

Arnaldo J. Diaz Vazquez

Biomedical Graduate Studies
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EDUCATION

- Ph.D. Biochemistry** May 2008
Texas A&M University, College Station, Texas
Thesis Advisor: Professor Paul S. Cremer
- B.S. Chemistry** May 2002
University of Puerto Rico, Rio Piedras, Puerto Rico
Graduated with honors

POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS

- National Institutes of Health Postdoctoral Fellow** August 2008 – February 2010
University of Pennsylvania
Department of Pharmacology
Research Advisor: Professor Ian A. Blair
- SACNAS Summer Leadership Institute** July 2009
Advancing Hispanics/Chicanos & Native American
in Science (SACNAS)
American Association for the Advancement of Science (AAAS)

OTHER APPOINTMENTS

- Adjunct Assistant Professor of Pharmacology** November 2011- present
Perelman School of Medicine, University of Pennsylvania
- Associate Director Biomedical Graduate Studies** October 2011- present
Perelman School of Medicine, University of Pennsylvania
- Recruitment and Special Programs Coordinator** March 2010 – September 2011
Biomedical Graduate Studies, University of Pennsylvania, Philadelphia, PA
- Co-Director, Penn Summer Undergraduate Internship Program** March 2010 - present
Biomedical Graduate Studies, University of Pennsylvania, Philadelphia, PA
- Co-Director, Penn Post-Baccalaureate Research Education Program** March 2010 - present
Biomedical Graduate Studies, University of Pennsylvania, Philadelphia, PA
- Leadership Alliance – Undergraduate Summer Advisor** May 2009 - July 2009
Biomedical Graduate Studies, University of Pennsylvania, Philadelphia, PA

ACADEMIC AND INSTITUTIONAL COMMITTEES

- Member, Executive and Admissions Committee, Summer Undergraduate Internship Program (SUIP), University of Pennsylvania** March 2010 - present

Member, Executive and Admissions Committee, Post-Baccalaureate Research Education Program , University of Pennsylvania	March 2010 - present
Member, Planning Committee, 2012 Ivy Plus McNair Scholars STEM Conference , University of Pennsylvania	March 2010 - present
Chair, Biomedical Postdoctoral Diversity Committee	November 2008 - present

ORGANIZING ROLES IN SCIENTIFIC MEETINGS

Member, Planning Committee, Leadership Alliance National Symposium	2008-2011
Member, Steering Committee, The Leadership Alliance's Summer Research Early Identification Program 20th Anniversary	2011

TEACHING EXPERIENCE & TRAINING

PENN-PORT Teaching Course University of Pennsylvania, Philadelphia, PA Instructor: Marybeth Gasman, Ph.D.	2008
Teaching Assistant , Biochemistry Laboratory (BICH 412) Texas A&M University, College Station, Texas	2005
Teaching Assistant Training , General Chemistry Laboratory University of Puerto Rico, Rio Piedras, Puerto Rico	2002
Chemistry Tutor , University of Puerto Rico, Rio Piedras, Puerto Rico	2000-2001

RESEARCH EXPERIENCE

National Institutes of Health Postdoctoral Fellow Department of Pharmacology, University of Pennsylvania, Philadelphia, PA	August 2008 - February 2010
National Institutes of Health Pre-Doctoral Fellow Department of Chemistry, Texas A&M University, College Station, TX.	April 2004 – May 2008
Chemistry/Biology Interface Pre-Doctoral Fellow Department of Medical Biochemistry and Genetics, Texas A&M University, College Station, TX	August 2002 – March 2004
Leadership Alliance Undergraduate Fellow Student Department of Chemistry, Columbia University, New York, NY	May 2001 – August 2001
Minority Access to Research Career Undergraduate Fellow Department of Chemistry, University of Puerto Rico, Rio Piedras, PR	June 2000 – July 2002

PUBLICATIONS AND PRESENTATIONS

Publications in refereed journals

1. **Diaz, A.J.**; Shi, J.J.; Pace, H.; Cho, Y.; Cremer, P.S. Movement of peripheral proteins by solid supported bilayer electrophoresis, To be Submitted
2. Sherrod, S.D.; **Diaz, A.J.**; Russell, W.K.; Cremer, P.S.; Russell, D.H. Silver nanoparticles as selective ionization probes for analysis of olefins by mass spectrometry, *Anal. Chem.*, 80, **2008**, 6796.
3. **Diaz, A.J.**; Albertorio, F.; Daniel, S.; Cremer, P.S. Double cushions preserve transmembrane proteins mobility in supported lipid systems, *Langmuir*, 24, **2008**, 6820.
4. Albertorio, F.; Chapa, V.A.; Chen, X.; **Diaz, A.J.**; Cremer, P.S. The α,α -(1 \rightarrow 1) Linkage of Trehalose is Key to Anhydrobiotic Preservation, *J. Am. Chem. Soc.*, **2007**, 129, 10567.
5. Daniel, S; **Diaz, A.J.**; Martinez, K.; Bench, B.J.; Albertorio, F; Cremer, P.S. Separation of Membrane-Bound Compounds by Solid-Supported Bilayer Electrophoresis, *J. Am. Chem. Soc.* 129, **2007**, 8072.
6. Shi, J.; Yang, T.; Kataoka, S.; Zhang, Y.; **Diaz, A.J.**; Cremer, P.S. GM1 Clustering Inhibits Cholera Toxin Binding in Supported Phospholipid Membranes, *J. Am. Chem. Soc.* 129, 2007, 5954.
7. Albertorio, F.; **Diaz, A.J.**; Yang, T.; Chapa, V.A.; Kataoka, S.; Castellana, E.T.; Cremer, P.S. Fluid and Air-Stable Lipopolymer Membranes for Biosensor Applications, *Langmuir* 21, 2005, 7476.
8. Crespo-Hernandez C.E.; Martinez L.; Gonzalez-Sierra A.E.; Robles-Irizarry L.; **Diaz-Vazquez A.**; Arce R., The 254 nm low intensity and 266 nm laser photochemistry of adenosine. Effect of pH and concentration on the reactive precursors of the principal products, adenine and FAPyAde. *Journal of Photochemistry and Photobiology A: Chemistry*, 2002, 152, 123.

Invited Presentations

1. "Solid Supported Bilayer Electrophoresis: Separation of Membrane-Bound Species. ACS National Meeting, New Orleans, LO, April 2008
2. "Supported Lipid Bilayers: Separation Matrix for Proteomics Applications"
Keynote Speaker - University of Puerto Rico, Minority Access to Research Career (MARC) Annual Meeting, November 2007
3. "Supported-Phospholipid Bilayer Systems"
Biological Membranes Journal Club - Texas A&M University, March 2007
4. "The effect of cushions on the lateral mobility of transmembrane proteins in supported lipid bilayers."
Gordon Conference, Biointerface Science, Les Diablerets, Switzerland, October 2006.
5. "Protein Supported Lipid Bilayers as a Mimic of Native Biological Membranes."
Symposium on Membrane Structure and Function, College Station, Texas, January 2006

Presentations

1. "Detection and quantification of PAH metabolites by liquid chromatography electron capture atmospheric pressure chemical ionization/mass spectrometry"
57th ASMS Conference on Mass Spectrometry and Allied Topics, Philadelphia, PA, June 2009
2. "Electrophoresis in Supported Lipid Bilayers: Separation of Membrane-Bound Species"

Industry-University Cooperative Chemistry Program (IUCCP), College Station, TX, October 2007

3. "Intrinsic pKa values of Ionizable Groups in Proteins from Unstructured Peptides."
Texas Protein Folders Meeting, Navasota, Texas, April 2003
4. "Understanding the different protein expression level of the GAL promoter and the ADH promoter".
223rd ACS National Meeting, Orlando, FL, April 2002
5. "Effect of protein expression level of the GAL promoter and the ADH promoter in the read-out of the three hybrid system."
Leadership Alliance National Symposium, Atlanta, Georgia, July 2001
6. "Understanding the different protein expression level of the GAL promoter and the ADH promoter".
Columbia University Annual Research Symposium, New York, New York, July 2001
7. "Effect of pH and concentration on the 254nm photochemistry of adenosine: reactive precursors of the principal products, adenine and FAPy Ade".
221th ACS National Meeting, San Diego, California, April 1-5, 2001
8. "Effect of pH and concentration on the 254nm photochemistry of adenosine: reactive precursors of the principal products adenine." Minority Access to Research Career (MARC) National Meeting, Washington, DC, November, 2000

FELLOWSHIPS AND AWARDS

Research Supplement to Promote Diversity in Health Related Research	2009
Leadership Alliance Doctoral Scholar	2008
Industry-University Cooperative Chemistry Program- Presentation Award	2007
Phi Lambda Upsilon Honor Society	2007
Gamma Sigma Delta Honor Society	2007
Carl Storm Underrepresented Minority Fellowship	2006
National Institutes of Health Pre-doctoral Fellowship	2005
Cargill Animal Nutrition Scholarship	2005
Graduate Teaching Award, Texas A&M University	2005
National Research Service Award, National Institutes of Health	2004
NIH-Chemical-Biology Interface Program, Texas A&M University	2002
Dean's List, Chemistry Department, University of Puerto Rico	2002
Leadership Alliance Undergraduate Research Fellowship	2001
Minority Access to Research Career Undergraduate Fellowship	2000
Governor's Scholar – Puerto Rico Top 50 high school seniors	1998

SERVICE AND OUTREACH

Diversity Committee Chair - Penn Biomedical Postdoctoral Council	2010
Treasure - Penn Biomedical Postdoctoral Council	2010
Leadership Alliance National Symposium Planning Committee	2009
Moderator for the Opening Ceremony – Leadership Alliance National Symposium	2009
Mentor for undergraduate and high school students	2009
Moderator and Judge at the Leadership Alliance National Symposium	2007
Community Service and Public Relations Committee, Minorities in Agriculture, Natural Resources, and Related Sciences Chapter, TAMU	2005-2006
Vice-President of the Puerto Rican Student Association (PRSA), Texas A&M University	2004-2005

Vice-President of Public Relations, PRSA, Texas A&M University	2003-2004
Vice-President of the American Chemical Society Puerto Rico Chapter	2000-2001
American Chemical Society "Kids and Chemistry" Team	2000-2001
Peer Counselor for freshman students, University of Puerto Rico	1999-2001
Board Member of the American Medical Student Association	1999-2000

MEMBERSHIPS AND PROFESSIONAL AFFILIATIONS

Chair, Biomedical Postdoctoral Diversity Committee
Treasurer, Biomedical Postdoctoral Association
Member Symposium Planning Committee, Leadership Alliance Organization
American Society for Mass Spectrometry (ASMS)
Advancing Hispanics/Chicanos & Native American in Science (SACNAS)
American Chemical Society
National Postdoctoral Association
Phi Lambda Upsilon Honor Society, Beta Beta Chapter
Gamma Sigma Delta Honor Society

LANGUAGES

Fluent in Spanish and English

CITIZENSHIP

U.S.A.