Summer Undergraduate Research Symposium

Friday, July 24, 2020

Words: SURF, bioinformatics, cancer, WNT, fMRI, Python, SARS-CoV2, medicine, reinnervation, PROTAC, technology, combination therapy, mutation, stem cells, BRCA, glia, type-2 diabetes, Sonic Hedgehog, protease inhibitor, microbiome, natural language processing, medulloblastoma, transcriptional research, radiation therapy, cancer, regeneration, racial disparities, firefighters, genomics, Agr2, epigenetics, artificial intelligence, virtual research.
# Symposium Agenda

**Summer Undergraduate Research Fellowship Program (SURF)**

**University of Miami Summer 2020**

## Morning Session

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<td>8:45 AM – 9:00 AM</td>
<td>Opening Remarks from Dr. Priyamvada Rai</td>
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<td>9:00 AM – 9:15 AM</td>
<td>Leadership Remarks from Dean Henri Ford</td>
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<td>9:15 AM – 9:30 AM</td>
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<td>9:30 AM – 10:00 AM</td>
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| 10:00 AM – 11:30 AM | Student Oral Presentations  
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| 11:30 AM – 1:00 PM | Lunch Break                                                           |

## Afternoon Session

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| 2:30 PM – 2:50 PM | Break                                                                |
| 3:00 PM – 3:30 PM | Awards & Closing Remarks from Dr. R. Grace Zhai                    |
Symposium Agenda
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University of Miami Summer 2020

Student Oral Presentations

10:00 AM - 10:15 AM
**Peyton Coady**
"IDENTIFICATION OF PREDICTIVE SYNERGISTIC DRUG COMBINATIONS IN TREATMENT OF MEDULLOBLASTOMA"
Mentor: Dr. Nagi Ayad
Department of Psychiatry & Behavioral Sciences

10:15 AM - 10:30 AM
**Sandy St-Hilaire**
"BRCA HAPLOINSUFFICIENCY IN FALLOPIAN TUBE EPITHELIA AND HIGH-GRADE SEROUS CARCINOMA"
Mentor: Dr. Sophia George
Department of Obstetrics & Gynecology

10:30 AM - 10:45 AM
**Larissa Dixon**
"INFLUENCE OF TOBACCO POLICY ON FLORIDA FIREFIGHTER SMOKING STATUS AT ONSET OF CANCER DIAGNOSIS"
Mentor: Dr. David Lee
Department of Public Health Sciences

10:45 AM – 11:00 AM
**Qetsia Etienne**
"MICROBIAL DYSBIOSIS DURING PROGRESSION OF PANCREATIC CANCER"
Mentor: Dr. Sulagna Banerjee & Dr. Santanu Banerjee
Department of Surgery

11:00 AM - 11:15 AM
**Russell Perkins**
"VISUALIZING AND COMPARING MICROBIAL POPULATIONS AMONG MICE UNDERGOING AGR2-BASED APPENDAGE REGENERATION"
Mentor: Dr. Sandra Rieger
Department of Biology

11:15 AM - 11:30 AM
**Veronica Rodriguez**
"MÜLLER GLIA: LEARNING RETINAL REGENERATION FROM FROGS"
Mentor: Dr. Daniel Pelaez
Department of Ophthalmology
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Student Oral Presentations

1:00 PM - 1:15 PM
Will Snyder
“CONNECTIVITY STATES OF THE HUMAN DORSAL ANTERIOR INSULA ACROSS THE LIFESPAN”
Mentor: Dr. Lucina Uddin
Department of Psychology

1:15 PM - 1:30 PM
Sofia Perez
“GENOMIC AND STRUCTURAL ANALYSIS OF SARS-COV-2 COMPONENTS AND THEIR EVOLVING VARIANTS”
Mentor: Dr. Daniel Isom
Department of Pharmacology & Molecular Biology

1:30 PM - 1:45 PM
J’Zaria Simpson
“INVESTIGATING ARTIFICIAL INTELLIGENCE CLASSIFIERS FOR THE UNDERLYING AMYLOIDOSIS IN PATIENTS WITH T2D AND CI”
Mentor: Dr. Delia Cabrera DeBuc
Department of Ophthalmology

1:45 PM – 2:00 PM
Bryan Weselman
“PREPARING ACTIONABLE INTELLIGENCE ON NERVOUS SYSTEM REGENERATION AND REINNERVATION”
Mentor: Dr. Sanjoy Bhattacharya
Department of Ophthalmology

2:00 PM - 2:15 PM
Antanisha Parks
“NEUROLOGICAL MANIFESTATIONS OF COVID-19 IN THE HISPANIC POPULATION”
Mentor: Dr. Ayham Alkhachroum
Department of Neurology

2:15 PM - 2:30 PM
Olivia Perez
“STRUCTURE-BASED MOLECULAR SIMULATION STUDIES TOWARDS THE DEVELOPMENT OF TARGETED PROTEIN DEGRADERS FOR SARS-COV2”
Mentor: Dr. Stephan Schürer
Department of Molecular and Cellular Pharmacology
Student Participants
Summer Undergraduate Research Fellowship Program (SURF)

University of Miami Summer 2020

Peyton Coady
James Madison University
Mentor: Dr. Nagi Ayad
Department of Psychiatry & Behavioral Sciences

Larissa Dixon
University of South Florida
Mentor: Dr. David Lee
Department of Public Health Sciences

Qetsia Etienne
Bowdoin College
Mentors: Drs. Sulagna Banerjee & Santanu Banerjee
Department of Surgery
Antanishaka Parks  
University of Missouri, St Louis  
Mentor: Dr. Ayham Alkhachroum  
Department of Neurology

Olivia Perez  
University of Notre Dame  
Mentor: Dr. Stephan Schürer  
Department of Molecular & Cellular Pharmacology

Sofia Perez  
University of Notre Dame  
Mentor: Dr. Daniel Isom  
Department of Molecular and Cellular Pharmacology
Russell Perkins
University of Oklahoma
Mentor: Dr. Sandra Rieger
Department of Biology

Veronica Rodriguez
Florida International University
Mentor: Daniel Pelaez
Department of Ophthalmology

J'Zaria Simpson
Savannah State University
Mentor: Dr. Delia Cabrera DeBuc
Department of Ophthalmology
Student Participants
Summer Undergraduate Research Fellowship Program (SURF)

University of Miami Summer 2020

William Snyder
Bucknell University
Mentor: Dr. Lucina Uddin
Department of Psychology

Sandy St-Hilaire
Florida International University
Mentor: Dr. Sophia George
Department of Obstetrics & Gynecology

Bryan Weselman
College of William and Mary
Mentor: Dr. Sanjoy Bhattacharya
Department of Ophthalmology
Thanks and Acknowledgements

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The SURF team
Dr. Priyamvada Rai (Program Director), Mr. Santos Cayetano, Ms. Sarah Sandiford, Ms. Theresa Votolato, Ms. Rositsa Kalinova, Ms. Maya Kono

Sponsors and Contributors

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