

DANYELL WILSON, PhD

Phone number: 757-695-8083 • E-MAIL: Danyell.S.Wilson@gmail.com

EDUCATION

- May 2009 **Ph.D.**, Biochemistry-University of Florida, Gainesville, Florida
Dissertation Topic: Developed a novel biosensor system for the DOD utilizing membrane proteins, a tethered bilayer system, and a microarray device.
- May 2006 **M.S.**, Analytical Chemistry-University of Florida, Gainesville, FL
Thesis Topic: Studied and characterized the Nicotine Acetylcholine Receptor and a mutant version using a Planar Linear Patch Clamp Technique.
- May 2003 **B.S.**, Chemistry, Minor: Anthropology- GPA: 3.41/4.00
Lincoln University, Lincoln University-Pennsylvania

RESEARCH AND TEACHING EXPERIENCE

- Aug. 2015-
pres. **Associate Professor**, Department of Natural Sciences, Bethune-Cookman University, Daytona Beach, FL
- Teach undergraduate students biology, chemistry, cancer biology, and analytical techniques
 - Conduct research in the areas of basic science, public health and science education through collaborations
 - Provide service to the University by serving on committees, mentoring and advising students
- Sep. 2013-
May 2015 **Assistant Professor**, Department of Natural Sciences, Bowie State University, Bowie MD
- Teach undergraduate students biology, chemistry, and analytical chemistry content
 - Conduct research in the areas of basic science, public health and science education through collaborations
 - Provide service to the University by serving on committees, mentoring and advising students
- Feb.2010-
July 2012 **Research Scientist**, Comparative Effectiveness Research for Eliminating Disparities CERED, Center for Equal Health and **Research Associate and Coordinator**, Protect LINK-ET: Leaders In New Knowledge-Emerging Technologies, Moffitt Cancer Center, Tampa, FL
- Prepared patient samples (blood, urine, and saliva) for analysis via HPLC and Mass Spec.
 - Reviewed **scientific data** and articles in support of medical interventions for prostate cancer;
 - Critically appraised and reviewed proposed research protocols for physicians at local hospitals.
 - Coordinated and co-developed the training curriculum and pre and post evaluations.
 - Authored a standard operating procedure (SOP), publication, and drafted a brochure on clinical proteomics in cancer research;
 - Coordinated the mentoring, training, and curriculum development in basic science research (microbiology, biochemistry, and proteomics) for program participants;
 - Wrote and developed evaluation assessment tools to ensure program guidelines were met.
- Jan. 2005-
May 2009 **Research Assistant & Lab Manager**, Chemistry Department, University of Florida, Gainesville, FL

- Designed the biochemistry and optical trap lab and enforced OSHA laboratory safety standards;
- Collaborated and molecularly engineered mutated proteins and tested their functionality in a self-assembled medical device via patch clamping for overall biosensory applications;
- Characterized the patch-clamp tip diameter using the bubble-test and SEM
- Generated mutations in the mechanosensitive channel (amplified using PCR) and tested their phenotype characteristics (Gain or Lost of Function) and their functionality;
- Analyzed percentage of dimer formation in the mutated channels via Western Blots.
- Characterized lipid vesicle size using DLS and developed a tethered bilayer through self-assembly in a controlled environment;
- Conducted ion channel screening assays and analyzed using Axon, and Origin Software;
- Interpreted results and developed reports that were published in peer-reviewed journals and presented nationally.

Jan. 2003-
May 2005

Teaching Assistant, Chemistry Department University of Florida, Gainesville, FL

- Taught weekly classes on general chemistry I and II content;
- Organized study groups for students who wanted extra assistance;
- Prepared quizzes, exams, homework, and discussion problems.

LEADERSHIP AND ADMINISTRATIVE EXPERIENCE

July 2012-2016 **Research Consultant and Medical Writer**, Danyell Wilson Consultant, Tampa Fl

- Technical expertise in writing include: grant writing, immediate turn around on post-meeting deliverables and Executive Summaries; training modules and curriculum design experience; systematic review development (comparing different drug treatments), SOPs and White Paper development; evaluations; and qualitative research.

Sept. 2010-2013 **Consultant**, Upward Bound Program, University of South Florida, Tampa, Fl

- Taught high school Chemistry
- Grant and proposal writing with grants funded at 3.25 million.
- Developed the interview process for the recruitment of 100 new program participants.
- Developed a systematic evaluation plan for the next five years based on programmatic model.

Aug. 2012-
Sept. 2012

Consultant/Contractor, State of Florida's **Department of Health** and Community Health Worker Coalition, Tallahassee, Fl

- Developed proposal based on Statement of Work (SOW)
- Worked with stakeholders to meet requirements of the projected work
- Researched state-level Community Health Worker curricula and training initiatives
- Identified core competencies and scope of practice for Community Health Workers
- Conducted formative interviews with community health workers
- Developed and submitted White paper and on time deliverables

May-Aug.
2004-2009

Assistant Director and Peer Advisor, Board of Education Summer Fellowship (BOE) program, Graduate School (GS), Gainesville, FL

- Managed and mentored a team of six and 25-35 program participants;
- Maximized retention of graduate students by interceding as a liaison and a resource;
- Coordinated participants' summer events (social and networking), activities, payroll, and seminars;
- Authored a portion of the procedural manual on recruiting and retaining minority students.

COMMITTEES

2016-	GMaP Junior Faculty Training Committee Member
2016-	B-CU Undergraduate Research Advisory Board member
2015-2015	Bowie State University Career Resource Center Advisory Board
2014-2015	Maryland's Business Roundtable, Steering Committee
2014-2015	Maryland's Department of Education, STEM Communication Sub-committee
2013-present	Undergraduate Research Advisory Committee, Bowie State University
2012-2013	External Advisory Board for the P20 NCI Grant between Lincoln University and Fox Chase Cancer Center
2011-present	Diversity Chair, 2012 USA Science and Engineering Festival, Washington, DC, (http://www.usasciencefestival.org/)
2010-2010	Science Fair Chair, Multicultural Health Festival and Science Fair, Tampa, FL
2010-present	Undergraduate Research Day Committee, Moffitt Cancer Center, Tampa, FL
2007-2008	Howard Hughes Medical Institute (HHMI) Outstanding Mentor Award Committee, University of Florida, Gainesville, FL
2002-2003	Core Curriculum Committee, Lincoln University, Lincoln University, PA
2002-2003	Student Representative for the Natural Science Committee, Lincoln University, PA

FELLOWSHIPS/SCHOLARSHIPS/AWARDS

2016	Awarded the OneFlorida Minority Investigator Program fellowship from University of Florida
2015	Awarded the HERI research fellowship from UF and Moffitt Cancer Center
2015	Associate Member of the Greenebaum Cancer Center, Population Group
2014	Faculty Travel Award-American Association for Cancer Research (AACR)
2011	Scholar in Training Award-American Association for Cancer Research (AACR)
2008	2 nd Place Winner at the Third Annual AGEP Program Conference and Poster Session
2008	Roderick J. McDavis Academic Achievement Award
2007	Florida-Georgia Louis Stokes Alliance for Minority Participation (LSAMP) Award
2007	National Institute of Health (NIH) Supplement Award for a research internship
2003	Alliances for Graduate Education and Professoriate (AGEP) Award
2003	Grinter Award from the University of Florida Chemistry Department
2001	Minority Access to Research Careers (MARC) Scholarship

PUBLICATIONS

PUBIC HEALTH PAPERS:

Zegelbone PM, Reljic T, **Wilson DS**, Mhaskar R, Miladnovic B, Kumar A, Djubegovic B. Chemoprevention agents for prostate cancer. Cochrane Reviews. 10 June 2016
<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD012228/full>

Sultan DH, Rivers BM, Osongo BO, **Wilson DS**, Schenck A, Carvajal R, Rivers D, Roetzheim R, Green BL. Affecting African American Men's Prostate Cancer Screening Decision-making through a Mobile Tablet-Mediated Intervention. J Health Care Poor Underserved. 25 (3): 1262-77. September 2014

D. Wilson, V. Dapic, R. Mhaskar, S. Connors, J. Pow-Sang, B. Miladinovic, N. Kumar, B. Rivers, A. Kumar, Benjamin Djulbegovic Chemoprevention agents (biological, botanical, and synthetic) for prostate cancer. *Cochrane Collaboration: Prostatic Diseases and Urological Cancer Group (Protocol Submitted)*

D. Wilson, E. August, V. Dapic, R. Mhaskar, J. Scian, D. Sultan, B. Rivers Comparative Effectiveness Research for Eliminating Disparities (CERED): A Multilevel Intervention to Promote Informed Decision-Making on Prostate Cancer among African American Men *Health Practice Promotion*, March 2013

D. Wilson, V. Dapic TRAINING OF COMMUNITY HEALTH WORKERS: Coordination Requirements Necessary for the Development of a Seamless CHW Educational Experience in Florida, **White Paper**. Florida Department of Health, September 2012.

BASIC SCIENCE PAPERS

D. Wilson, B. Fang, W. Dalton, C. Meade, J. Koomen An ET-CURE Pilot Project Supporting Undergraduate Training in Cancer Research, Emerging Technology, and Health Disparities. J. Cancer Education, April 2012

LM. Yang, R. Wray, J. Parker, **D. Wilson**, R. Duran, P. Blount Three Routes to Modulate the Pore Size of the MscL Channel/Nanovalve, ACS Nano 2012, Jan. 6

M. Andersson, J. Jackman, **D. Wilson**, P. Jarvoll, V. Alfredsson, G. Okeyo, R. Duran Vesicle and Bilayer formation of DPhPC and DPhPE mixtures and their Bilayers' Electrical Stability, Colloids and Surfaces B: Biointerfaces. **82**;2, February 2011, p. 550-561

L. Yang, **D. Wilson**, R. Wray, R. S. Duran, P. Blount. Modulating the Conductance and Ionic Preference of MscL, A Nanovalve. *Biophys. J.* March 2009, **94**:3 p. 256a

D. Wilson, M. Andersson, G. Okeyo, P. Blount, R. Duran. Single Channel Analysis of MscL Reconstituted in a Tethered Lipid Bilayer: Gated by an Applied Voltage. *Biophys. J.* Jan. 2008, **94**: 1005

M. Andersson, G. Okeyo, **D. Wilson**, H. Keizer, P. Moe, P. Blount, D. Fine, A. Dodabalapur, R. Duran; Voltage-induced gating of the mechanosensitive MscL ion channel reconstituted in a tethered lipid bilayer membrane *Biosensors and Bioelectronics* **23**:6 January 2008. p. 919-923

SCIENCE EDUCATION PAPERS:

D. Wilson, B. Fang, W. Dalton, C. Meade, J. Koomen An ET-CURE Pilot Project Supporting Undergraduate Training in Cancer Research, Emerging Technology, and Health Disparities, J. Cancer Education, April 2012 (*Epub ahead of print*)

D. Wilson, A. Donnelly Academia vs. Industry: A Study of the Most Common Factors that Influence the Career Choices of Minority PhDs in STEM Fields, WEPAN Conference proceedings, April 2010, Baltimore MD (http://ocs.sfu.ca/wepan/index.php/WEPAN/namepa_wepan2010/paper/viewFile/91/29)

RESEARCH PRESENTATIONS

- Nov. 10, 2014 American Association of Cancer Research, Health Disparities Conference, San Antonio, TX
Title: Are Community Health Workers Learning the Basic Science of Cancer
- Nov. 9, 2014 Sigma Xi Annual Conference, Phoenix, AZ
Title: The Mechanistic Involvement of Ion Channels and Transporters in Glioma Cellular Metastasis and Proliferation
- Nov. 7, 2014 Mid-South Sociological Annual Conference, Baton Rouge, LA
Title: Community Health Worker Perspectives on the Administration of a Competency-Based Training Curriculum for the State of Florida
- April 21, 2014 Bowie State University Research Symposium, Bowie, MD
Title: Systematic Review of Cancer Education for Community Health Workers
- April 21, 2014 Bowie State University Research Symposium, Bowie, MD
Title: Ion Channels and Glial Cells
- Jan. 9, 2012 Center for Evidence Based Medicine Seminar, University of South Florida, Tampa, FL
Title: Paper Review-Out of Sight, But Not Out of Mind: How to Search for Unpublished Clinical Trial Evidence-by Dr. Ann Wen Chan
- Nov. 3, 2011 American Institute for Cancer Research Annual Conference Poster Session, Washington, DC
Title: Developing a Systematic Review Analyzing Chemoprevention using Natural and/or Synthetic Agents for Prostate Cancer
- Oct. 2, 2010 American Association for Cancer Research Health Disparities Conference Poster Session, Miami, FL
Title: Training Cancer Researchers that are Community Advocates
- July 19, 2008 Florida-Georgia Louis AMP Steering Committee Meeting, SEAGEP representative, Orlando, Florida
Title: FGLSAMP Expo 2008 Overall Evaluation Data
- Feb. 8, 2008 Biophysical Society Conference, Mechanosensitive Channel Platform, Long Beach, CA
Title: Single Channel Analysis of MscL Reconstituted in a tBLM: Gated by an Applied Voltage
- Mar. 26, 2006 American Chemical Society (ACS) National Spring Poster Session, Atlanta, GA
Title: Electrophysiological Studies of M2 δ Ion Channel Using a Patch Clamp Technique

OUTREACH PRESENTATIONS

- Feb. 6, 2015 Sustained Mentoring Program at BEYA, Washington DC
Title: Mentoring Makes a Difference
- March 12, 2015 First Annual Undergraduate Research Conference, Bowie MD
Title: Undergraduate Research
- Oct. 3, 2014 Minority Access Annual Conference, Washington DC

Title: Presentation Dos and Don't

Jan. 21, 2015 Spring Faculty Institute, Bowie MD
Title: Culturally Responsive Teaching in Higher Education

April 4, 2011 American Association for Cancer Research (AACR) Annual Meeting, High School Day-Science Education Event, Orlando, FL
Title: **Keynote Address:** Why Cancer Research Needs You

Mar. 19, 2011 Lincoln University Science Conference, Lincoln University, PA
Title: **Keynote Address:** Shaping Your Science Careers

Dec. 2, 2010 Lincoln Day, Fox Chase Cancer Center, PA
Title: **Keynote Address:** What can You do with a Lincoln University's Education: Any and Everything