 1969; and MS, Psychology-Clinical Track, 1972)  
University of Washington, Seattle, WA  
(Ph.D., Physiological Psychology-Behavioral Neuroscience, 1986)  
Cornell University Medical College, Bourne Research Laboratory,  
(Postdoctoral Fellow, September 1986-June 1989)

## POSITIONS HELD

Associate Professor and Research Associate Professor; Program in Neuroscience and Behavior, and Center for Neuroendocrine Studies and the Department of Psychology (Biopsychology Division), University of Massachusetts, September, 1997 – present.  
Assistant Professor and Instructor in Psychiatry; Cornell University Medical College, July 1991 – June 1997 in Psychiatry, July 1989 -- July 1991  
Research Assistant, Departments of Medicine and Biological Structure, University of Washington, 1983-1986.  
Teaching Assistant, Dept. Psychology, University of Washington, 1981-1982.  
Designated Mental Health Professional (Involuntary Treatment Officer), Spokane, Yakama and Snohomish Counties, Washington, 1974-1981.  
Psychotherapist, Mower County Consultation Service, Austin, Minnesota, 1972-1973.

## PROFESSIONAL MEMBERSHIPS

American Association for the Advancement of Science  
Society for the Study of Ingestive Behavior  
The Society for Neuroscience  
International Behavioral Neuroscience Society

## **HONORS AND AWARDS**

Bachelor of Arts, High Honors 1969

Graduate Student Research Fellowship, 1984-1985, University of Washington

Austin Cable Fellowship, September 1986-August 1987, Cornell University Medical College and Bourne Behavioral Research Laboratory

McDermott Traveling Fellowship, June - September 1989, Cornell University Medical College

Chair's Committee for Special Research Award, March 1995, Cornell University Medical College and the Department of Psychiatry

## **ACTIVE RESEARCH AND SUPPORT**

Neuropeptide Y and hindbrain: control of food intake (Principal investigator) National Institute of Diabetes, Digestive and Kidney Diseases RO1 DK55829-01; 1999-2004; Direct cost: \$578,636

Hormones, brain function, and behavior; (Co-investigator) National Institute of Neurological Disorders and Stroke RO1 NS10873 (G. Wade, Principal Investigator); 1998-2002.

## **PREVIOUS RESEARCH SUPPORT**

National Research Service Award, National Institutes of Health, October 1988-September 1989.

St. Luke's-Roosevelt Obesity Core Center Pilot and Feasibility Grant, July 1988-July 1990, \$30,000

Whitehall Foundation Grant, October 1990-September 1993; Total direct cost: \$122,154.

Biomedical Research Support Grant, July 1991-June 1992, \$4,925.

Whitehall Foundation Grant, October 1993-September 1996; Total direct cost: \$93,000.

Hoffmann-La Roche, Inc. Research Grant, January 1996: Total cost: \$20,000.

Pfizer Health Research Foundation, October 1996 (co-investigator; Shuji Inoue, principal investigator); "Role of ventromedial hypothalamus on cell proliferation of visceral organs and adipose tissue"

## **SERVICE**

### **Journal Review**

American Journal of Physiology, Brain Research, Endocrinology, Proceedings of the National Academy of Sciences, Peptides, and Physiology and Behavior.

### **Committees** University of Massachusetts

Institutional Animal Care and Use Committee (IACUC), 1999 to present.

Admissions committee, Neuroscience and Behavior Program, fall 2000. Psychology Colloquium Committee (Chairman) 1999 to 2000,

Coordinator of monthly meetings, Center for Neuroendocrine Studies 1999 – spring 2001

Minority recruitment for Neuroscience and Behavior Program, 1999-2003

## TEACHING

### University of Massachusetts-Amherst

Psych 335, Motivation and Emotion, fall and spring 1999-2003.

<http://www-unix.oit.umass.edu/~psyc335c/index.html>

Psych 591, Biological Basis of Neuropsychiatric Disorders, fall 1998 and spring 2000 and 2001. Psych 330, Physiological Psychology, spring 2002.

<http://www-unix.oit.umass.edu/~psyc330/index.html>

## BIBLIOGRAPHY

### JOURNAL ARTICLES

- Fitts DA, Corp ES, Simpson JB: Salt appetite and intravascular volume depletion following colloid dialysis in hamsters. **Behavioral Neural Biology** 34:75-88, 1982.
- Fitts DA, Yang O, Corp ES, Simpson JB: Sodium retention following DOCA in hamsters. **Am J Physiol** 244(1):R78-83, 1983.
- Baskin DG, Brewitt B, Corp ES, Davidson D, Paquette T, Figlewicz DP, Porte Jr. D, Dorsa DM: Quantitative autoradiographic evidence for insulin receptors in the choroid plexus of the rat brain. **Diabetes** 35(2):246-249, 1986.
- Baskin DG, Davidson D, Corp ES, Lewellen T, Graham M: An inexpensive microcomputer digital imaging system for densitometry: quantitative autoradiography of insulin receptors with [<sup>125</sup>I]-insulin and LKB film. **J Neurosci Methods** 16:119-129, 1986.
- Bohannon NJ, Figlewicz DP, Corp ES, Wilcox BJ, Porte Jr. D, Baskin DG: Identification of binding sites for an insulin-like growth factor (IGF-1) in the median eminence of the rat brain by quantitative autoradiography. **Endocrinology** 119(2):943-945, 1986.
- Corp ES, Woods SC, Porte Jr. D, Figlewicz DP, Dorsa DM, Baskin DG: Localization of [<sup>125</sup>I]-insulin binding sites in the rat hypothalamus by quantitative autoradiography. **Neurosci Lett** 70:17-22, 1986.
- Bohannon NJ, Corp ES, Wilcox BJ, Figlewicz DP, Dorsa DM, Baskin DG: Characterization of insulin-like growth factor-1 (IGF-1) receptors in the median eminence of the brain and their modulation by food restriction. **Endocrinology**, Suppl.122 (5):1940-1947, 1988.
- Bohannon NJ, Corp ES, Wilcox BJ, Figlewicz DP, Dorsa DM, Baskin DG: Localization of binding sites for insulin-like growth factor-1 (IGF-1) in the rat brain by quantitative autoradiography. **Brain Research** 444:205-213, 1988.
- Wilcox BJ, Corp ES, Dorsa DM, Figlewicz DP, Greenwood MRC, Woods SC, and Baskin DG: Insulin binding in the hypothalamus of lean and genetically obese Zucker rats. **Peptides** 10:1159-1164, 1989.
- Corp ES, Melville LD, Greenberg D, Gibbs J, Smith GP: Effect of fourth ventricular neuropeptide Y and peptide YY on ingestive and other behaviors. **Am J Physiol** 259:R317-R323, 1990.
- Davidson DA, Bohannon NJ, Corp ES, Lattemann DP, Woods SC, Porte, Jr. D, Dorsa DM, and Baskin DG: Evidence for separate receptors for insulin and insulin-like growth factor-I in choroid plexus of rat brain by quantitative autoradiography. **J Histochem Cytochem** 38, No 9:1289-1294, 1990.

- Corp ES and Smith GP: Characterization of axonally transported [<sup>125</sup>I] PYY binding sites in rat vagus nerve. **Brain Research** 553:175-179, 1991.
- Weller A, Corp ES, Tyrka A, Ritter RC, Brenner L, Gibbs J, and Smith GP: Trypsin inhibitor and maternal reunion increase plasma cholecystokinin in neonatal rats. **Peptides**, 13: 939-941, 1992.
- Corwin RL, Corp ES, Gibbs J, and Smith GP: Decreased behavioral effects of daily intracerebroventricular bombesin. **Peptides** 13:1215-1218, 1992.
- Corp ES, McQuade J, Moran TH, and Smith, GP: Characterization of type A and type B cholecystokinin receptor binding sites in rat vagus nerve. **Brain Research**, 623:161-166, 1993.
- Turner M, Corp ES and Galbraith RA: Inhibition of the feeding response to NPY in cobalt protoporphyrin-treated rats is a post-receptor defect. **Physiol Behav**, 56(5):1009-1014, 1994.
- Geary N, Smith GP and Corp ES: The increased satiating potency of CCK-8 is not mediated by upregulation of NTS CCK receptors. **Brain Research**, 179:179-186, 1996.
- Min N, Joh TH, Corp ES, Baker H, Cubells JF and Son JH: A transgenic mouse model to study trans-synaptic regulation of tyrosine hydroxylase gene expression. **Journal of Neurochemistry**, 67:11-18, 1996.
- Corp ES, Curcio M, Gibbs J and Smith GP: The effect of centrally administered CCK receptor antagonists on food intake in rats. **Physiol Behav**, 61(6): 823-827, 1997.
- Haupt TA, Corp ES, Berlin RA. Intracerebroventricular angiotensin II stimulates intraoral intake of water in rats. **Peptides**, 19(1):171-173, 1998.
- Corp ES, Conze DB, Smith F, Campfield LA: Regional localization of specific [<sup>125</sup>I]leptin binding sites in rat forebrain, **Brain Research**, 789, 40-47, 1998.
- Asarian L, Corp ES, Hrupka B, Geary N: Intracerebroventricular GLP-1 inhibits sham feeding in rats without eliciting satiety, **Physiol Behav**, 64(3):367-72. 1998
- Corp ES, McQuade J, Krasnicki S, Conze DB: Feeding after fourth ventricular administration of neuropeptide Y receptor agonists, **Peptides**. March;22(4):493-499, 2001.
- Corp ES, Gréco B, Powers JB, Marín Bivens C, Wade G: Neuropeptide Y inhibits estrous behavior and stimulates food intake through separate receptors in Syrian hamsters, **Am J Physiol Regul Integr Comp Physiol**, Apr;280(4):R1061-8, 2001.
- Jones JE, Corp ES, Wade GN: Effects of naltrexone and CCK on estrous behavior and food intake in Syrian hamsters, **Peptides**. 2001 Apr;22(4):601-6, 2001.
- Jones JE, Pick RR, Keene AC, Corp EC, Wade GN: Disinhibition of female sexual behavior by a CRH receptor antagonist in Syrian hamsters. **Am J Physiol Regul Integr Comp Physiol**. Sep;283(3):R591-7 2002.
- Jones JE and Corp ES: Effect of naltrexone on food intake and body weight in Syrian hamsters depends on metabolic status, **Physiol Behav**, Jan 78: 67-72 2003
- Keene AE, Jones JE, Wade GN, Corp ES: Forebrain sites of NPY action on estrous behavior in Syrian hamsters, **Physiol Behav**, Apr; 78(4-5): 711-6, 2003

### **BOOK CHAPTERS AND REVIEWS**

- Baskin DG, Dorsa DM, Figlewicz DP, Corp ES, Wilcox BJ, Wallum BJ, Woods SC: Insulin as a regulatory peptide in the CNS. In: Peptide and Amino Acid Transport Mechanisms in the Central Nervous System. D Begley, B Zlokovic (eds), Macmillan Press, 1987.
- Smith GP, Greenberg D, Corp E, Gibbs J: Afferent information in the control of eating. In: Obesity: Towards a Molecular Approach. GA Bray, D Ricquier, and BM Spiegelman (eds), Wiley-Liss, New York, 1990, pp. 63-79.
- Smith GP, Gibbs J, Schneider L, Greenberg D, Murphy R, Corp E, Corwin R: The satiating effect of cholecystokinin. In: Y Oomura, S Tarui, S Inoue, and T Shimazu, (eds.), Progress in Obesity Research, John Libbey & Company Ltd., London, 1991, pp. 25-28.
- Corp ES: The receptor bases of neuropeptide Y-induced food intake. In: Drug Receptor Subtypes and Ingestion. SJ Cooper and PG Clifton (eds) Academic Press, London, pp. 323-345, 1996.

### **INVITED PRESENTATIONS**

- University of Washington, Department of Psychology, September 1989. "NPY and PYY can influence behavior at sites localized in the hindbrain".
- Johns Hopkins University School of Medicine, Department of Psychiatry and Behavioral Science, May 1992. "NPY receptor subtypes involved in feeding"
- Columbia University, Appetitive Seminars, May 1994. "The hindbrain, feeding and NPY: Evidence for complex receptor interactions".
- IBC First International Symposium on Obesity, March 1, 1995. "NPY receptor subtypes and obesity".
- Pfizer, Inc. Department of Metabolic Diseases, June 1995. "NPY receptor subtypes involved in feeding"
- Dr. Karl Thomae GmbH, Division of Pharma Research. Biberach, Germany. July 3, 1995 "NPY receptor subtypes involved in feeding".
- VI Symphagium Benjamin Franklin-Lafayette, June 3, 1996 "[<sup>125</sup>I]Leptin receptors in the hypothalamus." La Napoule, France
- Food Research Institute, September 6, 1996" Specific Neuropeptide Y receptors involved in ingestion. Reading, UK
- Visiting scientist and lecturer. National Institute of Health, Tokyo, Japan. Feb 1-17 1998. Leptin effects in VMH lesioned rat.

### **SELECTED ABSTRACTS AND PRESENTATIONS**

- Fitts DA, Corp ES, Simpson JB: Stimulation of salt appetite in hamsters. Soc. Neurosci Abstr 7:874, 1981.
- Corp E, Fitts D, Woods S: Cholecystokinin, subdiaphragmatic vagotomy and food intake in hamsters. Soc Neurosci Abstr 9:195, 1983.
- Corp E, Brewitt B, Figlewicz D, Porte Jr. D, Baskin D: Insulin binding in rat brain: quantitative receptor autoradiography by computer digital image analysis. Soc Neurosci Abstr 10:557, 1984.
- Baskin D, Davidson D, Corp E, Porte Jr. D, Dorsa D: Characterization of insulin binding sites in the rat brain by quantitative autoradiography. Neural Endocrine Peptides and Receptors Abstr, 1985.

- Corp ES, Davidson DA, Figlewicz DP, Dorsa DM, Woods SC, Porte Jr. D, Baskin DG: Insulin binding sites are widely distributed in rat brain: in vitro quantitative receptor autoradiography. Soc Neurosci Abstr 11:54, 1985.
- Davidson D, Corp E, Figlewicz D, Woods S, Porte Jr. D, Dorsa D, Baskin D: Characterization of insulin receptors in the rat brain by quantitative autoradiography and computer densitometry. Soc Neurosci Abstr 11:415, 1985.
- Bohannon N, Corp E, Figlewicz D, Wilcox B, Porte Jr. D, Baskin D: Identification of specific binding sites for insulin-like growth factor(IGF-1) in the rat brain by in vitro autoradiography. Appetite 7:243-244, 1986.
- Corp ES, Bohannon NJ, Wilcox BJ, Woods SC, Dorsa DM, Porte, Jr. D, Baskin, DG: Increased insulin binding in the paraventricular nucleus of rats after chronic caloric restriction: in vitro quantitative autoradiography. Soc Neurosci Abstr 12:612, 1986.
- Corp ES, Bohannon NJ, Wilcox BJ, Figlewicz DP, Woods SC, Porte Jr. D, Dorsa DM, Baskin DG: Insulin binding sites are heterogeneously distributed in rat hypothalamus. Appetite 7:248, 1986.
- Wilcox, B, Corp E, Dorsa D, Porte Jr. D, Baskin D: Characterization of insulin binding sites in the olfactory bulb in the three genotypes of the Zucker rat by in vitro quantitative autoradiography. Appetite 7:311-312, 1986.
- Wilcox BJ, Corp ES, Figlewicz DP, Dorsa DM, Greenwood MRC, Porte Jr. D, Baskin DG: Characterization of insulin binding in hypothalamus of three genotype of Zucker rat by in vitro quantitative autoradiography. Soc Neurosci Abstr 12:1488, 1986.
- Bohannon NJ, Corp ES, Wilcox BJ, Figlewicz DP, Dorsa DM, Baskin DG: Insulin-like growth factor-1 (IGF-1) binding in the median eminence of the rat is increased by food restriction. Endocrinology, Suppl.120:42, 1987.
- Corp ES, and Smith GP: Food and water ingestion after fourth ventricular injection of neuropeptide Y (NPY) and peptide YY (PYY). Proceedings of the Annual Meeting of the Eastern Psychological Association 59:31, 1988.
- Murphy RB, Schneider LH, Sidhu J, Pederson JT, Pincus MR, Corp ES, Weatherford SC, Watson CA, Gibbs J, Smith GP: Chronic treatment with the potent cholecystokinin antagonist, L-364,718 produces multiple pathological changes in the rat. Soc Neurosci Abstr 14: 917, 1988.
- Watson CA, Schneider LH, Corp ES, Weatherford SC, Schindeldecker R, Murphy RB, Smith GP, and Gibbs J: The effects of chronic and acute treatment with the potent peripheral cholecystokinin antagonist L364,718 on food and water intake in the rat. Soc Neurosci Abstr 14: 1196, 1988.
- Schneider LH, Gibbs J, Corp ES, Weatherford SC, Watson CA, Schindeldecker R, Smith GP, Pincus M, Sidhu J, Pedersen J, Murphy RB: Chronic administration of the cholecystokinin antagonist L-364,718 in the rat: effects on food and water intake, body weight, and gross and ultrastructural pathology. Brit J Psychopharm, 1988.
- Corp ES, Melville LD, Greenberg D, Gibbs J, Smith GP: Fourth ventricular effects of peptide YY and neuropeptide Y on ingestive behaviors. Soc Neurosci Abstr 14:761, 1988.

- Corp ES, Weatherford SC, Greenberg D, Torres NI, Gibbs J, Smith GP: Distribution of [<sup>125</sup>I]-cholecystokinin-8 following parenteral administration in rats. FASEB Abstr 3(3):A653, 1989. Corp ES and GP Smith: Axonal transport of peptide YY binding sites in the rat vagus nerve. Soc Neurosci Abstr 15:346, 1989.
- Corp ES, Curcio M, Smith GP: Potency of peptide YY analogues for stimulation of feeding and in competition for [<sup>125</sup>I]-PYY binding sites in the hindbrain. Soc Neurosci Abstr 16:978, 1990.
- Curcio M, Corp ES, Smith GP, Gibbs J: Proglumide but not lorglumide increases food intake following lateral ventricular administration. Proceedings of the Eastern Psychological Association 62:16, 1991.
- Corp ES, Curcio M, Smith GP: Presence of A- and B-type CCK binding sites in rat vagus nerve. Soc Neurosci Abstr 17:724, 1991.
- Corp ES, Curcio M, Smith GP: Competition by Y<sub>1</sub> and Y<sub>2</sub> receptor agonists for <sup>125</sup>I-peptide YY binding sites in rat hindbrain. Int J Obesity 15:42 (supp 3), 1991.
- Corp ES and McQuade, JA: Effect of GTP on neuropeptide Y receptor binding in rat brain: Analysis by quantitative receptor autoradiography. Appetite 19:172 1992.
- Corp ES and McQuade, JA: Detection of Y<sub>1</sub>-neuropeptide Y binding sites in rat basilar artery by quantitative receptor autoradiography. Soc Neurosci Abstr 18:1467, 1992.
- Corp ES, McQuade, JA and Smith GP: Localization of NPY-Y<sub>1</sub> binding sites in the rat medial hypothalamus. Appetite 21 169, 1993.
- Kirkham TC, McQuade J, Gibbs J, Smith GP, and Corp ES: Effects of serosal surfactant treatment on gastric <sup>125</sup>I-bombesin sites. Appetite 21:186, 1993.
- Corp ES, Wahlestedt C and McQuade, JA: The hindbrain, feeding and neuropeptide Y-related peptides: Evidence for complex receptor interactions. Soc Neurosci Abstr 19:1264, 1993.
- Corp ES and Krasnicki SM: Comparative Potencies of Leu<sup>31</sup>,Pro<sup>34</sup>NPY and Leu<sup>31</sup>,Pro<sup>34</sup>PYY to stimulate food intake and inhibit [<sup>125</sup>I]-PYY binding in rat hypothalamus and cortex. Appetite (in press) 1994.
- Corp ES, Min N, Joh TH, Son JH: Down-regulated cortical [<sup>3</sup>H]ketanserin binding in anorexic mutant mice expressing serotonergic hyperinnervation. Soc Neurosci Abstr 20:1184, 1994.
- Geary N, Trace D, Smith GP, and Corp ES: Effect of estradiol on CCK-8 binding in the nucleus of the solitary tract and area postrema of ovariectomized rats. Soc Neurosci Abstr 20:587,1994
- Corp ES, Conze DB and Krasnicki S: Y<sub>1</sub> and Y<sub>2</sub>-like neuropeptide Y receptors in the perifornical hypothalamus. Soc Neurosci Abstr 21:696, 1995.
- Conze DB, Smith GP and Corp ES: Peptide YY(3-36) stimulates robust feeding after fourth ventricular administration. Symposium on Pancreatic Polypeptides. Newport Beach CA. The Physiologist 38:(5) A-251, 1995.
- Asarian L, Cuomo AM, Corp E, Hrupka B and Geary N: Glucagon-like peptide-1 elicits behavioral satiety in sham feeding rats. Soc Neurosci Abstr 22: 16, 1996.
- Bhatti TK, Conze DB, Geary N, Young RC and Corp ES: Reduction of NPY2-36's orexigenic potency by estradiol in ovariectomized rats is associated with neuropeptide Y receptor modulation in the perifornical hypothalamus. Soc Neurosci Abstr 22: 1410, 1996.

- Jahng JW, Joh TH, Peng CH, Corp ES, Houpt TA and Son JH: Over expression of BCL-2 causes weight gain and adrenal hypertrophy in DBH-BCL-2 transgenic mice. Soc Neurosci Abstr 22: 1560, 1996.
- Corp ES, Conze DB, Smith F and Campfield LA: Specific [<sup>125</sup>I]OB protein binding sites localized in choroid plexus, thalamus and hypothalamus in rat. Soc Neurosci Abstr 22: 617, 1996.
- Corp ES, Powers JB, Greco B, Marín Bivens CL, Wade GN: Neuropeptide Y suppresses estrous behavior through PYY3-36-preferring receptors, but enhances food intake through Leu<sup>31</sup>Pro<sup>34</sup>PYY-preferring receptors in Syrian hamsters. Soc Neurosci. Abstr 25: 1879, 1999.
- Jones JE; Keene AC, Corp ES, Wade GN; CRH and NPY are involved in the suppression of estrous behavior in food-deprived Syrian hamsters. Soc. Neurosci. Abstr., Vol. 27, Prog. No. 191.17, 2001.
- Keene AC, Jones JE, Corp ES, Wade GN: PYY 3-36 acts in the hypothalamic paraventricular nucleus to inhibit lordosis in Syrian hamsters. Soc. Neurosci. Abstr., Vol. 27, Prog. No. 424.11, 2001.
- Figueira RJ, Jones JE, Tetel MJ, Corp ES: Fourth ventricular administration of the NPY antagonist, NPY (28-36, Pro<sup>30</sup>, Tyr<sup>32</sup>, Leu<sup>34</sup>) suppresses food-deprivation induced food intake in rats. Soc. Neurosci. Abstr., Vol. 27, Prog. No. 948.3, 2001.
- Buck MJ, Panza D, Figueira RJ, Corp ES: The effect of differential receptor agonist on food intake following fourth ventricular administration. Soc. Neurosci. Abstr., Vol. 27, Prog. No. 948.4, 2001.