



Translational Research Academy

Cohorts 2021 & 2022



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?

8 months

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.



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?
2 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.



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?

1 year

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



Paul M. Bunch, MD

Assistant Professor, Radiology

pbunch@wakehealth.edu

TRA Cohort 2021

Faculty Profile

<https://school.wakehealth.edu/Faculty/B/Paul-M-Bunch>

How long have you been at Wake Forest?

5 years

Background and Research Interests

I am a neuroradiologist with a subspecialty focus in head and neck imaging. My research focuses primarily on primary hyperparathyroidism and head and neck cancer, though I have a growing interest in body composition and frailty.

What do you enjoy doing in your free time?

Spending time with my wife and 3 children.
Walking, seeing live music, fishing.



Samuel P. Carmichael II, MD MS

Assistant Professor, Trauma Surgery

scarmich@wakehealth.edu

TRA Cohort 2021, KL2 Scholar 2021-2023

Faculty Profile

<https://school.wakehealth.edu/Faculty/C/Samuel-P-Carmichael>

How long have you been at Wake Forest?

5 years

Background and Research Interests

I am a trauma surgeon and translational scientist researcher. My research focuses on the formation of scar within the abdomen and the development of novel regenerative medicine technologies for patients undergoing abdominal operation.

What do you enjoy doing in your free time?

Spending time with my family and music.



Sarah Cilvik, MD, PhD

Assistant Professor, Pediatrics – Neonatology

scilvik@wakehealth.edu

TRA Cohort 2021, KL2 Scholar 2022-2024

Faculty Profile

<https://school.wakehealth.edu/Faculty/C/Sarah-Nicole-Cilvik>

How long have you been at Wake Forest?

3 years

Background and Research Interests

I am a board-certified pediatrician, board-eligible neonatologist, and physician scientist; I most recently completed my fellowship in Neonatal-Perinatal Medicine in July 2020 studying maternal-fetal physiology in a sheep model. My current research focuses on developmental origins of chronic diseases (specifically the role of placental dysfunction in fetal programming of cardiac disease) using the Wake Forest Vervet (nonhuman primate) Research Colony.

What do you enjoy doing in your free time?

Exploring the outdoors with my husband, 4 yo son, and 3 dogs.



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?

2 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.



Ryan Hughes

Assistant Professor, Radiation Oncology

ryhughes@wakehealth.edu

TRA Cohort 2021

Faculty Profile

<https://school.wakehealth.edu/Faculty/H/Ryan-Thomas-Hughes>

How long have you been at Wake Forest?

3 years as faculty, 14 years for all my education and training

Background and Research Interests

I am a radiation oncologist specializing in head and neck cancer, skin cancer and hematologic malignancies such as lymphoma and leukemia. My research is focused on reducing late sequelae of (primarily H&N) radiotherapy through development and investigation of novel methods to prevent/mitigate/reverse radiation normal tissue injury.

What do you enjoy doing in your free time?

Spending time with my daughters, watching Star Trek, growing hot peppers and experimenting with homemade hot sauces.



Genesio Karere, PhD

Assistant Professor, Molecular Medicine

gkarere@wakehealth.edu

TRA Cohort 2021

Faculty Profile

<https://school.wakehealth.edu/Faculty/K/Genesio-Karere>

How long have you been at Wake Forest?

5 years

Background and Research Interests

My research background includes genomic, genetics and molecular biology. My research interest is focused on the role of miRNAs on human complex diseases. Specifically, I am interested in miRNAs and atherosclerosis, the primary cause of atherosclerotic cardiovascular disease.

What do you enjoy doing in your free time?

I enjoy a bit of everything, including site seeing, golfing, watching basketball, hiking, and now learning guitar.



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?

10 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.



Ashish K. Khanna, MD, FCCM, FCCP, FASA

Associate Professor, Anesthesiology

akhanna@wakehealth.edu

TRA Cohort 2021, KL2 Scholar 2020-2022

Faculty Profile

<https://school.wakehealth.edu/Faculty/K/Kumar-Khanna>

How long have you been at Wake Forest?

5 years

Background and Research Interests

Perioperative outcomes using large datasets, continuous monitoring of vital signs using portable wearable technology to predict adverse outcomes within and outside the ICU, blood pressure/hemodynamics and organ system failure, vasopressors in shock states.

What do you enjoy doing in your free time?

Tennis, my Peleton, and trying to be a good parent. :)



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?

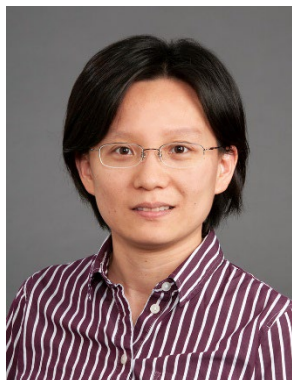
4 years

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.



Meng-Yun Lin, PhD, MPH

Assistant Professor, Social Sciences and Health Policy

M.Lin@wakehealth.edu

TRA Cohort 2021

Faculty Profile

<https://school.wakehealth.edu/Faculty/L/Meng-Yun-Lin>

How long have you been at Wake Forest?

4 years

Background and Research Interests

I am a health services researcher and health economist who applies big data to evaluate health policy and interventions. My research focuses on disparities in health care utilization, spending, and outcomes, with an emerging focus on lung cancer care.

What do you enjoy doing in your free time?

Road biking and hiking with friends.



Lindsay Munn, PhD, MSN, RN

**Assistant Professor, Emergency Medicine,
Atrium Health**

Lindsay.Munn@atriumhealth.org

TRA Cohort 2021

How long have you been at Atrium Health?

6 years

Background and Research Interests

I am a researcher who is clinically trained as a nurse. My research focuses on understanding and optimizing the healthcare work environment to improve patient, clinician, and organizational outcomes. I am specifically interested in clinician burnout.

What do you enjoy doing in your free time?

Reading, traveling, and spending time with my family.



Kristen Nicholson, PhD

Assistant Professor, Orthopaedic Surgery

kfnichol@wakehealth.edu

TRA Cohort 2021

Faculty Profile

<https://school.wakehealth.edu/Faculty/N/Kristen-Nicholson>

How long have you been at Wake Forest?

5 years

Background and Research Interests

I am an upper extremity biomechanist with a particular interest in the development of non-invasive tools and methods for assessing kinematics and implementing scapular kinematics in baseball pitching.

What do you enjoy doing in your free time?

Hiking, biking, and being outdoors with my family.



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?

2 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?

9 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?

6 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.



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?

1 year

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?

5 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.



Jaclyn J. White, MD

Assistant Professor, Neurosurgery

jjwhite@wakehealth.edu

TRA Cohort 2021

Faculty Profile

<https://school.wakehealth.edu/Faculty/R/Jaclyn-Janine-Renfrow>

How long have you been at Wake Forest?

14 years

Background and Research Interests

I am a fellowship trained neurosurgeon subspecializing in neurosurgical oncology. My patients compel my research brain tumor genetics, biology, and immunology along with therapeutic delivery of agents to the nervous system in both the preclinical and clinical setting.

What do you enjoy doing in your free time?

Enjoying the company of my family, cooking, and cycling.



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?

6 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.



Translational Research Academy

Faculty and Staff



Wake Forest University
School of Medicine



David Miller, MD, MS

Professor, General Internal 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?

22 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.



Kathryn Weaver, PhD, MPH

Professor, Social Sciences and Health Policy

TRA Co-Director

keweaver@wakehealth.edu

Faculty Profile

<https://school.wakehealth.edu/Faculty/W/Kathryn-E-Weaver>

How long have you been at Wake Forest?

13 years

Background and Research Interests

I am a behavioral scientist and health services researcher who leads multi-site oncology studies through the NCI Community Oncology Research Program. My research focuses on cancer survivorship, with a specific interest in cancer health equity, symptom management, and post-treatment follow-up care.

What do you enjoy doing in your free time?

Riding horses with my daughter and yoga.



Graça Almeida-Porada, MD, PhD

**Professor, Wake Forest Institute for
Regenerative Medicine**

galmeida@wakehealth.edu

Faculty Profile

<https://school.wakehealth.edu/Faculty/A/Graca-Almeida-Porada>

How long have you been at Wake Forest?

12 years

Background and Research Interests

I am a professor of regenerative medicine, and I trained in hematology and transfusion medicine. My research focuses on the development of cellular and gene delivery and gene editing platforms to treat genetic and immune-mediated diseases. I am particularly interested in improving the outcome of stem cell transplantation and gene therapy in fetal and neonatal patients with genetic disorders, and in developing therapies for children with immune-mediated diseases.

What do you enjoy doing in your free time?

I enjoy painting, playing music, doing radioastronomy, and going to F1 races with my husband and son.



Michael Brennan, DDS, MHS

Professor & Chair, Oral Medicine, Atrium Health

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?

22 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

skritche@wakehealth.edu

Faculty Profile

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

How long have you been at Wake Forest?

19 years

Background and Research Interests

I am an epidemiologist/gerontologist who study's 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

jparks@wakehealth.edu

Faculty Profile

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

How long have you been at Wake Forest?

43 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

slsimpso@wakehealth.edu

Faculty Profile

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

How long have you been at Wake Forest?

14 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?

17 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

colivier@wakehealth.edu

How long have you been at Wake Forest?

5 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

tomroth@wakehealth.edu

How long have you been at Wake Forest?

28 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 guest 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, photography, bicycling, and audio/video technician for church livestream.