BOARD OF TRUSTEES UNIVERSITY OF THE DISTRICT OF COLUMBIA UDC RESOLUTION NO. 2023 - 22

SUBJECT: TENURE APPROVAL FOR BRANDY HUDERSON, PH.D., COLLEGE OF ARTS & SCIENCES

WHEREAS, pursuant to D.C. Code §38-1202.06(3), the Board of Trustees is authorized to establish or approve policies and procedures governing admissions, curricula, programs, graduation, the awarding of degrees, and general policy making for the components of the University; and

WHEREAS, Dr. Brandy Huderson, Ph.D., Associate Professor of Biology in the Division of Sciences & Mathematics of the College of Arts and Sciences (CAS) of the University of the District of Columbia (University), has petitioned the University to be granted tenure in the department in which she is qualified; and

WHEREAS, Dr. April Massey, Dean of CAS, in conjunction with the Division Chair, Department and College Promotion and Tenure Committees, has conducted a thorough review of Professor Huderson's academic background and records of achievement in teaching, scholarship, and university and community service and have recommended her for promotion from Assistant Professor to the rank of Associate Professor and for tenure; and

WHEREAS, they judged Professor Huderson to be an excellent professor with impressive skills and knowledge in her field who meets the criteria by which University of the District of Columbia faculty are evaluated, based on the 8th Master Agreement, noting her rankings as excellent in her teaching effectiveness and mentoring; the quality of her emerging research and scholarly works; and wide community engagement make her an asset to UDC; and

WHEREAS, the Chief Academic Officer and the President have affirmed the recommendation of tenure for Professor Huderson from Dean Massey and the Division and College Promotion and Tenure Committees, and the President has forwarded the recommendation for tenure to the Board of Trustees.

NOW THEREFORE BE IT RESOLVED, that the Board of Trustees of the University of the District of Columbia approves the award of tenure to Dr. Brandy Huderson, College of Arts and Sciences, at the rank of Associate Professor.

Submitted by the Academic & Student Affairs Committee: May 31, 2023

Approved by the Board of Trustees: June 8, 2023

Christopher D. Bell Chairperson of the Board



LAWRENCE T. POTTER, JR., Ph.D. CHIEF ACADEMIC OFFICER

CONFIDENTIAL MEMORANDUM

TO: Ronald Mason, Jr., J.D.

President

FROM:

Chief Academic Officer

DATE: April 30, 2023

RE: Recommendation: Professor Brandy Huderson for tenure and promotion to the rank of

Associate Professor

President Mason:

Guided by the *Eight Master Agreement* and criteria established by the College of Arts and Sciences for promotion and tenure, I have reviewed the portfolio and supporting documentation submitted by **Dr. Brandy Huderson for tenure and promotion to the rank of Associate Professor**.

As Chief Academic Officer, my review aims to evaluate evidence of significant and relevant achievements in scholarship/creative work, teaching, and service. In addition, I review the self-narrative to ensure there is alignment between established standards and evidence provided within the portfolio. I conduct my review of each applicant after the files have been reviewed by the Chair, DEPC, CPC, Dean, and URC (in cases where an appeal is filed). Based on a holistic review of recommendations and the file, I make an independent recommendation to you for consideration.

Professor Huderson arrived at UDC in August 2014 as an Assistant Professor of Biology. **Dr. Huderson has received nothing lower than "Outstanding" ratings for all her annual evaluations**; however, for the academic years 2019-2021, she was on leave to complete the AAAS Science and Technology Policy Fellowship, where she was placed at the National Science Foundation (NSF). Her mentor, Dr. Julie Johnson, completed her evaluations during this time. She received **"Excellent"** or **"Very Satisfied"** ratings during those two years (the highest ratings on a scale from Excellent to Poor and Very Satisfied to Very Dissatisfied). The Fellowship had no rating system comparable to that of the 8th Master Agreement (Distinguished rating requirement). Dr. Huderson has never received the required (*composite*) "Distinguished" rating (despite what reviewers in CAS have stated, including the Dean). **However, I believe it would be acceptable to allow the Fellowship at NSF to be considered as representing distinguished work** for those two academic years and thus validate the portfolio as meeting eligibility standards for annual ratings. Professor Huderson meets time-in-rank eligibility requirements.

Chair: Recommended (3 of 3)

DEPC: Recommended (Cousin Chair)

CPC: Strongly Recommended (5 of 5, Licata Chair)

Dean: Recommended (4 of 5)

TEACHING: The **Dean** observes that Dr. Huderson "has translated the value of her bench research to the building of curricula that engage and sustain student interest and create openings for populations historically underrepresented in STEM" and notes that in her portfolio, Dr. Huderson "samples student feedback to document the impacts of her work and potential for broadening its reach." Professor Huderson's narrative focuses on her attention to student needs and research interests in her classrooms and in their educational journeys. Her narrative emphasizes actions and efforts to put the onus on students, in part a manifestation of the flipped classroom and in part a method to make STEM more attractive. She writes, "The first assignment in my lecture courses has historically been an icebreaker where I ask each student to answer 5 or 6 questions about themselves. This assignment was used to gather basic information about students. However, a re-envisioning of this assignment now has students sharing recordings of their introductions with their classmates, and that has facilitated an exchange of shared experiences allowing students to find commonality and community within each course." This is laudable, and the narrative here is representative of the emphasis Professor Huderson brings to the classroom in terms of focusing on students and their sense of community. She points to the ultimate rationale by saying, "The driving force for my studentcentered research program is the desire to make sure that every student knows and understands both the options and power of a STEM-related degree." Professor Huderson's students provide evidence of her teaching success through their own journeys, and some have written in support of Professor Huderson's promotion/tenure application. For example, Aliyah Patterson, a UDC graduate who is now in medical school at Loma Linda University, writes:

"Dr. Huderson is an incredibly good listener. She considered and valued my input, encouraged and nurtured my curiosity, and explored and facilitated several ideas that I had. She encouraged thinking out of the box, and I attribute much of my success in medical school to her mentorship, and her guidance in critical reasoning. Throughout my years at UDC, I spent several hours in her office, learning from her as well as receiving guidance throughout the medical school application process. Dr. Huderson provided encouragement, pushed me to excel, and celebrated my successes with me along the way."

Another former student, Dr. Thomas A. Elimihele, MD, MS, who is an Internal Medicine Resident Physician at Meharry Medical College and a 2017 graduate of UDC's MS program in Cancer Biology, Prevention, and Control had this to say:

"During the summer of 2016 . . . I had the opportunity of being accepted into [Dr. Huderson's] laboratory for my research work that will ultimately serve as the thesis for my Master's program. Throughout this period, she created an environment that made me comfortable enough to stretch my curiosity and never felt ashamed to ask any question; to her, no question was stupid as long as it helped with the progress of our work and my understanding. . . Today, I can confidently say that I had a positive and memorable experience working with Dr. Huderson as my professor, mentor, and supervisor of my research work. I still constantly deploy the things I learned in her lab, even in my current role as an Internal Medicine resident doctor when faced with explaining complex Molecular Biology results to patients."

Finally, Soukeina Traore, who graduated from UDC in 2021 with a BS in Biology, offered these thoughts about Professor Huderson:

"Through my time with the STEM center and in Dr. Huderson's lab, I had the chance to present at ABRCMS (Annual Biomedical Research Conference For Minority Scientists), which was such a great opportunity to network and opened my eyes to a whole new world of discovery within STEM. After my time with the STEM center, with the help of Dr. Huderson, I had something to do every summer, one of which was participating in the Advanced College Summer Enrichment Program (ACSEP) as Tier II at Howard University. . . .

My time spent doing research with Dr. Huderson has [shaped] where I am today. At the time, as a freshman at UDC, you are assigned an adviser until Junior when you can pick an adviser of your choosing. I remember telling Dr. Huderson that she would be my adviser. By then, she was my go-to person for anything UDC related. She has not only guided me through my academic journey but also just me as a person. Her advice was not just legalistic by the book, but she took into account the whole person, not only the title of a student. She kept in mind that a student can also

be a daughter, son, mother, full or part-time worker. She kept in mind that a college student has a life outside the 4 walls of the university. She follows up and continues to do so even after graduation."

Professor Huderson's shift from more traditional research appears to manifest in these voices. She writes, [After many engagements with students], "I realized that a greater paradigm shift needed to not only bring students into the scientific enterprise but also help them to remain and succeed. I began to rethink how to center my expertise at the bench to a broader and more programmatic opportunity to build the next generation of STEM scholars." The need for this kind of embedded recruitment effort to build a much greater/broader representation of the next generation of STEM students/scholars is paramount. One would hope the scholar can maintain (and grow) a serious research agenda while mentoring and encouraging the next generation. Professor Huderson's shift in research emphasis appears to have been (at least partly) at the expense of a more robust personal research agenda. While the result is arguably a less developed portfolio of scholarship, it is difficult not to be swayed by the next generation's voices, as evidenced above. That inspiration is critical and can arguably be seen as counterbalancing the depreciation of a more rigorous traditional research agenda.

SCHOLARSHIP: The **DEPC** expresses the following concerns about the scholarly production to date for Professor Huderson:

"The committee raised concerns about her research capacity and activities during her eight years at U.D.C. Since she changed her cancer biology research efforts to Science Education in the past two years, her publications record is not well-grounded. Also, she published almost no first-author or corresponding author articles. Although she obtained a decent amount of U.D.C. internal grants, she has not received any external assistance as a P.I."

Similarly, the **Chair** (Dr. Song) expresses reservations along these same lines:

"My only area of concern for Dr. Huderson's professional development has been her progress in becoming an independent scientist with an active research program. She certainly can engage students in her research laboratory and has helped a significant number of these students gain valuable experiences. Her students have presented posters and given talks at local, regional and national meetings, all of which are important. One area to improve upon is in her research program. An increase in the number of peer-reviewed publications and extramural grant proposals/funded submissions that come out of her research program is essential.

The Dean's observations effectively echo Dr. Huderson's explanation for her trajectory; they add little to the wording found in Dr. Huderson's narrative. Moreover, the Dean does not delve into the nature of publications, opting to reference the raw numbers in very general terms: "Dr. Huderson documents 20+ research projects between 2017 and present with four (4) projects in progress." This is not especially helpful because of the unspecified range of quality and type of "projects" involved. Most of the reviewers comment favorably on the two-year AAAS Fellowship conducted at NSF, and the experience clearly made an impact. She writes, "The fellowship allowed me to return to UDC with a better understanding of my own science pedagogy and its juxtaposition to current national trends and best practices in STEM Education." The experience has garnered her speaking engagements at NIH, the National Science Board (NSB), the National Academies of Sciences, Engineering, and Medicine (NASEM), and the Strategic Council on Research Excellence. This is important because Dr. Huderson might not have been afforded these speaking opportunities without completing the AAAS Fellowship. And conceivably, her talks at those levels can influence educational policy. Dr. Huderson does provide a specific reference to impact on students (through the 2019 AAAS HBCU Making and Innovation Showcase), but it is unclear exactly how/when she was involved. In that Showcase, students from a range of HBCUs were tasked to address a problem that fell in line with one of the 17 Sustainable Development Goals (SDGs) adopted by the United Nations. The Showcase prompted students to identify and develop solutions to realworld problems. Dr. Huderson notes that "UDC's [four-member] team focused its efforts on Goal 6: Clean Water and Sanitation . . . [working] together to identify an issue and present their research." Whether these four students were in Dr. Huderson's previous classes or if she served as a mentor, etc., is unclear. There is no mention of the students by name or reference to classroom interaction. There is no narrative framing, in other words, for that event.

In terms of publications, Professor Huderson has **two** book chapters (both from 2019), **one** review article, and **two** published research articles (2020 and April 2015), since arriving at UDC. The most recently published article *before her arrival* is from 2011 in the *Journal of Dairy Science*. Like several UDC faculty members, Professor Huderson has published her two coauthored book chapters with <u>IGI Global</u>, which has mixed reviews for its reputation. It has been termed either a "predatory" or "vanity" press, depending on the source of evaluation. There is plenty of internet counterweight to these assessments, but one cannot determine what has been fabricated and what is genuine when reading a defense of IGI Global. The work in question is of value (advancing STEM education in underserved urban public schools); therefore, I believe it should have appeared from a more reputable publisher, ideally a university press. The first of the two journal articles published during Professor Huderson's time at UDC (April 2015) appears in *Domestic Animal Endocrinology*, which is reputable. The most recent (2020) appeared in the *Journal of Mathematics and Science: Collaborative Explorations*, which VCU's Scholar Commons publishes. In summary, overall, both the amount of production itself and the concerns of the DEPC and Chair make it a borderline case for meeting the standard in this domain.

SERVICE: Professor Huderson's service to CAS includes: AY 2021-2022: Faculty Advisor; AY 2019-2020, Division of Sciences and Mathematics Faculty Search Committee: Chemistry; April 2018; D.S.A.M. Honors Dinner Program; AY 2017-2018: Chemistry Program Review and A.C.S. Certification; Division of Sciences and Mathematics Grievance Committee, CHAIR; AY 2016-2017: DSAM Faculty Search Committee: Biology; AY 2016-2019: Bio-Chem Club Faculty Advisor; AY 2014-2016, 2021-2022: CAS Grievance Committee. She has served as a Hear Me Lead Faculty Mentor, STEAM Symposium coordinator, member of the DEPC, and Undergraduate Research Day coordinator/facilitator. Arguably, numerous service strands are embedded in the narratives of the students advised and mentored by Professor Huderson. She is truly dedicated to them. One of the students notes that Professor Huderson was most recently in touch with a lunch invitation—and they joined with another former UDC student who was a lab partner. In myriad ways, sometimes not immediately visible, Professor Huderson exemplifies service to the students, the discipline, and the university. She meets standards in this domain.

Summary Evaluation

Professor Huderson supplies two external letters of recommendation: from **Dr. Ed Smith**, Professor of Animal and Poultry Sciences at Virginia Tech, and **Dr. Vashti Bryant**, Dean of Math and Sciences at North Seattle College. Dr. Bryant highly praises Dr. Huderson, calling her a "dedicated, innovative, and highly motivated scholar, mentor, and all-around steward of the scientific community." Dr. Smith, who mentored Professor Huderson at Virginia Tech, says, "She is focused, innovative as a scientist and professor, and an exemplary citizen. For these reasons and the potential she continues to have for impacting your students and others nationally, I very strongly and enthusiastically support Dr. Huderson's application." Dr. Smith's high praise continues as he points out that Virginia Tech has invited Dr. Huderson back a few times to share her story and inspire the next generation. He concludes, "Dr. Huderson's discipline, her citizenship, and her commitment to training the next generation of scientists make her an exemplary scientist who will continue to be impactful at UDC and nationally for a very long time." Without disinterested external reviewers who can more objectively assess portfolios, we regularly see enthusiastic support with little critical assessment (although not always).

Dean Massey offers commentary to account for a relative lack of scholarly production: "Dr. Huderson is part of a growing body of scientists prioritizing student access and learning. Her references for this application offer additional models of this perspective and work." It is important to applicate work in advancing STEM education/access for historically marginalized and minoritized students; however, I am not sure the choice is an either-or proposition. The two pursuits go hand in hand.

Taken as a whole, the application merits support, and that is because teaching and mentorship are of such impact/importance that they can be seen as counterbalancing the challenges in the scholarly domain. Therefore, I concur with the recommendations in supporting <u>Professor Brandy Huderson to be tenured and promoted to the rank of Associate Professor</u>.

The electronic dossier is available for review. Send an email request to the Office of the Chief Academic Officer at CAO@udc.edu.

I, Ronald Mason, Jr., President of the University of the District	of Columbia, APPROVE	<u>X</u>	DENY
the recommendation to promote Professor Brandy Huderson to the rank of Associate Professor with tenure, and			
recommend her for approval to the Board of Trustees.			
Small Harvey	5/11/23		
Signature	Date		

cc: Professor Brandy Huderson
Albert Pearsall, President, UDCFA
Lorinnsa Bridges-Kee, Vice President of Human Resources

Brandy Huderson, Ph.D.

brandy.huderson@udc.edu

EDUCATION

Ph.D., (May 2010). Department of Animal Science -Dairy Option, Virginia Polytechnic Institute and State University, Blacksburg, VA, USA.

Concentration: Mammary Gland Physiology

Dissertation: The Effects of Exogenous Somatotropin, Ovarian Hormones, and Extracellular Matrix on Prepubertal

Bovine Mammary Gland Composition and Gene Expression

Advisor: R. Mike Akers, PhD

M.S., (December 2003). Department of Biological Sciences, University of New Orleans, LA, USA.

Concentration: Molecular Genetics/Biochemistry

Thesis: Cellular localization of the meiotic inducer, IME4P and requirement for the methyltransferase

domain in Saccharomyces cerevisiae

Advisor: Mary J. Clancy, PhD

B.S., (May 2000). Xavier University of Louisiana, New Orleans, LA. USA.

Major: Biology/Pre-Med; Minor: Chemistry

PROFESSIONAL AND RESEARCH EXPERIENCE

<u>Assistant Professor- Biology</u> (August 2014- Current): Division of Sciences and Math, University of the District of Columbia, Washington, DC, USA.

- Lead a Nuclear Steroid Receptor Biology research program
- Research Projects:
 - Investigating the role of exosomes in ligand-independent activation of androgen receptor signaling pathway using triple negative breast cancers as study model.
 - Investigating the effects of complete hormonal supplantation of endogenous systems with exogenous hormone
- Curriculum development, course coordination, and instruction of upper-level and graduate biology lecture laboratory courses
- External grant management: managed sub-award budget, organized student summer research
 placement, Science and Research SME, developed and organized scholar's research experience
 Design and manage research experiences for masters (1) and undergraduate (>10) students

<u>AAAS Science and Technology Policy Fellow</u> (September 2019 – August 2021): American Association for the Advancement of Science (AAAS), Washington, DC, USA

- Placed at the National Science Foundation (NSF) in the Directorate for Education and Human Resources (EHR)/Division of Research on Learning in Formal and Informal Settings (DRL) AISL Program (Advancing Informal STEM Learning)
- Coordinated the NSF Summer Scholar Internship Program (SSIP) to introduce students from historically underrepresented backgrounds to science policy
- Contributed to the operation and execution of NSF's Merit Review Process through the analysis of proposals received and funded to inform proposal recommendations

- Responsible for portfolio analysis, data collections and management, proposal management from submission to award or declination, post-award management, and overall program support
- Strategically building the Informal Science field through partnership with AISL resource center, CAISE
- Engaged stakeholders via communication briefs and reports about program investments Generated informational communications tools for public engagement
- Engage network to actively highlight and promote AISL and other DRL programs, recruit potential submitters and reviewers to DRL programs
- Participated in the collaborative EHR Evaluation and Monitoring Group (EMG), to develop, collect and prioritize learning agenda questions, and reviewed EHR Office of Management and Budget Information Collection Review (OMB-ICR) packages

<u>Postdoctoral Fellow</u> (May 2012 – August 2014): Lombardi Comprehensive Center, Georgetown University, Washington, DC, USA.

- Investigated the role of bivalent cations in the activation of the androgen receptor in estrogen receptor negative/androgen receptor positive breast cancers.
- Investigated the role of cadmium in the activation of the androgen receptor in prostate cancer.
 Mentor College and High School Summer Science Scholars
- Mentor/Advised Biochemistry/Biotechnology M.S. Students

Techniques mastered and taught: Quantitative real-time PCR, Chromatin Immunoprecipitation (ChIP), Western blotting, Transient transfections and cell culture of breast cancer cell lines.

<u>Postdoctoral Fellow</u> (February 2010 – January 2012): Structural and Cellular Biology Department, Tulane University School of Medicine, New Orleans, LA, USA.

- Investigated the role of attenuated phosphorylation in the functioning of estrogen receptor alpha in estrogen receptor-alpha positive breast cancer cells.
- Mentor Summer Science Academy (High School Students)
- Grant Writing

Techniques mastered and taught: Immunohistochemistry, western blotting, cell based assays, cell culture of breast cancer cells, small animal models.

<u>Graduate Research Assistant</u> (August 2006- May 2010): Department of Dairy Science, Virginia Polytechnic Institute and State University, Blacksburg, VA, USA.

- Investigated the hormonal regulation of mammary gland growth and development in dairy heifers
- Studied the mechanisms involved in Growth Hormone-signaling in bovine mammary gland
- Studied the effects of the extracellular matrix on gene profile expression using in-vitro bovine mammary model
- Organized and assisted in conducting surgeries in sheep as well as jugular catheterization in cattle
- Undergraduate Anatomy and Physiology of Domestic Animals Laboratory
- Assisted with Undergraduate Professional Development Course
- Assisted in teaching the laboratory for Advanced Anatomy and Physiology of Domestic Animals

• VT- PREP (Post-Bacc Baccalaureate Research and Education Program) Peer Mentor Student mentor to Undergraduate STEM students

Techniques mastered and taught: RNA isolation and purification from tissue homogenates, Parafin embedding of mammalian tissue samples, Quantitative real-time PCR, SDS-PAGE, Western blotting, Ligand blotting, Immunohistochemistry, Immunofluorescence, DNA, protein and lipid quantification from tissue samples, mammalian cell culture

<u>Graduate Research Assistant</u> (August 2000- December 2003): Department of Biological Sciences, University of New Orleans, LA, USA.

• Investigated the role subcellular localization of IME4p in meitoitc induction in sporulating yeast, Saccharomyces cerevisiae

Techniques mastered and taught: Prokaryotic Cell Culture, Site Directed Mutagenesis, Protein Cloning, PCR Primer Design, Traditional PCR, Western Blotting, Immunohistochemistry, Light and Fluorescent Microscopy, SDS polyacrylamide gel electrophoresis, DNA isolation, Protein isolation.

INVITED TALKS

"Graduate Funding" **Huderson, B**. National Science Foundation (NSF) Summer Scholars Internship Program (SSIP). Virtual, 2021, 2022.

"Workforce Development: Understanding the Potential of STEM Degrees" **Huderson, B.** National Institutes of Health (NIH) Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) STRIVE Scientific Workforce Diversity Committee. <u>Path to Enhancing Scientific Workforce Diversity Workshop</u>. Virtual, May 18, 2022.

"Improving Early-Career Researcher Experiences" **Huderson, B.** National Academies of Sciences, Engineering, and Medicine and the <u>Strategic Council on Research Excellence, Integrity, and Trust.</u> Virtual, February 10, 2022.

"K-12 Urban STEM Education" **Huderson, B**. National Science Board (NSB). <u>The Uneven Geography of K-12</u> **STEM Education**. Virtual, December 8, 2021.

"Creating Experiential Learning Experiences by Examining the Role of Cancer-Derived Exosomes in Steroid-Hormone Receptor Activation in AR+ Breast Cancer Cells" **Huderson, B.** James Madison University Biology Seminar Series. Virtual, November 5, 2021.

"Women Are Here: But What Do You Really See?" **Huderson, B.** NSF HBCU-UP BPR Peer Mentoring e STEM Webinar, University of the District of Columbia, Virtual, November 4, 2020.

"Intersectional Identities and How This Influences Black Women's Success In Stem Fields" Huderson, A. and **Huderson**, **B.** WEPAN Professional Development Webinar Series, Virtual, August 13, 2020.

Book Chapters

Huderson, A., & **Huderson**, **B.** (2019). Societal Factors and Workplace Perceptions: Understanding Social Determinants of Professional STEM Achievement and Persistence for Black Women. In Thomas, U., & Drake, J. (Ed.), *Women's Influence on Inclusion, Equity, and Diversity in STEM Fields* (pp. 1-21). IGI Global. http://doi:10.4018/978-1-5225-8870-2.ch001

Huderson, B., & Huderson, A. (2019). Urban STEM Education: A Vehicle for Broadening Participation in STEM. In Wendt, J. L., & Apugo, D. L. (Ed.), *K-12 STEM Education in Urban Learning Environments* (pp. 1-24). IGI Global. http://doi:10.4018/978-1-5225-7814-7.ch001

Review Articles

M. Anbalagan, and **B. Huderson**, L. Murphy and B. G. Rowan. Post-translational modifications of nuclear receptors and human disease. Nucl Recept Signal. 10:e001.

Research Papers

- J. Wendt and **B. Huderson**. (2020). The Influence of Observational Experience and Metaconceptual Teaching Activities on Secondary Science Teacher Candidates" Conceptual Understanding of the Practices of Science. JMSCE. 16:224-237 https://doi.org/10.25891/55qn-3k55
- T. Elimihele, and **B. Huderson**. 2017. Ligand Independent Activation of Androgen Receptor in Estrogen Receptor-Negative, Androgen Receptor-Positive Breast Cancer Cells: Crosstalk with Wnt (Master's Thesis). The University of the District of Columbia, Washington, DC.
- B. T. Velayudhan, **B. P. Huderson**, S. E. Ellis, C. L. Parsons, R. C. Hovey, A. R. Rowson, and R. M. Akers. 2015. Ovariectomy in young prepubertal dairy heifers causes complete suppression of mammary progesterone receptors. Domestic Animal Endocrinology. 51C:8-18.
- **Huderson, B. P.**, B. T. Velayudhan, R. E. Pearson, S. E. Ellis, and R. M. Akers. 2013. Effect Of Exogenous Somatotropin And Staged Ovariectomy On mRNA Expression Of Select ECM-Related Genes. Online Journal of Animal Science. 3:160-168.
- **Huderson, B. P.**, Duplessis, T. T., Williams, C. C., Seger, H. C., Hill, S. R., And Rowan, B. G. 2012. Stable Inhibition Of Specific Estrogen Receptor A (ERα) Phosphorylation Confers Increased Growth, Migration/Invasion, And Disruption Of Estradiol Signaling In Mcf-7 Breast Cancer Cells. Endocrinology. 153: 4144-4159.

Velayudhan, B. T, **B. P. Huderson**, M. L. McGilliard, H. Jiang, S. E. Ellis, and R. M. Akers. 2012. Effect of Staged Ovariectomy on Measures of Mammary Growth and Development in Prepubertal Dairy Heifers. Animal. 6: 941-951.

Huderson, B. P., B. T. Velayudhan, R. E. Pearson, S. E. Ellis, and R. M. Akers. 2011. Effect of Exogenous Somatotropin in Prepubertal Holstein Heifer Mammary Gland Composition and Proliferation. J Dairy Sci. 94: 5005-5016.

Conference Presentations

*Denotes presentation with former or current student(s)

"The Science of Education" Burtin, A., **Huderson, B** (panelist), Taraboletti, A. 2nd Annual Teaching Learning Roundtable. University of the District of Columbia, Virtual, April 2022.

"Defining Urban STEM Education" Baltzley, P., **Huderson, B.** (Panelist), Staley, J., and Wilson, C. MD CRUSE: Maryland Collaborative for Research in Urban STEM Education Methodology Institute, Virtual April 30, 2022.

"Mentoring in a Virtual Space: Best Practices and Ways to Promote DEI" Bickham-Wright, U., **Huderson, B.** (panelist), Miles, K., Nguyen, J. American Association for the Advancement of Science (AAAS) Annual Meeting. Virtual, February 18, 2022.

"Teaching from the Middle" Vixamar-Owens, D., **Huderson, B.** CAS National Conference-Teaching Learning Roundtable. University of the District of Columbia, Virtual, May 2021.

"Careers in STEM Policy: Opportunities for Underrepresented minorities" Carter, D., Decerega, R., **Huderson, B** (moderator/coordinator), Toldson, I. American Association for the Advancement of Science (AAAS) Annual Meeting. Virtual, February 9, 2021.

"What if I Don't Want to Be a College Professor? STEM Careers Beyond Academia" **Huderson, B**. (Moderator); Banks, L.; Findlay, R.; Leggett, C. Black Doctoral Network Conference, Virtual, October 29-31, 2020.

"Reconstructing Black Feminist Dialogue and Rhetoric During a Presidential Election: Examining Social Determinants of Professional STEM achievement and persistence for Black Women" **Huderson, B.** (Panelist) and Huderson, A. Black Doctoral Network Conference, Virtual, October 29-31, 2020.

"Artificial Intelligence and STEM: How to Prepare a Diverse and Qualified Workforce" Davis, S. Y.; Gore, S.; **Huderson, B.** (Panelist). Lawrey, A.; Vann, A.; Webster, K. U.S. News Stem Solution Conference, Washington, DC, April 4, 2018.

Career Panel. Baker, T., Barizo, O., Bonivel, J., Fordyce, G., Huderson., A. (moderator), **Huderson, B**. (panelist), Leach, E. ERN, Washington, DC, February 2017.

Wendt, Jillian, **Huderson**, **Brandy**. Science Teacher Candidates' Conceptual Understandings of the Practices of Science: The Influence of Metaconceptual Teaching Activities. VERA 2016.

*Huderson, Brandy P., Alkhilaiwi, Faris A, Conner, Scot A., Albohamad, Dalal, Scot A. Conner, Dalal Albohamad, Dowling, Samuel D., Noguchi, Glyn M., and Martin, Mary Beth. The Role of Calcium in Androgen Receptor Activation in Estrogen Receptor Negative Breast Cancer. CABTRAC 2013. Wilmington, NC.

- *Huderson, Brandy P., Dowling, Samuel D., Noguchi, Glyn M., and Martin, Mary Beth. The Role of Ca²⁺ and NO₂- in the Activation of Androgen Receptor in Estrogen Receptor Negative Breast Cancer Cells. Lombardi Comprehensive Cancer Center, Georgetown University 2013. Washington, DC.
- *Venero, Sophia, **Huderson, Brandy P.,** Martin, Mary Beth. 2013. The effect of metalloid ions on cell proliferation in estrogen receptor-negative, androgen receptor positive MDA-MB 453. Howard Hughes Medical Institute Summer Symposium. Georgetown University. Washington, DC.
- *Amouzou, Serge, **Huderson, Brandy P.,** Martin, Mary Beth. 2012. Study of Prostate Cancer: C4-2B Cell Line Approach. Howard Hughes Medical Institute Summer Symposium. Georgetown University. Washington, DC.

Accepted Abstracts

*Denotes presentation with former or current student(s)

Carter-Johnson, F., Fullilove, F., **Huderson, B.**, Leddy, M., Sievert, R., Soso, S., Stone, E. 2019. Methods and Practices for Evaluation Capacity Building in Historically Underrepresented STEM Communities. Understanding Interventions, San Antonio, TX (cancelled due to covid-19).

- *Ahouti, B. S., Elimihele, T., **Huderson, B**. 2017. Wnt Activation by Cancer-Associated Exosomes. ABRCMS, Phoenix, AZ.
- *Patterson, A. and **Huderson, B**. 2017. *Comparison of the Molecular Content of Cancer-Derived Exosomes fromEstrogen Receptor-Negative, Androgen Receptor-Positive Breast Cancer Cells*. ABRCMS, Phoenix, AZ.
- *Traore, S. and **Huderson, B**. 2017. Effects of Rimonabant on ER-/AR+ Breast Cancer Cell Growth. ABRCMS, Phoenix, AZ.
- *McIntyre, A. and **Huderson, B**. 2017. Effects of Complete Hormonal Replacement on AR-Driven Cells. ABRCMS, Phoenix, AZ.
- *Joseph, T. and **Huderson**, **B**. 2015. Effects of Extracellular Matrix on ER-/AR+ Breast Cancer Cell Proliferation. ARTC Research Day, Georgetown University, Washington, DC.
- *Langston, T. and **Huderson, B**. 2015. Identification and Quantification of Cancer-Associated Exosomes. STEM Summer Research Symposium, The University of the District of Columbia, Washington, DC.
- *Odunusi, Temi, **Huderson**, **Brandy P**., Martin, Mary Beth. 2014. The role of Inorganic Ions in androgen Receptro Activation of Prostate Cells. MS in Biotechnology Program Spring 2014. Georgetown University. Washington, DC.
- *Huderson, Brandy P., Alkhilaiwi, Faris A., Dowling, Samuel D., Noguchi, Glyn M., and Martin, Mary Beth. 2013. The role of calcium and nitratie in androgen receptor activation in estrogen receptor negative breast cancer. Lombardi Research Days. Washington, DC.

- *Alkurathi, Dalal, **Huderson, Brandy P.**, Martin, Mary Beth. 2013. The role of calcium and nitrite in triple negative breast cancer. MS in Biotechnology Program Fall 2013. Georgetown University. Washington, DC.
- *Alkhilaiwi, Faris A., **Huderson, Brandy P**., Martin, Mary Beth. 2013. The role of calcium and nitrogen in androgen receptor activation in estrogen receptor negative breast cancer. MS in Biotechnology Program Spring 2013. Georgetown University. Washington, DC.
- **Huderson BP**, Duplessis TT and Rowan BG. 2011. Effects of attenuated ER-alpha phosphorylation on growth, metastasis and estradiol signaling in ER positive breast cancer cells. Louisiana Cancer Research Consortium Research Retreat. New Orleans, LA.
- **Huderson, B. P.**, B. T. Velayudhan, S. E. Ellis and R. M. Akers. 2009. Effect of Exogenous Growth Hormone and Ovariectomy on Protein Expression of Aromatase in Prepubertal Bovine Mammary Gland. J. Dairy Sci. 92: (E-Suppl. 1, no.M147).
- Velayudhan, B. T., R. M. Akers, **B. P. Huderson**, A. Rowson-Baldwin, R. C. Hovey, and S. E. Ellis. 2009. Effect of staged ovariectomy on mammary histology and transcript abundance in prepubertal heifers. J. Dairy Sci. 92: (E-Suppl. 1, no. M156).
- **Huderson, B. P.,** B. T. Velayudhan, S. E. Ellis, and R. M. Akers. 2008. Hormonal influence on mammary tissue composition in pre-pubertal Holstein heifers. J. Dairy Sci. 91: (E-Suppl. 1, no.TH 108, page 438).
- **Huderson, B. P.**, B. T. Velayudhan, S. E. Ellis, and R. M. Akers. 2008. Effect of Ovariectomy on Gene Expression of Selected Extracellular Matrix Components in the Prepubertal Heifer Mammary Gland. Program of 6th International Congress on Farm Animal Endocrinology (page 48, no. 16), Hotel Roanoke, Roanoke Virginia, November 14-16th, 2008.
- **Huderson, B. P.,** B. T. Velayudhan*, S. E. Ellis, and R. M. Akers. 2008. Effect of Exogenous Bovine Somatotropin on Gene Expression of Extracellular Matrix Components and Presence of Aromatase in Prepubertal Heifer Mammary Gland. Program of 6th International Congress on Farm Animal Endocrinology (page 49, no. 17), Hotel Roanoke, Roanoke Virginia, November 14-16th, 2008.
- Korn, N., **B. P. Huderson**, B. T. Velayudhan, and R. M. Akers, S. E. Ellis. 2008. Ovarian Regulation of Myoepithelial Cell Ontogeny in Heifers. Invited Presentation, Program of 6th International Congress on Farm Animal Endocrinology (page 53), Hotel Roanoke, Roanoke Virginia, November 14-16th, 2008.
- Velayudhan, B. T., **B. P. Huderson**, S. E. Ellis and R. M. Akers. 2008. Effect of Staged Ovariectomy and bST Treatment on Gene Expression of GH-IGF axis molecules in Prepubertal Bovine Mammary Parenchyma. Program of International Conference on Farm Animal Endocrinology, (page 77, no. 33), Hotel Roanoke and Conference Center, Roanoke Virginia, November 14-16th, 2008.

Velayudhan, B. T., **B. P. Huderson** and R. M. Akers. 2008. Effect of bST Treatment on Putative Stem Cell Population and Mammary Epithelial Growth in Prepubertal Bovine Mammary Gland. Program of International Conference on Farm Animal Endocrinology (page 78, no. 34), Hotel Roanoke and Conference Center, Roanoke, VA, November 14-16th, 2008.

Huderson, B. P., B. T. Velayudhan, S. E. Ellis and R. M. Akers . 2008. Hormonal Influence on Mammary Tissue Composition in Pre-pubertal Holstein Heifers. J Dairy Sci 91: Suppl 1, page 438.

SKILLS AND CERTIFICATIONS

Diversity, Equity and Inclusion in the Workplace, May 2021 University of South Florida, Corporate Training and Professional Education

Education Program Evaluation, December 2020 Georgetown University School of Continuing Studies

Coding and Analyzing Qualitative Data, October 2020 Research Talk, Inc., Virtual

Virtual Research Learning Series: How to Write About Qualitative Research, August 2020 American Education Research Association, Virtual

Logic Models for Program Evaluation and Planning, Responsive Quantitative Evaluation STEM Education, November 2019

American Evaluation Association Annual Conference, Minneapolis, MN

FUNDING

Wendt, J. L. (PI), Rockinson-Szapkiw, A., & Walker, T. (\$286, 128; **Awarded**) National Science Foundation (NSF) HBCU-UP Broadening Participation. *Empowering Minority Females in STEM Research and Leadership* (2017-2019). Role: Senior Personnel

Huderson, B. (\$5, 000; **Awarded**). University of the District of Columbia Grants Research Academy. *Effect of Exogenous Feminizing Hormones on Post-Pubertal Male Mammary Gland Development and Physiology*. (Summer 2018). Role: Co-Pl

Huderson, B. (**Awarded**) Henry Jackson Foundation. *HBCU Summer Undergraduate Training Program in Prostate Cancer: A Partnership Between USU-CPDR and UDC* (2017-2018). Role: Co-PI

Huderson, B. (\$5, 000; **Awarded**). UDC STEM Center for Research and Development Mini-Grant Program. *Ligand-Independent Activation of Nuclear Steroid Hormone Receptors in Two Separate Model Systems*. (2017-2018). <u>Role: PI</u>

Fleming, J. Harris, L., and Huderson, B. (\$250, 000; Not Awarded). National Science Foundation (NSF) INCLUDES. *UDC STEM Takeover*. (2017). Role: Co-PI

Huderson, B. (\$375, 242; Not Awarded). National Institutes of Health (NIH) National Cancer Institute (NCI). The Role of Exosomes in the Activation of AR/Wnt Signaling in ER-/AR+ Breast Cancer Cells. (2017). Role: PI

Huderson, B. (\$3, 000; **Awarded**). **College of Arts and Sciences Summer Grant**. *Evaluating the Role of Extracellular matrix and exosomes in hormone receptor activation in AR+ cancer cells*. (2017). Role: PI

Huderson, B. (\$7, 500; Not Awarded). University of the District of Columbia Faculty Incentive Research Grant (FIRG). *Cancer Cell-Derived Exosome Content and Effect on Cell Migration and Invasion*. (2016). Role: PI

Song X. and Huderson, B. (\$3, 000; Not Awarded). University of the District of Columbia FIRG Curriculum Improvement Grant. *Re-Evaluation and Assessment of Student Readiness of Core Courses for Biology and Chemistry in the Division of Sciences and Mathematics at the University of the District of Columbia*. (2016). Role: Co-PI

Huderson, B. (\$3,000; **Awarded**). **College of Arts and Sciences Summer Grant**. *Cancer Cell-Derived Exosome Content and Effect on Cell Migration and Invasion*. (2016). <u>Role: PI</u>

Huderson, B. (\$5, 000; **Awarded**). UDC STEM Center for Research and Development Mini-Grant Program. *Cancer Associated Fibroblasts Modulate Breast Cancer Growth Through Exosome Secretion*. (2015-2016). Role: PI

Huderson, B. (\$7, 500; **Awarded**). University of the District of Columbia Faculty Incentive Research Grant (FIRG). *Cancer Associated Fibroblasts Modulate Breast Cancer Growth Through Exosome Secretion.* (Summer 2015). Role: PI

Burtin, A., Dekissa, T., and Wellman, B. (\$2, 146, 000; **Awarded**). National Science Foundation (NSF) Robert Noyce Scholarship Program (DUE). *Project Firebirds Reinventing STEM Teaching (Project FRST)*. (2015-2022). Role: Co-Investigator; Science Content Manager; Science Mentor

AWARDS AND HONORS

New Voices (Cohort 2), Co-Chair, 2021-Present National Academy of Sciences, Engineering, and Medicine, Washington, DC

National Science Foundation (NSF) Reviewer, 2017, 2018, 2022

National Defense Education Program (NDEP) Reviewer, 2021 Department of Defense, Research and Engineering

Fulbright Application Reviewer, 2021

Dialogues in Leadership: HERStory Workshop Series, Jan -April 2020 University of the District of Columbia, Washington, DC

Citizenship in the American and Global Polity: An Interdisciplinary Seminar for College and University Faculty, July 2018

AACU/Aspen Institute Wye Academic Seminar, Wye River, MD

Judges Award, 2017

ABRCMS, Phoenix, Arizona

Leader of Promise Award, 2017

College of Arts and Sciences, University of the District of Columbia

NIH T-32 Postdoctoral Fellow, 2012-2014

Georgetown University Lombardi Comprehensive Cancer Center, Washington, DC

Graduate Student of Distinction, 2008

Who's Who in American Colleges and Universities, 2008

OUTREACH AND SERVICE

Professional and Community Service

Preparing for College Webinar Series, 2020-present

Executive Producer, Gulfisde Assembly, Waveland, MS

National Science Reviewer, 2017, 2018, 2022

8th Annual Women in STEM Forum, March 2022

University of the District of Columbia Community College, Virtual

AAAS Science and Technology Policy Fellow Social Co-Chair, 2019-2021

National Science Foundation, Alexandria, VA

Policy Writing Workshop Reviewer, February 2021

JSPG/AAAS Endless Frontier Writing Workshop, Virtual

Visiting Science Presenter, 2018-2021

Smithsonian GEAR-UP Program, Lafayette, LA

National Defense Education Program (NDEP) Reviewer, 2021 Department

of Defense, Research and Engineering

Fulbright Application Reviewer, 2021

Fulbright Distinguished Awards in Teaching Short-Term Program (Fulbright DAST)

Fulbright Application Reviewer, 2021 Fulbright

Teacher Exchange

What Can you do With a Degree in STEM, April 2021

Academy of Biotechnology Scholars, McKinley Technology High School, Virtual

University Service

Division of Sciences and Mathematics Faculty Search Committee: Chemistry,

University of the District of Columbia, 2019-2020

Division of Sciences and Mathematics Grievance Committee

University of the District of Columbia, 2014-2015, 2015-2016, 2017-2019 (Chair)

College of Arts and Sciences Grievance Committee

University of the District of Columbia, 2017-2019

UDC Annual Student Research Days

University of the District of Columbia, 2014-2019

STEM Career Seminar

University of the District of Columbia, 2017 (Organizer)

Bio-Chem Club Faculty Advisor

University of the District of Columbia, 2016-2019

Student Advisor: Biology Program

University of the District of Columbia, 2014-present

Annual STEAM Symposium: Faculty Advisor

University of the District of Columbia, 2016, 2017 (Chair)

Chair/Discussant Student Roundtable Presentations: MS Education Program

University of the District of Columbia, 2016

C.A.S.E. Stars Summer Science Experience: Campus Liaison/Organizer

University of the District of Columbia, 2016, 2017

C.A.S.E. First Light Saturday Science Academy: Campus Liaison/Organizer

University of the District of Columbia, Spring 2017

Division of Sciences and Mathematics Faculty Search Committee: Biology,

University of the District of Columbia 2016-2017

Division of Education, Health, and Social Work Faculty Search Committee: Education

University of the District of Columbia 2014-2015

Division of Sciences and Mathematics DEPC:

University of the District of Columbia, 2014-2016

Assistant Professor: Biology Program, The University of the District of Columbia, 2014-present

- **Biological Sciences I Lecture** (Biol 101): Fall 2014, Spring 2015, Fall 2015, Spring 2016, Spring 2017; Fall 2017, Spring 2019, Fall 2021, Spring 2022
 - Biological Sciences I Lab (Biol103): Fall 2014, Spring 2015, Fall 2015, Spring 2016, Spring 2017, Fall 2017, Spring 2022
 - Biological Sciences II Lecture (Bio 102): Spring 2017
 - Biological Sciences II Lab (Bio 104): Spring 2017
 - Fundamentals of Human Anatomy I Lecture (Biol 111): Fall 2014
 - Fundamentals of Human Anatomy I Lab (Biol 113): Fall 2014
 - Fundamentals of Human Anatomy II Lecture (Biol 114): Spring 2019
 - Fundamentals of Human Anatomy II Lab (Biol 112): Spring 2019
 - Endocrinology (Biol 395): Fall 2016, Spring 2018, Spring 2022
 - General Physiology Lecture (Biol 319 (220)): Fall 2017, Fall 2021
 - General Physiology Lab (Biol 317 (218)): Fall 2017, Fall 2021
 - Cell Biology I Lecture (Biol 331): Fall 2018, Fall 2021
 - Cell Biology I Lab (Biol 330): Fall 2018, Fall 2021
 - Undergraduate Research I: Breast Cancer (Biol 401): Summer 2015
 - Undergraduate Research II: Endocrinology (Biol 402): Spring 2016, Spring 2017, Spring 2018, Spring 2019
 - Undergraduate Research I: Endocrinology (Biol 401): Fall 2016, Fall 2018
 - Independent Study: Biomathematics (Biol 495): Summer 2018, Summer 2019 Independent Study: Bioinformatics (Biol 495): Fall 2021; Spring 2022
 - Independent Study: Bioinformatics II (Biol 495): Fall 2017
 - Independent Study: Biostatistics (Biol 495): Summer 2022
 - Cellular and Molecular Immunology (Biol 495): Summer 2017
 - Tumor Biology (Biol 508): Fall 2015

Adjunct Professor: Department of Biology, Montgomery College, Takoma Park, MD, USA., 2013-2016

• Principals of Biology I (Bio 107) Lecture/ Laboratory

Adjunct Professor: Department of Biology, Delgado Community College, New Orleans, LA, USA., 2010-2011

- General Biology (Bio 141) Lecture
- General Biology (Bio 143) Laboratory



FISCAL IMPACT STATEMENT

TO: The Board of Trustees

FROM: Managing Director of Finance David A. Franklin

DATE: June 8, 2023

SUBJECT: Tenure Approval for Brandy Huderson, Ph.D., College of Arts & Sciences

Conclusion

It is concluded that there is no fiscal impact associated with the granting of tenure to Dr. Brandy Huderson, Assistant Professor of Biology in the Division of Sciences & Mathematics, in the College of Arts & Sciences (CAS) of the University of the District of Columbia (UDC). The proposed resolution is for the approval of tenure for Dr. Huderson at the rank of Associate Professor.

The Chair, DEPC, and CPC of CAS have conducted thorough, independent reviews and prepared independent reports to the dean regarding tenure for Professor Huderson. It was then considered at the Dean's, CAO's and President's levels. It has been recommended in the Board Resolution that Professor Huderson be approved for tenure.

Background

Dr. Huderson joined the CAS in August of 2014. Vetting of all dossier content was completed at the levels of the program, Department, and School. The CAO reviewed all recommendations and Dr. Huderson's portfolio (which includes external reviews of her qualifications). All reviews validate the strengths of Professor Huderson's tenure and promotion dossier and conclude that she is an excellent teacher and mentor, particularly for marginalized students in the STEM areas, plus an emerging researcher and scholar, making her a valued teacher and tenure candidate. Additionally, she has demonstrated a strong record of service to the University community.

The recommendation of tenure for Professor Huderson has been affirmed by the Dean, Chief Academic Officer, and President. The President has forwarded the recommendation and background information along with a resolution for the award of tenure to the Board of Trustees.

Financial Impact

This request has been approved based upon the information provided. There are no anticipated risks at this time.