



2022
SUMMER UNDERGRADUATE
RESEARCH
INSTITUTE (SURI)

VIRTUAL SYMPOSIUM

Thursday, August 4, 2022

Session I: 9 AM to 11:45 AM | Session II: 2 PM to 4:20 PM
&

Friday, August 5, 2022

Session I: 9 AM to 11:45 AM | Session II: 2 PM to 3:40 PM



PROGRAM AGENDA

Thursday, August 4, 2022

Session I

9 AM to 11:45 AM



9:00 AM- 9:05 AM Welcome

Dr. Guy-Alian Amoussou, Associate Provost,
Division of Academic Affairs

Dr. Carl B. Goodman, Provost & Vice President
of Academic Affairs

Julian Ajenifuja, Program Coordinator, Office of
Undergraduate Research & Entrepreneurship
Innovation Center (EIC)

ROOM 1

9:05 AM- 10:21 AM SURI Scholars Oral Presentation

Moderators:

Julian Ajenifuja

Denisaime Ngotcha Yokam, Graduate Assistant
Office of Research & Sponsored Programs

Scholar (s): Sydney Barnes & Kylarenee Still

Mentor (s): Dr. Erica Hernandez

Project Title: Student Success for Students Who Are Caregivers

Scholar (s): Destiny-Ruth Sterling, Aliyah Strozier, & Kheni Upson

Mentor (s): Professors Christine Marsh & Elena Velasco

Project Title: The Map Maker's Quest

Scholar (s): Hunter Tate & Melody Washington

Mentor (s): Dr. Guy-Alain Amoussou

Graduate Assistant: Ms. Shionta Somerville

Project Title: Using Digital Twins in Incident Response to
Improve the Security of Water Systems for Small
Cities

Scholar (s): Marta Fuentes
Mentor (s): Dr. Charla McKinzie-Bishop
Project Title: Elements in Correspondence with Cleanliness During the Covid-19 Pandemic: Measures Taken and Their Effect on College Students' Stress and Gender

5 MINUTE BREAK

10:27 AM- 11:40 AM SURI Scholars Oral Presentation

Scholar (s): Jocelyn Parker
Mentor (s): Ms. Johnetta Hardy
Project Title: Jrenee Designs

Scholar (s): Taelor Francois, Cynthia Ikeazor, & Faith Uda
Mentor (s): Dr. Cordelia Obizoba
Project Title: Medicaid Maternal Opioid Misuse Disorder: MOM Project

Scholar (s): Alvin Atuonah & Zhayne Hackett
Mentor (s): Dr. Supriyo Ray
Project Title: Finding Drug Targets for Naegleria Fowleri

Scholar (s): Valaria Sanchez
Mentor (s): Mr. Paul Agboli
Project Title: Business and Database Infrastructure

ROOM 2

9:05 AM- 10:21 AM SURI Scholars Oral Presentation

Moderators:

Ms. Dinali Jayawardana, Teaching Assistant in the Department of Computer Science
Ms. Darlene Ajayi, Program Manager, Entrepreneurship Innovation Center (EIC)

Scholar (s):	Imani Burke, Brenda Cortes-Ramos, & Erica Harrell
Mentor (s):	Drs. William Johnson and Barbara Smith
Project Title:	Outreach to Teach: First Year Students' Perceptions of the College Environment
Scholar (s):	Yetunde Agbaje, Chelsea Ejimakor, & Jules Millimono
Mentor (s):	Dr. Juliana Agubokwu
Project Title:	An Innovative Strategy for Students' Engagement in Nursing Education: Smartphone Use in Active Teaching & Learning.
Scholar (s):	Kenia Best
Mentor (s):	Ms. Johnetta Hardy
Project Title:	Your Very Own!
Scholar (s):	Paige Blake, Xavier Brown, & Aliyah Phelps
Mentor (s):	Dr. Donovan Griffin-Blake
Project Title:	Perspectives of Black Students on Science Education and Related Vocations

5 MINUTE BREAK

10:27 AM- 11:43 AM SURI Scholars Oral Presentation

Scholar (s):	Katherine Palacios
Mentor (s):	Dr. Karen Cook-Bell
Project Title:	Black Women in War and Freedom Digital History
Scholar (s):	Antoné Graham & Isaac Scott
Mentor (s):	Dr. Jayne Cubbage
Project Title:	Introducing Media Literacy to Diverse Learners in Higher Education and K-12 Classrooms
Scholar (s):	Keilyn Cook, Anna Mullins Hildreth, & Kaiya Vickers
Mentor (s):	Dr. Janeula Burt
Project Title:	I'm SO Glad: An Examination of Freshmen Year Experience Programs at HBCUs
Scholar (s):	Seyi Akinwale & Bernadine Lacdao
Mentor (s):	Dr. Dawit Hailu
Project Title:	The Effect of Air Resistance and Facemask on the Projectile of Aero-Droplets

11:43 AM- 11:45 AM Closing

Thursday, August 4, 2022
Session II
2 PM to 4:20 PM

2 PM- 2:05 PM Welcome

ROOM 1

2:05 PM- 3:21 PM SURI Scholars Oral Presentation

Scholar (s): Johnathan Gorum
Mentor (s): Ms. Johnetta Hardy
Project Title: ExclusiveeKicks LLC

Scholar (s): Angela McNeil & Clarissa Smith
Mentor (s): Drs. Emory Perkins & Sharon Wilks
Project Title: The Impact of the COVID-19 Pandemic on the Academic Performance, Level of Knowledge, and the Health and Well-being of Students on an HBCU Campus

Scholar (s): Misa Gould
Mentor (s): Dr. Kim Evelyn
Project Title: Exploring Caribbean Literature through Digital Archives: The Explication of Olive Senior

Scholar (s): Sekai Artis-Scott & Carley Walker
Mentor (s): Dr. Shannell Thomas
Project Title: Racialized Language in Wrongful Convictions

5 MINUTE BREAK

3:26 PM- 4:18 PM SURI Scholars Oral Presentation

Scholar (s): Abimbola Akerele & William Leppert
Mentor (s): Dr. Guy-Alain Amoussou
Graduate Assistant: Ms. Shionta Somerville
Project Title: Using Digital Twins and Incident Response to Improve the Security of the Power Sector within Critical Infrastructure

Scholar (s): Amaya Brown
Mentor (s): Dr. Monika Gross
Project Title: Mitigating Stress During The Collegiate Transition

Scholar (s): Kayla Washington
Mentor (s): Ms. Johnetta Hardy
Project Title: Trending Topic Brand

ROOM 2

2:05 PM- 3:21 PM SURI Scholars Oral Presentation

Scholar (s): Ronald Franklin
Mentor (s): Dr. Theodore-Lewis
Project Title: Parole & Parolees: An Overview of The Social and Economic Impact of The American parolee System

Scholar (s): Adeola Adekoya, Roxan Rockefeller, & Gregory Walters Jr
Mentor (s): Dr. Loubna Dali
Project Title: Data Encryption

Scholar (s): Jesse Kelly
Mentor (s): Brandon Wallace
Project Title: The Trifecta of Self-Esteem: How Diet, Mindset and Skillset Impacts Confidence

Scholar (s): Salisha Peeler
Mentor (s): Ms. Johnetta Hardy
Project Title: Bodii' Couture

5 MINUTE BREAK

3:26 PM- 4:18 PM SURI Scholars Oral Presentation

Scholar (s): Ines Kenhoung
Mentor (s): Dr. Evangelyn Alocilja
Project Title: Detection of Synthetic Swine Viral DNA Using a Nanoparticle-based Biosensor

Scholar (s): Olaoluwa Adewoye
Mentor (s): Mr. Jesse Bemley
Project Title: Supercomputing: Research and Concept Demo

Scholar (s): Courtney Matthews
Mentor (s): Dr. Jacqueline Smith
Project Title: Synthesis of Tryptophan Linkers

4:18 PM- 4:20 PM Closing- Please return to main Zoom room

Friday, August 5, 2022

Session I

9 AM to 11:45 AM

9:00 AM- 9:05 AM Welcome

ROOM 1

9:05 AM- 10:21 AM SURI Scholars Oral Presentation

Moderators

Julian Ajenifuja

Denisaime Ngatchayokam

Scholar (s): Elise Kinyanjui

Mentor (s): Dr. Anne Osano, Dr. Joshua Ogendo, Prof. Nancy Mungai1, Cyril Wasike

Project Title: Effect of Foliar Nitrogen on Rhizobia and Yield Performance among Common Bean (*Phaseolus vulgaris* L.) in Kenya.

Scholar (s): John King

Mentor (s): Marvin Mukoma, Elick Otachi, Dr. Anne Osano, Joshua Ogendo

Project Title: Water Quality Monitoring in the Affordable Domestic Fish Farming Technology at Egerton University.

Scholar (s): Jhiame Kwegyir-Afful

Mentor (s): Rachael Muthoni Kamau, Erick Cheruiyot, Dr. Anne Osano, Joshua Ogendo

Project Title: Lipid Fractions Associated with Reproductive-Phase Cold Tolerance in Sorghum [*Sorghum Bicolor* (L.) Moench] Genotypes.

Scholar (s): Valdel Lekane

Mentor (s): Milcah Wambua, Richard Mulwa, Dr. Anne Osano, Joshua Ogendo

Project Title: Determination of Nutrient and Anti-Nutrient Factors in Cassava Leaves of Selected Varieties in Kenya.

5 MINUTE BREAK

10:27 AM- 11:43 AM SURI Scholars Oral Presentation

Scholar (s):	Max Sahi
Mentor (s):	Nelly Chebet, Erik Cheruiyot, Dr. Anne Osano, Joshua Ogendo
Project Title:	Determination of Morpho-Physiological Mechanisms of Salt Tolerance in Sorghum (<i>Sorghum bicolor L.</i>).
Scholar (s):	Dayanna Robb
Mentor (s):	Evans Obura, Dr. Anne Osano, Joshua Ogendo
Project Title:	Nutrition of Fungus Fermented Napier Grass (<i>Pennisetum Purpureum S.</i>).
Scholar (s):	Justin Leslie
Mentor (s):	Jonathan Kandagor, Maurice Udot, Dr. Anne Osano, Joshua Ogendo
Project Title:	Cape Gooseberry Domestication in Baringo County Kenya.
Scholar (s):	Madison Marshall
Mentor (s):	Mary Simiyu, Dr. Anne Osano, Joseph Mafurah, Joshua Ogendo
Project Title:	Diversity of Endophytes in Sunn Hemp (<i>Crotalaria Junicea</i>).

ROOM 2

9:05 AM- 10:21 AM SURI Scholars Oral Presentation

Moderators:

Dinali Jayawardana
Samuel Nwulu, Graduate Assistant,
Entrepreneurship Innovation Center

Scholar (s):	Joseph C. Butler, Percival Parlade Jr., & Samuel Collin Zanders
Mentor (s):	Dr. Uchenna Onuzulike
Project Title:	The Police Killing of Amir Locke: A Critical Discourse Analysis of the Press Conference Held by the Mayor and Its Police Chief

Scholar (s):	Mardline Cadet Prevot
Mentor (s):	Ms. Johnetta Hardy
Project Title:	Mazative Artra Design
Scholar (s):	Olawumi Akinfeleye, Ashley Moore, Kamsi Nebo, Elaine Obahiagbon, & Angel Porter
Mentor (s):	Dr. Eric Bonsu
Project Title:	Synthesizing Antiviral Compounds through C-2 Modifications of Nucleosides
Scholar (s):	Ayreanna Pettijohn
Mentor (s):	Dr. Jacqueline Smith
Project Title:	HeLa Cell Proliferation Assay

5 MINUTE BREAK

Scholar (s):	Nikola Johnson
Mentor (s):	Ms. Johnetta Hardy
Project Title:	Itgirk Ko
Scholar (s):	Khalil Davis, Sydney Raymond, & David Tan
Mentor (s):	Dr. David Anyiwo
Graduate Assistant:	Mr. Jerry Godwin Diabor
Project Title:	Efficient Approach to Closing the Cyber–Breach Detection Gap
Scholar (s):	Pauline Ebisike, Colin Lingerfelt, & Oluwanifemi Orekoya
Mentor (s):	Dr. Rosemary Shumba
Graduate Assistant:	Ms. Shionta Somerville
Project Title:	Cyber Poverty Line Across Critical Infrastructure
Scholar (s):	Tiana Jemmott
Mentor (s):	Ms. Johnetta Hardy
Project Title:	The IcyPrint

11:43 AM- 11:45 AM Closing- Please return to the main Zoom room

Friday, August 5, 2022
Session II
2 PM to 3:40 PM

2:00 PM- 2:05 PM Welcome

Dr. Anne Osano, Associate Professor, Department of Natural Science
Ms. Darlene Ajayi, Program Manager, Entrepreneurship Innovation Center

ROOM 1

2:05 PM- 3:00 PM SURI Scholars Oral Presentation

Scholar (s):	Vanessa Chery
Mentor (s):	Dayanna Robb, Evans Obura, James Kamau, Joshua Ogendo, Anne Osano
Project Title:	Biophysical Characteristics of Fungus Fermented Napier Grass <i>Pennisetum Purpureum S.</i>
Scholar (s):	Abdullahi Iro
Mentor (s):	Tirihana Amayu, Vivian Watt, Paul Kimurto, Anne Osano, Joshua Ogendo
Project Title:	Analysis of Plant Hormone Therapies and Nitrogen Fertilization on Growth of Finger Millet and Nutritional Analysis of Biofortified Baby Formula.
Scholar (s):	Jenny Tseng
Mentor (s):	Mary Simiyu, Joseph Mafurah, Anne Osano, Joshua Ogendo
Project Title:	Dolichos (<i>Lablab purpureus</i>) Microbiota and Its Potential in Plant Growth Promotion.

RETURN TO MAIN ROOM

ROOM 2

2:05 PM- 3:00 PM SURI Scholars Oral Presentation

Moderator: Dinali Jayawardana

Scholar (s): Katelyn Davis

Mentor (s): Marvin Mukoma, Elick Otachi, Anne Osano, Joshua Ogendo

Project Title: Assessing the Growth Performance of the African Catfish Cultured in the Affordable Domestic Fish Farming Technology.

Scholar (s): Faris Alhumoudi & Peerce R Gladden

Mentor (s): Dr. Haydar Teymourlouei

Project Title: Network Behavior Analysis Techniques for Cyber-Attack Detection

Scholar (s): Okwudindu Ogbuji Emmanuel

Mentor (s): Tirihana Amayu, Vivian Watt, Professor Kimurto, Professor Osano, Professor Ogendo

Project Title: Constraints of Finger Millet Production and Innovation to its Nutrients Element.

RETURN TO MAIN ROOM

3:05 PM- 3:35 PM Appreciation & Presentation of Awards

Dr. Guy-Alain Amoussou, Associate Provost,
Division of Academic Affairs

3:35 PM- 3:40 PM Closing

MENTORS

Mr. Paul Agboli

Department of Information Technology

Dr. Julie Agubokwu

Department of Nursing

Dr. Evangelyn Alocilja

Michigan State University Department of Biosystems & Agricultural
Engineering

Dr. Guy-Alain Amoussou

Associate Provost & Department of Computer Science

Dr. David Anyiwo

Department of Management Information Systems

Mr. Jesse Bemley

Department of Technology and Security

Dr. Eric Bonsu

Department of Natural Sciences

Dr. Janeula Burt

Department of Educational Leadership

Dr. Karen Cook-Bell

Department of History and Government

Dr. Jayne Cubbage

Department of Communications

Dr. Loubna Dali

Department of Computer Sciences

Dr. Kim Evelyn

Department of Language, Literature, and Cultural Studies

Dr. Donovan Griffin-Blake
Department of Natural Sciences

Dr. Monika Gross
University Honors Program

Dr. Dawit Hailu
Department of Natural Sciences

Ms. Johnetta Hardy
Entrepreneurship Innovation Center (EIC)

Dr. Erica Hernandez
Department of Psychology

Dr. William Johnson
Department of Education Studies & Leadership

Dr. Theodore-Lewis
Department of Behavioral Sciences & Human Services

Professor Christine Marsh
Department of Fine and Performing Arts

Dr. Charla Mckinzie
Behavioral Science and Human Services

Dr. Cordelia Obizoba
Department of Nursing

Dr. Uchenna Onuzulike
Department of Communications

Dr. Anne Osano
Department of Natural Sciences

Dr. Emory Perkins
Department of Social Work

Dr. Supriyo Ray
Department of Natural Sciences

Dr. Rosemary Shumba
Department of Computer Science

Dr. Barbara Smith
Department of Teaching, Learning & Professional Development

Dr. Jacqueline Smith
Department of Natural Sciences

Dr. Haydar Teymourlouei
Department of Technology & Security

Dr. Shannell Thomas
Department of Behavioral Sciences and Human Services

Professor Elena Velasco
Department of Fine & Performing Arts

Dr. Brandon Wallace
School of Education Montgomery College

Dr. Sharon Wilks
Department of Nursing

SURI GRADUATE ASSISTANTS

Ms. Shionta Somerville
Department of Computer Science

Mr. Jerry Godwin Diabor
Department of Computer Science

RESEARCH SCHOLARS

Adeola Adekoya

Olaoluwa Adewoye

Yetunde Agbaje

Abimbola Akerele

Prince George's Community College

Olawumi Akinfeleye

Seyi Akinwale

Faris Alhumoudi

Sekai Artis-Scott

Alvin Atuonah

Sydney Barnes

Kenia Best

Paige Blake

Amaya Brown

Xavier Brown

Imani Burke

Joseph C. Butler

Vanessa Chery

Montgomery College

Keilyn Cook

Brenda Cortes-Ramos

Khalil Davis

Valdosta State University

Katelyn Davis

Fort Valley State University

Pauline Ebisike

Chelsea Ejimakor

Okwudindu Ogbuji Emmanuel

Taelor Francois

Ronald Franklin

Marta Fuentes

Peerce R Gladden

Johnathan Gorum

Misa Gould

Antoné Graham

Zhayne Hackett

Erica Harrell

Anna Mullins Hildreth

Cynthia Ikeazor

Abdullahi Iro

Tamani Jemmott

Nikola Johnson

Jesse Kelly

Ines kenhoung

John King

Fort Valley State University

Elise Kinyanjui

St Mary's College of Maryland

Jhiame Kwegyir-Afful

Bernadine Lacdao

Valdel Lekane

William Leppert

George Mason University

Justin Leslie

North Carolina A&T State University

Colin Lingerfelt

Georgia College & State University

Madison Marshall

Courtney Matthews

Angela McNeil

Jules Millimono

Ashley Moore

Kamsi F. Nebo

Elaine Obahiagbon

Oluwanifemi Orekoya

Prince George's Community College

Katherine Palacios

Jocelyn Parker

Percival Parlade Jr.

Salisha Peeler

Ayreanna Pettijohn

Aliyah Phelps

Angel Porter

Mardline Cadet Prevot

Sydney Raymond

Georgetown University

Dayanna Robb

Roxan Rockefeller

Max Sahi

Texas A&M University San Antonio

Valeria Sanchez

Isaac Scott

Clarissa Smith

Kylarenee Still

Destiny-Ruth Sterling

Aliyah Strozier

David Tan

Valdosta State University

Hunter Tate

Tennessee State University

Jenny Tseng

University of California, Berkeley

Faith Uda

Kheni Upson

Kaiya Vickers

Carley Walker

Gregory Walters Jr

Kayla Washington

Melody Washington

Randolph College

Samuel Collin Zanders

SURI TEAM

Ms. Darlene Ajayi

Entrepreneurship Innovation Center

Ms. Julian Ajenifuja

Undergraduate Research and Entrepreneurship Innovation Center

Ms. Temerance Ali

Office of the Provost

Dr. Guy-Alain Amoussou

Associate Provost & Department of Computer Science

Dr. Anika Bissahoyo

Office of Research & Sponsored Programs

Ms. Anselma Fevrier

Office of the Provost

Ms. Yulanda Florence

Ronald E. McNair Scholars Program

Johnetta Hardy

Entrepreneurship Innovation Center

Dinali Jayawardana

Office of Research & Sponsored Programs

Oluwatoyin Kode

Entrepreneurship Innovation Center

Samuel Nwulu

Entrepreneurship Innovation Center

Randy Prout
Entrepreneurship Innovation Center

Mr. Matthias Seisay
Ronald E. McNair Scholars Program

Denisaime Ngatcha Yokam
Office of Research & Sponsored Programs

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Summer Undergraduate Research Institute
(SURI), especially:**

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Undergraduates in Cybersecurity**

Entrepreneurship Innovation Center (EIC)

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NSF I-Corps Short Course & Train the Trainer Program

January 2023

Learn how to commercialize your technology!

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- By learning how to assess commercialization opportunities, teams gain a better understanding of their market, customers, competitors and industry.



All BSU professors, research staff, postdocs, graduate students, and undergraduate students with potentially commercializable research or technology-based business ideas are eligible and encouraged to consider applying for January 2023 cohort

In collaboration with the
University of Maryland

To learn more or discuss your research potential please contact:

Dr. Guy-Alain Amoussou

For more information contact: eic@bowiestate.edu

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