

# Molecular Medicine and Translational Science Graduate Program Student Profiles

#### Marcel G. Brown, MD

Orthopaedic Surgery Physician Scientist Program, 2022-2023

Year Matriculated: 2022

Email: marcebro@wakehealth.edu

Education: MD, Geisel School of Medicine at Dartmouth, 2022

BA, Chemistry, Williams College, 2015

Research Mentor: Xue Ma, MD, PhD (Orthopaedics)

**Research Interests**: Regenerative medicine and applications of amniotic fluid stem cells; Degenerative joint disease; arthroplasty and periprosthetic joint infections; Peripheral nerve injury and repair

# **Justin Campbell**

Second Year PhD Student, 2022-2023

Year Matriculated: 2021

Email: jdcampbe@wakehealth.edu

Education: Bachelor of Science Biology; Minor in Pre-Health;

Winston-Salem State University

Associate in Applied Science; Major in Biotechnology; Associate in Applied Science; Major in Nanotechnology

Forsyth Technical Community College

Research Mentor: Thomas Shupe, PhD (WFIRM); Frank Marini, PhD (Cancer Biology)

Research Interests: Cell Biology; Virology; Tissue Engineering; Regenerative Medicine

# Samuel P. Carmichael II, MD

Third Year PhD Candidate, 2022-2023

Year Matriculated: 2022

Email: scarmich@wakehealth.edu

Education: MD, University of Kentucky College of Medicine, 2013

Research mentor: Anthony Atala, MD (WFIRM)

Research Interests: Shock Resuscitation; Intra-Abdominal Adhesion







Tameka Dean, DO, MS

Orthopedic Physician Scientist Program, 2022-2023

Year Matriculated: 2021

Email: tamdean@wakehealth.edu

Education: Philadelphia College of Osteopathic Medicine

Doctorate of Osteopathic Medicine, 2021

MS, Biomedical Science, 2021

Research mentor: Xue Ma, PhD (Orthopedics)

Research Interests: Ischemia-reperfusion injury; skeletal muscle physiology



Second Year PhD Student, 2022-2023

Year Matriculated: 2021

Email: hdidier@wakehealth.edu

**Education:** Kennesaw State University B.S. Molecular & Cellular Biology, 2021

B.A. Dance, 2021

Research Mentor: Karen Haas, PhD: Microbiology & Immunology

Research Interests: Cancer Immunology; Translational Science; B Lymphocyte Response/Differentiation; Tumor

Associated Carbohydrate Antigens; Anti-Tumor Immune Response

### Maryssa Ellison

Second Year PhD Student, 2022-2023

Year Matriculated: 2021

Email: maelliso@wakehealth.edu

Education: Bachelor of Science, Biology Major; Molecular Biology & Biotechnology

concentration; Palm Beach Atlantic University, 2016

Research mentor: Anthony Atala, MD and Victoria Weis, Ph.D. (Regenerative Medicine)

Research Interests: necrotizing enterocolitis; hPCS therapy; intestinal stem cell niche; paracrine signaling;

Research Interests: Neurodegenerative; Neuroimmunological; Blood brain barrier; Molecular genetics; Drug discovery

immunomodulation; pediatrics; translational science; regenerative medicine

# Aya Abdel Raouf El-Taibany, MD

Third Year PhD Student, 2022-2023

Year Matriculated: 2021

and translational Research

Email: aeltaiba@wakehealth.edu

Education: MD, School of Medicine, Alexandria University, 2008 Internship, School of Medicine, Alexandria University, 2010

MS, Medical Genetics, Alexandria University, 2016

Research mentor: Michael Seeds, Ph.D. (WFIRM) and Anthony Atala, MD (WFIRM)









# **Lindsey Farris**

Forth Year PhD Candidate, 2022-2023

Year Matriculated: 2019

Email: <a href="mailto:lfarris@wakehealth.edu">lfarris@wakehealth.edu</a>

Education: BS, Biology & Chemistry, Western Carolina University, 2019

Research mentor: Leslie Poole, Ph.D. (Biochemistry)

Research Interests: Cancer therapeutics & translational medicine



#### **Alexandria Harrison**

Eighth Year PhD Candidate, 2022-2023

Year Matriculated: 2015 (transferred 2017)

Email: alexharr@wakehealth.ediu

Education: BS, Biology, Winston-Salem State University, 2014

Research mentor: Donald McClain, MD, PhD (Endocrinology & Metabolism)

Research Interests: Diabetes; Obesity; Metabolism; Dietary iron; Hypoxia



### Brendan Johnson, DVM

Forth Year PhD Candidate, 2022-2023

Year Matriculated: 2020

Email: bjjohnson@wakehealth.edu

Education: DVM, University of Missouri, 2018

Research mentor: Mark Cline, DVM, PhD (Pathology, Comparative Medicine)

Research Interests: Comparative Medicine; Cancer Biology; Radiation Oncology; Cognition and Memory



# **Sudarshan Krishnamurthy**

Third year MD/PhD dual degree program, 2022-2023

Year Matriculated: MD 2020, PhD 2022

Email: sukrishn@wakehealth.edu

Education: BS Biomedical Sciences, University of South Florida, 2019

Research mentor: Dr. Samuel Lockhart (IM - Gerontology) and Dr. Trey Bateman

Research Interests: Aging; Alzheimer's disease and related dementias; Cardiometabolic Index; Social Deprivation;

Health disparities; Health equity



# Caroline Kuczynski

Forth Year PhD Candidate, 2022-2023

Year Matriculated: 2019

Email: <a href="mailto:ckuczyns@wakehealth.edu">ckuczyns@wakehealth.edu</a>

Education: BS, Biophysics with Honors, Wake Forest University, 2018

Research mentor: Graça Almeida-Porada, MD, PhD (WFIRM)

**Research Interests:** Genetic Hematologic Disorders (particularly sickle cell anemia and other hemoglobinopathies); Adeno-Associated Virus (AAV)-based gene therapy; prenatal gene therapy; and Molecular Dynamics (MD) Simulations.



Second Year PhD Student, 2022-2023

Year Matriculated: 2021

Email: hlamond@wakehealth.edu

Education:

Bachelors of Science; Biochemistry/Molecular Biology Major; Writing Minor

Loyola University Maryland, 2020

Research Mentor: Dr. Ellie Rahbar, PhD (Biomedical Engineering)

Research Interests: Inflammation; Immunology; Liver; Polyunsaturated; Fatty acids



Forth Year PhD Candidate, 2022-2023

Year Matriculated: 2020

Email: klangste@wakehealth.edu

Education: DVM, University of Missouri, 2017

MS in Biomedical Sciences, University of Missouri, 2017

Residency in Anatomic Pathology, University of Minnesota, 2020

Research mentor: Bethany Kerr, Ph.D. (Cancer Biology)

Research Interests: Cancer Biology; Pathophysiology

# Daniel Lara, MD

Orthopedic Physician Scientist Program, 2022-2023

Year Matriculated: 2017

Email: dlara@wakehealth.edu

**Education:** BS, University of Notre Dame, 2011 MD, Creighton University School of Medicine, 2016

Research mentor: Thomas Smith, PhD (Orthopaedic Surgery)

Research Interests: Neuromuscular Junction/Peripheral Nerve Trauma and Regeneration









### Sumaiya Nazli

Sixth Year PhD Candidate, 2022-2023

Year Matriculated: 2017

Email: snazli@wakehealth.edu

Education: Bachelors of Science Biology Major, Math Minor, Salem College, 2015

Research mentor: Michael Olivier, PhD (Molecular Medicine)

Research Interests: Plasma Proteomics; Mass Spectrometry; Plasma Biomarkers for Biological Disease



Third Year PhD Student, 2022-2023

Year Matriculated: 2020

Email: ecparson@wakehealth.edu

Education: B.A. Biology and Sociology, minor in Chemistry, Wake Forest University, 2018

Research mentor: Anthony Atala, MD

Research Interests: Immunology, Translational Science; Osteoarthritis; Immunomodulatory Cell-based treatment;

Cellular and Molecular Mechanisms

# **Chirayu Patel**

Third Year PhD Candidate, 2022-2023

Year Matriculated: 2020

Email: cpatel@wakehealth.edu

**Education:** M.S. Cancer Biology, Wake Forest B.S. Cell and Molecular Biology, Appalachian State

Research mentor: Jeff Willey, PhD (Radiology Biology)

**Research Interests:** The study of pharmaceutical countermeasures and artificial gravity as preventative measures of spaceflight induced musculoskeletal degradation on the International Space Station. The development and use of

hardware to test interplanetary travel mission conditions at the NASA Space Radiation Lab.

# Patrick Ralph

Third Year MD/PhD dual degree student, 2022-2023

Year Matriculated: MD 2019, PhD 2021

Email: pralph@wakehealth.edu

Education: B.S. Biology, William Peace University

Research mentor: Sang Jin Lee, PhD (WFIRM)

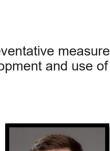
Research Interests: Tissue engineering; Model development; Neurobiology; Regenerative medicine; Neurodegeneration;

Behavioral neurology; Neuropsychiatry









### Kaitlyn Reno

Second year PhD student, 2022-2023

Year Matriculated: 2021

Email: kreno@wakehealth.edu

Education: B.S. Biology, Chemistry Minor, Virginia Tech, 2021

Research mentor: Jeff Willey, PhD (Radiation Oncology)

Research Interests: Identifying novel biomarkers of bone damage due to radiation therapy; Radiation Oncology;

Identifying biomarkers of progressive fibrosis and pneumonitis in NSCLC



Third Year PhD Candidate, 2022-2023

Year Matriculated: 2020

Email: mackrobe@wakehealth.edu

Education: B.S. Neuroscience, Duke University, 2019

Research mentor: Leah Solberg Woods, PhD (Molecular Medicine)

Research Interests: Genetics; Translational Science; Obesity; Diabetes



Fifth Year PhD Candidate, 2022-2023

Year Matriculated: 2019

Email: wsills@wakehealth.edu

**Education:** 

BS, Zoology, NC State University; DVM, NC State University

Residency, Anatomic Pathology, Cornell University

Research mentor: Mark Cline, DVM, PhD, DACVP (Pathology-Comparative Medicine)

Research Interests: Immunology and pathology; Immune response to tumors and cancer immunotherapy; Cancer

genetics and genomics; Long-term effects of radiation

**Maggie Smith** 

Third Year PhD Candidate, 2022-2023

Year Matriculated: 2020

Email: margsmit@wakehealth.edu

Education: B.S. Biology, Appalachian State University, 2018

Research mentor: Fei Xing, PhD (Cancer Biology)

Research Interests: Immune Checkpoint Inhibitors, NSCLC, Cancer Genomics, Genomic Mutation, and Tumor

Microenvironment









## **Alexandria Szalanczy**

Fifth Year PhD Candidate, 2022-2023

Year Matriculated: 2018

Email: aszalanc@wakehealth.edu

Education: Centre College, B.S. Biochemistry & Molecular Biology

Research mentor: Leah Solberg Woods, PhD (Molecular Medicine)

Research Interests: Genetics; Obesity; Stress; Rodent Models

Yuezhu Wang Second year PhD Student, 2022-2023

Year Matriculated: 2021

Email: yuewang@wakehealth.edu

Education: Master of Science in Genomic and Bioinformatics, the Chinese University of

Hong Kong, 2019; Bachelor of Medicine, Soochow University, 2018

Research Mentor: Fei Xing, PhD (Cancer Biology)

Research interests: Tumor Immunotherapy, Cancer genomics, Genetic mutation



