Getting to Know a Scientist in Your Field

BBSP First Year Group
Fall 2020
Dr. Eduardo A.C. Almeida

Area of Expertise: Stem-cell-based tissue regeneration

Training:
- B.S. Biology, University of San Francisco
- M.S. Biology, University of San Francisco
- Ph.D. Zoology, University of California, Davis
- Postdoctoral Fellow, University of Virginia
- Postdoctoral Fellow, University of California, San Francisco
- Co-Director NASA Ames Bone & Signaling Laboratory (2001-Present)

Research:
- Uses animal models to study how microgravity and mechanical unloading impact stem-cell proliferation and differentiation in tissue regeneration.
- Has studied stem-cell-based tissue regeneration in multiple model organisms exposed to the spaceflight environment including newts and mice.
- His lab has identified a potential molecular mediator (p21/CDKN1a) which is overexpressed in stem cells that fail to differentiate in microgravity.

Resources:
- [https://www.nasa.gov/ames/research/space-biosciences/eduardo-a-almeida](https://www.nasa.gov/ames/research/space-biosciences/eduardo-a-almeida)
- [https://www.youtube.com/watch?v=KTelwF805Os&feature=youtu.be](https://www.youtube.com/watch?v=KTelwF805Os&feature=youtu.be)
Gloria Long Anderson PhD

Area of Expertise: Chemistry

Training:
- Bachelors-Arkansas Agricultural, Mechanical, and Normal College
- Masters- Atlanta University
- PhD- University of Chicago

Research:
- Dr. Anderson studies Fluorine-19 chemical shifts and interactions as probes for synthesis reactions. She also studies antiviral drug synthesis, fluoridated pharmaceutical compounds, and substituted amantadines.

Resources:
- https://morrisbrown.edu/vice-president/
Javier Apfeld

Assistant Professor
Northeastern University

Area of Expertise: Aging, redox cell biology

Training:
- BSc in Biology, MIT, 1994
- PhD in Biochemistry, University of California, San Francisco, 1999
  - Cynthia Kenyon’s Lab

Research:
- Uses C. elegans to study how animals use the nervous system to regulate the aging process on an organismal level.

Resources:
- https://cos.northeastern.edu/people/javier-apfeld/
- http://apfeldlab.mystrikingly.com/

Contributor: Sean Johnsen
Dr. Yeka Aponte

Area of Expertise: Cellular Neurobiology of Feeding and Reward

Training:
- PhD University of Freiburg
- Postdoc Dr. Scott Sternson, Howard Hughes Medical Institute

Research:
- Understanding how certain cell types drive behaviors related to survival such as feeding. Uses optogenetics, chemogenetics, electrophysiology, two-photon fluorescence endomicroscopy, and behavioral models to research how these circuits may relate to feeding behavior and addiction.

Resources:
- NIDA IRP website (https://irp.nih.gov/pi/yeka-Aponte)

Tenure-Track Investigator
NIH National Institute on Drug Abuse IRP

Contributor: Devin Effinger
Area of Expertise: Cancer Epigenetics

Training:
- M.Eng Electronic Engineering, Imperial College London (1995-1999)
- M.Sc Neuroscience, King's College London (1999-2000)
- Postdoctoral Fellow, School of Medicine, Johns Hopkins (2008-2010)
- Assistant Professor of Pathology, Massachusetts General Hospital (2012-)
- Assistant Professor, Harvard T.H. Chan School of Public Health (2015-)

Research:
- Developing computational tools for extracting signals from noisy genomic datasets
- Developing blood-based early cancer detecting diagnostics

Resources:
- [https://aryee.mgh.harvard.edu/](https://aryee.mgh.harvard.edu/)
- [https://www.broadinstitute.org/bios/martin-aryee](https://www.broadinstitute.org/bios/martin-aryee)
Wayne Bowen, PhD

Area of Expertise: Opioid receptors, cancer biology

Training:
- B.S. in Chemistry, Morgan State University (1974)
- Ph.D. in Biochemistry and Neurobiology (1981)
- Postdoctoral work at the NIH

Research:
- Dr. Bowen is recognized as a leader in the characterization of sigma-2 receptors, and his lab focuses particularly on using them as a druggable target in forms of cancer, activating these receptors to promote apoptosis in cancerous tissues.

Resources:
- https://vivo.brown.edu/display/wbowen#Research
- https://cancerres.aacrjournals.org/content/80/16_Supplement/2559.short

Chair of Molecular Biology, Pharmacology, and Biotechnology
Brown University

Contributor: Jacob Pantazis
Donita C. Brady

Area of Expertise: Signal transduction and cancer

Training:
- B.S. in Chemistry from Radford University
- PhD in Pharmacology from UNC-Chapel Hill
- Postdoctoral researcher at Duke University School of Medicine

Research:
- Metalloallostery: redox-sensitive metals, particularly copper, participate in nutrient sensing and affect kinase signaling
- Discovered that kinases require copper to function
- Targeting Cu-dependent kinases for cancer therapies

Resources:
- https://www.med.upenn.edu/apps/faculty/index.php/g275/p8851480
Dr. Breann Brown

Assistant Professor
Department of Biochemistry
Vanderbilt University

Area of Expertise: Structural biology, mitochondrial physiology

Training:
- B.S., Chemistry - Duke University 2006
- Ph.D., Molecular Biology and Physiology - Brown University, 2006-2012
- Postdoctoral Fellow, MIT (Dr. Tiana A. Baker lab), 2012-2018
- HHMI Postdoctoral Fellow, 2012-2013

Research:
- Using structural biology and biochemical techniques to understand the assembly mechanisms necessary for the regulation of heme biosynthesis and mitochondrial DNA copy number.

Resources:
- https://medschool.vanderbilt.edu/biochemistry/person/breann-brown/
Emery Brown, MD, PhD

Area of Expertise: Computational Neuroscience

Training:
- BA, Harvard College
- AM in Statistics, Harvard University
- MD, Harvard Medical School
- PhD in Statistics, Harvard University
- Internship in Internal Medicine, Brigham and Women’s Hospital
- Research Fellowship in Endocrinology, Brigham and Women’s Hospital
- Residency in Anesthesiology, Massachusetts General Hospital

Research:
- Utilizing neural signal processing algorithms to better investigate various brain states
- Understanding the neural processes underlying induction and maintenance of general anesthesia

Resources:
- http://imes.mit.edu/people/faculty/brown-emery/
- http://brain.harvard.edu/?people=emery-n-brown

Warren M. Zapol Professor of Anesthesia, Harvard Medical School, Massachusetts General Hospital
Edward Hood Taplin Professor of Medical Engineering and of Computational Neuroscience, MIT

Contributor: Monica Lyons
Dr. Namandje N. Bumpus

Area of expertise: Pharmacology

Training:
- B.A. Occidental College
- Ph.D, University of Michigan at Ann Arbor

Research:
- Antiviral drug toxicity, drug metabolism, and drug development.

Resources:
- https://www.hopkinsmedicine.org/profiles/results/directory/profile/0800008/namandje-bumpus
- https://hub.jhu.edu/2020/06/23/namandje-bumpus-historic-department-chair/

Professor and Director of the Department of Pharmacology and Molecular Sciences at Johns Hopkins University

First African-American woman to be head of a department at JHU School of Medicine!
Raychelle Burks

Area of Expertise: Analytical Chemistry

Training:
- BS, Chemistry - Northern Iowa University
- MFS, Forensic Science - Nebraska Wesleyan University
- PhD, Chemistry - University of Nebraska - Lincoln
- Post Doctoral Fellow, Doane College
- 2020 American Chemical Society Grady-Stack award for “excellence in public engagement”

Research:
- Developing low-cost colorimetric and luminescent sensors to detect chemicals of forensic and national security interest, such as drugs and explosives

Resources:
- https://www.american.edu/cas/faculty/burks.cfm
- https://www.pictureascientist.com/
Carlos Bustamante, Ph.D.  

Area of Expertise: Biophysics

Training:
- BSc from Cayetano Heredia University in Lima, Peru
- MSc in biochemistry from National University of San Marcos in Lima, Peru
- PhD in biophysics from UC Berkeley (Ignacio Tinoco, Jr.)
- Postdoc at the Lawrence Berkeley National Laboratory (Marcos Maestre)
- Kellogg Foundation scholarship during the Masters
- Fulbright Commission and Institute of International Education Fellow
- Abraham Rosenberg scholarship, UC Berkeley

Research:
- The Bustamante lab studies dynamics and function of molecular motors in transcription and translation, protein folding using single molecule techniques (i.e. optical tweezers, magnetic tweezers, single molecule fluorescence imaging, cryo-EM).

Resources:
- https://en.wikipedia.org/wiki/Carlos_Bustamante;
- https://www.hhmi.org/scientists/carlos-j-bustamante;
- https://bustamante.berkeley.edu

Contributor: Rob McGinty
Dr. Silvia Caballero

Associate Director, Infectious Diseases
Vedanta Biosciences

Area of Expertise: Microbiology (Bacteria against antibiotic drug resistance)

Training:
● Ph.D. Microbiology and Immunology, Weill Cornell Medical College
● Hunter College

Research:
● Multidrug-resistant organism decolonization program.
● Identification of bacteria that can effectively control three potentially lethal bacterial strains (vancomycin-resistant enterococcus and carbapenem-resistant enterobacteriaceae) often found in hospitals and nursing homes.

Resources:
● https://www.technologyreview.com/innovator/silvia-caballero/
Paul M. Campbell, PhD

Assistant Professor
Fox Chase Cancer Center - Temple Health

Area of Expertise: Ras GTPases / Pancreatic Cancer

Training:
- BSc - University of Toronto
- MSc - University of Toronto
- PhD - McGill University
- Postdoctoral Fellow - University North Carolina, Linberger CC

Research:
- Ras family of GTPases relating to tumor progression in cancer - specifically KRas and Pancreatic Ductal Adenocarcinoma (PDAC)
- Also interested in PDAC stroma/tumor microenvironment talk

Resources:
- [https://www.foxchase.org/paul-campbell](https://www.foxchase.org/paul-campbell) (Faculty/Lab)
- [https://twitter.com/campbellpanclab?lang=en](https://twitter.com/campbellpanclab?lang=en) (Lab Twitter)
Area of Expertise: cancer genomics

Training:
- PhD at the Ohio State University in human genetics
- Postdoctoral Fellowship at NHGRI, NIH
- Tenure-track Investigator at NHGRI, NIH
- Deputy Director of Basic Science Research, Translational Genomics Research Institute

Research:
- Dr. Carpten’s work uses genomic approaches to identify cancer mutations that may be associated with disease risk and prognosis, with a specific focus on cancer disparities among underrepresented communities

Resources:
- [https://keck.usc.edu/faculty-search/john-d-carpten/](https://keck.usc.edu/faculty-search/john-d-carpten/)

Contributor: Dina O’Connell
Dr. Claudia Castillo-Gonzalez
Area of Expertise: Telomere Biology

Training:
- B.Sc. Microbiology - Universidad de Los Andes, Bogota, Colombia
- M.Sc. Microbiology - Universidad de Los Andes, Bogota, Colombia
- Research Assistant - Universidade de Sao Paulo, Sao Paulo, Brazil
- Ph.D. Biochemistry - Texas A&M University

Research:
- Studies the role of POT1 proteins in the model plant *Arabidopsis thaliana* to investigate negative regulation of telomerase in response to environmental stimuli

Resources:
Dr. Ibrahim Cissé
Associate Professor
Department of Physics
Massachusetts Institute of Technology

Area of Expertise: Super-Resolution live cell imaging

Training:
- B.S. Physics, North Carolina Central University (2004)
- Ph.D. Physics University of Illinois at Urbana-Champaign (2009)
- Postdoctoral Fellow, Ecole Normale Supérieure de Paris (2010-2012)
- Research Specialist, Howard Hughes Medical Institute (2013-2014)
- Assistant Professor, Massachusetts Institute of Technology (2014-2020)

Research:
- Major question: What are the major events driving gene transcription within the nuclei of living cells?
- Discovered transient RNA polymerase clusters of about 100 molecules existing for ~10 seconds at transcription sites, correlating to mRNA levels

Resources:
- [http://www.icisse.org/](http://www.icisse.org/)
- [https://web.mit.edu/physics/people/faculty/cisse_ibrahim.html](https://web.mit.edu/physics/people/faculty/cisse_ibrahim.html)
Leon Coleman, MD PhD

Assistant Professor
Department of Pharmacology
Bowles Center for Alcohol Studies
University of North Carolina at Chapel Hill

Area of Expertise: Neuropharmacology

Training:
- BS in Chemical Engineering, University of Virginia
- MD/PhD in Neurobiology, University of North Carolina at Chapel Hill
- Residency in General Surgery, UNC Hospital

Research:
- Dr. Coleman's research investigates the modulation of the innate immune pathways in chronic alcohol use and the role of alcohol-induced inflammation in diseases involving immune dysfunction

Resources:
Kizzmekia Corbett, Ph.D

Research Fellow & Scientific Lead
Coronavirus Vaccines & Immunopathogenesis Team
NIH, NIAID, Vaccine Research Center

Area of Expertise: Viral Immunology & Vaccine Development

Training:
- B.S. Biological Science & Sociology -- University of Maryland-Baltimore County
  - Meyerhoff Scholar
  - NIH Undergraduate Scholar
- Ph.D. Microbiology & Immunology -- University of North Carolina at Chapel Hill

Research:
- Developing novel coronavirus vaccines including mRNA-1273, a leading candidate against SARS-CoV-2 currently in Phase III clinical trials (Moderna)
- Universal coronavirus vaccine concepts and therapeutic antibodies

Resources:
- https://asm.org/Biographies/Kizzmekia-S-Corbett,-Ph-D
Giselle Corbie-Smith

Kenan Distinguished Professor of Social Medicine
UNC Chapel Hill

Area of Expertise: Health equity promotion and ethical inquiry, community-based participatory research

Training:
- BA, Cornell University
- MD, Albert Einstein School of Medicine
- MSc, Emory University

Research:
- Director of UNC’s Center for Health Equity Research (CHER)
- Uses mixed methodologies to study and intervene in community health settings
  - Focuses on rural counties in NC with minority populations with a specific interest in chronic disease (especially CVD)
  - Methodological, practical, and ethical dimensions
- Elected to NASEM in 2018

Resources:
- https://www.med.unc.edu/socialmed/directory/giselle-corbie-smith/
Anthony Covarrubias

Area of Expertise: Molecular gerontology (inflammation and aging)

Training:
- Post doc, Buck Institute, Verdin Lab
- PhD, Harvard School of Public Health, biological sciences
- BS, Biochemistry, UCLA

Research:
- Interest in how the innate immune system utilizes nutrients
- Among the first to show that endogenous changes in metabolites can affect gene function
- Worked on mTOR-TSC and ROS in macrophage metabolism

Resources:

Contributor: Jackie Brinkman
**Stephanie Dance-Barnes, PhD**  

**Dean, College of Science and Health**  
*Depaul University*

**Area of Expertise: Cancer Biology**

**Training:**
- Elizabeth City State University, BS in Biology/Pre-Medicine
- North Carolina Agricultural & Technical State University, MS in Biology
- Wake Forest University, Ph.D. in Cancer Biology and Toxicology  
  *The first African-American woman to do so at WFU in 2007*
- University of North Carolina at Chapel hill, Postdoctoral Research Associate, Cancer Biology, Genomics, and Bioinformatics emphasis

**Research:**
- Dr. Dance-Barnes's research focuses on using genomics and genetics to develop therapies for distinct subtypes of breast cancer. Her main focus is triple negative breast cancer, which disproportionately affects African American women.

**Resources:**
- [https://www.depaul.edu/about/administration/Pages/dance-barnes.aspx](https://www.depaul.edu/about/administration/Pages/dance-barnes.aspx)
- [http://cdiwsnc.org/project/stephanie-dance-barnes/](http://cdiwsnc.org/project/stephanie-dance-barnes/)
Area of Expertise: Microbial Pathogenesis and Pulmonary Care

Training:
- MD/PhD in immunology and virology at University of Toronto and Yale University

Research:
- Identify immune regulators involved in mediating lung damage due to smoke inhalation and lung infections
- Examine how smoke exposure affects the pathogenesis of chronic obstructive pulmonary disease (COPD)

Resources:
- https://medicine.yale.edu/lab/delacruz/profile/charles_delacruz/
Enrique De La Cruz

Area of Expertise: Catalytic reaction pathways

Training:
- B.S. Biology, Rutgers University
- Ph.D. Biochemistry, Cell and Molecular Biology, Johns Hopkins University School of Medicine
- Postdoctoral Fellow, University of Pennsylvania School of Medicine
- Visiting Scientist at Centre National de la Recherche Scientifique, France

Research:
- DEAD box proteins and duplex rRNA unwinding and RNA export
- Catalytic specificities and biological activities of nucleotide pyrophosphate/phosphodiesterase enzymes

Resources:
- https://medicine.yale.edu/profile/enrique_delacruz/?tab=bio
- https://diverseeducation.com/article/191007/
- https://delacruzlab.yale.edu

Professor and Chair of Molecular Biophysics and Biochemistry
Yale School of Medicine

Contributor: Amy Aponte
Dr. Luis de la Torre-Ubieta

Assistant Professor
UCLA

Area of Expertise: Gene-regulation, neocortex development, neurodevelopmental gene-expression

Training:
- Undergrad: University of Puerto Rico
- Graduate: PhD in neurobiology from Harvard, focusing on the mechanism and regulation of neuronal morphogenesis.
- Post-Doc: Geschwind Lab at UCLA, where he worked on developing in-vitro models of human cortical neurogenesis.

Research:
- The Dynamic Landscape of Open Chromatin during Human Cortical Neurogenesis
- A quantitative framework to evaluate modeling of cortical development by neural stem cells

Resources:
- https://labs.dgsom.ucla.edu/torre-ubieta/pages/people

Contributor: Thomas Collins
Juan de Pablo, PhD
Area of Expertise: Protein Engineering & Polymeric Materials Simulations

Training:
- Bachelor’s in Chemical Engineering from Universidad Nacional Autónoma de México (1985)
- PhD in Chemical Engineering from University of California, Berkeley (1990)
- Postdoctoral Research at Swiss Federal Institute of Technology in Zurich, Switzerland

Research:
- Juan de Pablo specializes in polymeric molecules, understanding them via supercomputer simulations and designing novel materials for specific applications.

Resources:
- [https://pme.uchicago.edu/faculty/juan-de-pablo](https://pme.uchicago.edu/faculty/juan-de-pablo)
- [https://pme.uchicago.edu/group/de-pablo-group](https://pme.uchicago.edu/group/de-pablo-group)
Brad Dickerson, PhD

Assistant Professor
University of North Carolina, Chapel Hill

Area of Expertise: Neural circuitry of the wingstroke

Training:
- University of Washington, PhD in Biology
- Swarthmore College, B.A. in Biology

Research:
- Dr. Dickerson looks to the halteres in *Drosophila melanogaster* to understand how sensory inputs are integrated to guide flight patterns.
- Techniques used are *in-vivo* imaging, muscle physiology, and behavioral observations.

Resources:
- [http://dickerson.bio.unc.edu](http://dickerson.bio.unc.edu)
- [https://bio.unc.edu/faculty-profile/dickerson-brad/](https://bio.unc.edu/faculty-profile/dickerson-brad/)
Area of Expertise: Molecular Pathogenesis of Reproductive Tract Tumors

Training:
- Doctor of Veterinary Medicine (D.V.M.) degree in 1982 at Tuskegee University School of Veterinary Medicine
- Ph.D. in 1985 at Michigan State University
- Postdoctoral Fellow at The Rockefeller University

Research:
- Pathogenesis and carcinogenesis of tumors affecting the reproductive tract of rodents and humans, and assessing the role of environmental and endogenous hormonal factors in the growth of these tumors

Resources:

Contributor: Charlotte Love
Dr. Daniel Dominguez

Area of Expertise: RNA processing and gene expression

Training:
- BS, Mathematics and Biology - University of Texas at El Paso (2007)
- PhD, Pharmacology - University of North Carolina at Chapel Hill (2014)
- Postdoctoral Fellow - Biology Department, MIT (2015-2018)

Research:
- Uses computational and experimental methods to study how RNA processing by RNA-binding proteins controls gene expression in normal and diseased settings.

Resources:
- Dominguez Lab website
- CV

Assistant Professor
University of North Carolina at Chapel Hill
Georgia M. Dunston, PhD

Area of Expertise: Human Immunogenetics

Training:
- B.S. in Biology - Norfolk State University
- M.S. in Biology - Tuskegee University
- PhD in Genetics - University of Michigan at Ann Arbor

Research:
- Human variation in the human major histocompatibility complex (MHC) and its effect on disease susceptibility in African Americans.

Resources:
- https://www.genome.gov/player/tUbyh_6-g4U/PL1ay9ko4A8sk0o9O-YhseFHzbU2I2HQQp
- https://biologos.org/people/georgia-m-dunston

Geneticist and Founder of the Whole Human Genome Foundation
Howard University

Contributor: Amjad Dabi
Kafui Dzirasa, Ph.D. | Associate Professor  
Duke University School of Medicine

Area of Expertise: Stress and depression

Training:
- Duke University, Ph.D. 2007
- Duke University School of Medicine, M.D. 2009
- Duke University School of Medicine psychiatry residency

Research:
- Uses new technologies to characterize cortical activity and circuitry and how they may play a role in stress and depression

Resources:
- [https://www.neuro.duke.edu/people/faculty/kafui-dzirasa](https://www.neuro.duke.edu/people/faculty/kafui-dzirasa)
- [https://www.dzirasalabs.com](https://www.dzirasalabs.com)
- [https://twitter.com/KafuiDzirasa](https://twitter.com/KafuiDzirasa)
Dr. Whitney Edwards

Area of Expertise: Cardiac Development and Disease

Training:
- B.S. St. Edwards University, Austin, TX
- Ph.D University of Illinois, Urbana-Champaign, IL

Research:
- Sex disparities in cardiac disease and development
- Proteomic analysis of differential cardiac protein expression to determine the causes of sex disparities as seen in congenital heart disease and recovery from myocardial infarction
- Co-Author of SPACE mini-course
- SPIRE fellow - Teaches courses at NC A&T

Resources:
- https://spire.unc.edu/spire-community/spire-scholars/whitney-edwards-ph-d/
- https://www.conlon-lab.com/lab-members

SPIRE Postdoctoral fellow
Biological and Genome sciences
University of North Carolina at Chapel Hill

Contributor: James (Ike) Emerson
Dr. Keke Fairfax

Principal Investigator
University of Utah School of Medicine
Division of Microbiology and Immunology
Department of Pathology

Area of Expertise: Immunology & Microbiology

Training:
- B.A. in Biology, University of Chicago
- Ph.D. in Microbiology, Yale University
- Postdoctoral Research Fellowship, Trudeau Institute
- Postdoctoral Research Fellowship, Washington University
  - UNCF/MERK Fellowship

Research:
- The Fairfax lab uses *Schistosoma mansoni*, a parasitic worm (“helminth”) to ask questions about cytokine response (specifically IL-4) and changes to immune system during helminth infections. Using *Schistosoma mansoni* as their point of study, her lab aims to develop an understanding of key immunological questions surrounding helminth infections.

Resources:
- [https://medicine.utah.edu/pathology/research/labs/keke-fairfax/research.php](https://medicine.utah.edu/pathology/research/labs/keke-fairfax/research.php)
Dr. Brielle Ferguson, PhD

Area of Expertise: Neuroscience

Training:
- Doctor of Philosophy, Drexel University (2017)
- Bachelor of Arts, University of Virginia (2012)

Research:
- Studying circuits in the brain support cognition and how those circuits are impaired during disease states
  - Focusing on attention impairments in a mouse model of epilepsy

Resources:
- https://www.blackinneuro.com/home
Dr. Aileen Fernandez

Area of Expertise: Oncology

Training:
- B.S. in Biology at Purchase College, SUNY
- MS from University of the District of Columbia, Cancer biology
- PhD in the Tumor Biology training program at Georgetown University
  ○ Focused on triple negative breast cancer

Research:
- Her postdoctoral research is in oncology and focuses on identifying and developing different biomarkers to identify which cancer patients will better respond to different cancer treatments.

Resources:
- https://medicine.yale.edu/profile/aileen_fernandez/
- https://www.linkedin.com/in/aileen-fernandez-she-her-hers-83554729/
Giulio Francia, PhD
Area of Expertise: Breast Cancer

Training:
- Bachelor’s in Biochemistry, Bristol University, UK.
- PhD from Imperial Cancer Research Fund, St. Thomas’ Hospital, London
- Postdoctoral Fellow at Bob Kerbel Lab, University of Toronto, Canada
- Assistant Professor, UTEP, 2012-Present

Research:
- Works on breast cancer metastasis and evolution of resistance to anti-cancer therapies
- Using preclinical models, evaluate how growth at secondary sites enables cancer cell resistance to chemotherapy

Resources:
- [https://expertise.utep.edu/profiles/gfrancia](https://expertise.utep.edu/profiles/gfrancia)
Hector Franco | Assistant Professor  
University of North Carolina at Chapel Hill

Area of Expertise: Cancer Genetics/Gene Regulation/Genomics

Training:
- PhD in Biochemistry & Molecular Genetics, University of Puerto Rico Medical School.
- American Cancer Society Postdoctoral scholar at UT Southwest Medical Center
- K99/R00 pathway to independence award from the National Cancer Institute to continue his research at UNC-Chapel Hill

Research:
- Elucidating the mechanism and formation of transcriptional enhancers and non-coding RNAs
- Understanding how these behave in response to the tumor environment

Resources:
- [https://www.med.unc.edu/genetics/directory/hector-franco-phd/](https://www.med.unc.edu/genetics/directory/hector-franco-phd/)
Dr. Stacey Finley

Area of Expertise: Mathematical Oncology

Training:
- B.S. Chemical Engineering, Florida A & M University
- Ph.D. Chemical Engineering, Northwestern University
- Postdoctoral Fellow, Biomedical Engineering, Johns Hopkins University
- Assistant Professor, University of Southern California (2013-2019)

Research:
- Dr. Finley uses computational modeling and systems biology approaches to study how the processes of angiogenesis, metabolism, and immunotherapy are involved in cancer.

Resources:
- https://ellison.usc.edu/portfolio/staceyf/
- https://viterbi.usc.edu/directory/faculty/Finley/Stacey
- http://csbl.usc.edu/people/principal-investigator/

Associate Professor
Department of Biomedical Engineering
University of Southern California

Contributor: Brooke Felsheim
David O Garcia PhD

Area of Expertise: Weight loss interventions

Training:
- Ph.D., Exercise Physiology: University of Pittsburgh, Pittsburgh, Pennsylvania
- M.S., Health, Physical Activity, and Chronic Disease-Research Focus University of Pittsburgh, Pittsburgh, Pennsylvania
- B.S. in Exercise Science, Magna Cum Laude: Slippery Rock University, Slippery Rock, Pennsylvania

Research:
- Development of gender and culturally-sensitive weight loss interventions for Hispanic males
- Implement and evaluate large, multi-site trials to systematically influence community environments and eventually, policies in order to improve health among underserved populations

Resources:
- https://publichealth.arizona.edu/directory/david-garcia
- http://crosstalk.cell.com/blog/100-inspiring-hispanic-latinx-scientists-in-america

Assistant professor
Health Promotion Sciences Department
Mel and Enid Zuckerman College of Public Health
University of Arizona

Contributor: Le Huang
Jaye Gardiner, PhD

Area of Expertise: Cancer Biology

Training:
- B.S., Biology, Macalester College, 2011
- PhD, Oncology and Cancer Biology, University of Wisconsin-Madison, 2017

Research:
- Exploring the how the pancreatic tumor microenvironment communicates with non-tumor cells to support tumor growth.

Resources:
- https://nrt.uky.edu/speaker/jay-gardiner/
- https://www.linkedin.com/in/jaye-gardiner
- https://www.blackincancer.com/meet-the-team

Postdoctoral Research Associate
Fox Chase Cancer Center

Contributor: Michael Sturdivant
Levi Garraway

Area of Expertise: Cancer genomics and drug resistance

Training:
- A.B. Biochemical Sciences, Harvard University
- M.D., Ph.D. Biological Chemistry and Molecular Biology, Harvard University
- Post-Doctoral Fellow, Medical Oncology, Dana-Farber Cancer Institute

Research:
- Works on developing systematic approaches to link genomic changes in tumors to novel avenues for targeted cancer treatments
- He described the first high-throughput adaptation of a genomic technology to profile human tumors for hundreds of “actionable” cancer gene mutations.

Resources:
- https://www.broadinstitute.org/bios/levi-garraway
- https://www.roche.com/about/governance/medical-officer-levi-garraway.htm

Contributor: Ryan Robb
Dr. Claudio Gonzalez

Area of Expertise: Gene expression and regulation; protein engineering

Training:
- Ph.D. (2000) National University of Tucumán, Argentine
- 2004-2007 Banting and Best Institute (University of Toronto)
- 2003-2004 University of California at San Diego (UCSD)
- 2000-2003 Stanford University

Research:
- Screening of esterases (group of enzymes) using rapid screening techniques.
- Understand the biological function and characterization of unknown proteins with hydrolytic activity. This group of proteins has industrial and biomedical utility.

Resources:
- http://microcell.ufl.edu/people/faculty-directory/gonzalez/

Professor
University of Florida

Contributor: Gabi Quickstad
Danielle E. Graham, PhD

Assistant Professor of Biological and Forensic Sciences
Fayetteville State University

Area of Expertise: Bacterial Infection & Immunology

Training:
- Postdoctoral Fellow, University North Carolina Chapel Hill, 2017
- PhD, Microbiology & Immunology, University of Arkansas for Medical Sciences, 2015
- B.S., Biology, Fayetteville State University, 2011

Research:
- Dr. Graham's research aims to understand how specific proteins in *Borrelia burgdorferi* contribute to increased pathogenesis leading to Lyme Disease

Resources:
- https://www.linkedin.com/in/danielle-grahamphd
Hadiyah Nicole Green

Assistant Professor
Department of Physiology
Morehouse School of Medicine

Area of Expertise: Cancer Research, Immunotherapy, Translational medicine

Training:
- B.S in Physics Alabama Agricultural and Mechanical University 1999
- M.S in Physics University of Alabama at Birmingham 2009
- PhD in Physics University of Alabama at Birmingham 2012

Research:

Resources:
- https://www.msm.edu/_testing/faculty_dev/department_a/profile_a/profile_a-2.php

Contributor: Breanna Jeffcoat
Dr. Neil Hanchard

Assistant Professor, Molecular & Human Genetics
Baylor College of Medicine

Area of Expertise: clinical genetics, pediatrics

Training:
- Clinical Fellowship at Baylor College Of Medicine
- Residency at Mayo Clinic, Rochester
- PhD from University Of Oxford
- MBBS from University Of The West Indies

Research:
- Identify the genes and gene-pathways that contribute to the clinical dichotomy of severe childhood malnutrition (SCM).
- Study the host factors that modulate the progression of HIV and HIV-TB infection in children from sub-Saharan Africa.
- Fine-map genetic associations of fetal hemoglobin production in sub-Saharan Africa.

Resources:
- https://www.bcm.edu/people-search/neil-hanchard-22633
Area of Expertise: Immunology/ Cancer Biology

Training:
- B.S. in Molecular Biology and Chemistry, Florida A & M University
- PhD in Immunology, Wake Forest University
- Adjunct Professor of Molecular Biology, Regis University
- Postdoctoral Research Fellow, University of Colorado Denver

Research:
- Research conducted focuses on understanding how chronic inflammation associated with childhood obesity and aging impacts immunity and leukemogenesis in both demographics.

Resources:
- https://www.linkedin.com/in/curtis-henry-ph-d-62688117/
- https://winshipcancer.emory.edu/bios/faculty/henry-curtis.html
- https://pedsresearch.org/people/faculty/dr-curtis-henry
Dr. Darren Higgins

Area of Expertise: Microbiology and Immunology

Training:
- BS, Microbiology, Texas A&M
- PhD, Microbiology and Immunology, University of Michigan Medical School
- Postdoctoral fellow, University of Pennsylvania School of Medicine
- Postdoctoral fellow, University of California, Berkeley

Research:
- Studies the molecular mechanisms of intracellular bacterial pathogenesis.
- Studies host-pathogen interaction and the host immune response to intracellular pathogens.

Resources:
- https://higginslab.med.harvard.edu/people.html
Shantá Hinton, PhD          | Associate Professor
                              | College of William & Mary

Area of Expertise: Cell & Molecular Biology

Training:
- University of North Carolina at Chapel Hill, B.A. (Biology) 1996
- Howard University, Ph.D. (Biology) 2002
- Assistant Professor: Department of Biological Sciences, Hampton University (2007-2010)
- Postdoctoral Fellow: Cold Spring Harbor Laboratory (2002-2007)

Research:
- The Hinton lab studies the characteristics and binding partners of the pseudophosphatase map kinase serine/threonine binding protein MK-SYX to better understand its role in decreasing stress granule formation, neuronal differentiation, and Ewing sarcoma cancer.

Resources:
- https://www.wm.edu/as/biology/people/faculty/hinton_s.php

Contributor: Cat Lewis
Dr. Parisa Hosseinzadeh

Area of Expertise: structure-guided rational protein/peptide design

Training:
- BSc, Biotechnology, University of Tehran
- PhD, Biochemistry and Molecular biology, University of Illinois at Urbana-Champaign, under Dr. Yi Lu
- Postdoctoral Fellow, Institute for Protein Design, under Dr. David Baker

Research:
- Computational biochemist invested in developing new tools to enhance human life, especially through structure-guided rational protein/peptide design and use of large data.

Resources:
- UofO page
- LinkedIn
Dr. Chanita Hughes-Halberte  |  Professor
Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina

Area of Expertise: Social Psychology and Behavior

Training:
- B.S. Psychology- Hampton University, Hampton, VA
- Ph.D. Psychology- Howard University, Washington, DC

Research:
- Identifying sociocultural, psychological and environmental determinants of minority health and health disparities
- Disseminating efficacious strategies into clinic and community settings

Resources:
- https://education.musc.edu/MUSCApps/FacultyDirectory/Halbert-Chanita
- https://www.aacr.org/professionals/membership/constituency-groups/minorities-in-cancer-research/micr-resources/micr-member-spotlight/ (AACR)
Area of Expertise: Effect of addiction in adolescence

Training:
- BA at Binghampton University; Biochemistry and Behavior
- PhD at the Karolinska Institutet in Stockholm, Sweden; Neuropsychopharmacology
- Research Fellow at NIH
- Staff Fellow at National Institute of Mental Health

Research:
- Dr. Hurd directs multidisciplinary research investigating the neurobiology underlying addiction disorders, taking a translational approach to evaluate the molecular and neurochemical effects of cannabis and heroin in the adolescent brain.

Resources:
Dr. Akiko Iwasaki

Professor
Yale University

Area of Expertise: Immunobiology

Training:
- BS, Biochemistry, University of Toronto
- PhD, Immunology, University of Toronto

Research:
- Studies how immunity is initiated and maintained at mucosal surfaces such as the genital tract and the lung.

Resources:
- https://medicine.yale.edu/lab/iwasaki/
- https://medicine.yale.edu/profile/akiko_iwasaki/
- https://www.pnas.org/content/115/50/12544
Dr. Franco Izzo, PhD

Area of Expertise: Hematology/Oncology

Training:
- Post Doctoral Fellow, Instituto de Biología y Medicina Experimental (2016)
- PhD, Molecular Biology and Biotechnology, University of Buenos Aires (2015)
- BS, Molecular Biology and Biotechnology, University of Buenos Aires (2010)

Research:
- Dr. Izzo’s research focuses on the early disregulation of hematopoiesis. More specifically, his work attempts to elucidate the role of key epigenetic modifying genes, such as those involved in DNA methylation, in hematopoietic cancers.

Resources:
- https://www.linkedin.com/in/franco-izzo-05573138/
- https://orcid.org/0000-0002-5813-6504
- https://scholar.google.com/citations?user=mAYN-TUAAAJ&hl=en&oi=ao

Postdoctoral Scientist
Weill Cornell Medical College/ The New York Genome Center

Contributor: Chelston Ang
Tracy Johnson, PhD

Professor and Maria Rowena Ross Chair
University of California Los Angeles

Area of Expertise: Molecular, Cell and Developmental Biology

Training:
- BA in Biochemistry and Cell Biology from UCSD
- Ph.D. in Biochemistry and Molecular Biology from UC Berkeley
- Postdoctoral Fellowship at California Institute of Technology

Research:
- Dr. Johnson's work is focused on deciphering gene regulatory mechanisms to understand cellular function and dysfunction. She specifically investigates this by studying how cells make, splice and process RNA to control gene expression.

Resources:
- https://bioscience.ucla.edu/faculty/tracy-johnson
- https://johnsonlab.mcdb.ucla.edu/
Ayana Jordan

Director of Global Mental Health Program
Yale University

Area of Expertise: Global Mental Health

Training:
● MS at Albert Einstein University
● MD/PhD at Albert Einstein University
● Psychiatry Residency and Addiction Fellowship at Yale University

Research:
● Dr. Jordan’s research focuses on increasing access to mental healthcare and decreasing stigma in both minority communities and in West Africa. She is now working on expanding addiction treatment access with African-American churches in Connecticut.

Resources:
Dr. Marquea D. King

Toxicologist
United States Environmental Protection Agency

Area of Expertise: Inhalation/ immunotoxicology

Training:
- MARC predoctoral fellow, Virginia Polytechnic Institute and State University
- Ph.D. Veterinary Medical Sciences. Virginia Polytechnic Institute and State University
- B.S. Chemistry, Delaware State University

Research:
- Immunotoxicology and heavy metals

Resources:

Contributor: Aleah Bailey
Area of Expertise: Human Genetics

Training:
- B.S. in biology, Rochester Institute of Technology (1989)
- Assistant Professor of Microbiology Howard University

Research:
- Identifying genetic and environmental contributions to cancer risk and treatment outcomes, including understanding the complex issues surrounding race, genetic ancestry and health disparities.
- Understanding the role of vitamin D in aggressive prostate cancer

Resources:
- https://medicine.arizona.edu/person/rick-kittles-phd
- https://www.cityofhope.org/rick-kittles
Ariangela J. Kozik, PhD

Area of Expertise: Human microbiome

Training:
- Ph.D., Comparative Pathobiology, Purdue University
- B.S., Biotechnology, Calvin University
- HHMI National Genomics Research Initiative: Science Education Alliance Participant

Research:
- Exploring the role of the respiratory microbiome in the presentation and pathogenesis of asthma
- Using biopsychosocial models of disease to address health disparities in minoritized populations

Resources:
- https://kozimicrobe.com/research/
- https://www.linkedin.com/in/ariangelakozik/

Postdoctoral Research Fellow
Dr. Yvonne Huang’s Lab
University of Michigan

Contributor: Alexa Spandrio
Dr. George Langford

Area of Expertise: Actin Cytoskeleton in Health and Disease

Training:
- B.S. Biology, Fayetteville State University
- M.S./Ph.D. Cell Biology, Illinois Institute of Technology
- Postdoctoral Fellow, University of Pennsylvania
- Honorary Doctor of Humane Letters, Beloit College

Research:
- Studies the role of the actin cytoskeleton in the transport of organelles/vesicles and in cell migration
- First to propose dual filament model of transport.

Resources:
- https://thecollege.syr.edu/people/faculty/langford-george-m/
Andres Lescano PhD. MSc.

Area of Expertise: Infectious diseases in Low and middle income countries and climate change

Training:
- PhD on International Health, Bloomberg school of public health Johns Hopkins University
- Master on Biostatistics, Bloomberg school of public health Johns Hopkins University
- Master on Health policy, Bloomberg school of public health Johns Hopkins University

Research:
- Epidemic activity after natural disasters without high mortality in developing settings
- Chagas disease genotyping in rural communities

Resources:
- https://www.linkedin.com/in/wlescano/
- https://www.researchgate.net/profile/Andres_Lescano

Associated professor
Universidad Peruana Cayetano Heredia, Perú
Director of “Emerge”, emerging diseases and climate change research group in Perú

Contributor: Cristian Roca
Carlos F. Lopez, PhD

Assistant Professor
Vanderbilt University

Area of Expertise: Biological network modeling in cancer

Training:
- BS, University of Miami
- PhD in Physical Chemistry, University of Pennsylvania
- Postdoc at UT-Austin, Fellowship at Harvard

Research:
- Using mathematical models, the Lopez Lab tries to understand the drivers of cell signaling in apoptosis and their relationship to cancer

Resources:
- https://my.vanderbilt.edu/lopezlab/
- https://twitter.com/ceelox4
- https://www.asbmb.org/about/minority-affairs-committee
Damaris Lorenzo, PhD

Assistant Professor
University of North Carolina, Chapel Hill

Area of Expertise: Cytoskeleton, cytoskeleton-associated disorders

Training:
- University of Havana, Biochemistry, BS
- University of Havana, Plant Molecular Biology, MS
- University of Minnesota, Molecular, Cellular, Developmental Biology and Genetics, PhD
- Howard Hughes Medical Institute, Duke University, Postdoctoral

Research:
- Dr. Lorenzo focuses on ankyrin and spectrin families of cytoskeletal-associated proteins, which deficits have direct implications in the regulation of cell migration, in metabolic disorders such as obesity and diabetes, and may also underlie neurological diseases

Resources:
- [http://www.lorenzolab.org/](http://www.lorenzolab.org/)

Contributor: Runfan Yang
Guillermina (Gigi) Lozano

Area of Expertise: Cancer genetics

Training:
- B.S. in Biology and Mathematics, University of Texas Rio Grande Valley
- Ph.D. in Biochemistry, Rutgers University and the University of Medicine and Dentistry of New Jersey
- Research Fellowship in Molecular Biology, Princeton University

Research:
- Utilizes Mdm2/Mdm4 KO and p53 mutation mouse models to better understand the signals that contribute to p53 pathway regulation
- Investigates tumor microenvironment modifications mediated by mutant p53

Resources:
- https://faculty.mdanderson.org/profiles/guillermina_gigi_lozano.html

Professor and Chair of Genetics
University of Texas MD Anderson Cancer Center

Contributor: Cassie Phillips
Dr. Chioniso P. Masamha
Area of Expertise: RNA Biology

Training:
- B.S. Honors Biology - University of Zimbabwe
- MS Biology - Indiana University of Pennsylvania
- PhD Biochemistry and Molecular Biology - University of Oklahoma Health Sciences Center
- Postdoctoral Fellow - University of Texas Health Sciences Center at Houston

Research:
- Studies alternative pre-mRNA processing in order to 1) identify the biological mechanisms of alternative splicing and alternative polyadenylation and 2) determine the role of alternative transcripts in disease

Resources:
- https://research.butler.edu/masamha-lab/
Rachel Mata, Ph.D

Area of Expertise: Pharmacognosy, ethnobotany, ethnopharmacology, natural products drug discovery and analytical chemistry

Training:
- B.S. Pharmacy, Central University of Venezuela
- M.Sc. Pharmacy, Purdue University
- Ph.D. Pharmacy, Purdue University

Research:
- Analysis of plant compounds from Mexican traditional medicinal plants
- Discovery of agrochemical compounds

Resources:
- https://www.researchgate.net/profile/Rachel_Mata

Contributor: Torhera Durand
Aqilah McCane
Postdoc, Moghaddam Lab
Oregon Health and Science University

Area of Expertise: Addiction Neuroscience

Training:
- BA, Indiana University - Bloomington
- PhD, Indiana University - Purdue University Indianapolis
- Postdoc, Oregon Health and Science University

Research:
- Investigated cortical circuitry underlying compulsive alcohol seeking behavior in rats
- Currently researching neural mechanisms involved in adolescent addiction vulnerability

Resources:
- https://www.blackinneuro.com/profiles/aqilah-mccane
- https://www.moghaddamlab.org/aqilah-mccane/
- https://www.researchgate.net/profile/Aqilah_Mccane

Contributor: Sara Conley
Dr. Juanita Merchant, MD, PhD

Area of Expertise: Gastroenterology

Training:
- B.S.: Biology, Stanford University 1977
- MD/PhD: Yale University School of Medicine 1984
- Internship & Residency: Internal Medicine: Harvard School of Medicine/Massachusetts General Hospital 1985, 1987
- Fellowship: Clinical fellowship in gastroenterology at UCLA

Research:
- Dr. Merchant’s research investigates the relationship between chronic inflammation and gastric cancer. Specific studies include environmental influences on *H. pylori* infection, Sonic Hedgehog and gastric cancer, and mechanisms of Gastrinoma development.

Resources:
- https://deptmedicine.arizona.edu/profile/juanita-l-merchant-md-phd-0

Professor of Medicine & Chief, Division of Gastroenterology
University of Arizona

Contributor: Molly Parrish
Kathryn Milligan-Myhre | Assistant Professor
Department of Molecular and Cell Biology
University of Connecticut

Area of Expertise: Host-microbe interactions

Training:
- B.S. Medical Microbiology & Immunology, University of Wisconsin
- Ph.D. Microbiology, University of Wisconsin
- Postdoctoral Fellow, Host-Microbe Interactions, University of Oregon
- Assistant Professor, University of Alaska Anchorage (2015-2020)

Research:
- Uses a fish model (threespine stickleback, *Gasterosteus aculeatus*) to examine how host genetic background influences the immune response to gut microbiota community membership to understand genetic contributions to diseases like inflammatory bowel disease.
- Found that genetically distinct populations have different gut microbial communities and vary in their immune responses to microbiota.

Resources:
- [https://mcb.uconn.edu/person/kat-milligan-mhyre/](https://mcb.uconn.edu/person/kat-milligan-mhyre/)
- [https://drkatlab.wordpress.com/about/](https://drkatlab.wordpress.com/about/)
- Seminar: [From Qikiktagruk to the halls of academia: a microbiology journey on a macro scale](https://drkatlab.wordpress.com/about/)

First Inupiaq to earn a Ph.D. in Microbiology

Contributor: Andrea Suria
Radiah C. Minor, PhD

Area of Expertise: Immunology, Cell and Molecular Biology

Training:
- B.S. Biology / Florida A&M University
- Ph.D. Biomedical Sciences / Meharry Medical College

Research:
- Dr. Minor’s lab uses *in vitro* and *in vivo* models to investigate mammalian immune regulation. Her research currently focuses on how dietary supplements influence the immune response in mammals. Her lab is also interested in how gut microbes influence health and immunity.

Resources:
- https://ncat.academia.edu/RadiahMinor
Dr. Edward Moreira-Bahnson Ph.D.

Area of Expertise: Reactive Oxygen Species, Vascular Biology, Cardiovascular Pathophysiology

Training:
- Postdoctoral Training: Northwestern University, Department of Surgery, 2010-2016
- PhD: Kent State University, School of Biomedical Sciences, 2004-2010
  - Area: Biomedical Sciences, Cell Biol / Pharmacology, Bioinorganic Chem
- BS: Universidad de la República, School of Sciences, 1994-2002
  - Area: Biochemistry

Research:
- Dr. Bahnson’s lab is interested in 3 main topics:
  - Understanding the difference in plaque progression and restenosis rates in diabetic vs non-diabetic environments.
  - Developing a specific targeted therapy for the vasculature to normalize the redox imbalance of diseased/injured arteries.
  - Investigating how vascular surgery outcomes are affected by environmental factors that might disrupt redox homeostasis.

Resources:
- http://bahnsonlab.web.unc.edu/people/edward-moreira-bahnson-phd/
- http://bahnsonlab.web.unc.edu/research/

Assistant Professor
Department of Surgery, Department of Cell Biology & Physiology, Center for Nanotechnology in Drug Delivery
University of North Carolina - Chapel Hill

Contributor: Morgan Narain
Sandra A. Murray

Area of Expertise: Cell organization and Cell-Cell communication

Training:
- B.S. Biology, University of Illinois
- M.S. Biology, Texas Southern University
- PhD Anatomy, University of Iowa
- Post Doctoral Fellow, University of California Riverside

Research:
- Investigates and compares signal transduction, rate of cell proliferation, and cell communication in normal and cancerous tissues.

Resources:
- http://www.cbp.pitt.edu/faculty/murray.html

Professor
Department of Cell Biology
University of Pittsburgh

Contributor: Kimberly Lukasik
Karen E. Nelson, PhD  |  President  
J. Craig Venter Institute

Area of Expertise: Microbiology, metagenomics, human microbiome

Training:
- Undergraduate: University of the West Indies
- PhD: Cornell University

Research:
- Published the first human metagenomic microbiome study (Gill et. al, Science, 2006)
- Research on *Thermotoga maritima* proved the existence of horizontal gene transfer
- Currently interested in impact of the human microbiome on infectious disease, metabolic disease, and chronic diseases

Resources:
- [http://www.nasonline.org/member-directory/members/20013261.html](http://www.nasonline.org/member-directory/members/20013261.html)
Dr. Lathiena Nervo, PhD

Assistant Professor
Pacific Lutheran University

Area of Expertise: Cytoskeletal regulation during Morphogenesis

Training:
● Post Doctoral Training, Mark Peifer Lab, UNC Chapel Hill
● PhD., Developmental Biology, University of Maryland - Baltimore County, 2015
● B.S., Biological Sciences, University of Maryland - Baltimore County, 2004

Research:
● Identified regulators of cell adhesion and the cytoskeleton that shape epithelial tissue architecture
● Understanding molecular machinery of tissue homeostasis as an embryo grows and becomes more complex

Resources:
● https://www.plu.edu/biology/staff/lathiena-nervo/
● http://peiferlab.web.unc.edu/labmembers/lathiena-manning-2/
● https://biology.umbc.edu/directory/faculty/starz-gaiano/starz-gaiano-lab/

Contributor: Noor Singh
Area of Expertise: Biostatistics and Bioinformatics-Statistical Population Genetics

Training:
- B.S. Biology and Mathematics-MIT
- Ph.D. Molecular Biology - Princeton
- Postdoctoral Research Associate-Princeton

Research:
- Studies evolution and disease under arbitrary relatedness with the aim of improving measures of genetic diversity and relatedness, genetic association statistics, estimation of heritability, detection of loci under selection, and inference of genetic admixture

Resources:
- https://ochoalab.github.io/
- https://www.linkedin.com/in/alejandro-ochoa-141a98103
- https://scholars.duke.edu/person/alejandro.ochoa

Contributor: Elizabeth Davis
Dr. Olorunseun Ogunwobi

Area of Expertise: Cancer Biology

Training:
- MBBS, University of Ibadan, Nigeria
- MS, Biomedicine, University of Hull, UK
- MS, Clinical and Translational Science, University of Florida, USA
- PhD, Molecular Medicine, University of East Anglia, UK
- Post Doctoral Fellow, University of East Anglia, Virginia Commonwealth University, University of Florida

Research:
- Studies mechanisms of metastasis and racial disparity of certain solid tumors, with a focus on circulating tumor cell biology and epigenetics.

Resources:
- https://loop.frontiersin.org/people/586504/overview

Associate Professor of Biology
Hunter College, New York, NY

Contributor: Aaron Chack
Opeyemi Olabisi, MD, PhD

Area of Expertise: Nephrology, Kidney Disease

Training:
- Assistant Professor of Medicine, Duke University
- Assistant Professor of Medicine, Harvard Medical School
- Attending Nephrologist, Massachusetts General Hospital
- Renal Fellow, Massachusetts General Hospital
- Research Fellow, Beth Israel Deaconess Medical Center
- Albert Einstein College of Medicine, MD & PhD

Research:
- Understand the role of APOL1 as a risk factor for accelerated human kidney disease. Utilizing transgenic mouse models, Dr. Olabisi elucidates mechanisms by which variant APOL1 signaling leads to toxicity to renal apoptosis and ultimately kidney disease.

Resources:
- https://dmpi.duke.edu/faculty/opeyemi-olabisi-md-phd
- https://www.linkedin.com/in/dr-opeyemi-olabisi-8127409b
Dr. Guillermo Oliver

Area of Expertise: Lymphatic Vasculature in Health and Disease

Training:
- PhD, University of California Los Angeles (UCLA)
- MSc, National University of Mexico (UNAM)
- BSc, University of Uruguay

Research:
- Dr. Oliver is a leading expert in the lymphatics field. His work is focused on how alterations in cellular and molecular mechanisms controlling organ development and formation can lead to defects and disease. He is interested in understanding the stepwise molecular process of organ formation.

Resources:
- https://sqi.northwestern.edu/people/faculty/guillermo-oliver.html

Elected member of the American Assoc for the Advancement of Sciences and the Academia de Ciencias de América Latina
Dr. Ofelia Ana Olivero

Area of Expertise: Cancer Genotoxicity

Training:

- M.S. Natural Sciences, School of Natural Sciences and Museum, National University of La Plata, Argentina
- Ph.D. Cytogenetics, School of Natural Sciences and Museum, National University of La Plata, Argentina
- Associate Scientist, NIH, National Cancer Institute, CCR, Laboratory of Cancer Biology and Genetics

Research:

- Dr. Olivero studies the transplacental genotoxic effects of drugs used for AIDS therapy. Using an \textit{in utero} mouse model, she discovered carcinogenic effects of a nucleoside analog used in azidothymidine (commonly known as the brand Retrovir).

Resources:

- https://www.cancer.gov/grants-training/training/contact/ofelia-olivero
- https://www.the-nhsn.org/Members/docs/Ofelia%20Olivero%20CV%20NH SN.pdf
Faith Osier

Area of Expertise: Malaria vaccine development

Training:
- Bachelor of Medicine & Bachelor of Surgery, University of Nairobi
- Master of Science, University of Liverpool
- Doctor of Philosophy, Life Sciences, Open University, UK
- Consultant Paediatrician, Kenya Medical & Dentists Practitioners Board

Research:
- Dr. Osier’s group is interested in developing malaria vaccines, recently developing a protein microarray to identify high affinity antibodies to merozoites of *Plasmodium falciparum* (Kamuyu et al. 2018). She is committed to training Kenyan scientists to investigate malaria and promoting scientific advancement and collaboration in Africa.

Resources:
- https://www.faithosier.net/
- https://twitter.com/FaithOsier
Dr. Mercedes Paredes

Assistant Professor, Neurology
UCSF Weill Institute for Neurosciences

Area of Expertise: Neuroscience

Training:
- B.S., Biochemistry - Harvard
- MD - UCSF
- Ph.D, Neuroscience - UCSF
- Neurology Residency and PostDoc - UCSF

Research:
- Studies the migration of postnatal migratory inhibitory neurons
- Investigates how normal late cortical development is disrupted in neuropsychiatric disorders

Resources:
- https://profiles.ucsf.edu/mercedes.paredes#toc-id0
- https://neurograd.ucsf.edu/people/mercedes-paredes-md-phd

Contributor: Ryan Sheehy
Sabine Petry | Assistant Professor
Princeton University

Area of Expertise: Microtubule Cytoskeleton

Training:
- Vordiplom (B.S.) Biochemistry and Business Administration, Goethe Universität and Max Planck Institute of Biophysics Frankfurt am Main, Germany
- Diplom (M.S.), Biochemistry, summa cum laude, Goethe University, Frankfurt am Main, Germany
- Ph.D. Biochemistry University of Cambridge, UK
- Postdoctoral Fellow, Ron Vale lab at UCSF (HHMI Fellow)
- Assistant Professor, Princeton University, 2013-Present

Research:
- How does the microtubule cytoskeleton build cellular structures like the mitotic spindle?

Resources:
- https://scholar.princeton.edu/petrylab/bio
Dr. Nikea Pittman                  
Area of Expertise: Structural biology, Cryo-EM

Training:
- B.S. University of Florida
- M.S. Biomedical Sciences, University of Florida
- PhD Biomedical Sciences, University of Florida

Research:
- Investigating the structure of the DoxD membrane proteins
- Bacterial antibiotic resistance

Resources:
- https://spire.unc.edu/spire-community/spire-scholars/nikea-pittman-ph-d/
- https://www.nature.com/articles/d41586-020-01883-8

SPIRE Postdoctoral Researcher
University of North Carolina at Chapel Hill

Contributor: Michelle Fiamingo
Carlos Ponce, MD, PhD

Assistant Professor of Neuroscience
Washington University in St. Louis

Area of Expertise: Sensory neuroscience

Training:
- BS, Biology and Chemistry, University of Utah
- PhD, Neuroscience, Harvard University
- MD, Harvard University

Research:
- Dr. Ponce’s research utilizes electrophysiology and machine learning to investigate how different cortical regions interact to form our visual perception of motion and shape.

Resources:
- [http://neurosci.wustl.edu/poncelab/](http://neurosci.wustl.edu/poncelab/)
- [https://source.wustl.edu/2020/10/neuroscientist-ponce-named-a-2020-packard-fellow/](https://source.wustl.edu/2020/10/neuroscientist-ponce-named-a-2020-packard-fellow/)
Area of Expertise: Biochemistry, Immunology, Gene regulation, RNA

Training:
- MD - University of Campinas, Brazil
- PhD - University of Sao Paolo, Brazil
- Postdoctoral Research at NIEHS-NIH

Research:
- Dr. Ramos studies leukemia inhibitory factor during early embryo implantation and novel L2 functions in vivo related to ovarian infertility: ovulation and oocyte maturation defects.

Resources:
- https://www.med.unc.edu/biochem/directory/ramos/
- https://ramoslab.web.unc.edu/people/
Dr. Lory Reveil | Director of Scientific and Regulatory Affairs - American Frozen Food Institute

Area of Expertise: Microbiology

Training:
- BS, Biology and Psychology - University of New Mexico
- MS, Molecular Biology - Harvard University
- PhD, Microbiology - Cornell University

Research:
- Studies how dairy environmental conditions (temperature and pH) affect the sensitivity of *Listeria monocytogenes* to bacteriophages and nisin treatment, as well as uses Tn-seq to determine the genes necessary for *L. monocytogenes* survival under stressful conditions.

Resources:
- [https://www.linkedin.com/in/lory-henderson/](https://www.linkedin.com/in/lory-henderson/)
- [https://loop.frontiersin.org/people/883679/overview](https://loop.frontiersin.org/people/883679/overview)
- [https://twitter.com/lory_oh?lang=en](https://twitter.com/lory_oh?lang=en)
Dr. Maribel Reyes

Area of Expertise: Clinical pharmacology and drug development strategies

Training:
- B.S. Pharmacology, University of California Santa Barbara
- Ph.D. Pharmaceutical Sciences, University of California San Francisco

Research:
- Dr. Reyes’ dissertation focused on effects of chronic kidney disease on drug transport, metabolism, and pharmacokinetics.
- QED, where Dr. Reyes currently works, focuses on precision medicine for FGFR-driven cancers and conditions.

Resources:
- https://www.linkedin.com/in/maribel-reyes-phd-8856197/
- https://psa.ucsf.edu/events/sacnas-interested-careers-industry-gilead-sciences-panel
- https://pspg.ucsf.edu/people/alumni

Senior Director of Clinical Pharmacology and Drug Metabolism and Pharmacokinetics at QED Therapeutics

Contributor: Mariaelena Nabors
Dr. Juan Carlos Rivera-Mulia

Area of Expertise: DNA Replication Timing, Genome Architecture

Training:
- B.S. - Autonomous University of the State of Mexico
- Ph.D. - National Autonomous University of Mexico
- Postdoctoral Fellow - Florida State University

Research:
- Their research seeks to elucidate the regulatory mechanisms of three dimensional genome organization and DNA replication timing, and how they factor into human disease

Resources:
- https://sites.google.com/umn.edu/rivera-mulialab/home
- https://cbs.umn.edu/contacts/juan-carlos-rivera-mulia

Assistant Professor
Department of Biochemistry, Molecular Biology, and Biochemistry
University of Minnesota Medical School

Contributor: Oscar Arroyo
Whitney R. Robinson

Area of Expertise: Health inequities, reproductive health, breast cancer, epidemiologic methods

Training:
- AB in Biochemical Sciences, Harvard University, 2001
- MSPH/PhD in Epidemiology, University of North Carolina at Chapel Hill, 2004/2008
- Scholar, Robert Wood Johnson Health and Society Scholars Program, University of Michigan, 2008-2010

Research:
- How social and environmental factors underlie race and sex differences in health, even for conditions previously thought to have primarily biological underpinnings (cancer, hysterectomy)
- Uses the lifecourse framework to explore how exposures during critical life stages (in utero, childhood, menopausal transition) impact later health

Resources:
- https://sph.unc.edu/adv_profile/whitney-robinson-phd/
- https://sites.google.com/site/whitneyrobinsonphd/

Associate Professor
Department of Epidemiology
UNC Gillings School of Global Public Health

Twitter: https://twitter.com/WhitneyEpi
Podcast: https://www.acadamespodcast.com/

Contributor: Catherine X. Li
Charles Rotimi, PhD

Area of Expertise: Cardiovascular and Inflammatory Disease

Training:
- B.S. Biochemistry, University of Benin, Nigeria
- M.S. Health Care Administration, University of Mississippi
- M.P.H. Epidemiology, University of Alabama at Birmingham
- Ph.D. Epidemiology, University of Alabama at Birmingham
- Assistant Professor, Preventative Medicine & Epidemiology, Loyola University Medical Center
- Genetic Epidemiology Director, National Genome Center, Howard University

Research:
- This lab develops epidemiology models to explore patterns of social, economic, and cultural determinants for metabolic disorders using whole exome and genome sequencing. His team published the first genome wide scan for hypertension in African Americans and T2 diabetes in West Africans.

Resources:

Distinguished Investigator & Director Center for Research on Genomics and Global Health
NIH Human Genome Research Institute

Contributor: Shea Ricketts
Jessica Scoffield

Area of Expertise: Microbiology

Training:
- Undergraduate - Tuskegee University - 2002 - B.S. Biology
- Graduate - Tuskegee University - 2004 - M.S. Biology
- Graduate - Auburn University - 2012 - Ph.D. Microbiology
- Fellowship - UAB - 2018 - Oral Microbiology

Research:
- Polymicrobial interactions in pulmonary and oral infections, particularly those in cystic fibrosis patients.
- “Our goal is to identify and characterize anti-infective strategies used by commensals in order to develop improved therapeutics for chronic infections.”

Resources:
- https://apps.medicine.uab.edu/facultydirectory/FacultyData.asp?s_lname=scoffield&s_keyword=&s_fname=&FacultyTypeID=&s_DeptName=&s_ResearchTitle=&FID=92434
Dr. Jason Sello

Area of Expertise: Pharmaceutical Chemistry

Training:
- BS, Biology - Morehouse College
- PhD, Biophysics - Harvard University
- Postdoctoral Fellow - Harvard Medical School
- Associate Professor - Brown University

Research:
- Studies methods of antibiotic resistance to molecules targeting ClpP peptidase, along with the antibacterial activity of these molecules in *Streptomyces* strains

Resources:
- [https://profiles.ucsf.edu/jason.sello](https://profiles.ucsf.edu/jason.sello)
- [https://vivo.brown.edu/docs/j/jsello_cv.pdf?dt=145915260](https://vivo.brown.edu/docs/j/jsello_cv.pdf?dt=145915260)
Herman Sintim

Drug discovery Professor of Chemistry - Organic Chemistry / Chemical Biology, Purdue University

Area of Expertise: Chemical Biology

Training:
- BSc, University College London, 1999
- Ph.D., University of Oxford, 2002
- Postdoctoral Fellow, University of Oxford, 2004
- Postdoctoral Fellow, Stanford University, 2006

Research:
- The chemical biology of bacterial communication, virulence factors production and biofilm formation (quorum sensing and c-di-GMP/c-di-AMP signaling in bacteria).
- The discovery of new antibiotics with novel modes of action.
- Cyclic dinucleotide and STING signaling in immune cells.

Resources:
- https://www.chem.purdue.edu/people/profile/hsintim
- https://sites.google.com/site/sintimgrouphomepage/?_ga=2.176826533.126192139.1604953873-195785695.1604032

Contributor: Jiwoong Lim
Dr. Pablo Sobrado

Area of Expertise: Flavoenzymology

Training:
- B.A., Biology, Merrimack College, Massachusetts, 1997
- Ph.D., Biochemistry and Biophysics, Texas A&M University, Texas, 2003
- Postdoctoral Fellow, Department of Biochemistry, University of Wisconsin-Madison, WI 2003-2007
- Postdoc, Institute of Biomedical Sciences, University of Chile, Santiago, Chile, 2003-2004

Research:
- Determination of the chemical mechanism, 3D structure, and the identification of inhibitors of enzymes important for pathogenesis in *Aspergillus fumigatus*, *Trypanosoma cruzi*, and *Mycobacterium tuberculosis*, which cause Chagas Disease, tuberculosis and fungal infections.

Resources:
- [https://www.biochem.vt.edu/people/faculty/sobrado-pablo.html](https://www.biochem.vt.edu/people/faculty/sobrado-pablo.html)

Professor
Associate Biochemistry Department Head
Virginia Tech

Contributor: Eric Merten
Dr. Erik J. Sorensen
Arthur Allan Patchett Professor
Organic Chemistry, Princeton University

Area of Expertise: Synthetic Organic Chemistry

Training:
- Postdoctoral Fellow, Sloan-Kettering Danishefsky Lab
- Ph.D. Chemical Synthesis, University of California San Diego
- B.A. Chemistry, Syracuse University

Research:
- The Sorensen lab seeks to better understand the biological activity of natural products through their chemical synthesis. They do this by using multi-reaction cascade sequences and C-H functionalization to generate complex structures.

Resources:
- [http://chemlabs.princeton.edu/sorensen/](http://chemlabs.princeton.edu/sorensen/)

Contributor: Sarah Anne Howard
Area of Expertise: Neuropharmacology

Training:
- B.S. in Biology, University of Alabama, Tuscaloosa
- Ph.D. in Neuroscience, University of Texas Southwestern Medical Center
- Postdoctoral Fellow, Medical University of South Carolina
- Assistant Professor, University of Minnesota (2018-Present)

Research:
- Dr. Spencer’s research investigates the neurocircuitry and synaptic mechanisms underlying the initial development of drug addiction and the vulnerability to relapse to develop new, more effective treatments for drug addiction.

Resources:
- https://med.umn.edu/bio/department-of-pharmacology/sade-spencer
- https://www.spencerlabatumn.com/
- https://www.linkedin.com/in/sade-spencer-54614686
- http://www.neuroscience.umn.edu/people/sade-spencer-phd

Contributor: Sarah Magee
Area of Expertise: Scientific Training and Trials

Training:
- PhD in physiology and biophysics from Howard University
- Postdoc in the Department of Pharmacology at Robert Wood Johnson School of Medicine

Research:
- In addition to running programs aimed to increase diversity in the science workforce, she works on research projects aimed to identify and find solutions to health disparities in cancer patients.

Resources:
- https://www.youtube.com/watch?v=YCxNr2D4EfA
- https://www.cancer.gov/about-nci/organization/crchd/about/contact#Springfield
- https://www.aacr.org/governance/sanya-a-springfield-phd/
Athena Starlard-Davenport, PhD  |  Assistant Professor of Genetics, Genomics and Informatics  
University of Tennessee Health Science Center

Area of Expertise: Molecular epidemiology & gene regulation

Training:
- PostDoc, Univ. of Arkansas for Medical Science
- Postdoc, Oak Ridge Institution for Science and Education (ORISE)
- PhD - Biochemistry & Molecular Biology, Univ. of Arkansas for Medical Science
- MS - Biology (emphasis in Micro), Univ. of Louisiana at Monroe
- BS - Biology, Univ. of Louisiana at Monroe

Research:
- Molecular epidemiology of breast cancer disparities and molecular mechanisms of globin gene regulation
- Using DNA Methyltransferase inhibiting microRNA as a novel fetal hemoglobin inducer and treatment for patients with sickle cell disease

Resources:
- https://uthsc.edu/sickle-cell/faculty/davenport.php
- https://www.linkedin.com/in/athena-starlard-davenport-a3836510
Area of Expertise: Molecular/Bacterial Pathogenesis and Clinical Lab Sciences

Training:
- B.M.L.S Medical Laboratory Sciences, University of Buea, Cameroon
- M.S Food Safety, North Dakota State University, Fargo, ND
- Ph.D Molecular Pathogenesis, North Dakota State University, Fargo, ND
- NIH Biodefense and Emerging Infectious Disease Fellowship. David Axelrod Institute for Public Health, Wadsworth Center, New York Department of Health, Albany, NY

Research:
- Interested in the discovery and use of novel antimicrobial peptides to combat bacterial pathogens
- Investigates bacterial encoded factors that lead to host cell death

Resources:
- [https://www.acphs.edu/ebot-sahidu-tab](https://www.acphs.edu/ebot-sahidu-tab)
- [https://www.linkedin.com/in/ebot-s-tab-ph-d-mb-ascp-cm-4277924/](https://www.linkedin.com/in/ebot-s-tab-ph-d-mb-ascp-cm-4277924/)
Malú Tansey, PhD  |  Professor of Neuroscience and Neurology
Director, Center for Translational Research in Neurodegenerative Disease
University of Florida

Area of Expertise: Inflammation and its Role in Neurodegenerative Disease

Training:
- BS in Biological Science, Stanford University
- MS in Biological Sciences, Stanford University
- PhD, University of Texas Southwestern Medical Center
- Postdoc, Washington University in St. Louis

Research:
- The Tansey Lab explores the interactions between the nervous and immune systems in the context of health and disease:
  - Microglia and brain macrophages in neurological disease pathogenesis
  - The role of TNF in neuroinflammation and AD/PD
  - Gene-environment interactions with chronic inflammatory states to predispose and perpetuate diseases of the CNS

Resources:
- https://en.wikipedia.org/wiki/Mal%C3%BA_G._Tansey
- https://neurology.ufl.edu/profile/malu-g-tansey/
- https://twitter.com/MaluTansey?s=20

Contributor: Lucas James
Area of Expertise: Quantitative Biology and BME

Training:
- B.S., Aerospace Engineering - Case Western Reserve University
- M.S., Mechanical Engineering - Case Western Reserve University
- Ph.D., Mechanical Engineering - Case Western Reserve University
- DHS Fellowship, 2006 - 2009

Research:
- Uses mathematical, computational, and engineering approaches to study biology and animal behaviour while using biological concepts to create engineering tools. Specifically, applications in magnetoreception and multimodal navigation.

Resources:
- https://bio.unc.edu/faculty-profile/taylor-brian/
Casey Overby Taylor, Ph.D.  

Area of Expertise: Bioinformatics, Biostatistics

Training:
- PhD, Biomedical Informatics, University of Washington, 2011
- MS, Biotechnology, University of Pennsylvania, 2006
- BS, Bioinformatics, University of Michigan, 2004

Research:
- Utilizing genomic data to inform clinical decisions.
- Creating medical devices and IT infrastructure to guide precision medicine and public health practices.

Resources:
- https://www.bme.jhu.edu/faculty_staff/casey-overby-taylor-phd/
- https://tirilab.github.io/research/
Dr. Kishana Taylor

Area of Expertise: Zoonotic viruses

Training:
- B.S., Animal Science, University of Delaware, 2011
- M.S., Public Health Microbiology and Emerging Infectious Disease, George Washington University, 2013
- Ph.D, Interdisciplinary Biomedical Sciences, University of Georgia, 2018
- Postdoc at Carnegie Mellon; chemical engineering

Research:
- Antibiotic resistance of E. coli in watersheds with high poultry density (MS)
- Transmission of zoonotic infectious diseases such as Epizootic hemorrhagic disease virus (EHDV)

Resources:
- https://www.linkedin.com/in/kishana-taylor
- https://www.researchgate.net/profile/Kishana_Taylor
- https://kishanataylor.com/

Adjunct Faculty
Mercy College

Contributor: Rachel Burdorf
Hugo Tejeda

Area of Expertise: Neuromodulation and Synaptic Integration

Training:
- B.S. in Psychology and Biology, University of Texas at El Paso
- Ph.D. in Neuroscience, University of Maryland, Baltimore
- Postdoctoral Fellow, National Institute on Drug Abuse

Research:
- Investigates how the brain utilizes neuromodulation in motivational and emotional neural circuits to process information and orchestrate behavior.
- Aimed to identify plastic changes in neuromodulation and synaptic integration in limbic circuits of animal models of psychiatric disorders to elucidate novel therapeutic targets.

Resources:
- Twitter: [https://twitter.com/neurotejeda?lang=en](https://twitter.com/neurotejeda?lang=en)
Steven Townsend

Assistant Professor of Chemistry
Vanderbilt University

Area of Expertise: Organic Chemistry

Training:
- BS, Chemistry, Oakland University
- PhD, Organic Chemistry, Vanderbilt University

Research:
- Studies the synthesis of natural products that have biological significance and uses in treating human disease.
- Research includes the study of human milk and the influence it has on the gut microbiome. The purpose of this work is to examine how milk oligosaccharides influence the gut microbiome.

Resources:
- [https://www.vanderbilt.edu/chemistry/faculty/townsend.php](https://www.vanderbilt.edu/chemistry/faculty/townsend.php)
- [https://www.townsendchemistry.org](https://www.townsendchemistry.org)
- [https://www.linkedin.com/in/steven-townsend-4b837143/](https://www.linkedin.com/in/steven-townsend-4b837143/)
Area of Expertise: Cell Signaling

Training:
- BS, Toxicology, Biochemistry, UC Davis (’86)
- PhD, Physiology, Pharmacology, UCSD (’92)
- Postdoctoral Fellow, UCSF
- MBA, Leadership & Finance, UCSD (2015)
- Assistant Professor, UNC Chapel Hill (2000)
- Professor, UCSD (2008)

Research:
- Discoveries concerning cell signaling by protease activated G-protein coupled receptors
- How cell signaling regulates vascular inflammation, endothelial barrier leakage and breast cancer progression.

Resources:
- https://profiles.ucsd.edu/joann.trejo#narrative
- http://trejolab.ucsd.edu/wordpress/?page_id=18
Dr. Elizabeth Villa

Area of Expertise: Structural cell biology and biophysics

Training:
- Ph.D, Biophysics and Computational Biology at the University of Illinois at Urbana-Champaign
- Postdoctoral Fellow at Max Planck Institute for Biochemistry

Research:
- The Villa lab works on developing microscopic techniques for determining the structure of macromolecular structures.
- One specific protein the Villa lab looks at is LRRK1 which is important in Parkinson’s disease.

Resources:
- https://villalab.ucsd.edu/

Assistant Professor
University of California San Diego

Contributor: Sierra Cole
Herschel V. Wade, Ph.D.  

Area of Expertise: multi-drug resistance, ligand dependent switches, metal ion homeostasis

Training:
- BS - California Polytechnic State University 1994
- PhD - UC San Francisco 2000

Research:
- The Wade lab utilizes biochemical, biophysical, and structural techniques to study the structural and thermodynamic aspects of ligand recognition and how protein conformation is controlled via ligand interactions.
- Ligand receptor studies, specifically within the MerR family of transcriptional regulators

Resources:
- https://www.hopkinsmedicine.org/profiles/results/directory/profile/6215496/herschel-wade
- http://biophysics.med.jhmi.edu/people/herschel-wade/

Associate Professor of Biophysics and Biophysical Chemistry
Johns Hopkins School of Medicine

Contributor: Mikayla Feldbauer
Cavin Ward-Caviness, PhD | Computational Biologist/Principal Investigator
US EPA (UNC Chapel Hill affiliated)

Area of Expertise: Computational genetics, statistical and population genetics

Training:
- PhD, Duke University, Durham NC
- Postdoc, Helmholtz Institute, Munich Germany

Research:
- Dr. Ward-Caviness studies the melding of environmental epidemiology with computational biology to better understand the links between the environment and human health.

Resources:
- https://www.wc-lab.com/
Clayton C. Yates, PhD

Area of Expertise: Cancer Biology

Training:
- PhD from University of Pittsburgh School of Medicine, Molecular Pathology
- Postdoctoral fellowship at Emory University School of Medicine in Urology and Prostate Cancer
- MS from Tuskegee University, Prostate Cancer

Research:
- Studies prostate cancer outcomes and other health disparities of African Americans and is an international leader in studying breast and prostate cancer development and metastasis.
- Has identified biomarkers for breast and prostate cancers and developed novel therapeutics, some of which are in clinical trial, and has generated novel cell line model systems for studying cancer in African Americans.

Resources:
- [https://www.aacr.org/governance/clayton-c-yates-phd/](https://www.aacr.org/governance/clayton-c-yates-phd/)
- [http://connect.rtrn.net/profiles/display/93528](http://connect.rtrn.net/profiles/display/93528)
- [https://www.linkedin.com/in/clayton-yates-0133675a/](https://www.linkedin.com/in/clayton-yates-0133675a/)

Contributor: Cole Martin
Dr. Jelani Zarif

Assistant Professor of Oncology
John Hopkins University School of Medicine

Area of Expertise: Oncology, Prostate Cancer

Training:
- B.S., Jackson State University, Human Biology
- M.S., Jackson State University, Biological Sciences
- Ph.D., Michigan State University, Cell and Molecular Biology
- Postdoctoral Fellow, Johns Hopkins SOM, Department of Urology
- Postdoctoral Fellow, Johns Hopkins SOM, Department of Oncology

Research:
- Studies the role of immune cells in tumor biology, metastasis, and therapeutic resistance of prostate cancer.
- Seeks to identify novel therapeutic targets of lethal prostate cancer.

Resources:
- [https://www.hopkinsmedicine.org/profiles/results/directory/profile/10004168/jelani-zarif](https://www.hopkinsmedicine.org/profiles/results/directory/profile/10004168/jelani-zarif)
- [https://zariflab.org/](https://zariflab.org/)