



Translational Research Academy

Cohorts 2020 & 2021



 **Wake Forest®**
School of Medicine

Clinical and Translational Science Institute



Halley Alexander, MD

Assistant Professor, Neurology

halexand@wakehealth.edu

TRA Cohort 2020

Faculty Profile

<https://school.wakehealth.edu/Faculty/A/Halley-Briglia-Alexander>

How long have you been at Wake Forest?

2 years

Background and Research Interests

I am an assistant professor of Neurology with specialty in epilepsy. I am in the process of obtaining a master degree in clinical and population translational sciences. My research interests include improving QOL and epilepsy associated comorbidities. My current research involves investigating exercise as a treatment for epilepsy and its comorbidities.

What do you enjoy doing in your free time?

Running, reading fiction, and spending time with my husband, dog, and our almost 1 year old daughter.



Michael Bancks, PhD, MPH

Assistant Professor, Epidemiology and Prevention

mbancks@wakehealth.edu

TRA Cohort 2020

Faculty Profile

<https://school.wakehealth.edu/Faculty/B/Mike-Bancks>

How long have you been at Wake Forest?

3 years

Background and Research Interests

I am an epidemiologist with interests in the epidemiology and prevention of cardiovascular disease, dementia, diabetes, and health disparities.

What do you enjoy doing in your free time?

I enjoy being outside exploring our community and doing activities including most sports, hiking, running, and fly fishing.



Justin Brooten, MD

Assistant Professor, Emergency Medicine

jbrooten@wakehealth.edu

TRA Cohort 2020

Faculty Profile

<https://school.wakehealth.edu/Faculty/B/Justin-Kenneth-Brooten>

How long have you been at Wake Forest?

7 years

Background and Research Interests

I am an emergency and palliative medicine physician. I am an assistant professor with the Department of Emergency Medicine and the Department of Internal Medicine, Section on Gerontology and Geriatric Medicine. My research is focused on identifying patients who can benefit from palliative care involvement in the emergency setting, as well as design and implementation EHR based processes which aid in assessment of acuity, and short-term prognosis.

What do you enjoy doing in your free time?

Spending time with my wife and our 6 year old daughter, usually on scooters, bikes, or walks. Seeing the sights around Winston Salem, and trying out new recipes.



Patrick Brown, MD

Assistant Professor, Radiology

patrick.a.brown@wakehealth.edu

TRA Cohort 2020

Faculty Profile

<https://school.wakehealth.edu/Faculty/B/Patrick-Allen-Brown>

How long have you been at Wake Forest?

2 years

Background and Research Interests

I am an interventional neuroradiologist in the departments of radiology and neurosurgery. My clinical and research interests are in mechanical thrombectomy for acute stroke, cerebral aneurysms and AVMs, as well as back pain related to degenerative disease and vertebral compression fractures. I'm hoping to gain a better handle on study design and data analysis and gain the necessary tools for obtaining a career development grant.

What do you enjoy doing in your free time?

Spending time with my two boys (4 1/2 and 1 year) and my wife, running, working out, listening to and playing music.



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?

3years

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?

3 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

Faculty Profile

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

How long have you been at Wake Forest?

1 year

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.



Franck Diaz, PhD

Adjunct Faculty

Franck.Diaz@wakehealth.edu

TRA Cohort 2020

How long have you been at Wake Forest?

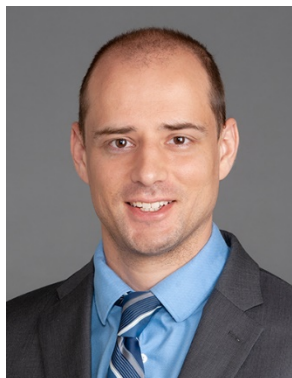
5 years

Background and Research Interests

I'm health informatician and biomedical engineer focused on conducting clinical data reuse methods development research. My work aims to improve chronic disease prevention and care while supporting the building of learning healthcare systems globally.

What do you enjoy doing in your free time?

Running, playing music and cooking.



Michael Farris, MD

Assistant Professor, Radiation Oncology

mfarris@wakehealth.edu

TRA Cohort 2020, KL2 Scholar 2021-2023

Faculty Profile

<https://school.wakehealth.edu/Faculty/F/Michael-Farris>

How long have you been at Wake Forest?

3 years

Background and Research Interests

I am a radiation oncologist junior faculty and lead of the thoracic division. I treat primarily lung cancer, and have several clinical trials ongoing now involving breath predictors of pneumonitis, oligometastatic disease, oligoprogressive disease, hypofractionated RT alone, and rib protection from high dose radiation. Hoping to learn more on writing clinical trial related grants or career development grants.

What do you enjoy doing in your free time?

Two kids at home under 3 yo, what is free time? In my previous life I used to build computers, play VR, lift weights, juggle, draw and paint with soft pastels. Trying to learn Korean presently.



Giya Harry, MD, MPH, MSc

Assistant Professor, Pediatrics

oharry@wakehealth.edu

TRA Cohort 2020, KL2 Scholar 2021-2023

Faculty Profile

<https://school.wakehealth.edu/Faculty/H/Giya-Harry>

How long have you been at Wake Forest?

2 years

Background and Research Interests

I am a pediatric rheumatologist with clinical and research expertise in systemic lupus erythematosus. My research focuses on enhancing self-management and treatment adherence in those with pediatric rheumatic conditions, particularly patients with lupus.

What do you enjoy doing in your free time?

Reading. Laughing with my family.



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?

1 year 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.



Guangxu Jin, PhD

Assistant Professor, Cancer Biology

gjin@wakehealth.edu

TRA Cohort 2020

Faculty Profile

<https://school.wakehealth.edu/Faculty/J/Guangxu-Jin>

How long have you been at Wake Forest?

7 years

Background and Research Interests

I am a bioinformatics scientist and have a long-term interest in developing clinically applicable technologies to facilitate clinical and translational research. My research focuses on artificial intelligence, genomics sequencing, single-cell sequencing, and cancer immunotherapy.

What do you enjoy doing in your free time?

Running ultra, skiing and snowboarding with my sons.



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?

3 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.



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?

3 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. :)



Jeongchul Kim, PhD

Assistant Professor, Diagnostic Radiology

jeokim@wakehealth.edu

TRA Cohort 2020

Faculty Profile

<https://school.wakehealth.edu/Faculty/K/Jeongchul-Kim>

How long have you been at Wake Forest?

6 years

Background and Research Interests

I am a biomedical engineer with medical imaging and mechanical engineering backgrounds. My research focuses on developing medical image analysis tools for more sensitive detection of early signs of Alzheimer's disease and mild traumatic brain injury (Imaging Biomarker).

What do you enjoy doing in your free time?

Gardening, camping, working out (indoor cycling, pull-up bar.)



Melissa Kozakiewicz, MD

Assistant Professor, Obstetrics and Gynecology

mkozakie@wakehealth.edu

TRA Cohort 2020

Faculty Profile

<https://school.wakehealth.edu/Faculty/K/Melissa-Lee-Kozakiewicz>

How long have you been at Wake Forest?

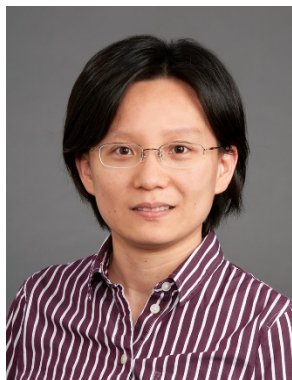
9 years

Background and Research Interests

I am a Maternal-Fetal Medicine physician with a primarily clinical background. My research focuses on the role of the endocannabinoid system in both normal and abnormal labor.

What do you enjoy doing in your free time?

Spending time with my family, reading and classes on the Peloton app.



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?

2 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?

4 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?

3 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.



Nathaniel O'Connell, PhD

Assistant Professor, Biostatistics and Data Science

n.oconnell@wakehealth.edu

TRA Cohort 2020

Faculty Profile

<https://school.wakehealth.edu/Faculty/O/Nathaniel-Sean-OConnell>

How long have you been at Wake Forest?

3 years

Background and Research Interests

As a biostatistician, my work and applied research interests span across varying medical disciplines. The bulk of my research effort is currently in cancer, neurology, and pediatric care. My current statistical methodology research interests focus on the design and conduct of clinical trials, developing methods for quantifying toxicity burden in patients on cancer trials, methods for handling and analyzing missing data (motivated by working on headache/migraine research), and prediction modeling using EHR data (motivated by my work in pediatrics).

What do you enjoy doing in your free time?

Spending time with my wife, 2-year old daughter, and 2 dogs. I run almost every day, love to hike, play disc-golf, and watch baseball and F1 racing.



Miranda Orr, PhD

Assistant Professor, Gerontology and Geriatric Medicine

morr@wakehealth.edu

TRA Cohort 2020

Faculty Profile

<https://school.wakehealth.edu/Faculty/O/Miranda-Ethel-Orr>

How long have you been at Wake Forest?

2 years

Background and Research Interests

I am a translational neuroscientist that studies the interaction between advanced chronological age and risk for developing Alzheimer's disease. My research program utilizes animal and cell culture models for mechanistic studies and drug discovery, as well as multicenter human clinical trials for intervention testing.

What do you enjoy doing in your free time?

Hiking, traveling, and enjoying the company of my friends, family and dogs.



Jessica Palakshappa, MD, MS

Assistant Professor, Internal Medicine

jpalaksh@wakehealth.edu

TRA Cohort 2020

Faculty Profile

<https://school.wakehealth.edu/Faculty/P/Jessica-Ann-Palakshappa>

How long have you been at Wake Forest?

4 years

Background and Research Interests

I am a pulmonary and critical care physician interested in the intersection of aging, critical care, and implementation science. My long-term career goal is to develop and test novel programs that improve the care we deliver to older adults both during critical illness and as they transition to the outpatient setting.

What do you enjoy doing in your free time?

Chasing my two young daughters, running outside in beautiful North Carolina.



Araya Puwanant, MD

Assistant Professor, Neurology

apuwanan@wakehealth.edu

TRA Cohort 2020

Faculty Profile

<https://school.wakehealth.edu/Faculty/P/Araya-Puwanant>

How long have you been at Wake Forest?

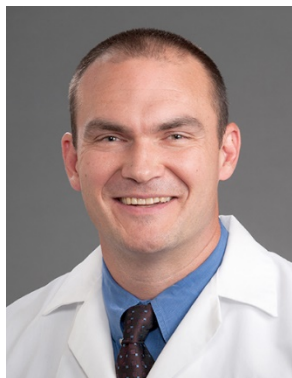
2 years

Background and Research Interests

I am a junior neuromuscular physician with a research interest in muscular dystrophy, muscle ion channels, and rare neuromuscular diseases. My research has been focused on developing imaging biomarkers and endpoints for Clinical Trial Readiness, and towards acquiring new treatments in myotonic dystrophy (DM), the most prevalent form of muscular dystrophy with multisystemic features.

What do you enjoy doing in your free time?

I started playing tennis again in 2020 after a 7-year pause mode with 2 small kids. I like cooking Thai food, music, reading, and traveling internationally (whenever we can do it safely again.)



Jason Stopyra, MD, MS

Associate Professor, Emergency Medicine

jstopyra@wakehealth.edu

TRA Cohort 2020, KL2 Scholar 2020-2022

Faculty Profile

<https://school.wakehealth.edu/Faculty/S/Jason-P-Stopyra>

How long have you been at Wake Forest?

7 years

Background and Research Interests

I am a board certified Emergency and EMS physician with a 15+year rural clinical practice experience. My research is focused on rural cardiovascular disparities in the prehospital environment.

What do you enjoy doing in your free time?

Home improvements, raising pigs and hunting.



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?

12 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.



Translational Research Academy

Faculty and Staff



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?

21 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, learning to fly, and doing jigsaw puzzles.



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?

12 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?

10½ 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.



Stephen 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 gerontologist who uses both observational and experimental methods to help older adults preserve and regain physical function. I focus mostly on behavioral approaches, but I am becoming increasingly interested in pharmacologic interventions that affect the biology of aging directly.

What do you enjoy doing in your free time?

Cooking and reading.



Barb Nicklas, PhD

Professor, Gerontology and Geriatric Medicine
bnicklas@wakehealth.edu

Faculty Profile

<https://school.wakehealth.edu/Faculty/N/Barb-Nicklas>

How long have you been at Wake Forest?

21 years

Background and Research Interests

I am a clinical investigator with research and scientific expertise in the fields of exercise physiology, obesity, and aging. I primarily conduct exercise and diet clinical trials, particularly in older adults, with both clinical and biological outcomes.

What do you enjoy doing in your free time?

Bike riding, gardening, swimming, and volunteering with various organizations.



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?

42 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, running, walking) 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?

13 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.



Claudia Olivier, PhD

Director of Education Programs, Clinical and Translational Science Institute

colivier@wakehealth.edu

How long have you been at Wake Forest?

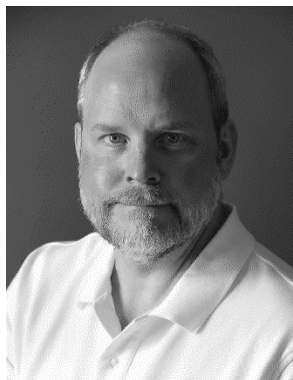
4 years

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?

27 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?

Home improvement projects, cooking, photography, bicycling, and audio/video technician for church livestream.