

CURRICULUM VITAE

David A. Ammar, PhD

Rocky Mountain Lions Eye Institute
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EDUCATION

Baccalaureate: BA Biochemistry, Harvard University, Cambridge, MA, 1987-1991

Doctoral: PhD Biological Chemistry, University of Michigan, Ann Arbor, 1991-1998

"Cloning of a type 2 neuropeptide receptor and characterization of neuropeptide Y responses in the retinal pigment epithelium." Lab of Debra Thompson, PhD

POST-DOCTORAL TRAINING

Fellowship: University of California, Berkeley, CA; Lab of John Forte, PhD, 1998-2003

ACADEMIC POSITIONS

Associate Specialist, School of Optometry, University of California Berkeley, CA

Lab of Sheldon Miller, Ph.D., June 2003-April 2004

Assistant Research Scientist, Department of Medicine/Division of Nephrology

University of California San Francisco, CA, May 2004- Jun 2006

Assistant Research Professor, Departments of Ophthalmology and Physiology & Biophysics

University of Colorado Denver, August 2007 - Present

SCIENTIFIC SOCIETIES

American Society of Biochemistry and Molecular Biology, 1996 - Present

American Society for Cell Biology, 1998 - Present

American Physiological Society, 1999 - Present

American Research in Vision and Ophthalmology, 2004 - Present

AWARDS AND HONORS

Travel award for 35th Meeting of the International Union of Physiological Sciences, 2001

University of Michigan Rackham Travel Grant: 1994, 1995, 1997

Departmental Honors, Harvard University, 1991

PEER-REVIEW WORK

Manuscript Reviewer, American Journal of Physiology: Cell Physiology, 1999 – 2003

RESEARCH FUNDING

Completed:

<u>Project number</u>	<u>Dates of funding</u>	<u>Percentage effort funded</u>
5F32-DK-00984	9/1/1999-8/31/2002	100%
PI: Dr Ammar	Granting Agency: NIH/NIDDK	
Title of Grant: "Actin remodeling and HCl secretion"		

PUBLICATIONS (peer reviewed)

1. Tal M, Ammar DA, Karpuj M, Naimb M, and Thompson DA. A novel putative neuropeptide receptor preferentially expressed in neural tissue, including sensory epithelia. *Biochem. Biophys. Res. Comm.* **209**:752-759, 1995.

2. **Ammar DA**, Eadie DM, Wong DJ, Ma Y-Y, Kolakowski LF Jr., Yang-Feng TL, and Thompson DA. Characterization of the human type 2 neuropeptide Y receptor gene (NPY2R) and localization to the chromosome 4q region containing the type 1 neuropeptide Y receptor gene. *Genomics* **38**:392-398, 1996.
3. **Ammar DA**, Hughes BA, and Thompson DA. Neuropeptide Y and the retinal pigment epithelium: Receptor subtypes, signaling, and bioelectrical responses. *Invest. Ophthalmol. Vis. Sci.* **39**:1870-1878, 1998.
4. **Ammar DA**, Nguyen PNB, and Forte JG. Functionally distinct pools of actin in secretory cells. *Am. J. Physiol. Cell Physiol.* **281**:C407-C417, 2001.
*Editorial Focus in: *Am. J. Physiol. Cell Physiol.* **281**:C386-387, 2001.
5. **Ammar DA**, Zhou R, Forte JG, and Yao XB. Syntaxin 3 is required for cAMP-induced acid secretion: streptolysin-O permeabilized gastric gland model. *Am. J. Physiol. Gastrointest. Liver Physiol.* **282**:G23-G33, 2002.
6. Lu M, **Ammar D**, Ives H, Albrecht F and Gluck SL. Physical interaction between aldolase and vacuolar H⁺-ATPase is essential for the assembly and activity of the proton pump. *J. Biol. Chem.* **282**:24495-24503, 2007.

CHAPTERS/REVIEWS (invited)

1. **Ammar DA** and Thompson DA. Human type 2 neuropeptide Y receptor gene. Isolation and characterization. *Methods Mol. Biol.* **153**: 25-43, 2000.

MEETING ABSTRACTS

- 1 Thompson DA, **Ammar DA**, Eadie DM, and Othman MI. "G protein-coupled receptors from retinal pigment epithelium and retina identified using polymerase chain reaction," *Invest. Ophthalmol. Vis. Sci.* **34**:981, 1993.
- 2 Thompson DA, Eadie DM, and Othman MI, **Ammar DA**, and Nicoletti A. "Strategies for the identification of G protein-coupled receptors using polymerase chain reaction," *Invest. Ophthalmol. Vis. Sci.* **35**:1983, 1994.
- 3 **Ammar DA**, Eadie DM, Wong DJ, Othman MI, Ma Y-Y, Yang-Feng TL, and Thompson DA. "A novel G protein-coupled receptor highly related to neuropeptide Y receptor, expressed in the epithelium of the eye," FASEB Summer Research Conference on the Biology and Chemistry of Vision, July 9-14, 1995.
- 4 Thompson DA, **Ammar DA**, Kolakowski LF Jr., Eadie DM, Wong DJ, Ma Y-Y, and Yang-Feng TL. "Cloning of human and bovine DNAs encoding a neuropeptide Y type 2 receptor expressed in retinal pigment epithelium and ciliary body," *Invest. Ophthalmol. Vis. Sci.*, **37**:1537, 1996.
- 5 **Ammar DA** and Thompson, D.A. "Neuropeptide Y regulation of second messenger signaling in the retinal pigment epithelium," *FASEB J.* **11**(supp.):2801, 1997.
- 6 **Ammar DA**, Liang J, and Forte JG. "The rearrangement of actin and acid secretion in gastric glands," *Mol. Biol. Cell*, **9**(supp.):139a 1998.
- 7 **Ammar DA**, Singh A, Liang L, & Forte JG. "The streptolysin-O permeabilized gastric gland model," *FASEB J.*, **13**(4):A731, 2000.
- 8 **Ammar DA**, Nguyen PNB, & Forte JG. "Kinase inhibitors have different effects in permeabilized secretory cells," *Mol. Biol. Cell*, **12**(supp.):453a, 2001.
- 9 **Ammar DA**, Kao K, Cheng A, & Forte JG. "An inhibitor of PLC phosphorylation in PKA-mediated parietal cell secretion," *Mol. Biol. Cell*, **13**(supp.):123a, 2002.
- 10 **Ammar D**, Chen S, Jalickee S, Banzon T, Wang F, & Miller SS. "H⁺/K⁺ ATPase-dependent changes in retinal pigment epithelial (RPE) physiology," *Invest. Ophthalmol. Vis. Sci.*, 2005.
- 11 Albrecht FE, **Ammar D**, & Gluck SL. "Isocitrate: A novel regulator of renal V-ATPase activity through cytoplasmic NADP-dependent isocitrate dehydrogenase," *J. Am. Soc. Nephrol.* **17**(supp): TH-FC059, 2006

DEPARTMENTAL SYMPOSIA

1. "Glucose effects on the assembly of the vacuolar proton pump in cultured kidney cells." Renal Research Symposium, University of California, San Francisco, CA, March 1, 2005.
2. "Assembly and activity of the vacuolar ATPase in cultured kidney cells." Renal Research Symposium, University of California, San Francisco, CA, January 3, 2006.

INVITED LECTURES

1. "Is ezrin required for stimulation of gastric parietal cells?" Federation of American Societies for Experimental Biology 2001, Orlando, FL, April 3, 2001.
2. "The cytoskeleton as a modulator of gastric secretion." Ninth International Proton Transport Conference, Leura, Australia, August 21, 2001.
3. "Are your eyes bigger than your stomach? Cytoskeleton and ion transport in epithelia." School of Optometry, University of California, Berkeley, CA, May 20, 2002.
4. "Trafficking and regulation of acid pumps in epithelial tissue." Department of Physiology & Biophysics, University of Colorado Denver, Denver, CO, October 10, 2006.
5. "Trafficking and regulation of acid pumps in epithelial tissue." Department of Medicine/Division of Gastroenterology & Hepatology Grand Rounds, University of Colorado Denver, Denver, CO, October 27, 2006.
6. H^+/K^+ ATPase-dependent Changes in Retinal Pigment Epithelial Physiology." Department of Ophthalmology Grand Rounds, University of Colorado Denver, Aurora, CO, May 18, 2007.