

Jean C. Hardwick, Ph.D.

Education:

Ph.D., Physiology and Biophysics, The University of Vermont, Burlington, VT; 1988.
B.A., Biochemistry, Smith College, Northampton, MA; 1983.

Experience:

Associate Professor, Biology Department, Ithaca College, Ithaca, NY; 2003-present
Assistant Professor, Biology Department, Ithaca College, Ithaca, NY; 1997-2002.
Lecturer, Department of Biology, The University of Vermont, Burlington, VT; Spring semester 1996 and 1997.
Lecturer, Department of Natural Sciences and Mathematics, Trinity College, Burlington, VT; Fall semester, 1995.
Research Associate, Department of Anatomy and Neurobiology, The University of Vermont, Burlington, VT; 1994-1997.
Postdoctoral Associate, Department of Anatomy and Neurobiology, The University of Vermont, Burlington, VT; 1988-1994. Advisor: Rodney L. Parsons, Ph.D.
Graduate Teaching Fellow, Department of Physiology and Biophysics, The University of Vermont, Burlington, VT; 1983-1988. Advisor: Edith D. Hendley, Ph.D.

Honors and Awards:

“Who’s Who Among American Teachers” – 2002
Nominated for Excellence in Scholarship Award; 2002
Named “Particularly Meritorious Faculty Member”; 2002
Named “Particularly Meritorious Faculty Member”; 2001
Honorary Member, Gold Key National Honor Society, The University of Vermont; 1996.
College of Medicine Graduate Student Research Award, University of Vermont; 1987.
Departmental Teaching Fellow of the Year, Department of Physiology and Biophysics, The University of Vermont; 1987.
High Honors in Biochemistry, Smith College; 1983.
Cum Laude, Smith College; 1983.
Sigma Xi Honor Society, Smith College; 1983.
Merck Research Fellowship, Smith College; 1982.

Teaching:

Ithaca College, Ithaca NY: 1997-present
Animal Physiology
Neurobiology
Literature in Biology
Biology of Aging
Biotechnology (Intermediate Honors Course)
The Human Organism

Introductory Biology labs (Principles and Fundamentals)
Cell Biology lab
University of Vermont, Burlington VT: 1996-1997
Comparative Animal Physiology
Anatomy and Physiology (selected lectures on Nerves, Muscles, Immune)
Trinity College, Colchester VT: 1995
Comparative Animal Physiology

Grants:

National Institutes of Health Minority Undergraduate Research Supplement; 2002; \$3600
National Institutes of Health Academic Research Enhancement Award (AREA); 2001-2004, entitled "Regulation of Cardiac Neurons by Mast Cells and Peptides"; \$120,241
National Science Foundation Equipment grant; 2001-2004, entitled "Acquisition of Microscopy Core Facility for Biological Research"; \$78,643
National Institutes of Health Academic Research Enhancement Award (AREA); 1998-2001, entitled "Modulation of Intracardiac Neurons by Mast Cells"; \$88,650
National Research Service Award Postdoctoral Fellowship, National Institutes of Health; 1989-1991, entitled "Regulation of nicotinic acetylcholine receptor recovery".

Affiliations:

President-Elect, Faculty for Undergraduate Neuroscience
Member, Society for Neuroscience.
Member, Sigma Xi
Member, Council for Undergraduate Research
Member, American Physiological Society

Publications: (*undergraduate student authors underlined*)

Jelson, G.S., DiMasi, G., Sager, K.S., and **Hardwick J.C.** (2003). Modulation of guinea pig intrinsic cardiac neurons by prostaglandins. *American Journal of Physiology*, **285**: R682-R689.

Powers, M.J., Peterson, B.A., and **Hardwick, J.C.** (2001). Regulation of parasympathetic neurons by mast cells and histamine in the guinea pig heart. *Autonomic Neuroscience*, **87**: 37-45.

Schoenfeld, L.S., Souder, J.A., and **Hardwick, J.C.** (2000). Pituitary adenylate cyclase-activating polypeptide innervation of the mudpuppy cardiac ganglion. *Brain Research*, **882**: 180-190.

Parsons, R.L., Rossignol, T.M., Calupca, M.A., **Hardwick, J.C.**, and Braas, K.M. (2000). PACAP peptides modulate guinea pig cardiac neuron membrane excitability and neuropeptide expression. *Annals of the New York Academy of Science*, **921**: 202-210.

Calupca, M.A., Hendricks, G.M., **Hardwick, J.C.**, and Parsons, R.L. (1999). Role of mitochondrial dysfunction in the Ca^{2+} -induced decline of transmitter release at K^{+} -depolarized motor neuron terminals *Journal of Neurophysiology*, **18**: 498-506.

Braas, K.M., May, V., Harakall, S.A., **Hardwick, J.C.** and Parsons, R.L. (1998). PACAP modulates parasympathetic neuron excitability in guinea pig cardiac ganglia. *Journal of Neuroscience*, **18**: 9766-9779.

May, V., Beaudet, M.M., Parsons, R.L., **Hardwick, J.C.**, Gauthier, E., Durda, J.P., and Braas, K.M. (1998). Mechanisms of pituitary adenylate cyclase activating polypeptide (PACAP)-induced depolarization of sympathetic superior cervical ganglion (SCG) neurons. *Annals of the New York Academy of Science* **865**: 164-175.

Kennedy, A.L., Harakall, S.A., Lynch, S.W., Braas, K.M, **Hardwick, J.C.**, Mawe, G.M, and Parsons, R.L. (1998). Expression and physiological actions of neuropeptide Y in guinea pig parasympathetic cardiac ganglia. *Journal of the Autonomic Nervous System*, **71**: 190-195.

Hardwick, J.C., Mawe, G.M., and Parsons, R.L. (1997). Tachykinin-induced activation of non-specific cation conductance via NK_3 neurokinin receptors in guinea-pig intracardiac neurons. *Journal of Physiology*, **504**: 65-74.

Connor, E.A., Dunaevsky, A., Giffiths, D.J.G., **Hardwick, J.C.**, and Parsons, R.L. (1997). Transmitter release differs at snake twitch and tonic endplates during potassium-induced nerve terminal depolarization. *Journal of Neurophysiology*, **77**: 749-760.

Hardwick, J.C. and Parsons, R.L. (1996). Activation of the protein phosphatase, calcineurin, during carbachol exposure decreases the extent of recovery from end-plate desensitization. *Journal of Neurophysiology*, **76**: 3609-3616.

Hardwick, J.C., Mawe, G.M., and Parsons, R.L. (1995). Evidence for sensory fiber innervation of parasympathetic neurons of the guinea pig cardiac ganglion. *Journal of the Autonomic Nervous System*, **53**: 166-174.

Hardwick, J.C. and Parsons, R.L. (1995). Necessity of protein kinase C activity for maintenance of acetylcholine receptor function at snake twitch fibre endplates. *British Journal of Pharmacology*, **114**: 433-441.

Hardwick, J.C. and Parsons, R.L. (1995). Requirement of a colchicine-sensitive component of the cytoskeleton for acetylcholine receptor recovery. *British Journal of Pharmacology*, **114**: 442-446.

Hardwick, J.C. and Parsons, R.L. (1993). Necessity of divalent cations for recovery from carbachol-induced nicotinic acetylcholine receptor inactivation at snake twitch fibre endplates. *British Journal of Pharmacology*, **110**: 889-895.

Coniglio, L.M., **Hardwick, J.C.**, and Parsons, R.L. (1993). Quantal transmitter release at snake

twitch and tonic muscle fibers during prolonged nerve terminal depolarization. *Journal of Physiology*, **466**: 383-403.

Hardwick, J.C. and Parsons, R.L. (1993). Mechanism of staurosporine-induced decrease in acetylcholine receptor recovery from desensitization. *British Journal of Pharmacology*, **108**: 741-748.

Hardwick, J.C. and Parsons, R.L. (1992). Galanin stimulates phosphatidylinositol turnover in cardiac tissue of the mudpuppy. *Journal of the Autonomic Nervous System*, **40**: 87-90.

Konopka, L.M., Merriam, L.A., **Hardwick, J.C.**, and Parsons, R.L. (1992). Aminergic and peptidergic elements and actions in a cardiac parasympathetic ganglion. *Canadian Journal of Physiology and Pharmacology*, **70**: S32-S43.

Hardwick, J.C., Coniglio, L.M. and Parsons R.L. (1991). Staurosporine inhibits the extent of acetylcholine receptor recovery from carbachol-induced desensitization in snake twitch fibres. *British Journal of Pharmacology*, **104**: 879-886.

Konopka, L.M., McKeon, T.W., Merriam, L.A., **Hardwick, J.C.**, and Parsons, R.L. (1991). Galanin in a parasympathetic ganglion, In: Galanin: A New Multifunctional Peptide in the Neuroendocrine System, ed. T. Hokfelt and J. Bartfai, Macmillan Press, New York, pp. 261-274.

Hardwick, J.C., Ehrlich, Y.H., and Hendley, E.D. (1989). Extracellular ATP increases norepinephrine uptake in PC12 cells. *Journal of Neurochemistry*, **53**: 1512-1518.

Hendley, E.D., Whittemore, S.R., ***Chaffee, J.E.** and Ehrlich, Y.H. (1988). Regulation of norepinephrine uptake by adenine nucleotides and divalent cations: Role for extracellular protein phosphorylation. *Journal of Neurochemistry*, **50**: 263-273.

Ehrlich, Y.H., Garfield, M.G., Davis, T.B., Kornecki, E., ***Chaffee, J.E.**, and Lenox, R.H. (1986). Extracellular protein phosphorylation systems in the regulation of neuronal function. In, Progress in Brain Research, **69**, ed W.H. Gispen and A. Routtenburg, Elsevier Sci Pub., pp. 197-208.

Briggs, R.T., ***Chaffee, J.E.**, and Anderson, M. (1985). Calcium-containing granules in myoepithelial cells of the polychaete *Syllis spongiphila*: Possible ionic modulators. *Tissue and Cell*, **17**: 923-928.

* publications under maiden name: J.E. Chaffee