

Midhat H. Abdulreda
University of Miami Miller School of Medicine, Diabetes Research Institute
1450 NW 10th Ave Fifth Floor, Miami, FL 33136 • United States
Home Phone: 954-296-6340 • Work Phone: 305-243-3326
mabdulreda@miami.edu • ab_m@msn.com

Employment History

- 8/97 - 8/02 **Lab Analyst & Supervisor** Envirodyne Inc., Boca Raton, Florida
Management of the Metals department. Determination of metal contents in environmental samples using atomic absorption & emission spectroscopy and mass spectroscopy.
- 1/99 - 8/02 **Research Associate** Florida Atlantic University, Boca Raton, Florida
Research work on a potential hybrid-cell vaccine in the treatment of chronic lymphocytic leukemia.
- 10/07 - pres. **Postdoctoral Associate** University of Miami, Miami, Florida, Diabetes Research Institute. Investigation of pancreatic islet physiology using non-invasive in vivo imaging of transplanted islets in the eye anterior chamber of a mouse model.

Education

- H.S., Experimental Sciences, 8/90**
High School of Tyr, Tyr, Lebanon
- B.S., Animal Biology, 8/94**
Lebanese University, College of Sciences, Beirut, Lebanon
- B.S., Biological Sciences, Minor: Microbiology, 8/98**
Florida Atlantic University, Boca Raton, Florida
- M.S., Biological Sciences, Minor: Immunology, 8/01**
Florida Atlantic University, Boca Raton, Florida
- Ph.D, Physiology & Biophysics, 12/07**
University of Miami Miller School of Medicine, Physiology and Biophysics Dept., Miami, Florida

Publications

- . Zhang, X., Chen, A., Wojcikiewicz, E., **Abdulreda, M.H.**, Banerjee, S., Moy, V.T. (2005): Probing ligand-receptor interactions with Atomic Force Microscopy. (p. 399-413) *Protein-Protein Interactions: A Molecular Cloning Manual*, Cold Spring Harbor Laboratory Press.
- . Wojcikiewicz, E.P., **Abdulreda, M.H.**, Moy, V.T. Force spectroscopy of LFA-1 and its ligands. *Biomacromolecules* 2006, 7(11):3188-3195.
- . **Abdulreda, M.H.** and Moy, V.T. Atomic force microscope studies of the fusion of floating lipid bilayers. *Biophysical Journal* 2007, 92(12):4369-78.
- . **Abdulreda, M.H.**, Bhalla, A., Chapman, E.R., Moy, V.T. AFM spectroscopy reveals a hemifusion

intermediate during SNARE-mediated membrane fusion. Biophysical Journal 2007, (in press).

. **Abdulreda, M.H.**, Bhalla, A., Chapman, E.R., Moy, V.T. Pulling force generated by interacting snares facilitates membrane hemifusion. Nature Structural and Molecular Biology 2007, (in review).

Abstracts

"AFM Studies on Bilayer interactions and Fusion." Proceedings of the 2006 Miami Nature Biotechnology Winter Symposium. ANGIOGENESIS IN CANCER AND VASCULAR DISEASE, Miami Nature Biotechnology Short Reports (Volume 17), February 2006, Page 87.

"Force Spectroscopy of LFA-1 and its ligands." Proceedings of the 2006 Miami Nature Biotechnology Winter Symposium. ANGIOGENESIS IN CANCER AND VASCULAR DISEASE, Miami Nature Biotechnology Short Reports (Volume 17), February 2006, Page 82.

"AFM Studies on Bilayer interactions and Fusion." Abstracts: 50th Annual Meeting (Salt Lake City, Utah). Biophysical Journal, Print Supplement, Addendum & Late Abstracts, February 2006, Page 12.

"Force Spectroscopy of LFA-1 and its ligands." Abstracts: 50th Annual Meeting (Salt Lake City, Utah). Biophysical Journal, Print Supplement, Addendum & Late Abstracts, February 2006, Page 7.

"AFM studies of SNAREs interactions during membrane fusion and fission." Proceedings of the 2007 Miami Nature Biotechnology Winter Symposium. INNATE IMMUNITY AND NOVEL VACCINES, Miami Nature Biotechnology Short Reports (Volume 18), January 2007, Page 79.

"AFM studies of SNAREs interactions during membrane fusion and fission." Abstracts: 51th Annual Meeting (Baltimore, MD). Biophysical Journal, Print Supplement, March 2007, Page 391a.

"AFM Studies on Bilayer interactions and Fusion." AFM BioMed Conference, Barcelona, Spain 2007, international meeting on AFM in Life Sciences and Medicine. The Journal of Molecular Recognition, April 2007, Page 131.

Awards and Scholarships

2000

The Keller's Foundation Scholarship

2003

The Florida Resident Scholarship

2005

The Whitaker Foundation Travel Grant

2005

The Provost Graduate Student Travel Award

2007

The Medical Faculty Association Margaret Whelan Graduate Student Scholarship Fund Travel Award

2007

The Medical Faculty Association Margaret Whelan Graduate Student Best Research Award

Invited Talks

Force Spectroscopy of LFA-1/ICAM-2 Interaction. (2005) 2nd International Workshop on Bioprinting, Biopatterning, and Bioassembly. Medical University of South Carolina, Charleston, SC, USA.

Investigation of SNARE-mediated fusion by AFM spectroscopy. (2007) U.S. Army Medical Research Institute of Infectious Diseases, Fort Detrick, MD, USA.

Societies

Biophysical Society
Member since 2005

AAAS (American Association for the Advancement of Science)
Member from 2004 - 2007

Workshops and Special Courses

2005: Scientific Writing
2004: Survival Skills for Scientists
2003: Research Ethics
2003: Professional Skills Ethics
2002: Research Ethics