

BIOGRAPHICAL SKETCH

NAME Nader H. Moniri		POSITION TITLE Assistant Professor	
eRA COMMONS USER NAME NMONIRI			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Georgia State University, Atlanta, GA	B.S.	1997	Biology/Chemistry
University of North Carolina at Chapel Hill, Chapel Hill, NC	Ph.D.	2004	Pharmacology, Medicinal Chemistry
Duke University Medical Center, Durham, NC	Post-Doc.	2004-2005	Pharmacology

A. Positions and Honors**Employment**

- 2006-Present Assistant Professor (tenure-track), Department of Pharmaceutical Sciences, College of Pharmacy and Health Sciences, Mercer University, Atlanta, GA.
- 2005-2006 Senior Scientist, Department of Biochemistry and Molecular Pharmacology, Neurogen Corporation, Branford, CT.
- 2004-2005 Post-Doctoral Fellow, Departments of Surgery, Pharmacology and Cancer Biology, Duke University Medical Center, Durham, NC.
- 2000-2004 Research Assistant, Division of Medicinal Chemistry, School of Pharmacy, University of North Carolina at Chapel Hill, Chapel Hill, NC.
- 1999-2004 Teaching Assistant, Division of Medicinal Chemistry, School of Pharmacy, University of North Carolina at Chapel Hill, Chapel Hill, NC.
- 1996-1997 Teaching Assistant, Department of Biology, Georgia State University, Atlanta, GA.

Honors

- 2008 Class of 2009, Elected Graduation Hooder, Mercer University College of Pharmacy and Health Sciences
- 2008 Teacher of the Year Award, 2007-2008, Rho Chi Honor Society, Mercer University Chapter
- 2007 Class of 2008, Elected Graduation Marshall, Mercer University College of Pharmacy and Health Sciences
- 2007 New Professor Recognition Award, 2006-2007, Rho Chi Honor Society, Mercer University Chapter
- 2006 Inductee, Cambridge's Who's Who in the Pharmaceutical Industry
- 2005 Invited Lecturer, School of Pharmacy, University of North Carolina at Chapel Hill, Chapel Hill, NC.
- 1997 Research distinction, microbiology, Georgia State University, Atlanta, GA

B. Peer-Reviewed Publications

Bagchi G, Wu J, French J, Kim J, **Moniri NH**, Daaka Y. Androgens transduce the G α s-mediated activation of protein kinase A in prostate cells. *Cancer Research*, 68: 3225-3231, 2008.

Moniri NH and Daaka Y. Agonist-stimulated reactive oxygen species formation regulates β 2-adrenergic receptor signal transduction. *Biochemical Pharmacology*, 74: 64-73, 2007.

Booth RG and **Moniri NH**. Novel ligands stabilize stereo-selective conformations of the histamine H1 receptor to activate catecholamine synthesis. *Inflammation Research*, 56:S1-2, 2007.

Moniri NH and Booth RG. Role of PKA and PKC in Histamine H1 Receptor-Mediated Activation of Catecholamine Neurotransmitter Synthesis. *Neuroscience Letters*, 407:249-253, 2006.

Principal Investigator/Program Director (Last, First, Middle): **Moniri, Nader H.**

Bagchi G, **Moniri NH**, Daaka Y. Androgen Receptor. *AfCS-Nature Molecules Pages*, 2006.

Guo R, Kasbohm EA, Arora P, Sample CJ, Baban B, Sud N, Sivashanmugam P, **Moniri NH**, Daaka Y. Expression and function of lysophosphatidic acid LPA1 receptor in prostate cancer cells. *Endocrinology*, 147:4883-4892, 2006.

Wang G, **Moniri NH**, Ozawa K, Stamler JS, Daaka Y. Nitric oxide regulates endocytosis by S-nitrosylation of dynamin. *Proceedings of the National Academy of Sciences, USA*, 103(5):1295-1300, 2006.

Booth RG and **Moniri NH**. Ligand-directed multifunctional signaling of histamine H₁ receptors. *Inflammation Research*, 54:S44-45, 2005.

Moniri NH, Covington-Strachan DW, Booth RG. Ligand-directed functional heterogeneity of histamine H₁ receptors: Novel agonists selectively activate and block H₁ mediated phospholipase C and adenylyl cyclase signaling in CHO cells. *Journal of Pharmacology and experimental Therapeutics*, 311:274-281, 2004.

Moniri NH and Booth RG. Functional heterogeneity of histamine H₁ receptors. *Inflammation Research*, 53:S71-72, 2004.

Booth RG, **Moniri NH**, Bakker RA, Choksi NY, Nix WB, Timmerman H, Leurs R. A novel phenylaminotetralin radioligand reveals a sub-population of histamine H₁ receptors. *Journal of Pharmacology and Experimental Therapeutics*, 302:328-336, 2002.

C. Presentations

Moniri NH and Daaka Y. β_2 -adrenergic receptor mediated generation of reactive oxygen species is a component required for signal transduction, desensitization, and homodimerization. *The FASEB Journal*. Presented at Experimental Biology (ASPET), Abstract #723.6, San Diego, CA, 2008.

Neal RL, Hendy MA, **Moniri NH**. Cloning, expression, and initial functional characterization of the human and rat free-fatty acid receptor GPR120. *American Society for Pharmacology and Experimental Therapeutics - SE Region Abstracts*. Presented at ASPET-SEPS Region meeting, Augusta, GA, 2007.

Booth RG and **Moniri NH**. Functionally selective ligands for the Histamine H₁ GPCR. *Experimental Biology meeting abstracts*. Presented at Experimental Biology (ASPET), San Diego, CA, 2005.

Moniri NH and Booth RG. Functionally selective histamine H₁ receptor ligands stimulate tyrosine hydroxylase in bovine adrenal chromaffin cells: effects of PKC and PKA inhibition on H₁-mediated catecholamine synthesis. *Society for Neuroscience Abstracts*, Vol. 29, presented at Society for Neuroscience Meeting, New Orleans, LA, 2003.

Legere JA, **Moniri NH**, Booth RG. (\pm)-2-Dimethylamino-5-phenyl-1,2,3,4- tetrahydronaphthalene binds to histamine H₁ receptors and selectively modulates cAMP vs. IP signaling pathways. *American Chemical Society Abstracts*, Paper #590220, presented at American Chemical Society Meeting, New Orleans, LA, 2003.

Legere JA, **Moniri NH**, Booth RG. 2-Dimethylamino-5-phenyl-1,2,3,4-tetrahydronaphthalenes: A new class of ligands for histamine H₁ and serotonin 5-HT₂ type receptors. *American Chemical Society Abstracts*, Paper #43231, presented at *American Chemical Society Meeting*, New York City, NY, 2003.

Moniri NH, Wyrick SD, Booth RG. Novel ligands selectively activate histamine H₁ receptors coupled to IP vs. cAMP signaling pathways to stimulate tyrosine hydroxylase. *Society for Neuroscience Abstracts*, Vol. 28, Program No. 830.13, presented at Society for Neuroscience Meeting, Orlando, FL, 2002.

Ghoneim OM, Covington DW, **Moniri NH**, Booth RG. Novel phenylaminotetralins stimulate IP accumulation and dopamine synthesis in rat striatum. *Society for Neuroscience Abstracts*, Vol. 28, Program No. 249.5, presented at Society for Neuroscience Meeting, Orlando, FL, 2002.

Principal Investigator/Program Director (Last, First, Middle): **Moniri, Nader H.**

Moniri NH, Wyrick, SD, Booth RG. New rigid diarylaminopropanes are histamine H₁ ligands that stimulate brain dopamine synthesis. *Society for Neuroscience Abstracts*, Vol. 27, Program No. 479.20, presented at Society for Neuroscience Meeting, San Diego, CA, 2001.

D. Teaching

College of Pharmacy and Health Sciences, Mercer University

PHA450 - Nervous System Disorders I - Pharmacology and Medicinal Chemistry
PHA453 - Cardiovascular and Renal Disorders II – Pharmacology and Medicinal Chemistry
PHA550 - Musculoskeletal Disorders - Pharmacology and Medicinal Chemistry
PHA554 - Infectious Diseases I - Pharmacology and Medicinal Chemistry
PHA804 - Research Techniques - Radioisotopes
PHA821 - Pharmacology

School of Pharmacy, University of North Carolina-Chapel Hill

PCY423 – Autonomic, Autocoids, Hormones – Medicinal Chemistry

E. Professional Service

Service to Mercer University

Institutional Radiation Safety Committee
Graduate Council
House of Delegates Research Committee
Howard Hughes Medical Institute Undergraduate Research Award Planning Committee
Biomedical Scholars Training Initiative Planning Committee

Service to College of Pharmacy and Health Sciences, Mercer University

Curriculum Committee
Faculty Advisor to Phi Delta Chi professional pharmacy fraternity
Self-Study Committee
Student Advising
Department of Pharmaceutical Sciences Graduate Student Admissions Committee

Service to School of Pharmacy, University of North Carolina-Chapel Hill

Graduate Student Organization
Laboratory Radiation Safety Officer

Service to Discipline

Peer Reviewer for Scholarly Journals (*Ad hoc*)
Biochemical Pharmacology (Since 2006)
Bioorganic and Medicinal Chemistry (Since 2006)
Drug Design, Development, and Therapy (Since 2007)
Journal of Pharmacology and Experimental Therapeutics (Since 2004)
Molecular Pharmacology (Since 2005)

F. Competitive Research Support

Ongoing:

Mercer University Seed Grant, GPR120 desensitization. The major goal of this proposal is to characterize free fatty acid mediated desensitization of GPR120.

Mercer University Biomedical Scholars Training Initiative, β 2-receptor mediated ROS generation. The major goal of this project is to begin to characterize molecular mechanisms of β 2 adrenergic receptor mediated ROS generation.

Solvay Pharmaceuticals Training Grant, GPR120-mediated ERK1/2 signaling, 05/2008-08/2008. The major goal of this proposal is to elucidate free fatty acid efficacy and potency with respect to GPR120-mediated ERK1/2 activation.

American Foundation for Pharmaceutical Education, GPR120 intracellular signaling. The major goal of this project is to assess intracellular signaling of GPR120. (Pre-doctoral fellowship awarded to Rebecca L. Neal, PharmD/PhD student).

Completed:

Mercer University Seed Grant, GPR120-mediated GLP-1 secretion. The major goal of this proposal is to elucidate free fatty acid efficacy and potency with respect to GPR120-mediated GLP-1 secretion.

Solvay Pharmaceuticals Training Grant, GPR120-mediated inositol phosphate formation, 05/2007-08/2007. The major goal of this proposal is to elucidate free fatty acid efficacy and potency with respect to GPR120-mediated inositol phosphate formation.

NIH (NIAID) (1R21AI065927-01A1): Regulation of uropathogenic E. coli invasion by dynamin, 05/2006-04/2008. The major goal of this grant was to elucidate the molecular mechanisms of dynamin-mediated entry of uropathogenic E. coli into the bladder epithelium.

G. Professional Memberships

American Society for Pharmacology and Experimental Therapeutics
Society for Neuroscience
American Chemical Society
American Association of Colleges of Pharmacy