



Translational Research Academy

Cohorts 2022 & 2023



Wake Forest University
School of Medicine



Bumsoo Ahn, PhD

Assistant Professor, Gerontology and Geriatric Medicine

bahn@wakehealth.edu

TRA Cohort 2022

Faculty Profile

<https://school.wakehealth.edu/faculty/a/bumsoo-ahn>

How long have you been at Wake Forest?

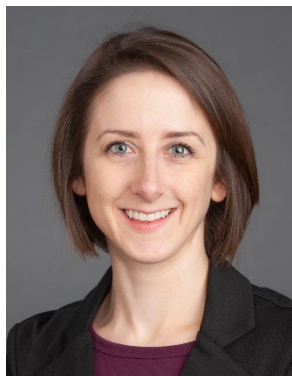
2 years

Background and Research Interests

I have training in physiology focused on mitochondrial bioenergetics and redox biology in skeletal muscle aging. My research interests are to understand the mechanisms of age-associated sarcopenia using animal models, and to find interventions that can delay muscle weakness with age, which can extend healthy lifespan in the elderly.

What do you enjoy doing in your free time?

Jogging, hiking, playing tennis, hanging out with my family.



Hannah Ainsworth, PhD

Assistant Professor, Biostatistics and Data Science

hainswor@wakehealth.edu

TRA Cohort 2023

Faculty Profile

<https://school.wakehealth.edu/faculty/a/hannah-christine-ainsworth>

How long have you been at Wake Forest?

2 years as faculty, 13 years spanning previous positions and educational training.

Background and Research Interests

I am a biostatistician/bioinformatician who studies multi-omic contributors to complex diseases. My research interests focus on developing methods for translating omics associations (e.g., SNP associations, transcriptomic profiles, epigenetic signatures) to actionable therapeutic targets and reliable diagnostic markers. Currently, I am working on methods that leverage intrinsic DNA topology to identify functional implications of genetic and epigenetic risk variants.

What do you enjoy doing in your free time?

I enjoy volunteering for community service projects, bouldering, drawing, and painting. I am currently learning Swedish and ASL.



Nicklaus Ashburn, MD, MS

Assistant Professor, Emergency Medicine

n.ashburn@wakehealth.edu

TRA Cohort 2023

How long have you been at Wake Forest?

1 year as faculty, 13 years for education and training

Background and Research Interests

I am an Emergency Medicine physician with postdoctoral NHLBI T32 research fellowship training in Cardiovascular Disease Epidemiology and Prevention. I am interested in the intersection of emergency cardiovascular care and the prevention of cardiovascular disease, prehospital cardiovascular care, and chest pain risk stratification.

What do you enjoy doing in your free time?

Spending time with my family, triathlons, and hiking.



Mohsen Bahrami, MS, PhD

Assistant Professor, Radiology

mbahrami@wakehealth.edu

TRA Cohort 2023

Faculty Profile

<https://school.wakehealth.edu/faculty/b/mohsen-bahrami>

How long have you been at Wake Forest?

8 years

Background and Research Interests

I am an Assistant Professor in the Department of Radiology with a background in Biomedical Engineering. My research is focused on developing and using analytical tools to understand how brain disorders affect the structure and function of the brain as a complex system.

What do you enjoy doing in your free time?

Spending time with family and friends, playing and listening to music, watching movies, and outdoor activities.



Dori Beeler, MA, PhD

**Research Scientist, Supportive Oncology,
Levine Cancer Institute, Atrium Health**
dori.beeler@atriumhealth.org

TRA Cohort 2022

How long have you been at Atrium Health?
3 years

Background and Research Interests

I am a research scientist in the Department of Supportive Oncology at Levine Cancer Institute with postdoctoral training in Cancer Epidemiology, Prevention, and Control. My primary interests include mixed methods research concerning cancer-related fatigue and survivorship across adult and pediatric oncology and their caregivers. My work aims to develop novel interventions that improve the quality of life across the cancer continuum of care.

What do you enjoy doing in your free time?

I enjoy gardening, reading, furniture painting, and spending time on travel adventures with my husband, our son, and friends.



Shirley Bluethmann, PhD, MPH

Assistant Professor, Social Sciences and Health Policy

sbluethm@wakehealth.edu

TRA Cohort 2023

Faculty Profile

<https://school.wakehealth.edu/faculty/b/shirley-morrison-bluethmann>

How long have you been at Wake Forest?

1 year

Background and Research Interests

I am a behavioral scientist specializing in research for older adults with cancer. I am especially interested in using exercise and behavioral strategies to manage cancer-treatment systems and reduce burden from chronic conditions.

What do you enjoy doing in your free time?

I love traveling, zumba, running and hiking outdoors.



Garrett Bullock, PT, DPT, DPhil

Assistant Professor, Orthopaedic Surgery

gbullock@wakehealth.edu

TRA Cohort 2022

Faculty Profile

<https://school.wakehealth.edu/faculty/b/garrett-scott-bullock>

How long have you been at Wake Forest?

2 years

Background and Research Interests

Physical therapist by clinical training, quantitative epidemiologist by research training, my work focuses on orthopaedic risk and risk mitigation.

What do you enjoy doing in your free time?

Hiking



Bailey Fearing, PhD

**Research Assistant Professor,
Orthopaedic Surgery, Musculoskeletal
Institute, Atrium Health**

bailey.fearing@atriumhealth.org

TRA Cohort 2022, KL2 Scholar 2022-2024

How long have you been at Atrium Health?

3 years

Background and Research Interests

I am a basic science and translational research-focused faculty member in the Musculoskeletal Institute with a background in molecular and biological mechanisms of orthopaedic disorders. My current research interests focus on implant-associated infections and regenerative medicine-based approaches to various musculoskeletal pathologies.

What do you enjoy doing in your free time?

Spending time with family, outdoor activities (hiking, running, cycling), and heading to the mountains whenever possible.



Chia-Chi Key, PhD

Assistant Professor, Molecular Medicine

cchuang@wakehealth.edu

TRA Cohort 2022

Faculty Profile

<https://school.wakehealth.edu/faculty/k/chia-chi-chuang-key>

How long have you been at Wake Forest?

11 years

Background and Research Interests

I am a basic scientist. Research in my lab focuses on understanding how disruption of lipid metabolism contributes to metabolic diseases (e.g., obesity, diabetes, and fatty liver disease) and exploiting those insights to develop new treatments and preventative measures. Toward that end, we utilize a wide variety of approaches including omics technologies as well as novel cell and mouse models.

What do you enjoy doing in your free time?

I like to spend time with my family, and I enjoy any outdoor activities, especially biking.



Erica Frechman, PhD

Assistant Professor, Gerontology and Geriatric Medicine

efrechma@wakehealth.edu

TRA Cohort 2023

How long have you been at Wake Forest/Atrium Health?

Atrium Health 15 years, Wake Forest since February 2023.

Background and Research Interests

I am a clinician scientist with clinical specialization in Palliative Care and Gerontology. My research focuses on aging, frailty, dementia, palliative care, transitions of care, and caregiving. I am interested in dementia care models that support person-and-family focused care from diagnosis to death.

What do you enjoy doing in your free time?

Yoga, cooking, and watching and supporting my kids playing softball and baseball.



Pooja Jadiya, PhD

Assistant Professor, Internal Medicine

pjadiya@wakehealth.edu

TRA Cohort 2023

Faculty Profile

<https://school.wakehealth.edu/faculty/i/pooja-jadiya>

How long have you been at Wake Forest?

1.5 years

Background and Research Interests

I am an Assistant Professor in the Department of Internal Medicine, Section on Gerontology, with a primary research focus on unraveling the intricacies of mitochondrial calcium signaling, quality control pathways, and cell death, particularly in the context of aging and Alzheimer's disease.

What do you enjoy doing in your free time?

I cherish moments with my family, indulge in cooking, and enjoy watching TV.



Philip Kramer, PhD

Instructor, Gerontology and Geriatric Medicine

pkramer@wakehealth.edu

TRA Cohort 2022

Faculty Profile

<https://school.wakehealth.edu/faculty/k/philip-adam-kramer>

How long have you been at Wake Forest?

5 years

Background and Research Interests

I am an Instructor in the Department of Internal Medicine, Section on Gerontology, a Research Education Core Developmental Scholar, and Director of the Core for Cellular Respirometry. My research focus is age-related mitochondrial dysfunction and its effect on muscle and immune function.

What do you enjoy doing in your free time?

Cooking, gardening, pottery, reading and writing.



Mitchell Ladd, MD, PhD

Assistant Professor, General Surgery

mrladd@wakehealth.edu

TRA Cohort 2023

Faculty Profile

<https://school.wakehealth.edu/faculty/l/mitche-ll-ryan-ladd>

How long have you been at Wake Forest?

1 year

Background and Research Interests

I have an undergraduate degree in biomedical engineering and then obtained my MD and PhD in biomedical engineering here at Wake Forest. I went on to do my general surgery training and pediatric surgical training (including a 2-year post-doctoral research fellowship) at Johns Hopkins. Currently, I am a pediatric surgeon with a research interest in tissue engineering, in particular, working toward developing a tissue-engineered small intestine to treat short bowel syndrome.

What do you enjoy doing in your free time?

I am married with three children so most of my free time is spent with them and getting my kids to extracurricular activities. I also enjoy live music (bluegrass in particular), smoking meats, sports, and the outdoors.



Rohan Mahabaleshwarkar, PhD

Assistant Professor, Center for Health System Sciences, Atrium Health

Rohan.Mahabaleshwarkar@atriumhealth.org

TRA Cohort 2023

How long have you been at Atrium Health?

9 years

Background and Research Interests

I have a background and interest in public health research, specifically the evaluation and implementation of interventions to improve primary care delivery for patients with chronic diseases such as diabetes and hypertension. I am also interested in conducting research on outcomes and receipt of guideline-concordant care in patients with chronic diseases, to identify groups at risk of not receiving recommended care and experiencing suboptimal outcomes and understand where the need of interventions is and what type of interventions are needed.

What do you enjoy doing in your free time?

Spending time with family, yoga, and meditation.



Shruti Mittal, MD, FAAP

Assistant Professor, Developmental & Behavioral Pediatrics, Atrium Health
shruti.mittal@atriumhealth.org

TRA Cohort 2023

Faculty Profile

<https://atriumhealth.org/provider-profile/shruti-mittal-1326393273>

How long have you been at Atrium Health?

3 years

Background and Research Interests

I am a developmental-behavioral pediatrician, originally from Greenville, SC. My research focus is improving access to DBP care for children with neurodevelopmental disabilities, in particular for preschool-age children with ADHD. I would like to study the impact of social determinants of health, historical redlining and structural racism on health outcomes in children with developmental disabilities.

What do you enjoy doing in your free time?

I enjoy spending time outdoors with my husband, two young children, Alisha (4 years old) and Arya (2 years old), and our miniature schnauzer Max. I love traveling, watching NBA basketball and CLT FC soccer, and reading fiction novels.



Andrew Nance, MD, DipABLM

**Assistant Professor, Family and Community
Medicine, Atrium Health**

andrew.nance@atriumhealth.org

TRA Cohort 2023

Faculty Profile

<https://atriumhealth.org/provider-profile/andrew-nance-1831544949>

How long have you been at Atrium Health?

7 years

Background and Research Interests

I am a clinician-researcher practicing inpatient, outpatient, and home-based family medicine. I am providing a more equitable preventive care experience for historically marginalized populations through my Lifestyle Medicine at Home program. I believe that collaborating with families to create a high-quality Lifestyle Action Plan can recognize the biological, psychological, and sociological needs of patients, can address health inequities, and can teach the future healthcare workforce how to practice Lifestyle Medicine in a way that prevents, treats, and reverses chronic diseases.

What do you enjoy doing in your free time?

Spending time with my wife, daughter and two cats, walking the greenway, landscaping my azaleas, rooting for Charlotte at Hornets and FC games, and cooking whole-food plant-based meals.



Sally Ong, MD

Assistant Professor, Ophthalmology

song@wakehealth.edu

TRA Cohort 2023

Faculty Profile

<https://school.wakehealth.edu/faculty/o/sally-s-ong>

How long have you been at Wake Forest?

3 years

Background and Research Interests

I am a vitreoretinal surgeon and a clinician scientist. My current research is focused on translating laboratory findings using animal models to the clinic to improve treatment options for patients with diabetic retinopathy and other ischemic retinopathies. Other research interests include studying ways to improve anatomical and functional outcomes after surgical repair for retinal detachments and full thickness macular holes.

What do you enjoy doing in your free time?

Travelling, hiking, dining out, exploring local children's museums and parks with my family. We also have immediate family living in four different continents and one of my goals in the coming years is to visit them all!



Yashu Pokharel, MD, MSCR

Assistant Professor, Cardiology

ypokhare@wakehealth.edu

TRA Cohort 2022

Faculty Profile

<https://school.wakehealth.edu/faculty/p/yashu-pokharel>

How long have you been at Wake Forest?

3 years

Background and Research Interests

I am a health service researcher interested in implementing evidence-based interventions in cardiovascular prevention.

What do you enjoy doing in your free time?

Yard work, tennis, running and spending time with family and friends.



Lindsay M. Reynolds, PhD

Assistant Professor, Epidemiology and Prevention

lireynol@wakehealth.edu

TRA Cohort 2022

Faculty Profile

<https://school.wakehealth.edu/faculty/r/lindsay-m-reynolds>

How long have you been at Wake Forest?

10 years

Background and Research Interests

I am a genetic epidemiologist focused on applying genomic methods to better understand lifestyle influences (e.g. diet, tobacco use) on aging biology and cardiometabolic health. My goals are to advance precision medicine approaches to improve health.

What do you enjoy doing in your free time?

I enjoy spending time with my family, gardening, playing tennis, golf, and site seeing.



Amit K. Saha, PhD

Assistant Professor, Anesthesiology

aksaha@wakehealth.edu

TRA Cohort 2022

Faculty Profile

<https://school.wakehealth.edu/faculty/s/amit-saha>

How long have you been at Wake Forest?

7 years

Background and Research Interests

I am a data researcher with a focus on interpreting, creating data models, and analyzing the data to create new knowledge and successfully achieve research goals. My present interest in research includes Healthcare Informatics, Patient Care Data Management, Quality Improvement, natural language processing (NLP) and Social Computing.

What do you enjoy doing in your free time?

Spending time with my family, reading books and exploring places around Winston-Salem.



Heather Shappell, PhD

Assistant Professor, Biostatistics and Data Science

hshappel@wakehealth.edu

TRA Cohort 2023

Faculty Profile

<https://school.wakehealth.edu/faculty/s/heather-marie-shappell>

How long have you been at Wake Forest?

3 years

Background and Research Interests

I am an Assistant Professor of Biostatistics and Data Science, as well as faculty member in the Laboratory for Complex Brain Networks, with experience performing inter-disciplinary research with collaborators from a variety of fields, including neuroscience, aging, mental health, and pediatrics. While my work initially focused on the statistical analysis for clinical trials and observational studies, my research emphasis over the past 6 years has been on the statistical analysis of network data, with a concentration in dynamic brain networks.

What do you enjoy doing in your free time?

I enjoy doing gymnastics, reading, playing various board and card games with friends and family, and spending time outdoors!



Atalie Thompson, MD, MPH

**Assistant Professor, Surgical Ophthalmology
and Gerontology and Geriatric Medicine**

atathomp@wakehealth.edu

TRA Cohort 2022

Faculty Profile

<https://school.wakehealth.edu/faculty/t/atalie-carina-thompson>

How long have you been at Wake Forest?

2 years

Background and Research Interests

I am a clinician-scientist and ophthalmologist with clinical specialization in glaucoma. My research focuses on early detection of age-related eye diseases in older adults, the use of microstructural ophthalmic imaging for detection of Alzheimer's disease and related dementias, and the association of changes in visual function with other age-related physical and cognitive dysfunction.

What do you enjoy doing in your free time?

Gardening, cooking, baking bread, spending time with my family.



Morgan Walls, MD, MS

Assistant Professor, Pediatrics, Atrium Health

morgan.walls@atriumhealth.org

TRA Cohort 2022

Faculty Profile

<https://atriumhealth.org/provider-profile/morgan-walls-1023379237>

How long have you been at Atrium Health?

6 years

Background and Research Interests

I am a board-certified pediatrician in the division of general academic pediatrics at Atrium Health and clinical assistant professor at Wake Forest School of Medicine in the Department of Pediatrics. I am a health services researcher, and my research focuses on improving health equity for children with developmental and behavioral disorders, such as autism spectrum disorder, within primary care.

What do you enjoy doing in your free time?

I recently became a children's book author and have been enjoying exploring my creative side. I also enjoy spending time with my husband, trying new restaurants, going to concerts, and exercising.



Mia Yang, MD, MS

Assistant Professor, Gerontology and Geriatric Medicine

miyang@wakehealth.edu

TRA Cohort 2022

Faculty Profile

<https://school.wakehealth.edu/faculty/y/mia-yang>

How long have you been at Wake Forest?

7 years

Background and Research Interests

I am a geriatrician clinician-researcher interested in transforming care models that benefit vulnerable older adults with dementia and their families. I enjoy having range in my clinical care (home care all the way to inpatient medicine) and in my research (RCTs to implementation/pragmatic studies, and health policy/economics).

What do you enjoy doing in your free time?

Spending time with my family, rowing, and creating episodes for my podcast “Ask Dr. Mia: Conversations on Aging Well” available on <https://www.miayangmd.com/> or Spotify.



Matthew Zuber, MD

**Assistant Professor, Obstetrics and
Gynecology, Section of Maternal-Fetal
Medicine**

mjzuber@wakehealth.edu

TRA Cohort 2023

Faculty Profile

<https://school.wakehealth.edu/faculty/z/matthew-james-zuber>

How long have you been at Wake Forest?

4 years

Background and Research Interests

I am a maternal-fetal medicine specialist with specific interest in vaccines in pregnancy. My research includes the unique immune response to vaccination in pregnancy, how maternal comorbidities or environmental exposures may influence novel and routine vaccines, and optimization of vaccine timing for maternal and neonatal benefit.

What do you enjoy doing in your free time?

I enjoy outdoor activities including hiking, golf and tennis. My wife and I adventure with our corgi, Newton.



Translational Research Academy

Faculty and Staff



Wake Forest University
School of Medicine



David Miller, MD, MS

**Professor, General Internal Medicine, Wake
Forest University School of Medicine**

TRA Director

dmiller@wakehealth.edu

Faculty Profile

<https://school.wakehealth.edu/Faculty/M/David-Philip-Miller>

How long have you been at Wake Forest?

23 years

Background and Research Interests

I am a primary care physician, board-certified clinical informaticist, and healthcare delivery researcher. My research focuses on developing, implementing, and evaluating multi-level digital health interventions that are designed to increase the efficiency and quality of primary healthcare.

What do you enjoy doing in your free time?

Hiking the Appalachian Trail, travel with family, and weekend warrior projects around our home.



Michael Brennan, DDS, MHS

Chair, Oral Medicine/Oral & Maxillofacial Surgery, Atrium Health

Professor, Otolaryngology/Head & Neck Surgery, Wake Forest University School of Medicine

mike.brennan@atriumhealth.org

Faculty Profile

<https://atriumhealth.org/education/graduate-medical-education/physician-residencies/general-practice-dentistry-and-oral-medicine/faculty-and-visiting-professors>

How long have you been at Atrium Health?

23 years

Background and Research Interests

I am an oral medicine specialist and hospital dentist. My research focuses include oral sequelae of cancer therapies, Sjogren's syndrome and lichen planus.

What do you enjoy doing in your free time?

Spending time with my wife and 2 children and playing volleyball and golf.



Stephen B. Kritchevsky, PhD

**Professor, Gerontology and Geriatric Medicine,
Wake Forest University School of Medicine**

skritche@wakehealth.edu

Faculty Profile

<https://school.wakehealth.edu/Faculty/K/Stephen-Kritchevsky>

How long have you been at Wake Forest?

20 years

Background and Research Interests

I am an epidemiologist/gerontologist who studies factors contributing to declining physical function in older adults.

What do you enjoy doing in your free time?

Reading, cooking and visiting historical sites.



John Parks, PhD

Professor, Molecular Medicine, Wake Forest University School of Medicine

jparks@wakehealth.edu

Faculty Profile

<https://school.wakehealth.edu/Faculty/P/John-S-Parks>

How long have you been at Wake Forest?

44 years

Background and Research Interests

I am a basic scientist who studies lipid metabolism in pre-clinical models of chronic diseases, such as fatty liver and prostate cancer. My lab uses tissue-specific gene-targeted mice to investigate gene-dietary fat interactions in disease pathogenesis.

What do you enjoy doing in your free time?

Any outdoor activity (biking, swimming, walking, YMCA workouts) and spending time with my three grown children and their families (five grandchildren.)



Sean Simpson, PhD

**Professor, Biostatistics and Data Science ,
Wake Forest University School of Medicine**
slsimpso@wakehealth.edu

Faculty Profile

<https://school.wakehealth.edu/Faculty/S/Sean-L-Simpson>

How long have you been at Wake Forest?
15 years

Background and Research Interests

I am a biostatistician with interests in network- and complexity-based neuroimaging, and health and social disparities. My main research focus has been on the development of novel fusions of statistical tools with network science methods for the analysis of whole-brain network data to engender more biologically meaningful approaches to understanding the root causes of a number of brain diseases and disorders.

What do you enjoy doing in your free time?

Reading, spending time with my family and friends, traveling, hiking, working out, engaging in social justice activities, watching movies.



Hazel Tapp, PhD

**Director, Center for Primary Care Research,
Family Medicine, Atrium Health**

Hazel.Tapp@atriumhealth.org

Faculty Profile

<https://atriumhealth.org/education/graduate-medical-education/physician-residencies/family-medicine/carolinas-medical-center-family-medicine-residency-program/research>

How long have you been at Atrium Health?

18 years

Background and Research Interests

My research interests are in implementing improved delivery of care for patients with chronic diseases such as asthma. As Director for the Center for Primary Care Research at Atrium Health and co-director of a practice-based research network (PBRN), I work on multiple projects designed to use community based participatory research (CBPR) and implementation research to study improved outcomes for populations with chronic disease through implementation of evidence-based interventions. For example we study the dissemination of shared decision making for asthma in primary care practices and the Emergency Department across Atrium.

What do you enjoy doing in your free time?

I enjoy travel and hiking with my husband and sons, Craig, Nick and Harrison, distance running with a local running group, and playing with our two dogs Willow and Lucy.



Claudia Olivier, PhD

Director of Education Programs, Clinical and Translational Science Institute, Wake Forest University School of Medicine

colivier@wakehealth.edu

How long have you been at Wake Forest?

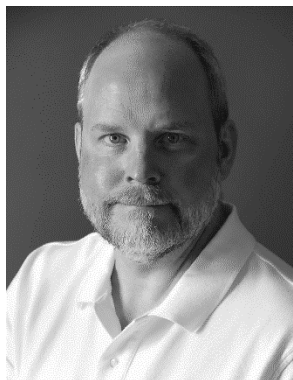
6 years

Background and Research Interests

My background is in basic science (microbiology /molecular biology); a prior faculty position (UW, Wisconsin) had a significant focus on teaching and education in biology, my later position (Medical College of Wisconsin) focused on establishing early career faculty and postdoctoral training programs, grant and scientific writing, and outreach (including middle and high schools.) The CTSI Education Team spans efforts across Wake to provide education and training to early career faculty (e.g. TRA, KL2), postdoctoral fellows, (e.g. TL1), staff, as well as mentoring training (e.g. Mentor Academy for mid-career and senior faculty).

What do you enjoy doing in your free time?

Spending time with my family, gardening, and hiking.



Tom Roth

Education Program Manager, Clinical and Translational Science Institute , Wake Forest University School of Medicine

tomroth@wakehealth.edu

How long have you been at Wake Forest?

29 years

Background and Research Interests

I'm an Education Program Manager in the Clinical and Translational Science Institute responsible for coordinating the Translational Research Academy, the KL2 Program, K&R Grant Writing Series, and the Medical Student Research Program and Research Day. I also create online, asynchronous training, record lectures, and try to leverage available tools and technology to facilitate learning opportunities.

What do you enjoy doing in your free time?

Hanging out with my family and two cats. Doing home improvement projects, cooking, bicycling, photography, and audio/video technician for church livestream.