
BIOGRAPHICAL SKETCH

NAME		POSITION TITLE		
Enyeart, John Joseph		Professor		
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)				
INSTITUTION AND LOCATION		DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Notre Dame Notre Dame, IN		B.S.	1971	Chemistry
University of Pennsylvania Philadelphia, PA		Ph.D.	1979	Pharmacology

A. Positions and Honors.

Postgraduate Training and Fellowship Appointments

- 1979-1980 Postdoctoral Fellow, Dept. of Biology, Reed College, Portland, Oregon.
1981-1982 Postdoctoral Research Associate, Dept. of Physics and Astronomy, Michigan State University, East Lansing, Michigan.
1982-1986 Postdoctoral Fellow, Dept. of Pharmacology, University of Rochester School of Medicine and Dentistry, Rochester, New York.

Faculty Appointments

- 1987-1992 Assistant Professor, Dept. of Pharmacology, The Ohio State University, Columbus, OH.
1992-1998 Associate Professor, Dept. of Pharmacology, with joint appointment in The Center for Biotechnology, The Ohio State University, Columbus, OH.
1991-1993 Course Instructor, Cold Spring Harbor Neuroscience Course, "Molecular Approaches to Ion Channel Function and Expression", Cold Spring Harbor Laboratory, Cold Spring Harbor, NY.
1998- 2000 Professor, Dept. of Pharmacology, with joint appointment in The Dept. of Neuroscience, The Ohio State University, Columbus, OH.
2000- Professor, Dept. of Neuroscience, The Ohio State University, Columbus, OH.
2001- Mentor, Postdoctoral program, Mathematical Biosciences Institute, The Ohio State University, Columbus, OH.

B. Selected peer-reviewed publications 1990-present:

1. Enyeart, J.J., Biagi, B.A., Day, R.N., Sheu, S-S. and Maurer, R.A. Blockade of low and high threshold Ca^{2+} channels by diphenylbutylpiperidine antipsychotics linked to inhibition of prolactin gene expression. *J. Biol. Chem.* **265**:16373-16379, 1990.
2. Biagi, B.A. and Enyeart, J.J. Multiple calcium currents in a thyroid C cell line: Biophysical properties and pharmacology. *Am. J. Physiol.*, **260** (6):C1253-1263, 1991.
3. Duchemin, A-M., Enyeart, J.A., Biagi, B.A., Mlinar, B. and Enyeart, J.J. Ca^{2+} channel modulation and kinase C activation in a pituitary cell line: Induction of immediate early genes and inhibition of proliferation, *Mol. Endocrin.*, **6**:563-571, 1992.
4. Enyeart, J.J., Biagi, B.A. and Mlinar, B. Preferential block of T-type calcium channels by neuroleptics in neural crest-derived rat and human thyroid C cell lines. *Mol. Pharm.* **42**:364-372, 1992.
5. Biagi, B.A., Mlinar, B. and Enyeart, J.J. Ionic currents in a human thyroid C cell line. *Am. J. Physiol. (Cell Physiol.)* **263/5**, Part 1: C986-C994, 1992.
6. Dubel, S.J., Starr, T.V.B., Hell, J., Ahlijanian, M.K., Enyeart, J.J., Caterall, W.A. and Snutch, T.P. Molecular cloning of the alpha-1 subunit of an omega-conotoxin-sensitive calcium channel. *Proc. Natl. Acad. Sci. USA* **89**: 5058-5062, 1992.

7. Mlinar, B., Biagi, B.A. and Enyeart, J.J. A Novel K⁺ Current is Inhibited by Adrenocorticotrophic Hormone and Angiotensin II in Adrenal Cortical Cells. *J. Biol. Chem.*, **268/12**: 8640-8644, 1993.
8. Mlinar, B., Biagi, B.A. and Enyeart, J.J. Voltage-gated transient currents in bovine adrenal fasciculata cells I: T-type Ca²⁺ current. *J. Gen. Physiol* **102**:217-237, 1993.
9. Mlinar, B. and Enyeart, J.J. Voltage-gated transient currents in bovine adrenal fasciculata cells II: A-type K⁺ current. *J. Gen. Physiol* **102**: 239-255, 1993.
10. Mlinar, B. and Enyeart, J.J. Block of current through T-type calcium channels by trivalent metal cations and nickel in neural rat and human cells. *J. Physiol. (London)*, **469**: 639-652, 1993.
11. Enyeart, J.J., Mlinar, B. and Enyeart, J.A. T-type Ca²⁺ channels are required for adreno-corticotropin-stimulated cortisol production by bovine adrenal fasciculata cells. *Mol. Endocrin.* **7**: 1031-1040, 1993.
12. Mlinar, B. and Enyeart, J.J. Identical inhibitory modulation of A-type K⁺ currents by dihydropyridine calcium agonists and antagonists. *Mol. Pharm.* **46**:743-749, 1994.
13. Mlinar, B., Biagi, B.A. and Enyeart, J.J. Losartan-sensitive All receptors linked to de-polarization-dependent cortisol secretion through a novel signaling pathway. *J. Biol. Chem.* **270**: 20942-20951, 1995.
14. Enyeart, J.J., Mlinar, B. and Enyeart, J.A. Adrenocorticotrophic hormone and cyclic AMP inhibit noninactivating K⁺ current in adrenocortical cells by an A-kinase-independent mechanism requiring ATP hydrolysis. *J. Gen. Physiol.* **108**: 251-264, 1996.
15. Enyeart, J.J., Boyd, R.T., and Enyeart, J.A. ACTH and All differentially stimulate steroid hormone orphan receptor mRNAs in adrenal cortical cells. *Mol. Cell. Endo.*, **124**: 97-110, 1996.
16. Enyeart, J.J., Gomora, J.C., Xu, Lin and Enyeart, J.A. Adenosine triphosphate activates a noninactivating K⁺ current in adrenal cortical cells through nonhydrolytic binding. *J. Gen. Physiol.* **110**: 679-692, 1997.
17. Enyeart, J.J., Xu, L., Gomora, J.C., and Enyeart, J.A. Modulation of A-type K⁺ current by a series of ten lanthanide elements. *J. Membrane Biol.*, **164**: 139-153, 1998.
18. Gomora, J.C., and Enyeart, J.J. Ca²⁺ depolarizes adrenal cortical cells through selective inhibition of an ATP-activated K⁺ current. *Am. J. Physiol.* **275** (*Cell Physiol.* 44): C1526-C1537, 1998.
19. Xu, L. and Enyeart, J.J. Purine and pyrimidine nucleotides inhibit a non-inactivating K⁺ current and depolarize adrenal cortical cells through a G protein-coupled receptor. *Mol. Pharm.*, **55**: 364-376, 1999.
20. Gomora, J.C., and Enyeart, J.J. Dual pharmacological properties of a cyclic AMP-sensitive potassium channel. *Journal of Pharmacology and Experimental Therapeutics*, **290**: 266-275, 1999.
21. Gomora, J.C. and Enyeart, J.J. Mibefradil potently blocks ATP-activated K⁺ channels in adrenal cells. *Mol. Pharmacol.*, **56**: 1192-1197, 1999.
22. Xu, Lin and Enyeart, J.J. Adenosine inhibits a noninactivating K⁺ current in adrenal cortical cells by activation of multiple P₁ receptors. *Journal of Physiology (London)* **521.1**: 81-97, 1999.
23. Gomora, J.C., Xu, L., Enyeart, J.A., and Enyeart, J.J. Effect of mibefradil on voltage-dependent gating and kinetics of T-type Ca²⁺ channels in cortisol-secreting cells. *JPET*, 292:96-103, 2000.
24. Enyeart, J.A., Xu, L., and Enyeart, J.J. A bovine adrenocortical Kv1.4 K⁺ channel whose expression is potently inhibited by ACTH. *J. Biol.Chem.*, **275** (44): 34640-34649, 2000.
25. Xu, L. and Enyeart, J.J. Properties of ATP-dependent K⁺ channels in Adrenocortical Cells. *Am.J.Physiol (Cell Physiol.)*, 280: C199-C215, 2001.
26. Enyeart, J.J., Xu, L., Gomora, J. C., and Enyeart, J.A. Reciprocal modulation of voltage-gated and background K⁺ channels mediated by nucleotides and corticotropin, *Mol. Pharmacol.*, 60(1):114-23, 2001.
27. Xu, L., Enyeart, J.A., and Enyeart, J.J. Neuroprotective agent riluzole dramatically slows inactivation of Kv1.4 potassium channels by a voltage-dependent oxidative mechanism. *JPET* 299(1):227-37, 2001.
28. Enyeart, J.J., Xu, L., and Enyeart, J.A. Dual actions of lanthanides on ACTH-inhibited leak K⁺ Currents. *Am J Physiol (Endocrinol + Metab)*, 282(6): E1255-E1266, 2002.
29. Enyeart, J.J, Xu, L., Danthi, S., and Enyeart, J.A. An ACTH- and ATP-regulated background K⁺ channel in adrenocortical cells is TREK-1. *J Biol Chem*, **277**(51):49186-99, 2002.
30. Enyeart JA, Danthi S. and Enyeart JJ. ACTH Induces the Expression of TREK-1 mRNA and K⁺ Current in Adrenocortical Cells. *Mol. Pharmacol.* **64**: 132-142, 2003.
31. Danthi, S, Enyeart, JA, and Enyeart, JJ. Modulation of Native TREK-1 and Kv1.4 K⁺ Channels by Polyunsaturated Fatty Acids and Lysophospholipids. *J. Membrane Biol.*, **195** (3) 147-164, 2003.
32. Danthi, S., Enyeart, J.A., and Enyeart, J. J. Caffeic acid esters activate TREK-1 potassium channels and inhibit depolarization-dependent secretion. *Mol Pharmacol.* **65**(3):599-610, 2004.

33. Enyeart J.A., Danthi S.J., and Enyeart J.J. TREK-1 K⁺ Channels Couple Angiotensin II Receptors to Membrane Depolarization and Aldosterone Secretion in Bovine Adrenal Glomerulosa Cells. *Am J Physiol Endocrinol Metab.* **287**(6):E1154-65, 2004.
34. Danthi, S.D., Enyeart, J.A. and Enyeart, J. J. Modulation of Native T-type Calcium Channels by Omega-3 Fatty Acids, *Biochem Biophys Res Commun*, **327**(2):485-93, 2005 .

C. Research Support

Properties of Ion Channels that Control Secretion, NIH 2 R01 DK047875-09, 10/1/04 - 9/30/09, \$1,520,000 total costs.

D. Thesis Students

Boris Mlinar, Neuroscience Program Present Appointment:	1990 – 1993 Associate Professor, Department of Preclinical and Clinical Pharmacology Mario Aiazzi-Mancini University of Florence, Viale G. Pieraccini 6, 50139 Florence, Italy
Lin Xu, Pharmacology Present Appointment:	1995 – 1999 Research Scientist, <i>Chemical Abstracts Service</i> , Columbus, OH.
Haiyan Liu, Biophysics	2004-

E. Postdoctoral Trainees

Juan Carlos Gomora, Ph.D. Present Appointment:	1996-1998 Assistant Professor, Department of Genetics of Development and Molecular Physiology, Institute of Biotechnology, UNAM, Avenida Universidad #2001, Col. Chamilpa, CP 62210, Cuernavaca, Mor., Mexico.
Lin Xu, Ph.D. Present Appointment:	1999 - 2001 Research Scientist, <i>Chemical Abstracts Service</i> , Columbus, OH.
Sanjay Danthi, Ph.D. Present Appointment:	2002-2004 Study Director, <i>Chantest Inc.</i> , Cleveland, OH