

# CURRICULUM VITAE

**Antonio Thomas Baines, Ph.D.**

**College Professor, Cancer Pharmacologist, Academic Toxicologist**

North Carolina Central University  
University of North Carolina at Chapel Hill

## **PERSONAL INFORMATION**

Department of Biological and Biomedical Sciences  
Cancer Research Program  
Mary Townes Science Complex  
North Carolina Central University  
1801 Fayetteville Street  
Durham, NC 27707  
email: abaines@ncsu.edu

## **EDUCATION**

2006	University of North Carolina at Chapel Hill	*SPIRE Postdoctoral Fellow, Pharmacology- Channing Der and Adrienne Cox
2001	University of Arizona	Ph.D., Pharmacology and Toxicology- Mark Nelson
1995	Norfolk State University	B.S., Biology (DNIMAS Scholar Honors Program)

\* Seeding Postdoctoral Innovators in Research and Education (SPIRE) – NIH-funded teaching and research postdoctoral program

## **ACADEMIC APPOINTMENTS**

2023-	Inaugural <b>STEM Faculty Fellow</b> for the Honors Program, North Carolina Central University
2023-	<b>University Director</b> for Intellectual Climate and Faculty Professional Development, College of Health & Sciences, North Carolina Central University

- 2022- **Member, Executive Committee**, Curriculum in Toxicology and Environmental Medicine, University of North Carolina at Chapel Hill
- 2021- **Member**, Precision Cancer Medicine & Investigational Therapeutics Program – Duke Cancer Institute
- 2017-2020 **Director**, Integrated Biosciences Ph.D. Program, North Carolina Central University
- 2017-2018 **Faculty Fellow** in the Dean’s Office, North Carolina Central University
- 2013- **Associate Professor**, Department of Biological and Biomedical Sciences, Cancer Research Program, Julius L. Chambers Biomedical/Biotechnology Research Institute, North Carolina Central University
- 2013- **Adjunct Associate Professor**, Department of Pharmacology, School of Medicine, University of North Carolina at Chapel Hill
- 2014- **Member**, Curriculum in Toxicology and Environmental Medicine, Graduate School, University of North Carolina at Chapel Hill
- 2011-2012 **Visiting Scholar**, Duke University Preparing Future Faculty Program
- 2006-2013 **Assistant Professor**, Department of Biology and the Cancer Research Program, Julius L. Chambers Biomedical/Biotechnology Research Institute, North Carolina Central University
- 2008-2013 **Adjunct Assistant Professor**, Department of Pharmacology, School of Medicine, University of North Carolina at Chapel Hill
- 2008- **Adjunct Cancer Center Member**, Lineberger Comprehensive Cancer Center, University of North Carolina at Chapel Hill
- 2007- **Career Faculty Advisor**, NIH Initiative for Maximizing Student Diversity (IMSD) educational training program, University of North Carolina at Chapel Hill
- 2006-2008 **Visiting Scholar**, Lineberger Comprehensive Cancer Center, University of North Carolina at Chapel Hill

## **ADMINISTRATIVE and LEADERSHIP POSITIONS**

- 2024- **Summer Program Coordinator**, North Carolina Central University, The Leadership Alliance Network
- 2024- **Member**, Novel and Exceptional Technology and Research Advisory Committee (NExTRAC), NIH
- 2022-2024 **Member**, Springer Nature US Research Advisory Council (Publisher for Nature and Scientific American)
- 2022-2023 **Member**, Working Group on Novel Alternative Methods (NAM) for the Advisory Committee to the NIH Director
- 2022- **Member**, American Association for Cancer Research (AACR) Science Education and Career Advancement Committee
- 2021- **Chair**, The Dr. Curtis Harper Distinguished Lectureship Planning Committee, UNC-Chapel Hill Department of Pharmacology
- 2021- **Member**, Scientific Advisory Committee on Alternative Toxicological Methods (SACATM), NIEHS
- 2021-2024 **Councilor**, Society of Toxicology (SOT)
- 2019-2020 **Chair**, Undergraduate Consortium Task Force, Society of Toxicology (SOT)
- 2017- **Associate Director**, Triangle Center for Evolutionary Medicine (TriCEM)
- 2015-2016 **Director**, Historically Minority Institution Research Initiative, UNC General Administration-Academic Affairs, Office of Research

### **PROFESSIONAL DEVELOPMENT IN LEADERSHIP**

- 2023 American Association for Medical Colleges (AAMC) Mid-Career Minority Faculty Leadership Seminar
- 2022-2023 Transforming Biomedical Research and Academic Faculty through Leadership Opportunities, Training, and Mentorship (TRANSFORM) program
- 2022 American Association for Medical Colleges (AAMC) Mid-Career Minority Faculty Leadership Seminar

- 2014 University Leadership Education and Development (ULEAD) Program between NCCU and UNC (semester-long program)
- 2015 American Council on Education (ACE) Spectrum Aspiring Leaders Program – Scottsdale, AZ

### **ADVISEES AND MENTEES (representative list)**

#### **Postdoctoral Trainees**

- 2014-2016 Dr. Vandana Singh  
 2013-2014 Dr. Nicole Barkely  
 2008-2011 Dr. Dapeng Xu

#### **Graduate Students**

- 2023-2024 McKayla Young  
 2021-2023 Donia Hanafi  
 2022-2023 Nadine Thomas  
 2018-2020 Tevin Williams  
 2017-2019 Afsaneh Karami  
 2017-2019 Kalgi Moldi  
 2017-2018 Khristian Harris  
 2016-2018 Ashley McLaughlin  
 2015-2018 Brittany Nixon  
 2012-2018 Denis Okumu (UNC Pharmacology)  
 2010-2013 Naima Stennett  
 2010-2013 Dana Austin  
 2008-2013 Michael Cobb  
 2007-2009 Ijeoma Nwosu  
 2007-2009 Brian Rogers

#### **Undergraduate Mentees and Careers (representative list)**

- Annika Barnett Anesthesiologist in Private Practice  
 Stephen Allsop Assistant Professor, Yale Dept. of Psychiatry, Adjunct Assistant Professor, Howard Dept. of Psychiatry  
 Desinia Johnson PhD Toxicologist  
 Kashif Hall General Dentist  
 Kala Nwachukwu Scientific Consultant and Grant Writing Specialist  
 Tiffany Parmes Epidemiologist  
 Jasmine Perry Clinical Pharmacist  
 Philomena Nwanze University of Cincinnati Family Medicine/Psychiatry Resident  
 Kenya Homsley Kaiser Oakland OB/GYN Resident  
 Andrew Barber Graduate Student at John Hopkins  
 Jonathan Harpe Graduate Student at John Hopkins

Anusha Joshi Graduate Student at UNC in biomedical sciences  
 Tamina Kienka MD/PhD program at Harvard University

### **HONORS and AWARDS**

2025 UNC Board of Governors Award for Excellence in Teaching  
 2024 Nature x Breast Cancer Research Foundation Rising Scholars Program  
 (**Receive Nature Masterclasses on Scientific Writing and Publishing**)  
 2023 Oncology Grand Rounds Seminar Series Invited Speaker – University of  
 Florida Health Sciences Cancer Center  
 2022 TRANSFORM Fellow – University of Pittsburgh  
 2021 Cell Mentor – 1000 Inspiring Black Scientists in America  
 2020 Black History Month Research Speaker, Georgia Southern University  
 2018 Outstanding Scientist and Champion of Research Excellence Keynote  
 Speaker, Eighth Annual Research Day Luncheon, Fort Valley State  
 University, GA  
 2016 Society of Toxicology Undergraduate Educator Award  
 2014 University Leadership Education and Development Program Award  
 2014 NCCU University Teaching Award for Excellence  
 2014 NCCU College of Arts & Sciences Recruitment and Retention Award  
 2014 American Association for Cancer Research Minority-Serving Institution  
 Faculty Scholar Award  
 2013 Top 25 Professors at Affordable Historically Black Colleges  
 2012 American Association for Cancer Research Minority-Serving Institution  
 Faculty Scholar Award  
 2011 American Association for Cancer Research Minority-Serving Institution  
 Faculty Scholar Award  
 2011 TAO (Toxicologists of African Origin) Mentor/Educator Award, Society of  
 Toxicology Annual Meeting  
 2011 Certificate of Appreciation, panelist for PROJECT SEED high school  
 science students, The Hamner Institute  
 2010 Dozoretz National Institute for Mathematics and Applied Sciences  
 (DNIMAS) Award, Norfolk State University  
 2009, 2010 Certificate of Completion, Pre-Health Professions Advisors Conference,  
 Meharry Medical College  
 2009 American Association for Cancer Research Minority-Serving Institution  
 Faculty Scholar Award  
 2009 Certificate of Appreciation, panelist for PROJECT SEED high school  
 science students, The Hamner Institute  
 2009 Nominated for the College of Science & Technology Faculty-Student  
 Research Award  
 2008 Certificate of Appreciation, Outstanding Proposal Writing and Grants  
 Management from the Office of Sponsored Research, Programs, and  
 Technology Transfer, NCCU  
 2008 Certificate of Appreciation, judge for PROJECT SEED high school science  
 students, The Hamner Institute

- 2008 Invited keynote speaker for DNIMAS Science Honors Program, Norfolk State University
- 2007 American Association for Cancer Research Minority-Serving Institution Faculty Scholar Award
- 2006 2<sup>nd</sup> Annual Summer Research Career Development Institute in Minority Health and Health Disparities Fellow, University of Pittsburgh
- 2005 10<sup>th</sup> Annual North Carolina Louis Stokes Alliance for Minority Participation/Fayetteville State University-CAMP Presenter
- 2004 American Association for Cancer Research Minority Scholar Award
- 2003 Minority Trainee Research Forum Award
- 2002 American Association for Cancer Research/Aventis Scholar-in-Training Award
- 2001 University of Arizona Academic Achievement Award from the African American Cultural Center
- 2001 American Association for Cancer Research Minority Scholar Award
- 2000 American Association for Cancer Research Minority Scholar Award
- 1998-1999 Who's Who Among Students in American Universities and Colleges
- 1998 University of Arizona/Pima Community College Pathways Intern Award
- 1998 University of Arizona Centennial Achievement Doctoral Award Nominee
- 1997 Society of Toxicology Minority Scholar Award
- 1997 American Association for Cancer Research Minority Scholar Award
- 1995 Senior Leadership and Service Award
- 1994 Scholar of the Year Award
- 1993-1994 Who's Who Among Students in American Universities and Colleges
- 1993 Society of Toxicology Minority Scholar Award
- 1992 Freshman Class Award
- 1991 Minority Participation in Forestry and Forestry-Related Sciences (MINIFORS) Travel Award

## **BIBLIOGRAPHY**

Ingle, K., Lacombe, J.F., Graves, L.M., Graves; **Baines, A.T.**, Bialkowska, A.B.: AUM302, a novel triple kinase PIM/PI3K/mTOR inhibitor, is a potent pancreatic cancer growth inhibitor", (2023) PLoS One, 18(11), 1-23.

Krulik, L.J., McDonald, I.M., Lee, B., Okum, D.O., East, M.P., Gilbert, T.S.K., Herring, L.E., Golitz, B.T., Wells, C.I., Axtman, A.D., Zuercher, W.J., Willson, T.M., Kireev, D., Yeh, J.J., Johnson, G.L., **Baines, A.T.**, and Graves, L.M.: (2018) Application of Integrated Drug Screening/Kinome Analysis to Identify Inhibitors of Gemcitabine-Resistant Pancreatic Cancer Cell Growth. *SLAS Discovery*, 23(8): 850-861.

**Baines, A.T.**, Martin, P.M., and Rorie, C.J., Current and Emerging Targeting Strategies for Treatment of Pancreatic Cancer. In: Kevin Pruitt, editor, *Progress in Molecular Biology and Translational Science*, Vol. 144, Burlington: Academic Press, pp. 277-320, 2016.

Xu, D., Cobb, M., Gavilano, L., Sam Witherspoon, S.M., Williams, D., White, C.D., Taverna, P., Bednarski, B., Hong Kim, H.J., Baldwin, A., and **Baines, A.T.**: Inhibition of oncogenic Pim-3 kinase modulates transformed growth and chemosensitizes pancreatic cancer cells to gemcitabine. Cancer Biology & Therapy, 14:6, pp. 492-501, 2013.

**Baines, A.T.**, Xu, D., and Der, C.J.: Inhibition of Ras for cancer treatment: the search continues. Future Medicinal Chemistry, 1787-1808, 2011.

Xu, D., Allsop, S., Witherspoon, S.M., Snider, J.L., Yeh, J.J., Fiordalisi, J.J., White, C.D., Williams, D., Cox, A.D., and **Baines, A.T.**: The oncogenic Pim-1 kinase is modulated by K-Ras signaling and mediates transformed growth and radioresistance in human pancreatic ductal adenocarcinoma cells. Carcinogenesis 32:488-495, 2011.

Rybarczyk, B. J., **Baines, A.T.**, McVey, M., Thompson, J.T., and Wilkins, H. "A Case-based Approach Increases Student Learning Outcomes and Comprehension of Cellular Respiration Concepts", Biochemistry and Molecular Biology Education, Vol. 35, No. 3, pp. 181–186, 2007.

Lim, K.-H., **Baines, A.T.**, Fiordalisi, J.J., Shipitsin, M., Feig, L.A., Cox, A.D., Der, C.J., and Counter, C.M.: Activation of RalA is critical for Ras-induced tumorigenesis of human cells. Cancer Cell 7:533-545, 2005.

**Baines, A.T.**, Lim, K.-H., Shields, J.M., Lambert, J.M., Counter, C.M., Der, C.J., and Cox, A.D.: Use of retrovirus expression of interfering RNA to determine the contribution of activated K-Ras and Ras effector expression in human tumor cell growth. Methods in Enzymology. Vol. 407, pp. 556-74, 2005.

**Baines, A.T.**, McVey, M., Rybarczyk, B., Thompson, J.T., and Wilkins, H.R.: Mystery of the toxic flea dip: An interactive approach to teaching aerobic cellular respiration. Cell Biology Education 3:4.0, 2004.

**Baines, A.**, Taylor-Parker, M., Goulet, A.-C., Renaud, C., Gerner, E.W., and Nelson, M.A.: Selenomethionine inhibits growth and suppresses cyclooxygenase-2 (COX-2) protein expression in human colon cancer cell lines. Cancer Biology and Therapy 1(4):370-4, 2002.

**Baines, A.T.**, Holubec, H., Basye, J.L., Thorne, P., Bhattacharyya, A.K., Spallholz, J., Shriver, B., Cui, H., Roe, D., Clark, L.C., Earnest, D.L., and Nelson, M.A.: The effects of dietary selenomethionine on polyamines and azoxymethane-induced aberrant crypts. Cancer Letters 160:193-198, 2000.

Redman, C., Scott, J.A., **Baines, A.T.**, Basye, J.L., Clark, L.C., Calley, C., Roe, D., Payne, C.M., and Nelson, M.A.: Inhibitory effect of selenomethionine on the growth of three selected human tumor cell lines. Cancer Letters 125:103-110, 1998.

Nelson, M.A., Holubec, H., **Baines, A.T.**, Basye, J.L., Thorne, P., Bhattacharyya, A.K., Payne, C., and Earnest, D.L.: Protective effect of dietary selenomethionine against colon

carcinogenesis. Selenium-Tellurium Development Association Sixth International Symposium, pp. 87-89, 1998.

Sauer, J.-M., Waalkes, M.P., Hooser, S.B., **Baines, A.T.**, Kuester, R.K., and Sipes, I.G.: Tolerance induced by all-trans-retinol to the hepatotoxic effects of cadmium in rats: Role of metallothionein expression. Toxicology and Applied Pharmacology 143:110-119, 1997.

Sauer, J.-M., Hooser, S.B., Badger, D.A., **Baines, A.**, and Sipes, I.G.: Alterations in chemically-induced tissue injury related to all-trans retinol pretreatment in rodents. Drug Metabolism Reviews 27(1&2):299-323, 1995.

## Other Publications

“Why Having Diverse Government Scientists is Key to Dealing with Climate Change”  
NPR-Short Wave – Heard on All Things Considered, April 30<sup>th</sup>, 2021 5:00 AM ET  
Hosted by Rebecca Hersher  
<https://www.npr.org/2021/04/30/981331348/biden-administration-seeks-to-build-trust-and-diversity-among-federal-scientists>

“Finding Yourself and Your Community when You Are Black in STEM”  
Written by Devin Williams, Feb. 24<sup>th</sup>, 2021, SN BEN  
<https://www.scientificamerican.com/article/finding-yourself-and-your-community-when-you-are-black-in-stem/>

"Hoping to InSPIRE the Perfect Academician"  
[\[http://nextwave.sciencemag.org/cgi/content/full/2004/11/04/10\]](http://nextwave.sciencemag.org/cgi/content/full/2004/11/04/10)  
published in Science's Next Wave Online Magazine, MiSciNet  
<http://www.nextwave.org/miscinet>

## Published Abstracts

- 2025 Emma Wen, Catalina Vera, Sahaana Kesavan, Fatim Kouassi, Joseph F. LaComb, Amber N. Habowski, **Antonio Baines**, Agnieszka B. Bialkowska. AUM-302, A Novel Triple PIM/PI3K/MTOR Inhibitor, Synergizes with KRAS Inhibitor and Hinders the Growth of Pancreatic Ductal Adenocarcinoma Spheroids and Organoids. DDW, San Diego, CA
- 2024 Neecki Zand, Hardik Patel, Caitlin Tsang, Fatim Kouassi, **Antonio Baines**, Amber Habowski, and Dave Tuveson. The efficacy of triple kinase PIM/PI3K/mTOR inhibitor AUM302 monotherapy and combination therapy against PDAC organoids. SRIMS, NY
- 2023 Komala Ingle, Joseph F. LaComb, Lee M. Graves, **Antonio T. Baines**, Agnieszka B. Bialkowska: Aum-302, A novel Triple Negative PIM/PI3K/mTOR inhibitor, is a potent pancreatic cancer cell growth inhibitor. DDW, Chicago, Ill



- 2018 Vandana Singh, Karim T.S. Gilbert, Steve Warner, David Bearss, Lee Graves, and **A.T. Baines**: Using kinome profiling to study chemoresistance in pancreatic cancer cells treated with PIM kinase inhibitors. International Society of Evolution Medicine and Public Health, Parkland, UT.
- 2017 Linas J. Krulikas, Ben Lee, Ian MacDonald, Karim T.S. Gilbert, Laura E. Herring, Brian Golitz (PKIS people), **Antonio Baines Ph.D.**, Jen Jen Yeh, Ph.D. and Lee M. Graves, Ph.D.: Application of High Throughput Kinomics Analysis to Identify Inhibitors of Gemcitabine Resistant Pancreatic Cancer Cell Growth. America Society of Pharmacology and Experimental Therapeutics, Chicago, IL.
- 2016 O'Hayer, K.M., Barbe, J.H., Singh, V., Nevler, A., O'Neil, M., Cunningham, D., Winter, J., **Baines, A.T.**, Brody, J.: Novel pan-PIM/pan-PI3K/mTOR inhibitors are highly active in preclinical models of pancreatic ductal adenocarcinoma. American Association for Cancer Research, New Orleans, LA.
- 2015 Nixon, B., He, Q., Singh, V., Warner, S., Bearss, D., **Baines, A.T.**, Sexton, J.: The use of PIM kinase inhibitors in combination with chemotherapeutic drugs in pancreatic cancer. ABCRMS, Seattle, WA.
- 2015 Singh, V., Gilber T.S. Karim, Warner, S., Bearss, D., Graves, L.M., and **Baines, A.T.**: The use of kinome profiling to determine potential resistance pathways in pancreatic cancer cells treated with PIM kinase inhibitors. American Association for Cancer Research, Pennsylvania, PA.
- 2014 **Baines, A.T.**, Ramos-Diaz, S., Barkley, N., Okumu, D., Graves, L.M.: The interaction between BIRC6 and PIM kinases and their role in gemcitabine chemosensitivity in pancreatic cancer cells. Pancreatic Cancer: Innovations in Research and Treatment, New Orleans, LA.
- 2012 Cobb, M.G., Austin, D.M., Xu, D., and **Baines, A.T.**: The role of Pim kinases and RUNX transcription factors as potential molecular targets of K-Ras signaling in pancreatic cancer cells. Pancreatic Cancer: Progress and Challenges, Lake Tahoe, NV.
- 2012 Austin, D., Nandiwada, V.B., Cobb, M., Baldino, C.M., Caserta, J., Chee, S.L., Flanders, Y., Dumas, S., and **Baines, A.T.**: Inhibition of oncogenic Pim kinases, including Pim-2, alters cell growth and signaling in pancreatic cancer. 103<sup>rd</sup> Annual American Association for Cancer Research, Chicago, Ill.
- 2011 Xu, D., Allsop, S., Nandiwada, V., Witherspoon, S.M., Snider, J.L., Yeh, J.J., Fiordalisi, J.J., Taverna, P., Cox, A.D., and **Baines, A.T.**: Implicating a role for Pim-1 kinase in K-ras mediated transformation of pancreatic cancer. Implicating the Cancer Genome-Keystone Meeting, Boston, MA.
- 2011 Xu, D., Gavilano, L., Witherspoon, S.M., Bednarski, B., Kim, H.J., Baldwin, A., **Baines, A.T.**: Downregulation of Pim-3 kinase inhibits cell growth and chemosensitizes pancreatic cancer cells to gemcitabine. 102<sup>st</sup> Annual American Association for Cancer Research, Orlando, FL.
- 2010 Xu, D., Bednarski, B., Kim, H.J., Yeh, J.J., Baldwin, A., **Baines, A.T.**: The role of Pim-3 kinase in NF- $\kappa$ B signaling and transformation of pancreatic

- cancer. 101<sup>st</sup> Annual American Association for Cancer Research, Washington, DC.
- 2009 Allsop, S., Xu, D., Cobb, M., Hall, K., Johnson, D., Parms, T., Sanders, A., Cox, A.D., Der, C.J., Chen, X., Bednarski, B., Kim, H.J., Baldwin, A, and **Baines, A.T.**: Implicating a role for Pim kinases in K-ras mediated transformation of pancreatic cancer. 100<sup>th</sup> Annual American Association for Cancer Research, Denver, CO.
- 2009 Cobb, M., Allsop, S., Barnett, A., Hall, K., Johnson, D., Parms, T., Sanders, A., Cox, A.D., Der, C.J., and **Baines, A.T.**: Implicating a role for Pim kinases in K-ras mediated transformation of pancreatic cancer. Life & Physical Sciences Research Symposium, NC A&T University, Greensboro, NC.
- 2008 Barnett, A., Allsop, S., Cobb, M., Hall, K., Johnson, D., Parms, T., Sanders, A., Cox, A.D., Der, C.J., **Baines, A.T.**: Implicating a role for Pim kinases in K-ras mediated transformation of pancreatic cancer. Annual Biomedical Research Conference for Minority Students (ABRCMS), Orlando, FL.
- 2005 **Baines, A.T.**, Fiordalisi, J.J., Lim, K.-H., Counter, C.M., Der, C.J., Cox, A.D.: Distinct roles of the Ras-related small GTPases RalA and RalB in growth transformation of human pancreatic cancer cells. Annual SPIRE Symposium, Chapel Hill, NC.
- 2004 **Baines, A.T.**, Fiordalisi, J.J., Lim, K.-H., Counter, C.M., Der, C.J., Cox, A.D.: Distinct roles of the Ras-related small GTPases RalA and RalB in growth transformation of human pancreatic cancer cells. Pancreatic Cancer in Mice and Man: The Penn Workshop, Philadelphia, PA.
- 2004 **Baines, A.T.**, Fiordalisi, J.J., Counter, C.M., Der, C.J., and Cox, A.D.: Activation and involvement of the Ras effector signaling pathway RalGEF >Ral in growth transformation of human pancreatic cancer cells. Annual Meeting of the Lustgarten Foundation for Pancreatic Cancer Research, San Francisco, CA.
- 2003 **Baines, A.T.**, Der, C.J., and Cox, A.D.: Stable suppression of transformation in pancreatic cancer cells by virus-mediated RNA interference with K-ras<sup>12V</sup>. Annual Meeting of the Lustgarten Foundation for Pancreatic Cancer Research, Boston, MA.
- 2002 **Baines, A.T.**, Fiordalisi, J.J., Bilter, G., Caskey, L., Calvo, B., Westwick, J., Der, C.J., and Cox, A.D.: Activation of Ras effector signaling pathways in human pancreatic cancer cells. Annual Meeting of the Lustgarten Foundation for Pancreatic Cancer Research, Houston, TX.
- 2002 **Baines, A.T.**, Fiordalisi, J.J., Bilter, G., Caskey, L., Calvo, B., Westwick, J., Der, C.J., and Cox, A.D.: Activation of Ras effector signaling pathways in human pancreatic cancer cells. American Association for Cancer Research 93<sup>rd</sup> Annual Meeting, San Francisco, CA.

### **UNIVERSITY TEACHING EXPERIENCES**

- 2013- Associate Professor, Department of Biology and the Cancer Research Program, North Carolina Central University, Durham, NC.

- Teach a virtual webinar course between NCCU and NC A&T with UNC's technical assistance called **Exploring Cancer: Exploring the Role of Biology, Race, Class, and Socioeconomics** (Fall semester)
- Teach undergraduate **Introduction to Pathology of Diseases** (BIOL 2030) lecture course (Fall semester)
- Teach undergraduate **Bioethics** (BIOL 4620) lecture course (Fall and Spring semesters)
- Teach undergraduate **Environmental Biology** (BIOL 2600) lecture course (Fall semesters)
- Co-teach **graduate Pharmacology** lecture course (PHRG 5000) (Spring 2017)
- Teach **graduate Toxicology** (BIOG 5140/BIOD 8040) lecture course (Fall semesters)
- Teach undergraduate **Scientific Writing** (BIOL 4930) lecture course (Fall and Spring semesters)
- Teach **Introduction of Biology** (BIOL 4400) laboratory course (Fall and Spring semesters)

- 2007-2013 Assistant Professor, Department of Biology and the Cancer Research Program, North Carolina Central University, Durham, NC.
- Taught **graduate Seminar in Biology** (BIOG 5700) course
  - Taught **graduate Research in Biology** (BIOG 5800) laboratory course
  - Co-teach graduate Toxicology (BIOG 5140) lecture course (Fall semesters)
  - Team-taught **graduate Genetics** (BIOG 5120) lecture course
  - Teach undergraduate Scientific Writing (BIOL 4930) lecture course (Fall and Spring semesters)
  - Team-taught **Critical Analysis of Research Literature in Biology** (BIOG 5130) lecture course
  - Teach Introduction of Biology (BIOL 4400) laboratory course (Fall and Spring semesters)
  - Teach **Molecules and Cell Function** (BIOL 1300) lecture and laboratory course (Fall and Spring semesters)
- 2004-2005 Pharmacology tutor, University of North Carolina at Chapel Hill, School of Dentistry, Chapel Hill, NC.
- 2003-2005 Visiting Assistant Professor, Department of Natural Sciences, Fayetteville State University, Fayetteville, NC.
- Taught a sophomore-level introductory biology course, Cellular and Molecular Biology (Biol 200-lecture and laboratory), fall 2003 and spring 2004 semesters
  - Developed an upper-level biotechnology course, Tissue Culture and Hybridoma Technology (BTCH 440-laboratory), spring 2004 semester

- Developed an upper-level special problems course, Molecular Mechanisms of Disease and Drug Therapy (Biol 430-(05)-lecture), taught by video-teleconference between Fayetteville State University and North Carolina Central University, spring 2005 semester

## **GRANTS**

2022-	Selective Targeting of Pancreatic Cancer- SPORE, UNC Lineberger Comprehensive Cancer Center	07/2022-08/2027
2022-	“Duke University Superfund Research Center – Development Co-Exposures: Mechanisms, Outcomes, and Remediation”	09/2022-08/2025
2022-2023	Duke and North Carolina Central Universities “Researching Environmental, Social, and Personal Preferences to Enhance Clinical Trial Engagement and Diversity (RESPECTED)” project	09/2022-05/2023
2021-2022	Burroughs Wellcome Fund and Triangle Center for Evolutionary Medicine Collaborative Grant: "Develop Collaborations with Burroughs Wellcome Fund to Increase Student Participation in the Sciences: TriCEM Tiered Mentorship Training Program at NCCU	01/2021-12/2022
2020-	UNC-NCCU 21 <sup>st</sup> Century Environmental Health Scholars, NIEHS R25 collaborative grant with UNC	05/2020-02/2025
2017-2020	Tolero Pharmaceuticals, Inc. Collaborative Grant, “Evaluate the role of Axl Inhibitor, TP-0903 in Pancreatic Cancer”	11/2017-08/2020
2016-2017	TriCEM- “Screening for Novel Kinase Inhibitors to Combat Drug Resistance in Pancreatic Cancer”	06/2016-12/2017
2015-2017	Incyte, Inc. Collaborative Grant, “Validate the Anti-Cancer Effects of the PIM inhibitors INCB053914 on Pancreatic Cancer”	08/4/2015 - 11/1/2017
2013-2015	NCCU-BBRI/UNC-Lineberger U54 Partnership in Cancer Research Grant, “Identification of the Pim kinome in pancreatic cancer”	08/30/13-07/31/15

- 2011-2012 Jasco Pharmaceuticals Collaborative Grant, “Pim kinase inhibitors in pancreatic cancer” 01/11-07/12
- 2008-2009 Duke-NCCU STEM Partnership Grant, “The role of Pim-1 kinase as a novel molecular target in pancreatic cancer” 09/01/08-11/30/09
- 2008-2012 NCI/NIGMS MBRS Support of Competitive Research (SCORE) Pilot Project Award (SC2), entitled “The role of Pim kinases as a novel molecular target in pancreatic cancer” 08/01/08-07/31/12
- 2008-2012 Academy of Applied Science and the Army Research Office; Support high school students conducting research during the summers
- 2006-2008 NCCU-BBRI/UNC-Lineberger Partnership in Cancer Research Pilot Grant, “Molecular targets in pancreatic cancer” 10/14/06-04/30/08

### **INVITED RESEARCH TALKS**

- 2024 Merck Pharmaceutical Company, West Point, PA
- 2024 SUNY Downstate Health Sciences University, 9<sup>th</sup> Annual Cancer Health Disparities Symposium, Brookly, New York
- 2024 AbbVie Pharmaceutical Company, Chicago, Ill
- 2023 Bates College, Senior Seminar for the Dept. of Biology, Portland, Maine
- 2023 University of Florida Health Cancer Center Oncology Grand Rounds Seminar Series, Gainesville, Florida
- 2023 NIEHS Diversity Speaker Series, RTP, North Carolina
- 2022 National Summer Undergraduate Research Project, University of Arizona
- 2021 Duke University Medical Center, North Carolina
- 2021 University of North Carolina at Chapel Hill, North Carolina
- 2021 University of Richmond, Richmond, Virginia
- 2020 University of Florida, Gainesville, Florida
- 2020 Georgia Southern University, Statesboro, Georgia
- 2019 4<sup>th</sup> Annual Health Disparities Symposium, SUNY Downstate Medical Center, Brooklyn, NY
- 2019 Florida Agricultural and Mechanical University, Tallahassee, Florida
- 2019 Claflin University, Orangeburg, South Carolina
- 2018 Dana Farber/Harvard Medical School, Boston Massachusetts
- 2018 Fort Valley State University, Fort Valley, Georgia
- 2016 Dana Farber/Harvard Cancer Center, Harvard Medical School, Boston, Massachusetts
- 2016 1<sup>st</sup> Annual Cancer Health Disparities Symposium, SUNY Downstate Medical Center, Brooklyn, NY
- 2015 Curriculum in Toxicology, UNC-Chapel Hill, Chapel Hill, NC
- 2014 Tolero Pharmaceuticals, Lehigh, Utah

- 2014 Eppley Cancer Institute, University of Nebraska Medical Center, Omaha, Nebraska
- 2013 Department of Biology, Massachusetts Institute of Technology, Cambridge, Massachusetts
- 2013 Division of Pharmacology & Toxicology, School of Pharmacy, University of Missouri-Kansas City
- 2012 Department of Environmental and Molecular Toxicology, North Carolina State University, Raleigh, NC
- 2012 Department of Pharmacology and Toxicology, Indiana University School of Medicine, Indianapolis, IN
- 2007 Department of Pharmacology Seminar Series, UNC-Chapel Hill, Chapel Hill, NC.
- 2006 Gastroenterology Division Research Conference, Duke University Medical Center, Durham, NC.

### **PROFESSIONAL SERVICES and EXPERIENCES**

- 2024 Speaker, Science Enrichment Preparation (SEP) Program, UNC-Chapel Hill
- 2024 American Association for Cancer Research Professional Advancement Session: "Personalized Career Conversations"- Moderator, San Diego, CA
- 2024 Society of Toxicology (SOT) Annual Meeting, Salt Lake City, UT
- 2024 Chair, Dr. Curtis Harper Lectureship Committee, Department of Pharmacology, School of Medicine, University of North Carolina at Chapel Hill
- 2024 UNC 47<sup>th</sup> Annual Lineberger Scientific Symposium, Friday Center, Chapel Hill, NC
- 2023 National Academies: Preparing the Future Workforce in Drug Research & Development Workshop, DC
- 2023 Chair, Dr. Curtis Harper Lectureship Committee, Department of Pharmacology, School of Medicine, University of North Carolina at Chapel Hill
- 2023 NC Society of Toxicology Regional Chapter Meeting, RTP, NC
- 2023 American Association for Cancer Research (AACR) Annual Meeting, Orlando, FL
- 2023 Society of Toxicology (SOT) Annual Meeting, Nashville, TN
- 2022 Chair, Dr. Curtis Harper Lectureship Committee, Department of Pharmacology, School of Medicine, University of North Carolina at Chapel Hill
- 2022 American Association for Cancer Research (AACR) Special Conference for Pancreatic Cancer, Boston, MA
- 2022 Annual Society of Toxicology (SOT) meeting, San Diego, CA
- 2022 American Association for Cancer Research Professional Advancement Session: "Personalized Career Conversations"- Moderator
- 2022 Speaker, Science Enrichment Preparation (SEP) Program, UNC-Chapel Hill
- 2021 American Association for Cancer Research Professional Advancement Session: "Personalized Career Conversations"- Moderator
- 2021 "Survival Skills: Postdoctoral Level"
- 2021 Chair, Dr. Curtis Harper Lectureship Committee, Department of Pharmacology, School of Medicine, University of North Carolina at Chapel Hill

- 2020 CABTRAC Career Path Panelist, Virtual Conference
- 2020 Speaker, McNair Program, Fayetteville State University
- 2020- Consultant, Guidepoint Network
- 2018- NIH U54 Grant-Florida-California CaRE2 Health Equity Center  
Program Steering Committee (UF, USC, FAMU)
- 2016- Associate Director, Triangle Center for Evolutionary Medicine  
(TriCEM)
- 2016-2020 NIH P20 Grant-PACHE External Advisory Board, Stonybrook University-SUNY  
(SUNY SBU, SUNY DMC, CSHL)
- 2016 Opening Speaker, Undergraduate Education Program, Society of  
Toxicology, New Orleans, LA
- 2015 Grant Reviewer, HHMI EXROP Study Section
- 2015 Grant Reviewer, CDDT Study Section
- 2014 Consultant, Clarion Healthcare
- 2014 Grant Reviewer, HHMI EXROP Study Section
- 2014 Panelist, Triangle Global Health Consortium, Chapel Hill, NC
- 2014 Panelist, ASPET, Experimental Biology 2014, San Diego, CA
- 2014 Opening Speaker, Undergraduate Education Program, Society of Toxicology, AZ
- 2013 Grant Reviewer, HHMI EXROP Study Section
- 2013 CABTRAC Career Path Panelist, Wrightsville Beach, NC
- 2013 Opening Speaker, Undergraduate Education Program, Society of Toxicology, TX
- 2013 NIH Career Fair Panelist, "Surviving the first 3 years and tenure"
- 2012 Grant Reviewer, HHMI EXROP Study Section
- 2012 Opening Speaker, Undergraduate Education Program, Society of Toxicology, CA
- 2011-2012 Consultant, Jasco Pharmaceuticals
- 2011- Cancer Cell Biology T32 Training Grant External Advisory Board  
Member
- 2011 Consultant, Currie Johnson Griffin Gaines & Myers, P.A.
- 2011 *Ad Hoc* Reviewer, NIH Molecular and Integrative Signal Transduction (MIST)  
Study Section
- 2011 Panel Moderator, AACR Undergraduate Student Program, AACR Annual  
Meeting, Orlando, FL
- 2011 American Association for Cancer Research Professional Roundtable Moderator,  
"Survival Skills: Postdoctoral Level"
- 2011-2013 Chair, Newsletter Committee, Toxicologists of African Origin (TAO)
- 2011 Reviewer, European Journal of Cancer
- 2011 College of Science & Technology 3rd Annual Undergraduate Research  
Symposium
- 2010- Initiative for maximizing student diversity (IMSD) Advisory  
Committee, University of North Carolina at Chapel Hill
- 2010 Panel Moderator, AACR Undergraduate Student Program, AACR Annual  
Meeting, Washington, DC.
- 2010 American Association for Cancer Research Professional Roundtable Moderator,  
"Survival Skills: Postdoctoral Level"
- 2010- Department of Biology Graduate Student Education Committee, NCCU
- 2010 College of Science & Technology 2<sup>nd</sup> Annual Undergraduate Research

- Symposium
- 2010 Hosted Summer Internship Panel Session, Department of Biology, NCCU
  - 2009 Hosted Keystone Symposia on Molecular and Cellular Biology representative for the Department of Biology, NCCU
  - 2009 Hosted Summer Internship Panel Session, Department of Biology, NCCU
  - 2009 College of Science & Technology 1<sup>st</sup> Annual Undergraduate Research Symposium
  - 2009 Panel Moderator, AACR Undergraduate Student Program, AACR Annual Meeting, Denver, CO.
  - 2009 American Association for Cancer Research Professional Roundtable Moderator, "Survival Skills: Postdoctoral Level"
  - 2009 Panelist, Science Career Forum for NASA/EXPORT and Summer Ventures high school students, North Carolina Central University
  - 2009 Moderator for the North Carolina Regional Science Bowl at NCCU
  - 2009 Panelist for the Duke University Graduate School Preparing Future Faculty (PFF) Fellows site visit
  - 2009 Participated in the Early Orientation Program for Freshman for the College of Science & Technology
  - 2009 Panelist for the Summer Ventures Program at NCCU
  - 2009 Search Committee for Research Compliance Officer, NCCU
  - 2009 Panelist for the Tri-Beta Biological Honor Society forum on Faculty Research, North Carolina A&T University
  - 2009 Participated in Career Day at Eastway Elementary School, Durham, NC
  - 2008- Member of the University Campus Safety Committee, NCCU
  - 2008 Participated in the Ph.D. and Professional Degree Application Workshop, School of Graduate Studies, NCCU
  - 2008 Science Fair Judge, Central Regional Science Fair, Wakefield Middle School
  - 2008 Represented the Department of Biology during a visit with the Naval Sea Systems Command
  - 2008 Fall Open House representative, Department of Biology, North Carolina Central University
  - 2008 Society of Toxicology Education Program Guest Speaker
  - 2007 - 2010 Councilor, Toxicologists of African Origin (TAO), Special interest group for the Society of Toxicology
  - 2007 Panel Moderator, AACR Undergraduate Student Program, AACR Annual Meeting, Los Angeles, CA.

### **PROFESSIONAL SOCIETIES**

- 2007 - Membership, American Association for Cancer Research (AACR)
- 2007 - Full Membership, Society of Toxicology (SOT)

### **REFLECTIVE STATEMENT**

With a strong sense of service, motivate and stimulate young minds to begin



their own quest for knowledge as life-long learners outside the classroom and research laboratory