

Aaron Miller, Ph.D.
722 7th St Boulder, CO 80302 aafmiller@yahoo.com 303 359-2670

Education and Training

Postdoctoral Research Fellow
University of Colorado
Department of Chemistry and Biochemistry, 2002-2005

Ph.D., Biochemistry, 2001
University of Texas Health Science Center
San Antonio, TX

B.A., Chemistry, cum laude, 1995
Saint Olaf College
Northfield, MN

Wilderness First Responder Certification
National Outdoor Leadership School
Wilderness Medicine Institute
August 2009

Qualifications

Research project design:

Identification of biological research problems, procurement of reagents, laboratory tools and protocols necessary to conduct experiments. Working independently, I have set up research projects to investigate the biological functions of novel hormones as well as the biochemical activities of G protein-coupled receptors. These projects were focused on understanding the inflammatory response and cellular motility.

Laboratory methodology:

Quantitative analysis of ligand-receptor interactions. recombinant DNA methods, cloning, PCR, epitope tags, western blotting, Northern blotting, ribonuclease protection, SDS-PAGE, ELISA, cell culture, stable and transient DNA transfection, fluorescence activated cell sorting, plasma membrane isolation, radioisotope handling.

Teaching assistant
1997-98 University of Texas Health Science Center School of Medicine
Biochemistry

Communications

Miller, A.F. and Falke, J.J. Chemotaxis Receptors and Signaling
Adv. Protein Chem., 2004 Vol. 68:393-444. Cell Surface Receptors
Edited by K. Christopher Garcia.

Miller, A.F. and Falke, J.J. Testing the Activation Mechanism of a

Ligand-regulated GPCR.
Keystone Symposia, Membrane Proteins: Structure and Mechanism, 2003.

Miller, A.F., Harvey, S.A.K., Thies, R.S. and Olson, M.S.
Bone Morphogenetic Protein-9: An Autocrine/Paracrine Cytokine in the
Liver. J.Biol.Chem. June 16, 2000, 275(24)17937-17945

Miller, A.F., Harvey, S.A.K., Thies, R.S. and Olson, M.S. Bone morphogenetic protein-9
expression and binding in adult rat liver. FASEB JOURNAL. March 15, 1999, 13(5) part
2, supplement S, A684.

Miller, A.F., Howard, K.M. and Olson, M.S. Expression of bone morphogenetic protein-9
during adult rat hepatic regeneration. FASEB JOURNAL. July 31, 1997 vol. 11(9)
supplement S, pp. 2054.

Community Service

Volunteer City of Boulder Open Space Mountain Parks summer 2009

Volunteer KGNU Radio spring pledge drives 2007-09

Volunteer Senior Partner 2003-2006 for the non-profit youth mentoring agency
Boulder County Partners. 1430 Nelson Road, Suite 206, Longmont,
Colorado 80501

References

John Corbin , Ph.D.
Senior Scientist I
Molecular Interactions & Biophysics
Preclinical Research & Development
XOMA (US) LLC
2910 Seventh Street
Berkeley CA 94710
510-204-7559

Joseph J. Falke, Ph.D.
Director, Molecular Biophysics Program
Department of Chemistry & Biochemistry
University of Colorado
Boulder, CO 80309-0215
falke@colorado.edu
303-492-3503

Merle S. Olson, Ph.D.
Professor Emeritus, Graduate School of Biomedical Sciences
7703 Floyd Curl Drive

San Antonio, TX 78229-3900
olsonm@uthscsa.edu