The EXCELLENCE IN CARDIOVASCULAR SCIENCES (EICS) SUMMER RESEARCH PROGRAM FOR DIVERSITY is funded by an R25 training grant from the National Heart, Lung, and Blood Institute. Drs. Debra Diz and Ann Tallant are the directors of the program, which has provided summer research training for approximately 300 undergraduate students from groups under-represented in the biomedical sciences over the past twenty-five years. Of our former EICS participants, who have completed their undergraduate degrees, approximately 30% obtained their professional degrees or are in professional schools and 35% obtained graduate degrees or are in graduate school. Of the students working towards their PhD, approximately 26% are in graduate programs at Wake Forest University.

Supported by:

- Graduate School of the Arts & Sciences
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- Hypertension & Vascular Research
  Wake Forest School of Medicine
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- Research Initiative for Scientific Enhancement (RISE) Program
- Minority Access to Research Careers Undergraduate Student Training in Academic Research (MARC U*STAR)
  Winston–Salem State University
  (Azeez Aileru, MS, PhD, Director)
PARTICIPANTS

Nikhet I. Chowdhury (Fordham University)
Mentor: Mark Chappell, PhD; Co-Mentor: Nildris Cruz-Diaz, PhD
Surgery/Hypertension, Cardiovascular Sciences Center

“Inhibition of AGE-Induced Epithelial to Mesenchymal Transition”

Justine Colon De Santiago (University of Puerto Rico)
Mentors: David Soto-Pantoja, PhD and Katherine Cook, PhD
Co-Mentors: Mark Chappell, PhD and Yismelin Feliz-Mosquea
Surgery/Hypertension, Comprehensive Cancer Center

“Deficiency of CD47 Regulates Bioenergetics to Prevent Chemotherapy Related Cardiac Toxicity”

Adriance S. Edington (Winston-Salem State University)
Mentor: Nicole Levi, PhD; Co-Mentor: Hale Cigdem Arca, PhD
Plastic & Reconstructive Surgery

“The Effects of Using Magnetic Field and Laser Light to Generate Hyperthermia”

Christine M. Eliazo (Lewis and Clark College)
Mentor: A’ja Duncan, PhD; Co-Mentor: Debra Diz, PhD
Surgery/Hypertension, Cardiovascular Sciences Center

“Muscadine Grape Extract Improves Exercise Capacity in Aging Transgenic (mRen2)27 Hypertensive Rats”

Zakaria J. Gary (Jackson State University)
Mentors: Gagan Deep, PhD, Cancer Biology and Tina Brinkley, PhD, Gerontology and Geriatric Medicine; Co-Mentors: Sierra Patterson, Surgery/Hypertension, and Taylor Peak, MD, Urology

“Exosome Use to Detect Enzalutamide-Resistance in Prostate Cancer Patients”

Raiven L. Harris (Cornell University)
Mentor: Jasmina Varagic, PhD; Co-Mentor: Jessica VonCannon
Surgery/Hypertension, Cardiovascular Sciences Center

“Long-Term Cardiovascular Effects of Acute Catecholamine Excess”

Asia S. Hoke (Winston-Salem State University)
Mentors: E. Ann Tallant, PhD and Patricia Gallagher, PhD
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Co-Mentors: Tracy Criswell, PhD
WFIRM

“Does a Muscadine Grape Extract Affect Exercise Performance in Aged Male Rats?”

We wish to thank the mentors for their outstanding contributions to the success of the summer training programs and the students for their participation.

PARTICIPANTS

Kathleen O. Kind (Lee University)
Mentor: Rong Chen, PhD
Co-Mentors: Deborah Luessen, MS, Tyler Hinshaw, and Haiguo Sun, PhD
Physiology and Pharmacology

“Chronic Ethanol Exposure Alters Cholesterol Content and Ga Protein Membrane Compartmentalization in Rat Brain”

Anne N. Lenzo (Winston-Salem State University)
Mentor: Leah Solberg Woods, PhD; Co-Mentors: Osborne Seshie and Sandra Kabler
Internal Medicine-Molecular Medicine Center on Diabetes, Obesity, and Metabolism

“The Effect of a HF Diet on a Diverse Population; Using Heterogeneous Stock Rats to Understand the Effects of a HF Diet on Metabolic Health”

DengFeng Li (UNC-Greensboro)
Mentor: Peter A. Antinozzi, PhD
Biochemistry Center on Diabetes, Obesity, and Metabolism

“A Retrospective Review of Primary Hypertension Treatments and Acute Myocardial Infarction Incidence”

Rabina Mainali ( Salem College)
Mentor: Hariom Yadav, PhD; Co-Mentor: Ravinder Nagpal, PhD
Internal Medicine-Molecular Medicine Comprehensive Cancer Center, Center on Diabetes, Obesity, and Metabolism, Redox Biology & Medicine Center

“Development of Food Addiction in C.elegans with Different Sugars”

Danielle Medina-Hernandez (Wake Forest University)
Mentors: Giselle Melendez, MD and Jennifer H. Jordan, PhD; Co-Mentors: Marie-Pierre Jolly, PhD and W. Gregory Hundley, MD, Internal Medicine-Cardiology, Comprehensive Cancer Center,

Abbas E. Mohamed (Winston-Salem State University)
Mentor: Elaheh Rahbar, PhD; Co-Mentor: Charlotte Mae K. Waits
Biomedical Engineering Center for Public Genomics, Office of Women In Medicine and Science

“Hyaluronic Acid Following Traumatic Brain Injury”

Joshua M. Waller (Winston-Salem State University)
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“The Sympathetic Nervous System Regulates Neuromuscular Junction Stability and Skeletal Muscle Motor Innervation”