Justin L. Wilson, Ph.D.
Science and Research 155 – Cleveland State University|Cleveland, Ohio 44115
Phone: 216-802-3391| E-Mail: j.l.wilson65@csuohio.edu |www.csuohio.edu/mcnair

PROFESSIONAL SUMMARY

- Experienced health scientist with 15 + years of healthcare-related, scientific research methodology and health service industry experience
- Emerging leader in the global health sector with additional experiences in academia, federal, for-profit, and non-profit sectors
- Excellent communicator in both written and oral media
- Technical expertise in molecular, surgical, and experimental procedures.
- Fiduciary expertise in budgeting, auditing, procurement, and an expert with MS office

EDUCATION

Howard University College of Medicine, Washington, District of Columbia Ph.D.
Physiology and Biophysics, July 2011
Dissertation: *"The role of interleukin-6, nicotinamide adenine dinucleotide phosphate oxidase subunit-2, and peroxisome proliferator activated receptor-alpha during angiotensin II induced hypertension"*

Howard University College of Arts and Sciences, Washington, District of Columbia
B.S. Biology and Chemistry, May 2005

EXPERIENCE

Cleveland State University, Cleveland, Ohio
Director of the McNair Scholars Program, July 2017 – Present
- Prepare unrepresented students for careers in Science, Technology, Engineering, and Mathematics
- I am responsible for planning and implementing workshop to prepare students for graduate school
- Supervise program staff and mentor many students

Hampton University, Hampton, Virginia
Assistant Professor of Biological Sciences, August 2014 – Present
- Created and developed curricula in the department.
- Analyzed complex biomedical health disparities research data using bio-informatical tools
- Served as an academic mentor undergraduate and graduate students
- Led and developed inter-departmental scientific journal discussions
- Coordinated scientific meetings at the university
- Wrote grants, white-papers, articles, and documents, which are used to apply for external funding
- Presented oral presentations at scientific meetings, within and outside of the university
- Served as NIH-MARC faculty advisor and Responsible Conduct of Research leader

National Institutes of Health National Heart, Lung, and Blood Institute, Bethesda, Maryland Intramural Research Training Fellow (Post-Doctoral Fellow), September 2011 – August 2013
- Researched polycystic kidney disease and water regulation through aquaporin-1 to determine biological pathways
- Mentored undergraduate students, taught different molecular/surgical techniques, as well as plan and execute experimental designs
- Performed mass spectrometry on rat inner medullary collecting ducts and perform dose responses to different drugs, which perturb water regulation signaling

- Managed large databases (Thermo-Proteome Discoverer, Sequest, InSPECT, PhosSA and other high-through put) data, and all the animal studies performed in system's biology laboratory
- Led discussions about relevant scientific topics/journal articles on the kidney's handling of water and phosphorylation
- Wrote articles and developed poster/presentations of results

Tucker Ellis, LLP, Cleveland, Ohio Summer
Associate May 2014 – August 2014

- Researched legal issues in the areas of maritime, medical malpractice, intellectual property, patent, and medical devices
- Wrote legal memoranda, legal briefs, summarized depositions, and interviewed clients
- Served as a medical/scientific advisor for the intellectual property division
- Reduced client legal fees by conducting pro-bono research
- Traveled to meet with prospective clients

Washington Adventist University, Takoma, Maryland Adjunct
Professor of Biology, Summer 2012 – Summer 2013

- Lectured to undergraduate students in Health and Human Diseases
- Met benchmarks of student success in the STEM
- Demonstrated the importance of science, physiology, and health in everyday lives of students
- Created new pedagogical techniques to entice students to engage in science, which was measured through online surveys

Howard University College of Medicine, Washington, District of Columbia Graduate
Assistant, August 2006 – July 2011
Student Seminar Coordinator, August 2006 – May 2008
Laboratory Volunteer, January 2005 – August 2006 Laboratory
Assistant, January 2002 – May 2005

- Created interactive lectures, exams, and maintained academic records of undergraduate students in physiology, endocrinology, biology, comparative anatomy, and other science courses
- Reduced the departmental budget by creating and developing my own laboratory manual
- Created new pedagogical techniques to entice students to engage in science
- Performed immune-histochemical techniques or other histological assays
- Processed and preserved coronal sections of postmortem mouse, rat, human, and monkey brains
- Used stereological techniques to measure neurons quality and quantity via NeuraLucida.
- Prepared and setup laboratories for all introductory biology students de novo (600 + students)
- Reduced spending by the department by setting up paradigms, making own reagents, and creating alternative experiments for laboratory use
- Organized weekly meetings with the graduate assistants/professors to teach each lab exercise
- Invited world-renowned researchers and clinicians to give weekly seminars in the College of Medicine
- Coordinated travel, accommodations and transportation for invited researcher and clinicians and ensured timely remuneration of all reimbursements for each presenter.
- Managed and setup the audio-visual technologies
- Served in the procurement capacity, by coordinating orders/deliveries different scientific companies, such as Fisher or Carolina

Kaiser Permanente Mid-Atlantic Region, Washington, District of Columbia, Silver Spring, Maryland, and

Northern Virginia.
Financial Business Officer, May 2005 – August 2006
Bioinformatics Trainer, 2004

- Helped reach benchmark goals of the financial auditing of medical centers through-out the metropolitan area
- Prepared daily cash audits and supervised all financial deposits for over 30 staff members
- Created financial reports for medical centers based in Northern Virginia
- Reduced level of loss prevention of cash collectors
- Utilized J-Point (Kaiser Permanente's financial software) to send comprehensive financial reports to the medical centers and the auditing team
- Trained and supervised employees on a new electronic medical record's system and cash collection's system
- Served as a one-on-one troubleshooter with each employee until certain benchmarks were met

GRANT APPLICATIONS

- Principle Investigator | Ronald McNair Trio Scholars Program | Department of Education $1, 327,000
- -Co-Principle Investigator | "Robert Noyce- Teachers Grant for STEM educators" National Science Foundation, $840,881
- "Determining The Molecular Indicators Underlying Organophosphates Toxicity" MSI STEM Research and Development – Department of Defense, $700,000, 4 years
- "Determining The Molecular Indicators Underlying Post-Traumatic Stress Syndrome" Department of Defense, $596,615, 3 years
- "The Role Of NAPHD Oxidase, IL-6, And Ang II During Chronic Hypertension", Hampton University Internal Grant, $5000, 1 year.

SKILLS

Over the past years, I have gained the experience as a technical thinker, problem solver, as well as leader. I am extremely organized and I am able to learn quickly. I am well verse in financial and auditing tools for budgeting. I also have many scientific techniques such as molecular techniques, western blotting, electrophoresis, immunohistochemistry, confocal microscopy, light microscopy, electron microscopy, tissue preparation, whole animal studies (rodents), mass spectrometry, biotelemetry, metabolic cage studies, non-human primate handling, stereology, neuron counting, data analysis, and many more techniques.

INVITED PRESENTATIONS

SMDP Biotech Conference	Philadelphia, Pennsylvania	2015
Sigma Xi Student Showcase Research Judge	National Meeting	2015
Invited Research Judge Louis Stokes Alliance for Minority Participation	Virginia State University, Petersburg, Virginia	2015
Invited Research Judge Louis Stokes Alliance for Minority Participation	Norfolk State, Norfolk, Virginia	2015
Invited Panelist "What's the next step after a Ph.D.	Georgetown University, Washington, District of Columbia	2015

Invited Lecturer “LinkedIn so that you can get in”	Hampton University, Hampton, Virginia	2015
Invited Speaker for Hampton Roads Dream High, INC.	Newport News, Virginia	2015
Invited Scientific Judge Newport News High School Regional Science Fair Newport News, VA	Newport News, Virginia	2015
ABRCMS Physiology Judge	San Antonio, Texas	2014
Invited Speaker Tucker Ellis, LLP "The Legal Consequences of Uber"	Cleveland, Ohio	2014
WBHR-LSAMP Summer Research Symposium	Bowie State, Bowie, Maryland	2013
Oral Presentation/Poster Presentation “Effect of no peptide V2 receptor antagonist SR121463b on the phosphoproteome of rat IMCD”	Experimental Biology Boston, Massachusetts	2013
Summer Bridges Program “A day with a scientist… stay in school”	Friendship Public Charter School Washington, District of Columbia	2013
System’s Biology Center-Work In Progress “Path analysis of large scale phosphor-proteomics in rat IMCD”	National Institutes of Health Bethesda, Maryland	2012
“alpha1 adrenergic-mediated vasoconstriction is attenuated in PPAR-alpha during Ang II infusions”	Howard University College of Medicine	2011
“alpha1 adrenergic-mediated vasoconstriction is attenuated in PPAR-alpha during Ang II	Experimental Biology	
“The role of IL-6 during angiotensin induced hypertension	Experimental Biology Anaheim, California	2010

PROFESSIONAL MEMBERSHIPS

Ohio Academy of Science
Educational Opportunity Association
American Physiological Society
Sigma Xi
American Association for the Advancement of Science

Reference List

Bradford, D., Raghuram, V., Wilson, J. L., Chou, C. L., Hoffert, J. D., Knepper, M. A., & Pisitkun, T. Use of LC-MS/MS and Bayes' theorem to identify protein kinases that phosphorylate aquaporin-2 at Ser256. (1522-1563 (Electronic)). doi:D - NLM: PMC4101623 OTO - NOTNLM

Wilson, J. L., Miranda Ca Fau - Knepper, M. A., & Knepper, M. A. Vasopressin and the regulation of aquaporin-2. (1437-7799 (Electronic)). doi:D - NLM: NIHMS467679
D - NLM: PMC3775849 EDAT- 2013/04/16 06:00 MHDA- 2014/09/10 06:00 CRDT- 2013/04/16 06:00 PHST- 2013/02/18 [received] PHST- 2013/02/25 [accepted] PHST- 2013/04/13 [aheadofprint] AID - 10.1007/s10157-013-0789-5 [doi] PST - ppublish

Lee, D. L., Wilson, J. L., Duan, R., Hudson, T., & El-Marakby, A. (2011). Peroxisome Proliferator-Activated Receptor-α Activation Decreases Mean Arterial Pressure, Plasma Interleukin-6, and COX-2 While Increasing Renal CYP4A Expression in an Acute Model of DOCA-Salt Hypertension. *PPAR Research, 2011*, 7. doi:10.1155/2011/502631

Lee, D. L., & Wilson, J. L. (2012). Urine from Sexually Mature Intact Male Mice Contributes to Increased Cardiovascular Responses during Free-Roaming and Restrained Conditions. *ISRN Veterinary Science, 2012*, 185461. doi:10.5402/2012/185461

Wilson, J. L., Duan, R., El-Marakby, A., Alhashim, A., & Lee, D. L. (2012). Peroxisome Proliferator Activated Receptor-α Agonist Slows the Progression of Hypertension, Attenuates Plasma Interleukin-6 Levels and Renal Inflammatory Markers in Angiotensin. *PPAR Research, 2012*, 7. doi:10.1155/2012/645969

Hoffert, J. D., Pisitkun, T., Saeed, F., Wilson, J. L., & Knepper, M. A. (2014). Global analysis of the effects of the V2 receptor antagonist satavaptan on protein phosphorylation in collecting duct. *American Journal of Physiology - Renal Physiology, 306*(4), 410-421. Retrieved from http://ajprenal.physiology.org/content/306/4/410.abstract
http://ajprenal.physiology.org/content/ajprenal/306/4/410.full.pdf