Meghan M. Murphy, PhD

Consumer Safety Officer
U.S. Food and Drug Administration

Work Experience

Consumer Safety Officer (July 2007-present)
US Food and Drug Administration, CDER, Office of Compliance, Division of New Drugs and Labeling Compliance, Pharmacy Compounding Team

- Interpret and address regulatory issues involving the practice of pharmacy compounding

Science Intern, HHS Emerging Leaders Program (July 2005-July 2007)
US Food and Drug Administration, CDER, Office of Compliance Division of New Drugs and Labeling Compliance (Home Office)

- Selective leadership development program sponsored by DHHS
- Conducted rotations at FDA, NIH, and AHRQ to develop new skills

Research Associate, Department of Pharmacology, University of North Carolina, Chapel Hill (June 1999-December 2004)

- Studied red blood cell signaling and adhesion in the context of Sickle Cell Disease
- Interacted with the clinicians and researchers at the University of North Carolina Comprehensive Sickle Cell Center
- Obtained informed consent from patients for the use of their blood samples
- Received training regarding HIPPAA, clinical research ethics
- Conducted independent research resulting in publication
- Analyzed and interpreted data
- Received a travel award from the American Society of Hematology and presented research findings at their annual meeting
- Mentored and supervised three rotating graduate students on research projects of three months in duration

Research Associate, Department of Chemistry, University of North Carolina, Chapel Hill (June, 1998-May, 1999)

- Conducted multi-step syntheses of derivatives of the anti-HIV nucleoside analog Abacavir
- Trained in standard synthetic methodologies
- Read and interpreted Infrared and NMR spectra of complex organic molecules
- Produced quarterly written reports of research progress

Education

University of North Carolina, Chapel Hill
Ph.D., Pharmacology, May 2005

Dissertation title: Rap1 Adhesive Signaling in Sickle Cell Disease: Activation by cAMP Promotes Adhesion to Immobilized and Soluble Laminin via the BCAM/LU Receptor
Advisor: Dr. Leslie Parise

University of North Carolina, Chapel Hill
M.A., Organic Chemistry, August 1999

Thesis title: Studies Toward the Synthesis of 2'-Alkyl Carbocyclic Nucleoside Analogs
Advisor: Dr. Michael Crimmins

University of Maryland, Baltimore County
B.S., Biochemistry, May 1997

Review Experience Ad hoc reviewer, Journal of Biological Chemistry (2004)

Publications **Meghan M. Murphy**, Mohamed A. Zayed, Allyson Evans, Carol E. Parker, Kenneth I. Ataga, Marilyn J. Telen, and Leslie V. Parise: Role of Rap1 in Promoting Sickle Red Blood Cell Adhesion to Laminin via BCAM/LU. *Blood*. 2005 Apr 15;**105**(8):3322-9.

Patrick C. Hines, **Meghan M. Murphy**, Chinedum Okafor, Marilyn J. Telen, Kenneth I. Ataga, Eugene P. Orringer, and Leslie V. Parise: Sickle RBCs Microaggregate Formation in Autologous Plasma Following Epinephrine Stimulation: A Role for Endogenous, Soluble Laminin. Submitted.

Presentations The Small GTPase Rap1 Activates BCAM/LU Dependent but not 4 1 Dependent Adhesion in Sickle Red Blood Cells: Evidence for Divergent Adhesive Pathways. **Oral Presentation**, American Society of Hematology 45th Annual Meeting, San Diego, CA. December, 2003. Abstract in *Blood*, 2003, **102**(11), 82a.

A New Paradigm in Rap-Mediated Cellular Adhesion: Rap1 Promotes Adhesion to Laminin Via an Integrin Independent Mechanism. **Poster Presentation**, American Society of Cell Biology 43rd Annual Meeting, San Francisco, CA. December, 2003. Abstract in *Mol. Bio. Cell*, 2003, **14S**, 68a.