



**HOWARD**  
**UNIVERSITY**

**RESEARCH DAY**  
**PROGRAM BOOK**

April 4, 2014

**RESEARCH DAY 2014**



HOWARD UNIVERSITY

---

**RESEARCH DAY**

---

April 4, 2014

PROGRAM BOOK



1867

**HOWARD**  
UNIVERSITY

# HOWARD UNIVERSITY

Office of the Associate Provost  
Research & Graduate Studies

April 4, 2014

Greetings Research Day Participants,

It is with great pleasure that I welcome you to Howard University's Research Day 2014. This event provides a wonderful opportunity to showcase the multiplicity of cross-disciplinary and groundbreaking research that has earned the University its unique reputation among institutions of higher education for many years. Approximately 400 faculty members, students, and postdocs from the thirteen schools and colleges comprise this year's Research Day participants. I congratulate each of the presenters for their excellent presentations, as well as for their willingness to share their accomplishments. It is my sincere desire that Research Day 2014 will strengthen current partnerships and spark new and further collaborations among our colleagues in the coming years.

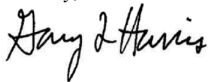
I would like to take this opportunity to express my gratitude to today's keynote speaker, Dr. Norman B. Anderson, Chief Executive Officer and Executive Vice President of the American Psychological Association, whose remarks will address the importance of mentoring, career development and networking across all disciplines. This is a timely address given the continuously expanding global partnerships that characterize today's research enterprise.

We are also grateful for the generous support and partnership of our sponsors, the National Science Foundation's HU ADVANCE-IT, Elsevier, and Pepco. Each of them has a booth in the Rotunda Room highlighting research opportunities and resources for faculty and students.

Additionally, I am deeply appreciative of the work of the judges, moderators, and many volunteers who represent a wide range of disciplines and expertise both external to and within the University community. I especially thank the Research Day Committee for their commitment and dedication to ensuring the success of this event.

Again, I extend warm greetings and gratitude for your contributions to a successful Research Day 2014.

Sincerely,



Gary L. Harris, Ph.D., P.E.

---

400 College Street, NW, Suite 108  
Washington, DC 20059



Telephone 202 806 6800  
Facsimile 202 806 4971  
[www.howard.edu](http://www.howard.edu)

## **KEYNOTE SPEAKER:** **NORMAN B. ANDERSON, PH.D.**

Dr. Norman Anderson is currently Chief Executive Officer and Executive Vice President of the American Psychological Association (APA). With 134,000 members and affiliates, APA is the largest and oldest of the world's psychological societies. Headquartered on Capitol Hill in Washington, D.C., APA has a staff of more than 550 and an annual budget greater than \$115 million.



Dr. Anderson, the founding Associate Director of the National Institutes of Health (NIH) in charge of social and behavioral science, was the first Director of the NIH Office of Behavioral and Social Sciences Research (OBSSR). At NIH, he was charged with facilitating behavioral and social sciences research across all of the 24 institutes and centers of NIH.

Dr. Anderson served as an associate professor at Duke University and as a professor at the Harvard School of Public Health. He is well-known for his research and writing on health and behavior as well as racial/ethnic and economic health disparities. For his research, service, and leadership, he has received a number of significant awards from scientific societies and universities, including four honorary doctorate degrees.

In 2012, Anderson was elected to membership in the Institute of Medicine of the National Academy of Science. For his work in science, he was inducted into the National Black College and University Hall of Fame in September 2013.

Dr. Anderson has provided volunteer leadership to several foundations including serving as president of the board of directors for the Starlight Children's Foundation of Los Angeles, and is currently a member of the board of directors for the American Psychological Foundation and the Excellence Foundation of the University of North Carolina at Greensboro.

Dr. Anderson is a Fellow of the American Association for the Advancement of Science, American Psychological Association, Association for Psychological Science, the Society of Behavioral Medicine, and the Academy of Behavioral Medicine Research, and is a past-president of the Society of Behavioral Medicine.

In addition to publishing dozens of scientific articles, Dr. Anderson is the author and editor of several books, editor-in-chief of the two-volume *Encyclopedia of Health and Behavior* (2003) and co-editor of *Interdisciplinary research: Case studies from health and social science* (2008). He is currently editor-in-chief of APA's flagship journal, *American Psychologist*.

# LOUIS STOKES HEALTH SCIENCES LIBRARY

Friday, April 4, 2014

## PROGRAM

**7:30 – 8:30 AM**

*Registration & Continental Breakfast*

1<sup>st</sup> Floor Lobby of Louis Stokes  
Health Sciences Library

**8:30 – 9:00 AM**

*Greetings*

Wayne A.I. Frederick, M.D., MBA, F.A.C.S  
INTERIM PRESIDENT

Kurt L. Schmoke

INTERIM PROVOST AND OFFICE OF GENERAL COUNSEL

*Opening Remarks*

Gary L. Harris, Ph.D., PE  
ASSOCIATE PROVOST FOR RESEARCH AND  
GRADUATE STUDIES

*Introduction of Keynote Speaker*

Kelechi Anyanwu

**9:00 – 9:45 AM**

*Keynote Address*

Norman Anderson, Ph.D.  
CHIEF EXECUTIVE OFFICER AND  
EXECUTIVE VICE PRESIDENT  
AMERICAN PSYCHOLOGICAL ASSOCIATION (APA)

**10:00 AM – 12:00 PM**

*Poster Presentations*

Physical Science & Engineering  
Translational & Clinical  
Computational & Modeling  
Biological & Biomedical Sciences

*Oral Presentations*

Humanities  
Social Sciences  
Business  
Creative Arts & Design  
Ethics & Religion  
Education & Outreach

**12:15 PM – 1:15 PM**

Lunch

(Participants on their own;  
Judges luncheon 4<sup>th</sup> floor Reading Room)

**1:15 PM – 2:15 PM**

*Sasakawa Fellows*

Conducting Research Abroad  
(Room 138)

*Women in STEM at Howard University*

(Room 237/238)

*Research Opportunities*

(4<sup>th</sup> Floor Reading Room)

**2:15 – 4:30 PM**

*Poster Presentations*

Humanities  
Social Sciences  
Business  
Creative Arts & Design  
Ethics & Religion  
Education & Outreach

*Oral Presentations*

Physical Science & Engineering  
Translational & Clinical  
Computational & Modeling  
Biological & Biomedical Sciences

**5:00 PM**

Award Ceremony & Closing Reception

# ORAL PRESENTATIONS

## SESSION I

10:00 – 11:00 A.M. | ROOM 138A | HUMANITIES

Presenter: **Gabrielle Hall**, Undergraduate Student  
*The Ideals of Feminism in W.E.B Du Bois' Darkwater: Voices from within the Veil*  
Faculty Advisor: Dr. Samuel Doku

Presenter: **Aisha Daniels**, Undergraduate Student  
*Investigating the Themes of Afrocentrism and African Nationalism in W.E.B Du Bois' Darkwater: Voices from within the Veil*  
Faculty Advisor: Dr. Samuel Doku

Presenter: **Kate McMahon**, Graduate Student  
*A Sufficient Number": The Historic African American Community of Peterborough in Warren, Maine*

Faculty Advisor: Dr. Jeffrey Kerr-Ritchie  
Presenter: **Joel Rhone**, Undergraduate Student  
*Measuring the Stature of the Minority Perspective in Modern Literature*  
Faculty Advisor: Dr. Alla Tovaes

10:00 – 11:00 A.M. | ROOM 139 | HUMANITIES

Presenter: **Keenan Glover**, Undergraduate Student  
*Catalytic Words: Aida Cartagena Portalatín of the Dominican Republic Pioneers the Literary Discourse on Women and Racial Awareness in the African Diaspora*  
Faculty Advisor: Dr. Annette Dunzo

Presenter: **Alana Jones**, Undergraduate Student  
*Human Responses to Epidemics from Ancient Athens to Modern America*  
Faculty Advisor: Dr. Molly Levine

Presenter: **Kenyana (Ashley) Simmons**, Undergraduate Student  
*Parallels in Russian Fairy Tales*  
Faculty Advisor: Dr. Brunilda Lugo de Fabritz

10:00 – 11:00 A.M. | ROOM 202 | HUMANITIES

Presenter: **Justin Nalos**, Undergraduate Student  
*Sex and Satire: Responses of Asian American Writers to Stereotyped Identities*  
Faculty Advisor(s): Dr. Christopher Shinn

Presenter: **Taylor-Rae Collins-Headley**, Undergraduate Student  
*Sight Unseen: A Study of How Perception of an Interviewee during a Radio Broadcast Affects Perception of the Event Being Covered*  
Faculty Advisor: Dr. Kehbuma, Langmia

Presenter: **Alexis Shaw**, Undergraduate Student  
*The Russian Federation and Integration in the Modern World*  
Faculty Advisor: Dr. Brunilda Lugo de Fabritz

10:00 – 11:00 A.M. | ROOM 231 | SOCIAL SCIENCES

Presenter: **Ginger Jacobson (SBE)**  
*Living in a cancer cluster: Residential Coping Response to Speculation of Environmental Contamination*

Presenter: **Nicole DeLoatch (SBE)**  
*Decolonizing the Mind: Racial Revalorization & Self-Reconceptualization as Resistance to Epistemic Violence*

Presenter: **Crisitina Bañuelos (SBE)**  
*GABAergic Signaling Alterations Contribute to Impaired Working Memory in Aged F344 Rats*

Presenter: **Kelesha Nevers (SBE)**  
*The Effects of Victimization on Drug Use and Delinquency: The Impact of Self-derogation and Depression*

10:00 – 11:00 A.M. | ROOM 232 | EDUCATION & OUTREACH

Presenter: **Jerel Saul**, Undergraduate Student  
*Organizational Communication and its Effects on Howard University Students*  
Faculty Advisor: Dr. Kehbuma Langmia

Presenter: **Lennox Cowan**, Undergraduate Student  
*The Fundamental Theorem of Miller: An Examination of Kelly Miller's Deanship at Howard University*  
Faculty Advisor: Dr. Ida Jones

Presenter: **Judith Imoite**, Graduate Student  
*Acclimatization and Integration: An exploration of the experiences of the African immigrant teachers in the DC metropolitan area public schools*  
Faculty Advisor: Dr. Dawn Williams

Presenter: **Larry Sanders**, Undergraduate Student  
*An outdated system: The Need for Public Education Reform in Detroit, Michigan*  
Faculty Advisor: Dr. Marilyn Lashley



10:00 – 11:00 A.M. | ROOM 233 | ETHICS & RELIGION

Presenter: **Rhonda Rhea**, Graduate Student  
*Bridging the Gap of Silence: An Examination of the Book of Enoch and its Influence in the Development of Ethiopian and Early Christianity*

Presenter: **Dr. Brandon Hogan**, Junior Faculty/ Lecturer/ Instructor  
*Hegel on Crime, Self, and Community*

Presenter: **Dr. Zainab Alwani**, Junior Faculty/ Lecturer/ Instructor  
*The Role of Muslim Women Scholars in Family law Reform in Morocco*

Presenter: **Victoria Lockhart**, Undergraduate Student  
*Feminism*

10:00 – 11:00 A.M. | ROOM 234 | BUSINESS

Presenter: **Dr. Lucy Lim**, Junior Faculty/ Lecturer/ Instructor  
*Mentoring Experience, Perceived Benefits, and Impact on Current Job Ranking in African-American Accountants*

Presenter: **Dr. Maryam Khan**, Senior Faculty  
*Sustainability in the Restaurant Industry*

10:00 – 11:00 A.M. | ROOM 237/238 | EDUCATION & OUTREACH

Presenter: **Dr. Amy Yeboah**, Junior Faculty/ Lecturer/ Instructor  
*(Re)Inscribing Meaning: An Examination of the Effective Approaches, Adaptations and Improvisational Elements in Closing the Excellence Gap for Black Students*

Presenter: **Dr. Linda Thompson**, Junior Faculty/ Lecturer/ Instructor  
*Using Peer Educators to Address Childhood Obesity in the District of Columbia*

Presenter: **Dr. Jennifer Obi**  
*No Pain! Great Gain! Improving Pain Management in Howard University Hospital*

Presenter: **Dr. Jean Sebastien Purchas-Tulloch**, Senior Faculty  
*Bi-Lingual ESL Interfacing: Challenges and Triumphs Encountered and Surmounted in Rendering Tertiary Instruction*

10:00 – 11:00 A.M. | ROOM 239 | CREATIVE ARTS & DESIGN

Presenter: **Alexus Jones**, Undergraduate Student  
*The Native America Ghost Dance Movement of the 1890s influences on dance therapy practices of today*  
Faculty Advisor: Dr. Lela Sewell-Williams

Presenter: **Liana John**, Undergraduate Student  
*How One's Gender Identification Influences his or her Appearance and Major Selection*  
Faculty Advisor: Dr. Elka Stevens

Presenter: **Jordan Stewart**, Undergraduate Student  
*Uniting the Divided: Film as an Intervention for Rebuilding Family Relationships*  
Faculty Advisor: Dr. Kehbama Langmia

10:00 – 11:00 A.M. | ROOM 240 | SOCIAL SCIENCES

Presenter: **Olusina Senu-Oke**, Undergraduate Student  
*The Efficacy of Private Equity, Venture Capital, and Micro Finance in Stemming Economic Growth in Africa in the Absence of Robust Financial Markets*  
Faculty Advisor: Dr. Cyril Hunte

Presenter: **Carlsen Phillip**, Undergraduate Student  
*Who Contributes to Growth?*  
Faculty Advisor: Dr. Emily Blank

Presenter: **Chandra Bowden (SBE)**  
*Young, Opinionated and Fabulous: How Lifestyle and Values Influence Housing and Community Choices of Millennials*

Presenter: **Justin Hosbey (SBE)**  
*Banking on Disaster: Charter Schools and the Re-development Apparatus*

## SESSION II

11:15 A.M. – 12:15 P.M. ROOM 138A | SOCIAL SCIENCES

Presenter: **Charlotte Otabor**, Graduate Student  
*Demographic Change in the U.S. Labor Force*  
Faculty Advisor: Dr. Charles Betsey

Presenter: **Mudiwa Ford**, Undergraduate Student  
*Comparing Adult Recalls Across Televised Narratives*  
Faculty Advisor: Dr. Danielle Brown

Presenter: **Amber Walden**, Undergraduate Student  
*Convict Labor Practices in the United States and the Soviet Union: Convict Leasing and the GULAGs*  
Faculty Advisor: Dr. Brunilda Lugo de Fabritz

Presenter: **Alison Hollis**, Undergraduate Student  
*Is it Real(Istic); An Exploration of Beauty Standards relating to Hair*  
Faculty Advisor: Dr. Eleanor King

11:15 A.M. – 12:15 P.M. | ROOM 139 | SOCIAL SCIENCES

Presenter: **Peta-Gaye Bullock**, Undergraduate Student  
*Comparing Goal Structures According to Outcomes*  
Faculty Advisor: Dr. Danielle Brown

Presenter: **Christina M. Crowder**, Undergraduate Student  
*Understanding how concrete and abstract goals in stories impact narrations to wordless picture books*  
Faculty Advisor: Dr. Danielle Brown

Presenter: **Chynere Best**, Undergraduate Student  
*Caribbean Cultural Transmission: An Analysis of Second Generation West Indians*  
Faculty Advisor: Dr. Debra D. Roberts

Presenter: **Christian Dotson-Pierson**, Graduate Student  
*Media Representations of Athletes through Languages and Images*  
Faculty Advisor: Dr. Eric Walters

11:15 A.M. – 12:15 P.M. | ROOM 202 | SOCIAL SCIENCES

Presenter: **Alhaji Conteh**, Graduate Student  
*“Shining a Light on African Freedom Struggles: The Council on African Affairs’ Newsletter New Africa.”*  
Faculty Advisor: Dr. Quito Swan

Presenter: **Amber Davis**, Graduate Student  
*African Americans, Domestic Sex Trafficking, Pimping, Oppression, Culture*

Presenter: **Brandale Mills**, Graduate Student  
*Blurred Lines: The Multiracial World Wide Web*

Presenter: **Keadrick Peters**, Graduate Student  
*Bougie yet Black: A DuBoisian Perspective on Class Consciousness*

11:15 A.M. – 12:15 P.M. | ROOM 219 | SOCIAL SCIENCES

Presenter: **Olga Herren**, Graduate Student  
*Components of Spirituality and Religiosity in Studying the Executive Function of African Americans*  
Faculty Advisor: Dr. Denne Mwendwa

Presenter: **Jonathan Guzman**, Graduate Student  
*Coping Strategies for Stress among Howard University College Students*  
Faculty Advisor: Dr. Shirley Jackson

Presenter: **Brittany Dancy**, Graduate Student  
*Experiences of Children of Clergy: Identity Development and Psychological Well-Being*  
Faculty Advisor: Dr. Angela Ferguson

Presenter: **Leticia Williams**, Graduate Student  
*Finding the First Lady: An Application of Black Feminist Thought to the Construction and Negotiation of Michelle Obama's Identity*  
Faculty Advisor: Dr. Carolyn Stroman

11:15 A.M. – 12:15 P.M. | ROOM 231 | SOCIAL SCIENCES

Presenter: **Aitza Haddad**, Graduate Student  
*Human Trafficking as a Human Rights Violations: A Case Study of the Role of Mass Media and Technology on Human Trafficking in the Caribbean*

Presenter: **Candice Hodge**, Graduate Student  
*Is Anyone Listening? Analyzing Police Response to Domestic Violence Reports in the 21<sup>st</sup> Century*

Presenter: **Devlon Jackson**, Graduate Student  
*Medical Self-diagnosis and Internet Usage among African American College Student*  
Faculty Advisor: Dr. Carolyn Stroman

Presenter: **Lauren McGhee**, Graduate Student  
*Mindfulness: An Everyday Practice for Everyday Problems*  
Faculty Advisor: Dr. Angela Ferguson

11:15 A.M. – 12:15 P.M. | ROOM 232 | SOCIAL SCIENCES

Presenter: **Myra Ann Houser**, Graduate Student  
*Namibian Trials in South African Courts: The Trial of the Namibians and the Cassinga Detainees*  
Faculty Advisor: Dr. Jean-Michel Mabeko-Tali

Presenter: **Joshua Johnson**, Graduate Student  
*Oversights and bias: An Exploration of Assessment Norms*  
Faculty Advisor: Dr. Jules Harrell

Presenter: **Jean-Louis Philemon Ntang Beb**, Graduate Student  
*Parent Involvement: Parents of Children with Developmental Delays who Face Unique Barriers*  
Faculty Advisor: Dr. Rochelle Ford

11:15 A.M. – 12:15 P.M. | ROOM 233 | SOCIAL SCIENCES

Presenter: **Rita Jacobs**, Graduate Student  
*Protective Actions of African Americans during Extreme Heat*  
Faculty Advisor: Dr. Terri Adams-Fuller

Presenter: **Kym Wilson**, Graduate Student  
*Rainwater Harvesting – Increasing Safe Water Sources in the Rural Communities: Policy Agenda and Water Advocacy in Ghana*  
Faculty Advisor: Dr. Mbye Cham

Presenter: **Julie Orme**, Graduate Student  
*Sex Trafficking: Secondary Source Research*  
Faculty Advisor: Dr. Fariyal Ross-Sheriff

Presenter: **Wheeler Winstead**, Graduate Student  
*South-South Cooperation: The Role of Brazilian Investments in Shaping Agricultural Transformation and Development in Mozambique*  
Faculty Advisor: Dr. Mbye Cham

11:15 A.M. – 12:15 P.M. | ROOM 234 | SOCIAL SCIENCES

Presenter: **Ashley Lewis**  
*Strategic Silence, Neo-colonialism, and the Black Experience in the Fresh Prince of Bel-Air*

Presenter: **Juwanza McIntosh**, Graduate Student  
*The Cognitive Shift of the Oppressed*  
Faculty Advisor: Dr. Aaron Stills

Presenter: **Pearline Tyson**, Graduate Student  
*The War on Poverty 50 Years Later: Poverty and Inequality in the U.S. and a Globalized World*  
Faculty Advisor: Dr. Russell Edgar

Presenter: **Porsche M. Boddicker**, Graduate Student  
*Variations in Early Developing Goal Structure Understanding and Causal Inference Generation: An Update*  
Faculty Advisor: Dr. Danielle Brown

11:15 A.M. – 12:15 P.M. | ROOM 237/238 | SOCIAL SCIENCES

Presenter: **Elma Kaiser**, Graduate Student  
*Violence against Female Street Children in Bangladesh and their Survival Strategies*  
Faculty Advisor: Dr. Fariyal Ross-Sheriff

Presenter: **Jennifer Myers**, Graduate Student  
*War on PTSD: A Determinant Prevalence and Risk Analysis of Military-Related PTSD*  
Faculty Advisor: Dr. Alphonso Campbell

Presenter: **Monique Major**, Graduate Student  
*Why Should I Take A Swimming Class? Changing African American Attitudes towards Swimming*

Presenter: **Shaneda Destine**, Professional Student  
*Differences in Social Attitudes between African-American Black College Students and Non-African-American Black College Students*

11:15 A.M. – 12:15 P.M. | ROOM 239 | SOCIAL SCIENCES

Presenter: **Angel Mills**, Undergraduate Student  
*“Acting White”: A Transformation of Animosity to Admiration in Black Peer Groups*  
Faculty Advisor: Dr. Chukwuka Onwumechili

Presenter: **Atila Libultsi**, Undergraduate Student  
*An Epidemiological Application of Social Context on Child Mortality in Sub-Sahara Africa*  
Faculty Advisor: Dr. Arvilla Payne-Jackson

Presenter: **Zakya Goins-McCants**, Undergraduate Student  
*And Miles to Go Before We Sleep: Education Policy in Louisiana, 1979-2013*  
Faculty Advisor: Dr. Edna Medford

Presenter: **Ashley Hill**, Undergraduate Student  
*Breaking Invisible Bonds: Anorexia Nervosa and Bulimia Nervosa among African American Women*  
Faculty Advisor: Dr. Kamilah Woodson

11:15 A.M. – 12:15 P.M. | ROOM 240 | SOCIAL SCIENCES

Presenter: **Pavilya Appleberry**, Undergraduate Student  
*Centralized Science in the Soviet Union: Genetics and Michurinite Lysenkoism*  
Faculty Advisor: Dr. Brunilda Lugo de Fabritz

Presenter: **Alexis Boyd**, Undergraduate Student  
*Rhetoric and Homelessness: The Formidable Effects of Language on Social Conditions*  
Faculty Advisor: Dr. Dana Williams

Presenter: **Kiah Wayman**, Undergraduate Student  
*Talk to you later vs. TTYL*

Presenter: **Dr. Bahiyah Muhammad**, Junior Faculty  
*The Truth about Children of Incarcerated Parents*

12:15– 1:15 P.M. | LUNCH (on your own)

## SESSION III AND FORUMS

1:15 – 2:15 P.M. | ROOM 138A | SASAKAWA FELLOWS

Presenters: **Sasakawa Fellows**

*Social Responsibility in Solving the World's Complex Problems*

Faculty Advisor: Dr. Mika Kato

1:15-2:15 P.M. | ROOM 237/238

Presenters: **Women Faculty and Students in STEM**

HU ADVANCE-IT

Faculty Advisor: Dr. Sonya Smith

1:15-2:15 P.M. | READING ROOM

Presenters: **Agency and Corporate Representatives and Principal Investigators**

*Research Opportunities*

Moderated by: Dr. Gary Harris, Associate Provost for Research and  
Dean of Graduate Studies

## SESSION IV

2:30 – 3:15 P.M. | ROOM 138A | PHYSICAL SCIENCE AND ENGINEERING

Presenter: **Dr. Roberto DeLeo**, Junior Faculty

*Magnetoresistance in Normal Metals under a Strong Magnetic Field*

Presenter: **Dr. Mandoye Ndoye**, Post Doc/ Resident/ Fellow

*An Iterative  $l_1$ -Regularized Least-Squares Algorithm for  
Ground Penetrating Radar Imaging*

Presenter: **Dr. Jose Vega Guzman**, Graduate Student

*The Minimum-uncertainty Squeezed States for Simple Harmonic Oscillator*

2:30 – 3:15 P.M. | ROOM 138B | TRANSLATIONAL & CLINICAL

Presenter: **Brian Nwannunu**, Professional Student

*Spleen Preserving Distal Pancreatectomy: Is it worth it?*

Faculty Advisor: Dr. Terrence Fullum

Presenter: **Naomi Blocton**, Undergraduate Student

*Health Disparities in Cardiovascular Disease among African Americans*

Faculty Advisor: Dr. Avis Graham

2:15 – 3:15 P.M. | ROOM 139 | PHYSICAL SCIENCE AND ENGINEERING

Presenter: **Miriama Orange**, Graduate Student

*Nanoparticle Diffusion in Biofilm*

Faculty Advisor: Dr. Everette Joseph

Presenter: **Kimberly Curtis**, Graduate Student

*Polyethylenimine Polymer: A Dynamic Interplay of Hydrophobic, Charge, and Charging Effects*

Faculty Advisor: Dr. Preethi Chandran

Presenter: **Daniel Casimir**, Graduate Student

*Raman Spectroscopic & Molecular Dynamics Simulation Study of the Thermal Expansion of Single Walled Carbon Nanotubes*

Faculty Advisor: Dr. Prabhakar Misra

Presenter: **Sidi Maiga**, Graduate Student

*Simulations of Noble Gases Adsorbed on Graphene*

Faculty Advisor: Dr. Silvina Gatica

2:15 – 3:15 P.M. | ROOM 202 | PHYSICAL SCIENCE AND ENGINEERING

Presenter: **Henry Ogworonjo**, Graduate Student

*A MAP method for landmine and IED Detection using GPR Datasets*

Faculty Advisor: Dr. John Anderson

Presenter: **Mosissa Fayissa**, Graduate Student

*Fluorescence Nitric Oxide Sensor-based on Copper (II) Complex of 5-dimethylamino-naphthalene-1-sulfonic acid (2-pyridin-2-ylethyl)-pyridin-2-ylmethy amide*

Faculty Advisor: Dr. Vernon Morris

Presenter: **Moses Ukaoma**, Graduate Student

*An Investigation of Biotransformation and Bioaccumulation of Polychlorinated Biphenyls (PCBs) in Vermi-Bioreactor Systems with Earthworms*

Faculty Advisor(s): Dr. John Tharakan

Presenter: **Bokani Mtengi**, Graduate Student

*Heteroepitaxial Growth of Polycrystalline Diamond Films by Hot Filament Chemical Vapor Deposition for Device Application*

Faculty Advisor: Dr. Gary Harris



2:15 – 3:15 P.M. | ROOM 219 | TRANSLATIONAL & CLINICAL

Presenter: **Dr. Adeyinka Laiyemo**, Junior Faculty  
*Colorectal cancer screening among cancer survivors in the US*

Presenter: **Dr. Nancy Murphy**, Junior Faculty  
*Integrating Interdisciplinary Buprenorphine Treatment within HIV Primary Care: An Action Research Implementation Study*

Presenter: **Dr. Seyed Mehdi Nouraie**, Junior Faculty  
*Sickle Cell Crisis and Systemic Disease predict Hospital Readmission Rate in Patients with Sickle Cell Disease*

2:15 – 3:15 P.M. | ROOM 231 | PHYSICAL SCIENCE & ENGINEERING

Presenter: **Heather Battiste-Alleyne**, Graduate Student  
*Size Based Method for Selective Anammox Retention Low Solids Retention Time for Deammonification Systems*  
Faculty Advisor: Dr. Kimberly Jones

Presenter: **Nailah Brandy**, Graduate Student  
*Synthesis and Characterization of Novel Emetine Dithiocarbamate Ester Derivatives*  
Faculty Advisor: Dr. Oladapo Bakare

Presenter: **Raul Garcia-Sanchez**, Graduate Student  
*The Effects of Increasing Temperature and Humidity on the Raman Spectroscopy Features of WO<sub>3</sub> Materials*  
Faculty Advisor: Dr. Prabhakar Misra

2:15 – 3:15 P.M. | ROOM 232 | TRANSLATIONAL & CLINICAL

Presenter: **Dr. John Hwabejire**, Post Doc/ Resident/ Fellow  
*Body Mass Index (BMI) in Blunt Trauma Patients with Hemorrhagic Shock: Opposite Ends of the BMI Spectrum portend Poor Outcome*

Presenter: **Dr. Samuel Onyewu**, Post Doc/ Resident/ Fellow  
*Ethnic and Gender Disparity in Breast Cancer: A Review of African American Men*  
Faculty Advisor: Dr. Lori Wilson

Presenter: **Dr. Stefan Hemmings**, Post Doc/ Resident/ Fellow  
*Fluid Balance and Hemodynamic Management in a Patient with Septic Shock and Massive Post Obstructive Diuresis*

Presenter: **Dr. Christine Nembhard**, Post Doc/ Resident/ Fellow  
*Infection complicating Hemorrhagic Shock after Blunt Trauma: Risk Factors and Predictors of Mortality*

2:15 – 3:15 P.M. | ROOM 233 | TRANSLATIONAL & CLINICAL

Presenter: **Ifeanyi Nwokeabia**, Professional Student  
*Characterization of Colonic Adenoma with High Grade Dysplasia among African Americans*  
Faculty Advisor: Dr. Lori Wilson

Presenter: **Patrick H. Lam**, Professional Student  
*Hepatitis B and C among Liver Transplant Patients with Hepatocellular Cancer: Characteristics and Outcomes across Racial/Ethnic Groupings*  
Faculty Advisor: Dr. Lori Wilson

Presenter: **Babawande Adesibikan**, Professional Student  
*How Early Should 'Early' Laparoscopic Cholecystectomy be performed for Acute Cholecystitis?*

Presenter: **Dr. Candice Thompson**, Junior Faculty  
*Rates of Immediate Breast Reconstruction Post-Mastectomy: A Trend Analysis across Race/Ethnicity*

2:15-3:15 P.M. | ROOM 234 | BIO & BIOMEDICAL SCIENCES

Presenter: **Stephanie Purnell**, Professional Student  
*Tuberculosis and Warburgia Salutaris*

Presenter: **Herman Kamboj**, Professional Student  
*Central Nervous System De-myelination in Pediatric SIV Infection*

Presenter: **Hamid Saranjam**, Professional Student  
*SEMA3F Purification and its Role in in Vitro Lymphoangiogenesis.*

Presenter: **Dr. Furqan Sami**, Post Doc/ Resident/ Fellow  
*Direct Interaction of Flap Endonuclease 1 with RECQ1 Demonstrates a Conserved Association with Human RecQ Homologs*  
Faculty Advisor: Dr. Sudha Sharma

2:30 – 3:15 P.M. | ROOM 237/238 | PHYSICAL SCIENCE & ENGINEERING

Presenter: **Dr. Katharine Gurski**, Senior Faculty  
*The Role of Intermittent Preventive Treatment (IPT) and the Spread of Drug Resistance to Malaria: A Mathematical Approach*

Presenter: **Dr. Wayne Patterson**, Senior Faculty  
*Visual Keccak*

Presenter: **Preethi Chandran**, Junior Faculty  
*DNA Nanoshells*

2:15 – 3:15 P.M. | ROOM 239 | PHYSICAL SCIENCE & ENGINEERING

Presenter: **Jonnetta Bratcher**, Undergraduate Student  
*A Novel FPGA-Based Algorithm for Message Authentication  
Using Hybrid Encryption Scheme*  
Faculty Advisor: Dr. Wayne Patterson

Presenter: **Joshua Brown**, Undergraduate Student  
*Are Hydrogen Vehicles Still A Rational Investment?*  
Faculty Advisor: Dr. Lathan Smith

Presenter: **Roshil Paudyal**, Undergraduate Student  
*The Three Cases of Ternary Numbers*  
Faculty Advisor: Dr. Louis Shapiro

Presenter: **Ahna Beruk**, Undergraduate Student  
*Solutions for Wastewater Treatment in Rural Mining Communities*  
Faculty Advisor: Dr. Lorraine Fleming

2:15 – 3:15 P.M. | ROOM 240 | PHYSICAL SCIENCE & ENGINEERING

Presenter: **Camille Carter**, Undergraduate Student  
*Development of Optimal Data Fusion of 2D Laser Scanner and Camera for  
Rear View Gap Detection of an Autonomous Vehicle*  
Faculty Advisor: Dr. Silas Burris

Presenter: **Valerie Keene**, Undergraduate Student  
*Examining the Chemical and Biological Characteristics of Aerosols*  
Faculty Advisor: Dr. Vernon Morris

Presenter: **Kinyata Cooper**, Undergraduate Student  
*Inoculates and Their Effects on Anaerobic Biogas Production at  
Ruai Wastewater Treatment Plant*  
Faculty Advisor: Dr. Charles Hosten

Presenter: **Miah Davis**, Undergraduate Student  
*The Biochronicity of Regulatory Networks during Cellulose Fermentation  
in Neurospora crassa*  
Faculty Advisor: Charles Hosten

## SESSION V

3:30 – 4:30 P.M. | ROOM 138A | BIO & BIOMEDICAL SCIENCES

Presenters: **Chandler Puritty**, Undergraduate Student  
*Bathyal Meiufaunal Community Structure in Relation to  
Oxygen Gradients off Costa Rica*  
Faculty Advisor: Dr. Mary McKenna

Presenter: **Kyle Burton**, Undergraduate Student  
*Quantitative Analysis of Hippocampal Neurons in Aged Vervet Non-Human  
Primates: A Potential Model of Early Alzheimer's Disease*  
Faculty Advisor: Dr. Mark Burke

Presenter: **Nia Johnson**, Undergraduate Student  
*Dark Response of Marine Cyanoacteria*  
Faculty Advisor: Dr. Mary McKenna

Presenter: **Jerome Lawrence**, Undergraduate Student  
*The Effects of SIV on the Blood Brain Barrier*  
Faculty Advisor: Dr. Mark Burke

3:30-4:30 P.M. | ROOM 138B | BIO & BIOMEDICAL SCIENCES

Presenter: **Dr. Xingxun Liu**, Post Doc/ Resident/ Fellow  
*Effects of Inorganic Fillers on the Thermal and Mechanical Properties  
of Poly (lactic acid)*

Presenter: **Dr. Sergei Nekhai**, Senior Faculty  
*Pilot Proteomic Profile of Tears from Juvenile Idiopathic  
Arthritis Patients with Uveitis*

Presenter: **Dr. Rajni Goel**, Senior Faculty  
*Secure Electronic Medical Records (EMR): Reducing Health Disparities*

Presenter: **Dr. Tongxin Wang**, Senior Faculty  
*Biomimetic Growing "Tooth" on Hydroxyapatite*

3:30 – 4:30 P.M. | ROOM 139 | BIO & BIOMEDICAL SCIENCES

Presenter: **Kia Byrd**, Undergraduate Student  
*The Effects of I $\kappa$ B Kinase Inhibitors on Cytokine Expression in  
Immune Cells of Huntington's disease Patients*  
Faculty Advisor: Dr. Winston Anderson

Presenter: **DeAna Smalls**, Undergraduate Student  
*Receptor for Activated C Kinase 1 in *Saccharomyces Cerevisiae* regulates  
Salt Stress Resistance Pathway*  
Faculty Advisor: Hemayet Ullah

Presenter: **Apri Gleaves**, Undergraduate Student  
*Antimicrobial Peptide-Metalloporphyrin Constructs for Bacterial Cell Detection*  
Faculty Advisor: Dr. Hamayet Ullah

Presenter: **Allison Hester**, Undergraduate Student  
*Cleansing of Biogas through Various Routes while effectively and safely removing H<sub>2</sub>s and CO<sub>2</sub>*  
Faculty Advisor: Dr. Winston Anderson

3:30 – 4:30 P.M. | ROOM 202 | BIO & BIOMEDICAL SCIENCES

Presenter: **Sheena Newson**, Graduate Student  
*Code Switching Awareness and Behavior in African American College Students*  
Faculty Advisor: Dr. Shirley Jackson

Presenter: **Gabrielle Styles**, Graduate Student  
*Health Beliefs, Performance Patterns and Activity Levels Amongst Normal Weight, Overweight, and Obese College Females Background, methods results and conclusions*  
Faculty Advisor: Dr. Shirley Jackson

Presenter: **Cyndy McGuire**, Undergraduate Student  
*Applications of Paper MEMS*  
Faculty Advisor: Dr. William Rose

Presenter: **Lauren Wells**, Undergraduate Student  
*Silver Chloride Encapsulated Poly Hydroxybutyrate (PHBV) for Potential Use in Bone Tissue Engineering*  
Faculty Advisor: Dr. Dharmaraj Raghavan

3:30 – 4:30 P.M. | ROOM 219 | BIO & BIOMEDICAL SCIENCES

Presenter: **Ermias Tilahun**, Graduate Student  
*Assessment of Nutritional Status and Associated Factors among Children with HIV/AIDS in Ethiopia*

Presenter: **Kimberly Mason**, Graduate Student  
*Genetic Variation within the Vitamin D Binding Protein and its association with Prostate Cancer risk in African American Men*  
Faculty Advisor: Dr. Tamaro Hudson

Presenter: **Shenye Hu**, Graduate Student  
*Mechanism of Cyclooxygenase-2 Inhibition by Salvonolic Acid B*  
Faculty Advisor: Dr. Xinbin Gu

Presenter: **Douglas Mansell**, Graduate Student  
*Vitamin D and Glucocorticoids Interact To Reduce Ubiquitin C in Asthmatic Airway Epithelium*  
Faculty Advisor: Dr. John Stubbs

3:30 – 4:30 P.M. | ROOM 231 | COMPUTATIONAL & MODELING

Presenter: **Ayodele Taylor**, Graduate Student  
*Automated Detection of Social Structure from Transcripts of Conversations*  
Faculty Advisor: Dr. Mugizi Rwebangira

Presenter: **Amber Rideout**, Undergraduate Student  
*Trends in Maternal Mortality and Pregnancy-related Death in the United States over a six-year Period*  
Faculty Advisor(s): Dr. Deneen Long-White

Presenter: **Lauren Prince**, Undergraduate Student  
*Using an SIR Model to Understand the Conditions That Cause Staphylococcus Aureus to Develop Resistance to Certain Treatments*  
Faculty Advisor: Dr. Katharine Gurski

3:30 – 4:30 P.M. | ROOM 232 | BIO & BIOMEDICAL SCIENCES

Presenter: **Ambria McDonald**, Undergraduate Student  
*Do Birds sing at a Higher Pitch, or is it just a Matter of Measurement?*  
Faculty Advisor: Dr. George Middendorf

Presenter: **Shruthi Shyamala**, Undergraduate Student  
*Isolation of Phage Milania*  
Faculty Advisor: Dr. Leon Dickson

Presenter: **Alyssa Buchanan**, Undergraduate Student  
*Optimization of Sorbitols and Softeners in Fruit Gum*  
Faculty Advisor: Dr. Charles Hosten

Presenter: **Kendra Jones**, Undergraduate Student  
*Sustainability through Soap: Small-Scale Solutions for Large-Scale Problems*  
Faculty Advisor: Dr. Wayne Patterson

3:30 – 4:30 P.M. | ROOM 233 | BIO & BIOMEDICAL SCIENCES

Presenter: **Priscilla Okunji**, Undergraduate Student  
*Determinants of Mortality Rate in Diabetic Myocardial Infarction Inpatients*

Presenter: **Ines Kafando**, Undergraduate Student  
*Effects of Serratia marcescens on Pieris rapae Larvae*  
Faculty Advisor: Dr. Courtney Robinson

Presenter: **Nailah Seale**, Undergraduate Student  
*Investigating The Role of Cerebral Hypoxia in The Development of Cerebral Malaria*  
Faculty Advisor: Dr. Pedro Cabrales

Presenter: **Dr. Nisha Branch**  
*Fatal Esophageal Bleeding following Endoscopic Stenting*

3:30 – 4:30 P.M. | ROOM 234 | BIO & BIOMEDICAL SCIENCES

Presenter: **Mamatha Garige**, Graduate Student  
*Curcumin Exerts an Inhibitory Effect on Growth and Development of Dictyostelium discoideum Amoeba*  
Faculty Advisor: Dr. Eric Walters

Presenter: **Eyob Kebede**, Graduate Student  
*Essential Oils of Myrtus communis L. Produce a Non-sedating Anxiolytic Effect in Mice Model of Anxiety*

Presenter: **Olatilewa Denloye**, Graduate Student  
*Exploring the Relationship between Air Quality and Urban Vegetation across Demographics in Washington DC*  
Faculty Advisor: Dr. George Middendorf

Presenter: **Stevland Charles**, Graduate Student  
*The Effects of Island Size on the Biodiversity of Lizards in Trinidad and Tobago*  
Faculty Advisor: Dr. George Middendorf

3:30 – 4:30 P.M. | ROOM 237/238 | BIO & BIOMEDICAL SCIENCES

Presenter: **Dr. Xiaowu Pang**, Junior Faculty  
*Development of Dengue Pseudoinfectious Virus as HPV Vaccine Candidate*

Presenter: **Dr. Pradeep Karla**, Junior Faculty  
*Discovery of HIV Drug Efflux Transporters on Primary Human CD4+ T Cells*

Presenter: **Dr. Gezahegn Tolla**, Junior Faculty  
*Inflammasome Sensors in Murine Resistance to Toxoplasma gondii*

Presenter: **Dr. Karl Thompson**, Junior Faculty  
*NsrR regulation of Small RNA RybB and RpoE in E. coli*

3:30 – 4:30 P.M. | ROOM 239 | BIO & BIOMEDICAL SCIENCES

Presenter: **Dr. Anna Allen**, Junior Faculty  
*Role of the Inhibitory Kinase WEE-1.3 in regulating the Meiotic Cell Cycle and Fertility in C. elegans*

Presenter: **Dr. Zaki Sherif**, Junior Faculty  
*The Roles of DLL4 and CASC5 in Tumorigenesis/ Li-Fraumeni Syndrome*

Presenter: **Dr. Aniebiet-Abasil Udofia**, Post Doc/ Resident/ Fellow  
*Anatomic Physcal Distance about the Knee in Skeletally Immature Patients*

Presenter: **Dr. Yonda Lei**, Post Doc/ Resident/ Fellow  
*Biomimetic Polymer for Tooth Care*  
Faculty Advisor: Tongxin Wang

Presenter: **Dr. Assya Pascalev**, Senior Faculty  
*Clinical Research in Vulnerable Populations with Chronic Conditions:  
The Patient's Perspective*

Presenter: **Dr. Brian Laurence**, Senior Faculty  
*Dental caries and Dental Infections Increase the Likelihood of  
Hospital Admission in Patients with Pneumonia*

Presenter: **Dr. Paul Wang**, Senior Faculty  
*Introduction of Howard University Molecular Imaging Laboratory*

Presenter: **Dr. William Lawson**, Senior Faculty  
*Mood Disorders in Opiate-dependent Substance Abusers with  
Correctional system Involvement*



# Poster Exhibition

**Dr. Mohammed Amine Achhal****El Kadmiri**

Post Doc/ Resident/ Fellow,  
Translational & Clinical  
*Recurrent Posterior Reversible  
Encephalopathy Syndrome in a patient  
with HIV infection*

**Dr. Akeem Adebogun**

Post Doc/ Resident/ Fellow,  
Translational & Clinical  
*Mystery in the Bone*

**Christianah Ademuwagun**

Undergraduate Student, Bio & Biomedical  
*Bacteriophages (Phages) Versus Bacteria*  
Faculty Advisor: Dr. Courtney Robinson

**Dr. Simeon Adesina**

Junior Faculty/ Lecturer/ Instructor,  
Bio & Biomedical  
*Synthesis, characterization and biological  
activity of paclitaxel-loaded, poly  
(lactide)-based nanoparticles*

**Olalekan Adewuyi**

Graduate Student, Physical Sciences  
& Engineering  
*Surface Phonon-Polariton-Assisted  
Thermal Radiation Transport in a  
One Dimensional Nanoparticle Chain*  
Faculty Advisor: Dr. James Hammonds

**Elena Adjei**

Graduate Student, Bio & Biomedical  
*Mass Spectrometry of Urine Proteins for  
Early Detection of Renal Complications in  
Sickle Cell Disease.*

**Jennifer Aka**

Professional Student, Translational & Clinical  
*Benchmarking of CXC Chemokine  
Receptors to Assist Ligand Discovery*  
Faculty Advisor: Dr. Xiang Wang

**Ameenat Akeeb**

Professional Student, Translational & Clinical  
*Adverse Childhood Experiences and Sleep  
Disturbance in Trauma Exposed Youth*

**Joanna Akinlosotu**

Undergraduate Student, Bio & Biomedical  
*Small Compounds targeting Arabidopsis  
RACK1A protein regulate diverse  
Environmental Stress resistance in crops*  
Faculty Advisor: Dr. Hemayet Ullah

**Ann-Marie Ako-Adounvo**

Graduate Student, Translational & Clinical  
*Development and testing of a buffered  
thermo-reversible gel containing  
Tenofovir-loaded poly (lactic-co-glycolic)  
acid nanoparticles*  
Faculty Advisor: Dr. Pradeep Karla

**Suzanne Al- Hamad**

Professional Student, Bio & Biomedical  
*Locked- in Syndrome Secondary to  
Post- Infectious Encephalomyelitis*  
Faculty Advisor: Dr. Mohankumar Kurukumbi

**Dr. Batul Al-Zubeidy**

Post Doc/ Resident/ Fellow,  
Bio & Biomedical  
*Lower Extremity Arterial Reconstruction  
in Patients Older than 80*

**Dr. Tatiana Ammosova**

Junior Faculty/ Lecturer/ Instructor,  
Bio & Biomedical  
*PEDF Prevents LPS-induced Apoptosis in  
Renal Endothelial Cells and Ameliorates  
Renal Injury in the Mouse Model of  
LPS-induced Acute Kidney Injury*

**Anietie Andy**

Graduate Student, Computation & Modeling  
*Exploiting Synonyms to improve Question  
and Answering Systems*  
Faculty Advisor: Dr. Robert Rwebangira

**Kunal Angra**

Professional Student, Translational & Clinical  
*Xeroderma Pigmentosum Group C in a  
Patient of Amish Descent*

**Dr. Chibuikwe Anokwute**

Post Doc/ Resident/ Fellow,  
Translational & Clinical  
*Presentation of a rare parotid gland tumor  
in an adult male patient*

**Dr. Miranda Armour-Chelu**

Junior Faculty/ Lecturer/ Instructor,  
Translational & Clinical  
*Frequency of abdominal aortic aneurysms  
likely underestimated in US*

**Barun Aryal**

Professional Student, Translational & Clinical  
*CT and MR imaging of Coronary Arteries:  
Beyond Atherosclerosis*  
Faculty Advisor: Dr. Andre Duerinckx

**Felix Asamoah-Darko**

**Professional Student, Bio & Biomedical**  
*Design and Synthesis of a Stimuli-  
Responsive Polymer for Site-Specific  
Nanoparticle Delivery of siRNA*  
Faculty Advisor: Dr. Simeon Adesina

**Dr. Hakeem Ayinde**

**Post Doc/ Resident/ Fellow,  
Bio & Biomedical**  
*A case of acute coronary syndrome  
associated with phencyclidine use*  
Faculty Advisor: Dr. Prafulla Mehrotra

**Nere Ayu**

**Graduate Student, Social Sciences**  
*Exploring Barriers and Cultural Assets  
as Predictors of Psychosocial Adjustment  
among African American Youth in  
Out-of-Home Care*  
Faculty Advisor: Dr. Debra Roberts

**Dr. Dilhana Badurdeen**

Post Doc/ Resident/ Fellow,  
Translational & Clinical  
*Mortality among Underserved Patients  
with Cirrhosis admitted for  
Upper GI Bleeding*

**Rotimi Bakare**

Graduate Student, Physical Sciences  
& Engineering  
*Synthesis and Characterization of  
Collagen Grafted Poly(hydroxybutyrate-  
valerate) (PHBV) Scaffold for Loading of  
Bovine Serum Albumin Capped Silver (Ag/  
BSA) Nanoparticles in the Potential Use of  
Tissue Engineering Application*  
Faculty Advisor: Dr. Dharmaraj Raghavan

**Dr. Zebalda Bamji**

Post Doc/ Resident/ Fellow,  
Bio & Biomedical  
*Signal transduction profiling for novel  
dithiocarbamate analogs of emetine as  
potential chemotherapeutic agents*  
Faculty Advisor: Dr. Robert Copeland Jr.

**Jonathan Barthe**

Undergraduate Student,  
Translational & Clinical  
*Improving the nutritional status of patients  
with dementia and Alzheimer's disease:  
A dietetic perspective*  
Faculty Advisor: Dr. Chimene Castor

**Dr. Abinet Bezarede**

Post Doc/ Resident/ Fellow,  
Bio & Biomedical  
*Pulmonary Function Abnormalities and  
Human Immune Deficiency Virus Infection  
In The Era of Antiretroviral Therapy*  
Faculty Advisor: Dr. Alem Mehari

**Dr. Laurie Blackman Thompson**

Junior Faculty/ Lecturer/ Instructor,  
Bio & Biomedical  
*"Getting in the Door" A Case Study of  
Employment Challenges*

**Jasmine Blackmon**

Undergraduate Student, Bio & Biomedical  
*Nicotinamide Adenine Dinucleotide  
Phosphate Oxidase subunit-4 (Nox-4)  
and Peroxisome Proliferator Activated  
Receptor (PPAR) -  $\hat{I}\pm$  expression  
in Human Primary Renal Proximal  
Tubule Epithelial Cells is increased by  
Angiotensin II*  
Faculty Advisor: Dr. Dexter Lee

**Ruby Boateng**

Graduate Student, Bio & Biomedical  
*Characterization of the role of *etr-1*  
in the Meiotic Cell Cycle*  
Faculty Advisor: Dr. Anna Allen

**Dr. Hassan Brim**

Junior Faculty/ Lecturer/ Instructor,  
Bio & Biomedical  
*Metagenomic analysis of colon cancer  
tumors from African American patients*

**Antonya Bruno**

Undergraduate Student, Social Sciences  
*Punch First Ask Questions Later: Reality  
Television's Effect on College-aged  
Women's Conflict Resolution Skills*  
Faculty Advisor: Dr. Audrey Byrd

**Silas Burris**

Graduate Student, Social Sciences  
*Comparing Adult Recalls of Televised  
Narratives According to Goal Structure*  
Faculty Advisor: Dr. Danielle Brown

**Kelley Butler**

Undergraduate Student, Bio & Biomedical  
*Measuring the Alignment Response of  
Graphite in a Magnetic Field*  
Faculty Advisor: Dr. Bin Hu

**Desiree Bygrave**

Graduate Student, Social Sciences  
*Eating Behavior, Inflammation and  
Cognitive Associations among  
African Americans*  
Faculty Advisor: Dr. Alfonso Campbell

**Dr. Cedrina Calder**

Post Doc/ Resident/ Fellow,  
Translational & Clinical  
*Open versus Laparoscopic Appendectomy  
in Pregnant Patients: a review of the  
National Surgical Quality Improvement  
Program database*  
Faculty Advisor: Dr. Terrance Fullum

**Marcia Calloway**

Graduate Student, Social Sciences  
*Comparing Four Books According to  
Types of Inferences*  
Faculty Advisor: Dr. Danielle Brown

**Shauna-Gaye Campbell**

Graduate Student, Physical Sciences  
& Engineering  
*Column Studies of Fate and Transport of  
Titanium Dioxide and Silver Nanoparticles  
from Biosolids through Porous Media*  
Faculty Advisor: Dr. Kimberly Jones

**Shayla Campbell**

Graduate Student, Translational & Clinical  
*Fear of falling and community access  
routines among older adults in  
Washington, D.C.*  
Faculty Advisor: Dr. Shirley Jackson

**Alicia Clement**

Undergraduate Student, Bio & Biomedical  
*Nutrition Management of End Stage Renal  
Disease: Clinical Nutrition Case Study*  
Faculty Advisor: Dr. Chimene Castor

**Rachel Darko**

Undergraduate Student, Bio & Biomedical  
*Characterization of Mycobacteriophages  
Abena and Revitiligo*  
Faculty Advisor: Dr. Courtney Robinson

**Cory Davis**

Graduate Student, Physical Sciences  
& Engineering  
*Synthesis of Two Nanoparticle-Polymer  
Composite Systems with Tunable Optical  
Phonon Mode Transmission: SiC-, and  
SiO<sub>2</sub>-Polyethylene*  
Faculty Advisor: Dr. James Hammonds

**Alanna Diggs**

Undergraduate Student, Bio & Biomedical  
*Examining the Biomarkers of  
Methylnicrobium Alcaliphium 20Z*  
Faculty Advisor: Dr. Terracita Powell

**Victoria Dillard**

Undergraduate Student, Physical Sciences  
& Engineering  
*Optimization of Biogas Production of  
Conditions using Pilot Scale Mesophilic  
and Thermophilic Anaerobic Digesters*  
Faculty Advisor: Dr. Tiffany Lathan-Smith

**Kierra Dotson**

Professional Student, Education  
& Outreach  
*Evaluation of Professionalism Culture  
Post-implementation of an Innovative  
Professional Development Program*  
Faculty Advisor: Dr. Oluwaranti Akiyode

**Michelle Dovil**

Graduate Student, Social Sciences  
*Deconstructing Disasters: A Critical  
Analysis of Hurricane Katrina*  
Faculty Advisor: Dr. Terri Adams-Fuller

**Shanu Eapen**

Professional Student, Education  
& Outreach  
*Senior Year Pharmacy Student's  
Opinion and Knowledge of  
New Treatment Guidelines*  
Faculty Advisor: Dr. Bisrat Hailemeskel

**Alexandria Edwards**

Professional Student, Education & Outreach  
*Evaluation of assessment tools utilized  
in the experiential program:  
A decade in review*  
Faculty Advisor: Dr. Salome Weaver

**Rita Egekenze**

Graduate Student, Physical Sciences  
& Engineering  
*Manganese Complexes of Schiff-Base and  
Reduced Schiff-Base Ligands: Synthesis,  
Characterization and Use in epoxidation  
of Olefins with H<sub>2</sub>O<sub>2</sub>*  
Faculty Advisor: Dr. Yilma Gultneh

**Dawit Eguale**

Professional Student, Bio & Biomedical  
*Useful Anti-screening Tools of  
Human Ether-a-Go-Go Related Gene  
(hERG) inhibitors for Cardiovascular  
Toxicity Prediction*  
Faculty Advisor: Dr. Xiang Wang

**Amanda ElBassiouny**

Graduate Student, Social Sciences  
*Moral Identity Salience Produces  
More Positive Evaluations of Targets  
While Religious Salience Increases  
Negative Assessment*  
Faculty Advisor: Dr. Lloyd Sloan

**Dr. Nkechi Enwerem**

Senior Faculty, Social Sciences  
*Knowledge and awareness of food and  
drug interactions (FDI) among nurses*

**Dr. Earl B. Ettienne**

Junior Faculty/ Lecturer/ Instructor,  
Translational & Clinical  
*Clinical Decision Support and  
Pharmacogenomic Testing in  
Ethnically Diverse Major Depressive  
Disorder Patients*

**Fortune Ezemobi**

Undergraduate Student, Bio & Biomedical  
*Synthesis and X-Ray Diffraction Studies of  
Imidooxy Derivatives to Treat Traumatic  
Brain Injury*  
Faculty Advisor: Dr. Dr. Raymond Butcher

**Mame Fall**

Undergraduate Student, Physical Sciences  
& Engineering  
*Implementing Safe Cooking Methods  
in Senegal*  
Faculty Advisor: Dr. Lorraine Fleming

**Dr. Yayin Fang**

Junior Faculty/ Lecturer/ Instructor,  
Computation & Modeling  
*Protein Structure Prediction of  
TrpE Site of Anthranilate Synthase*

**Taryn Finley**

Undergraduate Student, Social Sciences  
*It's Written in Black & White: The Effects  
of the Rhetoric in Women's Magazines on  
African American*  
Faculty Advisor: Dr. Kehbuma Langmia

**Maurice Fluit**

Graduate Student, Translational & Clinical  
*An Evidence Based Review for Ethnic  
Differences in Baseline HOMA-IR Values*  
Faculty Advisor: Dr. Kanwal Gambhir

**Kenisha Ford**

Graduate Student, Physical Sciences  
& Engineering  
*Classifying Nanomaterials Using  
Raman Spectroscopy*  
Faculty Advisor: Dr. Marcus Alfred

**Dr. Rochelle Ford**

Senior Faculty, Education & Outreach  
*Jumpstart: Case study of service achieving  
general education learning outcomes*

**Ariel Gaines**

Undergraduate Student, Bio & Biomedical  
*Supernumerary Centrosomes Contribute to Increase in Cell Motility for Cancer Metastasis*

Faculty Advisor: Dr. Winston Anderson

**Dr. Charu Gandotra**

Junior Faculty/ Lecturer/ Instructor,  
Translational & Clinical  
*Feasibility of 2-D Echocardiography to Assess Right Ventricle in a Morbidly Obese African American Female Cohort*

**Felicia Gangloff-Bailey**

Graduate Student, Education & Outreach  
*Hip Hop Music in the Classroom: A Motivational Tool for African American Student Success in School?*

Faculty Advisor: Dr. Kimberley Freeman

**Donnesha Gibson**

Graduate Student, Social Sciences  
*Intersection of Race and Gender Identities in the Workplace: The Effects and Coping Behaviors among Professional Black Women*

Faculty Advisor: Dr. Kamilah Woodson

**Amber Gilbert**

Professional Student, Bio & Biomedical  
*Salivary Biomarkers in African American Type-II Diabetic Patients*

Faculty Advisor: Dr. Xinbin Gu

**Onyeka Godwin**

Graduate Student, Bio & Biomedical  
*Cost-Effectiveness Analysis of two Antiretroviral Therapies for Children with HIV in Resource-Constrained Areas with Peripartum Nevirapine Exposure from the Perspective of Payers*

Faculty Advisor: Dr. Earl Ettienne

**Dr. Avis Graham**

Junior Faculty/ Lecturer/ Instructor,  
Education & Outreach  
*Community Voices for Health Expansion Project*

**Dr. Lennox Graham**

Junior Faculty/ Lecturer/ Instructor,  
Education & Outreach  
*Relationship Impact and African American Males' Response to Health Care Practitioner Recommendation*

**Gina Greenidge**

Graduate Student, Physical Sciences & Engineering  
*Single Layer Graphene as Nitrogen Oxide Gas Detectors*

Faculty Advisor: Dr. Joshua Halpern

**Dr. Tahmineh Haidary**

Post Doc/ Resident/ Fellow,  
Translational & Clinical  
*Plasma MACC1: a surrogate for metastatic potential in pre-neoplastic colonic lesions in African Americans*

**Leah Hairston**

Undergraduate Student, Humanities  
*The Aftermath of the Guatemalan Civil War: Psychological Implications and Consequent Impacts on the Social, Educational and Political Opportunities of Women*

Faculty Advisor: Dr. Mary Roof

**Thomas Hampton**

Graduate Student, Social Sciences  
*Effects of Lending Competition and Regulation on Housing Finance in the South-Atlantic Metropolitan Statistical Area*

Faculty Advisor: Dr. Mika Kato

**Dr. Barbara Harland**

Senior Faculty, Bio & Biomedical  
*Chromium +3 as a Therapy for Diabetes Type 2*

**Sally Hassan**

Graduate Student, Translational & Clinical  
*Ulcerative Colitis and risk of Adenoma in African Americans*

Faculty Advisor: Dr. Hassan Ahktorab

**Shanae Henry**

Undergraduate Student, Bio & Biomedical  
*Can binge eating cause the development of hypertension?*  
Faculty Advisor: Dr. Kimberlei Richardson

**Brittany Hill**

Professional Student, Bio & Biomedical  
*The association between health literacy and medication adherence in the HIV population*

**Glynn Hill**

Undergraduate Student, Physical Sciences & Engineering  
*Geo-engineering*

**Charnel Hollier**

Graduate Student, Social Sciences  
*The Effect of Hair Texture, Skin Tone, and Body Shape on Maladaptive Eating Behaviors among African American Women*  
Faculty Advisor: Dr. Kamilah Woodson

**Amanda Holmes**

Undergraduate Student, Bio & Biomedical  
*Reduction of Immature Neurons in the Amygdala of Pediatric SIV-Infection*  
Faculty Advisor: Dr. Mark Burke

**Janelle Holmes**

Undergraduate Student, Physical Sciences & Engineering  
*Low-Gravity Liquid Gas Contactor*  
Faculty Advisor: Dr. Prabhakar Misra

**Kelli Hunnicut**

Undergraduate Student, Bio & Biomedical  
*Nicotinamide Adenine Dinucleotide Phosphate Oxidase subunit-4 (Nox-4) expression in the kidney of Peroxisome Proliferator Activated Receptor - alpha knockout mice during Angiotensin II-induced Hypertension*  
Faculty Advisor: Dr. Dexter Lee

**Sheena Hutchinson**

Professional Student, Ethics & Religion  
*Microfinance: The New Storehouse in Our Contemporary Society*

**Nabil Idris**

Graduate Student, Bio & Biomedical  
*Synthesis and Characterization of Phenylthiourea Analogs of Emetine*  
Faculty Advisor: Dr. Dr. Oladapo Bakare

**Ayobami Idubor**

Graduate Student, Physical Sciences & Engineering  
*Modified Back-Projection Algorithm for Landmine Detection*  
Faculty Advisor: Dr. Mihai Dimian

**Efosa Igbinigun**

Graduate Student, Physical Sciences & Engineering  
*Novel Graphene-Oxide Functionalized Polyethersulfone (PES) Membrane: Fabrication, Characterization and Anti-fouling Behavior*  
Faculty Advisor: Dr. Vernon Morris

**Lotanna Ikeotuonye**

Undergraduate Student, Bio & Biomedical  
*Mathematical Analysis Modeling of Malaria Transmission in Nigeria*  
Faculty Advisor: Dr. Katharine Gurski

**Akira Isaac**

Undergraduate Student, Bio & Biomedical  
*Isolation of a Unique Mycobacteriophage KiKi*  
Faculty Advisor: Dr. Leon Dickson

**Andrey Ivanov**

Post Doc/ Resident/ Fellow,  
Bio & Biomedical  
*The Q248H Mutation Prevents Ferroportin Ubiquitination*  
Faculty Advisor: Dr. Sergei Nekhai

**Osi Iyalomhe**

Professional Student, Translational & Clinical  
*Aerobic exercise-induced gene expression changes in aging individuals with mild cognitive impairment*  
Faculty Advisor: Dr. Thomas Obisesan

**Dr. Juhi Jain**

Post Doc/ Resident/ Fellow,  
Bio & Biomedical  
*Vitiligo in Hepatitis C patient on Interferon treatment*

**Manjot Jassal**

Professional Student, Translational & Clinical  
*Sleep Fear – A Potentially Modifiable  
Factor Contributing to Nocturnal ANS  
Arousal in Urban Minorities*  
Faculty Advisor: Dr. Thomas Mellman

**Porscha Johnson**

Professional Student, Education & Outreach  
*Professionalism Among Professional  
Health Sciences Students*  
Faculty Advisor: Dr. Oluwaranti Akiyode

**Octavia Jordan**

Graduate Student, Translational & Clinical  
*Evaluating the relationship of BMI and  
CD4 count in an HIV infected population*  
Faculty Advisor: Dr. Monika Daftary

**Jasmine Joseph-Morris**

Undergraduate Student, Social Sciences  
*Development of a preliminary database  
for the Cobb Collection of Human  
Skeletal Remains*  
Faculty Advisor: Dr. Fatima Jackson

**Bisola Kamara**

Undergraduate Student, Computation  
& Modeling  
*Combining Statistical and Example Based  
Machine Translation*  
Faculty Advisor: Dr. Mugizi Rwebangira

**Dr. Vandana Kansal**

Post Doc/ Resident/ Fellow,  
Translational & Clinical  
*Is there an association between  
Colonic Neoplasia and AF in AAs?*

**Sakshi Kaul**

Professional Student, Bio & Biomedical  
*Uncommon radiological findings of  
CNS diseases in HIV patients*  
Faculty Advisor: Dr. Mohan Kurukumbi

**Gurpreet Kaur**

Graduate Student, Physical Sciences  
& Engineering  
*Growth and Characterization of  
Graphene on SiC Substrates*  
Faculty Advisor: Dr. Gary Harris

**Lorna Koumou**

Undergraduate Student, Bio & Biomedical  
*Analysis of the Microbial Component of  
Senegalese Dust*  
Faculty Advisor: Dr. Courtney Robinson

**Denna Kowalek**

Undergraduate Student, Social Sciences  
*Hurricane Sandy: Applying the  
CAUSE model in a content analysis  
of Instagram photos to determine Risk  
Communication practices*  
Faculty Advisor: Dr. Dr. Carolyn Stroman

**Dr. Krishna Kumar**

Senior Faculty, Bio & Biomedical  
*Functional Solid Lipid Nanoparticles  
using a Fluorescent Molecule for Targeted  
Delivery to HIV-1 Infected Cells*

**Namita Kumari**

Post Doc/ Resident/ Fellow,  
Bio & Biomedical  
*Molecular Mechanism of  
HIV-1 Restriction in Sickle Cell Disease:  
Induction of HIF-1 $\alpha$  and p21 by  
Ferroportin Mediated Iron Export*

**Amanda Lam**

Professional Student, Translational & Clinical  
*Pharmacotherapy and Management of  
Asthma among Children and Young adults  
in an Office-based ambulatory care setting*  
Faculty Advisor: Dr. Mary Maneno

**Kin-Sang Lam**

Professional Student, Education & Outreach  
*Ease of Access to and Availability of Drug  
Information on Selected Free Websites*  
Faculty Advisor: Dr. Bisrat Hailemeskel

**Joseph Lavela**

Professional Student, Translational & Clinical  
*Cardiovascular Risk Factors related  
to Blood Pressure in Young Adult  
African Americans*  
Faculty Advisor: Dr. Thomas Mellman

**Michael Leak**

Graduate Student, Social Sciences

*Drumming up arousal*

Faculty Advisor: Dr. Jules Harrell

**Demi Lewis**

Undergraduate Student, Bio & Biomedical

*The Isolation of Tripl3t*

Faculty Advisor: Dr. Leon Dickson

**Dr. O'Dene Lewis**

Post Doc/ Resident/ Fellow,

Translational & Clinical

*New Onset Supraventricular Arrhythmia*

*and Outcomes in African American*

*Patients with Severe Sepsis in the Medical*

*Intensive Care Unit*

Faculty Advisor: Dr. Alem Mehari

**Laura Libuit**

Professional Student, Bio & Biomedical

*Ureteral Injury after Laparoscopic Versus*

*Open Colectomy*

Faculty Advisor: Dr. Nabeel Zafaar

**Dr. Ping-Chang Lin**

Junior Faculty/ Lecturer/ Instructor,

Bio & Biomedical

*Assessment of chemical exchange kinetics*

*through CPMG multiple spin-echo*

*NMR measurements*

**Dr. Stephen Lin**

Post Doc/ Resident/ Fellow,

Bio & Biomedical

*Construction of Transferrin Receptor*

*targeted Multi-modality Agents for*

*Cancer Imaging*

Faculty Advisor: Dr. Paul Wang

**Dr. Xionghao Lin**

Post Doc/ Resident/ Fellow,

Translational & Clinical

*Structure-Based Lead Optimization of*

*N-Benzylaniline Derived Human Histone*

*Deacetylase 2 Inhibitors*

Faculty Advisor: Dr. X. Simon Wang

**Laricca London**

Graduate Student, Bio & Biomedical

*Small RNA regulation of an*

*Anti-Sigma Factor in E. coli*

Faculty Advisor: Dr. Karl Thompson

**Nelson Malone**

Undergraduate Student, Bio & Biomedical

*The Characterization of  $\beta$ -Actin*

*Transcription Activator-Like Effector*

*Nucleases as a Genome Editing Tool*

Faculty Advisor: Dr. Porteus Matthew

**Chloe Martin**

Graduate Student, Social Sciences

*The Relationship Between Fear of*

*Recurrence, Optimism and Coping in*

*African-American Breast Cancer Survivors*

Faculty Advisor: Dr. Jules Harrell

**Tehja Martin**

Undergraduate Student, Bio & Biomedical

*The Isolation of*

*Mycobacteriophage Tania2*

Faculty Advisor: Dr. Courtney Robinson

**DeVoshia Mason**

Graduate Student, Social Sciences

*Music, Identity, Gender Roles, &*

*Facebook: An Investigation of Minority*

*Adolescents' Music Media Posts*

**Tafari Mbadiwe**

Professional Student, Bio & Biomedical

*Assessing The Value of Routine Upper*

*Gastrointestinal Contrast Studies*

*Following Bariatric Surgery:*

*A Systematic Review and Meta-Analysis*

Faculty Advisor: Dr. Terrence Fullum

**Mamadou Mbaye**

Graduate Student, Physical Sciences

& Engineering

*Isosteric Heat of Adsorption of CO<sub>2</sub>*

*Within the groove of Carbon Nanotubes*

Faculty Advisor: Dr. Silvina Gatica

**Earyn McGee**

Undergraduate Student, Bio & Biomedical

*Sceloporus Jarrovi in Cave Creek Canyon:*

*A Population Study*

Faculty Advisor: Dr. George Middendorf

**Dr. Charmaine McKie**

Junior Faculty/ Lecturer/ Instructor,

Translational & Clinical

*Factors Affecting Quality of Life in*

*Adolescents and Young Adults (AYAs) with*

*Cancer Receiving Treatment*



**Latesha McLaughlin**

Professional Student, Bio & Biomedical  
*Fear of Sleep accounts for a relationship between neighborhood stress and sleep quality*  
Faculty Advisor: Dr. Thomas Mellman

**Ken-Won Miller**

Undergraduate Student,  
Translational & Clinical  
*Nutritional Therapy for HIV AIDS using the Nutrition Care Process: A Case Study*  
Faculty Advisor: Dr. Avis Graham

**Dr. Lloyd Mitchell**

Junior Faculty/ Lecturer/ Instructor,  
Bio & Biomedical  
*Development of methods to correct Sickle Cell Anemia and Huntington's disease mutations*

**Mandy Mitchell**

Graduate Student, Physical Sciences & Engineering  
*Nanoparticle Toxicity on Biofilms Developed within an Environmentally Relevant System: A comparison of a mixed bacterial community to a single bacterial strain*  
Faculty Advisor: Dr. Kimberly Jones

**Allegra Mosley**

Undergraduate Student, Bio & Biomedical  
*The Significance of Mycobacteriophage Studies in Examining Microbiological Life*  
Faculty Advisor: Dr. Courtney Robinson

**Verona Mulgrave**

Graduate Student, Translational & Clinical  
*Nutritional Management Cirrhosis of the Liver Disease: A case Report*  
Faculty Advisor: Dr. Allen Johnson

**Husain Murad**

Graduate Student, Social Sciences  
*The Discourse of the Syrian Conflict in US Newspapers*  
Faculty Advisor: Dr. Barbara Hines

**Mpho Musengua**

Graduate Student, Physical Sciences & Engineering  
*Deposition of Graphene on Various Substrates using Different Methods of Chimiical Vapor Deposition*  
Faculty Advisor: Dr. Gary Harris

**Saba Nawaz**

Undergraduate Student, Bio & Biomedical  
*Isolation of Bacteriophage*  
Faculty Advisor: Dr. Leon Dickson

**Sarah Ngeki**

Professional Student, Computation & Modeling  
*Sirtuin Benchmarking Datasets in drug discovery*  
Faculty Advisor: Dr. Xiang Wang

**Blanche Ngo Mahop**

Undergraduate Student, Physical Sciences & Engineering  
*Sensitivity Analysis: Extended Fourier Amplitude Sensitivity Test*  
Faculty Advisor: Dr. Katharine Gurski

**Loan-Chi Nguyen**

Professional Student, Computation & Modeling  
*Cheminformatic Modeling of CXC Chemokine Receptors*  
Faculty Advisor: Dr. Xiang Wang

**Dr. Xiaomei Niu**

Post Doc/ Resident/ Fellow, Education & Outreach  
*Prevalence of Sickle Cell Disease and Trait in the Metropolitan District of Columbia Area General Population*

**Dr. Ngozi Nnunukwe**

M.D., Post Doc/ Resident/ Fellow,  
Translational & Clinical  
*A Rare Case Of Akinetic Mutism Secondary To Bilateral Anterior Cerebral Artery Infarction In A Patient With Thyrotoxicosis*  
Faculty Advisor: Dr. Mohankumar Kurukumbi

**Karis Norwood**

Undergraduate Student, Bio & Biomedical  
*The Effects of Dendritic Cell Vaccines on T-Cell Trafficking and the Tumor Draining Lymph Node*

Faculty Advisor: Dr. Michael Lipscomb

**Charles Ogindo**

Graduate Student, Computation & Modeling  
*Molecular Modeling approaches to a rational Drug Design for Chagas Disease: Differentiation of drug affinities for modeled tubulin protein for H. sapiens and T. cruzi as a basis of anti-trypanosomal drug design*

Faculty Advisor: Dr. Oladapo Bakare

**Chika Okafor**

Professional Student, Bio & Biomedical  
*A Null Mutation in ACTN3: A Possible Marker for Achilles Tendinopathy*

**Sussie Okoro**

Graduate Student, Social Sciences  
*International Migration of Igbo Women to the United States of America 1995-2012, Brain Drain, Brain Gain or Brain Circulation?*

Faculty Advisor: Dr. Almaz Zewde

**Dr. Sheryl Oliver**

Junior Faculty/ Lecturer/ Instructor, Business  
*Perceptions of Hiring Managers on the Lack of Racial Diversity and Inclusion in the Advertising Industry*

Faculty Advisor: Dr. Chukwuka Onwumechili

**Michael Ongele**

Undergraduate Student, Bio & Biomedical  
*Peroxisome proliferator activated receptor- $\alpha$  Regulation of Sodium Transport Mechanisms in Human Primary Proximal Tubule Cells during Angiotensin II Treatment*

Faculty Advisor: Dr. Dexter Lee

**Laura O'Shea**

Graduate Student, Humanities  
*Young Children's Attention Network Skills and Narrative Goal Structure Understanding*

Faculty Advisor: Dr. Danielle Brown

**Michael Oyewole**

Professional Student, Translational & Clinical  
*Cheminformatic Tools to anti-screen Peroxisome Proliferator-Activated Receptors-Alpha Agonism Induced Human Liver Toxicity*

Faculty Advisor: Dr. Xiang Wang

**Davynte Pannell**

Undergraduate Student, Social Sciences  
*In the Middle: Personality as a Moderator of the Effect of Arousal on Performance*

Faculty Advisor: Dr. Jules Harrell

**Khristiana Parchman**

Undergraduate Student, Social Sciences  
*Diminished Confidence in Test Performance after Reminder of Racial Differences*

Faculty Advisor: Dr. Jamie Barden

**Dawn Payne**

Undergraduate Student, Bio & Biomedical  
*Evaluating the Intercellular Communication and Unique Differentiation and Proliferation of Colonic Polyps in HT-29, a Potential Model for All Colorectal Cancer Studies*

Faculty Advisor: Dr. Winston Anderson

**John Perez**

Undergraduate Student, Social Sciences  
*What are the Factors that Contribute to the Increase of Homicides in Puerto Rico from 2007-2012?*

Faculty Advisor: Dr. Ernest Quimby

**Fayola Pompey**

Undergraduate Student, Bio & Biomedical  
*Documentation of Possibly New Phage*

Faculty Advisor: Dr. Courtney Robinson

**Andre Porter**

Graduate Student, Bio & Biomedical  
*Frequency-dependent Mate Selection in the Guppy*

Faculty Advisor: Dr. Jack Frankel

**Reema Puri**

Graduate Student, Bio & Biomedical  
*Cellular uptake and cytotoxicity studies of pH-responsive nanoparticles on PC3 and LNCaP prostate cancer cell lines*  
Faculty Advisor: Dr. Emmanuel Akala

**Taylor Purks**

Undergraduate Student, Bio & Biomedical  
*The Effect of Salt Ions on the Plaque Formation*  
Faculty Advisor: Dr. Leon Dickson

**Dr. Otelio Randall**

Senior Faculty, Translational & Clinical  
*Hypertension: A proposed Mechanistic Pathway for Arterial System Remodeling*

**Dr. Inez Reeves**

Senior Faculty, Translational & Clinical  
*Vitamin D Deficiency in Pregnant Women of Ethnic Minority: Potential Contributor to Preeclampsia*

**Sydney Revelle**

Undergraduate Student, Physical Sciences & Engineering  
*Human Powered Vehicle Safety: Recumbent Tricycle Visibility of Surroundings*  
Faculty Advisor: Dr. Sonya Smith

**Bria Rice**

Undergraduate Student, Computation & Modeling  
*Effects of Salt and pH on the Polymer Properties of Gene Transfection Agent Polyethyleneimine: A Molecular Dynamics and Dynamic Light Scattering Study*  
Faculty Advisor: Dr. Preethi Chandran

**Dr. Kimberlei Richardson**

Junior Faculty/ Lecturer/ Instructor, Bio & Biomedical  
*Topographical Differences in Orexin Neuronal Activation: Binge-eating Prone versus Binge-eating Resistant Rats*

**Thomas Riehl**

Professional Student, Bio & Biomedical  
*Pharmacotherapy and management of asthma among adults in the office based ambulatory care setting*  
Faculty Advisor: Dr. Mary Maneno

**Danielle Robinson**

Professional Student, Translational & Clinical  
*Should Thoracic Aortic Aneurysms Be Repaired in the Very Elderly?*  
Faculty Advisor: Dr. Kakra Hughes

**Ryane Rollock**

Graduate Student, Physical Sciences & Engineering  
*Understanding the Fouling Mechanisms of Cross-Flow Filtration Systems for Nuclear Waste Applications*  
Faculty Advisor: Dr. Kimberly Jones

**Keren Rosado**

Graduate Student, Physical Sciences & Engineering  
*Detection and Diagnosis of Tropical Storms in High-Resolution Atmospheric Models*  
Faculty Advisor: Dr. Gregory Jenkins

**Jean Sebastien Rowe**

Professional Student, Bio & Biomedical  
*Alzheimer's Disease and other Dementia in Persons of Sub-Saharan African Descent: Estimates of Mortality in Sub-Saharan Africa and the Caribbean from the Global Burden of Disease Study 2010*  
Faculty Advisor: Dr. Richard F. Gillum

**Ebony N. Russ**

Professional Student, Social Sciences  
*Effects of Minority Stress on Black College Students*  
Faculty Advisor: Dr. Kamilah Woodson, PhD

**Bryan Sackey**

Professional Student, Translational & Clinical  
*Evaluating the Association between Diabetes Patient's Medication Adherence and Glycemic Control*  
Faculty Advisor: Dr. Oluwaranti Akiyode

**Mohammed Safi**

Graduate Student, Bio & Biomedical  
*Electrical Stimulation and its effect on lingual, labial and buccal muscles strength*  
Faculty Advisor: Dr. Wilhelmina Wright-Harp

**James Samotshozo**

Undergraduate Student,  
Computation & Modeling  
*A Converter from LilyPond to MusicXML*  
Faculty Advisor: Dr. Mugizi Rwebangira

**Shadya Sanders**

Graduate Student, Social Sciences  
*Demographics and Protective Actions During Severe Weather: Tuscaloosa, AL 2011*  
Faculty Advisors: Drs. Terri Adams-Fuller and Joseph Everette

**Sabrina Scott**

Graduate Student, Social Sciences  
*Female Criminality: Perpetration of Gang Violence*  
Faculty Advisor: Dr. Kamilah Woodson

**Dr. Liang Shan**

Junior Faculty/ Lecturer/ Instructor,  
Translational & Clinical  
*Engineered Antibody Fragments and Immunotoxin for Targeted Imaging and Therapy of Prostate Cancer*

**Dr. Babak Shokrani**

Junior Faculty/ Lecturer/ Instructor,  
Translational & Clinical.  
*Conversion of nuclear B-catenin expression with obesity in colorectal neoplasia from African Americans*

**Dr. Danielle Singleton**

Post Doc/ Resident/ Fellow,  
Translational & Clinical  
*Liver Disease in Sickle Cell Patients and the Risk of Inpatient Mortality.*  
Faculty Advisor: Seyed-Mehdi Nourraie, MD, PhD

**Kahli Smith**

Graduate Student, Bio & Biomedical  
*Nanoparticles with Protein Phosphatase 1-targeting small compounds for Activation of HIV-1 Infection*  
Faculty Advisor: Dr. Sergei Nekhai

**Rufus Spann**

Graduate Student, Education & Outreach  
*Getting back to the basics: Advocating for social justice in our schools through the Organic Home-School-Community Model*  
Faculty Advisor: Dr. Kamilah Woodson

**Troy Spruill**

Undergraduate Student, Bio & Biomedical  
*Isolation and Characterization of Novel Mycobacteriophages Amiratis & Jdent14*  
Faculty Advisor: Dr. Courtney Robinson

**Dr. Brent Stephens**

Post Doc/ Resident/ Fellow,  
Bio & Biomedical  
*Hip Fractures in the Elderly: Does Race Matter?*  
Faculty Advisor: Dr. Robert Wilson

**Grace Swanson**

Graduate Student, Bio & Biomedical  
*Genetic variation in serotonin type 7 receptor (5-HT7) gene and its association with C-reactive protein (CRP) levels in African-Americans*  
Faculty Advisor: Dr. Muneer Abbas

**Ahmed Tadde**

Undergraduate Student, Physical Sciences & Engineering  
*Associating Finite Groups with Dessins d'Enfants*  
Faculty Advisor: Dr. Edray Goins

**Dr. Mestawet Teka**

Post Doc/ Resident/ Fellow,  
Bio & Biomedical  
*Risk Factors for Pulmonary Embolism at Autopsy among HIV Infected Patients*

**Belen Tesfaye**

Post Doc/ Resident/ Fellow,  
Translational & Clinical  
*Comparison of the indication and colonoscopy findings among blacks of Ethiopia descent versus African Americans*  
Faculty Advisor: Dr. Adeyinka Laiyemo

**Felecia Theune**

Social Sciences  
*Challenges of Black Male Student-Athletes in Big-Time Intercollegiate Sports: A Critical Review of the Evidence*

**Courtney Thomas**

Graduate Student, Bio & Biomedical  
*Computational Modeling of Calreticulin for Calreticulin Acetylating Ability Studies*  
Faculty Advisor: Dr. Lystranne Maynard

**Bethrice Thompson**

Graduate Student, Bio & Biomedical  
*Global Chromatin Landscape Analysis to Identify Novel Pathways during Bone Differentiation*  
Faculty Advisor: Dr. Clarence Lee

**Daisy Tsao**

Professional Student, Translational & Clinical  
*A Case-Control Comparison of Gene Expression and Methylation Profiles associated with Post-Traumatic Stress Disorder*  
Faculty Advisor: Dr. Thomas Mellman

**Dr. Cortni Tyson**

Post Doc/ Resident/ Fellow,  
Bio & Biomedical  
*An Unusual Case of Non-Cirrhotic Portal Hypertension*

**Irieon Walker**

Professional Student, Education & Outreach  
*Inexpensive IT solutions for Teaching of Clinical Anatomy and Radiology Correlation*  
Faculty Advisor: Dr. Andre J. Duerinckx, MD-PhD2, FACR, FACC

**Arielle Waller and Makamba Sackey**

Undergraduate Student, Bio & Biomedical  
*Effect of Temperature on a Hydrophobic Polyelectrolyte*  
Faculty Advisor: Dr. Preethi Chandran

**Sean Walsh**

Undergraduate Student, Bio & Biomedical  
*Muscle birth defects in a human trisomy-18 fetus, comparisons with other trisomies and karyotypically normal humans, and discussion of implications for the understanding and surgical treatment of non-pentadactyl limbs*  
Faculty Advisor: Dr. Nathan Smith

**Dr. Zejun Wang**

Junior Faculty/ Lecturer/ Instructor,  
Bio & Biomedical  
*Resibufogenin and Cinobufagin Excite CNS Neurons by Performing Ouabain-like Action*

**Jalesa Watkins**

Undergraduate Student, Bio & Biomedical  
*Phylogenetic relationships of Sulidae inferred from external morphological characters*  
Faculty Advisor: Dr. Nathan Smith

**Ambriel Weatherly**

Undergraduate Student, Bio & Biomedical  
*Isolation of a Unique Mycobacteriophage*  
Faculty Advisor: Dr. Courtney Robinson

**Alexis Wells**

Undergraduate Student, Physical Sciences & Engineering  
*Renewable Energy Credits for Residential Pellet Stoves Through Thermal Energy Metering*  
Faculty Advisor: Dr. James Hammonds

**Chakoria Wells**

Graduate Student, Bio & Biomedical  
*The Impact of Classroom and Instructional Quality on the Expressive Language of African American Preschoolers*

**Layla West**

Undergraduate Student, Humanities  
*Medu Netcher: Ancestor of Ebonics*  
Faculty Advisor: Dr. Mario Beatty

**Anna Wheatley**

*Perceptions of Depression and its assessment among Black adults*

**Jasmine Wheeler**

*Disrespectful Americans and Middle Easterner Extremists: The Lingering Effects of Stereotyping in America and the Middle East*

**Brittney Williams**

Undergraduate Student, Bio & Biomedical  
*Study of Nitrate Rich Beetroot Juice on Cardiac Autonomic Modulation in Rest and During Exercise*  
Faculty Advisor: Dr. Vernon Bond

**Malcolm Williams**

Undergraduate Student, Computation & Modeling

*Specifying Melodic Features for Jazz and Swing Melody Evaluation*

Faculty Advisor: Dr. Mohamed Chouikha

**Shalonda Williams**

Graduate Student, Bio & Biomedical

*Integrative Pharmacophore Based Screening of Novel Antineuroinflammatory Agents to Treat Parkinson's Disease*

Faculty Advisor: Dr. X. Simon Wang

**Sharlene Wilson Ottley**

Graduate Student, Translational & Clinical

Faculty Advisor: Dr. Linda Bland-Stewart  
*Use of African-American English in the Spontaneous Language of Children with Hearing Loss*

**Morgan Woods**

Graduate Student, Translational & Clinical  
*Association of Fetal Microchimeric Cells with breast cancer and breast cancer subtypes*

Faculty Advisor: Dr. Tamer Hudson

**Gerilyn Worthy**

Graduate Student, Social Sciences

*Gender differences in African-American and Latino-American substance use: An examination of cultural factors related to minority of substance use*

Faculty Advisor: Dr. Dominicus So

**Jie Xia**

Graduate Student, Computation & Modeling

*An Unbiased Method to Build Benchmarking Sets for Ligand-Based Virtual Screening and its Application to GPCRs*

Faculty Advisor: Dr. Xiang Wang

**Aara'L Yarber**

Undergraduate Student, Physical Sciences & Engineering

*Age-Dating Star Clusters in the Luminous Infrared Galaxy VV340*

Faculty Advisor: Dr. Aaron Evans

**Weonpo Yarl**

Professional Student, Translational & Clinical  
*Determinants of Lower Limb Salvageability Following Infrapopliteal Arterial Trauma*  
Faculty Advisor: Dr. Kakra Hughes

**Dr. Yayin Yayin**

Junior Faculty/ Lecturer/ Instructor, Computation & Modeling

*Protein Structure Prediction of TrpE Site of Anthranilate Synthase*

**Dr. Ang Yu**

Post Doc/ Resident/ Fellow,

Physical Sciences & Engineering

*Earth Effects, Radiation Patterns and Transmission Property of Antennas Applied in a Subsurface Object Detection System*

Faculty Advisor: Dr. Mihai Dimian

**Aamir Zariwala**

Undergraduate Student, Bio & Biomedical  
*Characterization of KIF23 in Dendritic cells*

Faculty Advisor: Dr. Michael Lipscomb

**Dr. Xiping Zhan**

Junior Faculty/ Lecturer/ Instructor, Bio & Biomedical

*Hypothalamic and Metabolic Regulation of Human Dopaminergic Neurons Derived from Inducible Pluripotent Stem Cells*

**Dr. Zhenjiang Zhang**

Post Doc/ Resident/ Fellow,

Physical Sciences & Engineering

*Near Infrared Laser Mediated Targeted Tumor Thermo-chemotherapy Using Thermosensitive Polymer Coated Gold Nanorods*

Faculty Advisor: Dr. Paul Wang

# RESEARCH OPPORTUNITIES

## **Elsevier (*Sponsor*)**

Elsevier is a world-leading provider of information solutions that enhance the performance of science, health, and technology professionals, empowering them to make better decisions, deliver better care, and sometimes make groundbreaking discoveries, that advance the boundaries of knowledge and human progress. Elsevier provides web-based, digital solutions — among them ScienceDirect, Scopus, Elsevier Research Intelligence, and ClinicalKey — and publishes nearly 2,200 journals, including *The Lancet* and *Cell*, and over 25,000 book titles, including a number of iconic reference works.

---

## **Georgetown-Howard Universities Center for Clinical and Translational Science**

The Georgetown-Howard Universities Center for Clinical and Translational Science (GHUCCTS) is a multi-institutional consortium of medical research institutions forged from a desire to promote clinical research and translational science. The members of the GHUCCTS consortium are: Georgetown University (GU), Howard University (HU), MedStar Health Research Institute (MHRI), Oak Ridge National Laboratory (ORNL), and the Washington Veteran’s Affairs Medical Center (VAMC). Through multiple partnerships and collaborations among the member institutions, GHUCCTS is transforming clinical research and translational science in order to bring new scientific advances to health care.

---

## **HU ADVANCE –IT (*Sponsor*)**

Howard University ADVANCE-IT: Women of Color Faculty in STEM as Change Agents aims to develop an innovative and strategic model for institutional transformation at Howard University that increases the number of female faculty and academic leaders in the STEM disciplines. The program plans to increase diversity through education, advocacy, and empowerment while simultaneously making a significant contribution to strengthening the nation’s STEM workforce. The portfolio of activities and outcomes will also benefit other non-STEM academic areas by supporting general policies and establishing practices reflective of the University’s commitment to diversity.

---

## **NOAA Center for Atmospheric Sciences**

The mission of NCAS is to increase the number of highly qualified, well-trained graduates in NOAA-related sciences, with particular emphasis on the atmospheric sciences, for career opportunities with NOAA, NOAA contractors, other Federal agencies, and academia. NCAS enhances the implementation of comprehensive academic and research-training programs, which capitalize on the strength of the university partners. All partners contribute to training workshops and professional conferences, shared courses and seminars, outreach activities, student recruitment and mentoring, and conduct and present NOAA related research at professional meetings.

---

## **Pepco (*Sponsor*)**

Pepco Holdings, Inc. is one of the largest energy delivery companies in the Mid-Atlantic region, serving about 2 million customers in Delaware, the District of Columbia, Maryland and New Jersey. PHI subsidiaries Pepco, Delmarva Power and Atlantic City Electric provide regulated electricity service; Delmarva Power also provides natural gas service. PHI also provides energy efficiency and renewable energy services through Pepco Energy Services.

## Research Centers in Minority Institutions

The RCMI Program focuses on the enhancement and further development of the necessary research infrastructure which will ensure the University's ability to contribute to the investigation of those diseases. These research infrastructure components include the expansion of two research core laboratories: The Laboratory of Molecular Computations and Bioinformatics (LMCB) and the Biomedical NMR Laboratory (BNMR). The core laboratories provide resource support to investigator-initiated projects. The LMCB provides resource support to biomedical research projects in the areas of molecular modeling and molecular dynamics simulations, bioinformatics, and quantum chemistry calculations. The BNMR laboratory provides support to projects involving biomedical imaging and structural NMR investigations.

---

### Sigma Xi

Sigma Xi is an international, multidisciplinary research society whose programs and activities promote the health of the scientific enterprise and honor scientific achievement. There are nearly 60,000 Sigma Xi members in more than 100 countries around the world. Sigma Xi chapters, more than 500 in all, can be found at colleges and universities, industrial research centers and government laboratories. The Society endeavors to encourage support of original work across the spectrum of science and technology and to promote an appreciation within society at large for the role research has played in human progress.

---

### The Cobb Laboratory

A laboratory facility for biological anthropology was built between 1985 and 1993 in order to accommodate the Cobb Collection and other projects, including the New York African Burial Ground Project. Today the W. Montague Cobb Biological Anthropology laboratory emerges as a state-of-the-art research facility, which students use to gain hands-on experience with skeletal collections.

---

### The Washington Baltimore Hampton Roads – Louis Stokes Alliance for Minority Participation (WBHR-LSAMP)

The Washington Baltimore Hampton Roads - Louis Stokes Alliance for Minority Participation (WBHR-LSAMP) was established in 1993 by the National Science Foundation (NSF) to increase the quality and quantity of underrepresented minority (URM) students who successfully complete baccalaureate degrees in science, technology, engineering, and mathematics (STEM), and who continue on to graduate studies in these fields. Distinguishing it from traditional scholarship programs, LSAMP takes a multidisciplinary approach to student development and retention, creating partnerships among colleges, universities, national research laboratories, business and industry, and other federal agencies in order to accomplish its goals. Hands-on research experiences and mentoring to build student interest in STEM are LSAMP's other key characteristics.

The WBHR-Alliance, which includes Howard University as the lead institution, Morgan State University, Bowie State University, the University of the District of Columbia, Virginia State University, Hampton University and Norfolk State University, ranks in the top producers of all STEM degrees for African Americans in the nation for the BS, MS, and Ph.D.



RESEARCH DAY  
**2014 COMMITTEE MEMBERSHIP**

**Ms. NICOLE RETLAND**  
2014 Research Day Chair  
Office of Grants Management

Dr. Emmanuel Akala  
College of Pharmacy

Dr. Hassan Ashktorab  
College of Medicine

Dr. Felicia Banks  
College of Nursing &  
Allied Health Sciences

Dr. Carolyn Broome  
College of Medicine

Dr. Gwendolyn Bethea  
Graduate School

Dr. Preethi Chandran  
College of Engineering,  
Architecture &  
Computer Sciences

Ms. Pamela Clarke  
Office of Admission

Ms. Tasha Delane  
Office of Grants Management

Dr. Yayin Fang  
College of Medicine

Mr. Sholnn Freeman  
Office of University  
Communications

Dr. Rajni Goel  
School of Business

Ms. Youlander Greene  
School of Communications

Mr. Glenn Griffin  
Graduate School

Dr. Tyish Hall Brown  
College of Medicine

Professor Garnett Henley  
College of Dentistry

Dr. Willie Hires  
University Libraries

Dr. Altaf Husain  
School of Social Work

Dr. Linda Jones  
Graduate School

Mr. Hesam Khalilzadeh  
Office of Grants Management

Dr. Dexter Lee  
College of Medicine

Dr. Thomas Mellman  
College of Medicine

Dr. Nadine Morris  
Office of Grants Management

Dr. Priscilla Okunji  
College of Nursing &  
Allied Health Sciences

Mr. Charles Prince  
School of Communications

Ms. Cherise Rhyns  
Office of Human Resources

Ms. Maya E. Shih  
Office of Grants Management

Professor Ingrid Sturgis  
School of Communications

Dr. Sudha Sharma  
College of Medicine

Dr. J. Fidel Turner  
School of Education

Mr. Vincent Walford  
Health Sciences

Dr. Talitha Washington  
College of Arts & Sciences

Mr. Errol S. Watkis  
University Libraries

Dr. Dana Williams  
College of Arts & Sciences

Dr. Daniel Williams  
College of Arts & Sciences

Ms. Toni Yancey  
Louis Stokes  
Health Sciences Library

# Thank You

## TO OUR SPONSORS

*Howard University thanks all of its generous sponsors who supported Research Day 2014.*

PLATINUM SPONSOR

### HU ADVANCE-IT



EDUCATION. ADVOCACY. EMPOWERMENT.

[huadvanceit.cldc.howard.edu](http://huadvanceit.cldc.howard.edu)

GOLD SPONSOR



## ELSEVIER

SILVER SPONSOR



Energy for a changing world.™





1867

**HOWARD**  

---

**UNIVERSITY**

OFFICE OF THE ASSOCIATE PROVOST  
FOR RESEARCH AND GRADUATE STUDIES  
400 College Street, NW | Washington, DC 20059  
202.806.6800  
[www.howard.edu](http://www.howard.edu)