

UNDERGRADUATE RESEARCH AND CREATIVE ACHIEVEMENT DAY

APRIL 27, 2016 • URCAD.UMBC.EDU • #URCAD

10 a.m.

Student: Lilian Anosike

Mentor: Dr. Michelle Starz-Gaiano

"Effects of a Chromatin Remodeler on Migratory Cell Fate

Determination"

Biological Sciences

10:15 a.m.

Student: Austin Gabel

Mentors: Dr. Rachel Brewster, Dr. Young-Sam Lee

"Understanding Induction of Suspended Animation in Zebrafish"

Biological Sciences

10:30 a.m.

Student: Jordyn Schroeder

Mentors: Dr. Ovijit Chaudhuri, Ms. Katrina Wisdom

"Regulation of Radioresistance of Breast Cancer Cells by Tissue

Composition and Mechanics" Mechanical Engineering

10:45 a.m.

Student: James Loy

Mentor: Dr. Matthew Pelton

"Charge Transfer from Single Semiconductor Nanocrystals to

Single Molecules"

Physics

11 a.m.

Student: Austin Maduka

Mentors: Dr. Natasha Zachara, Dr. Kamau Fahie,

Ms. Jennifer Groves

"Assessing the Stress-Dependent Role of AMPK on OGT and

OGA Activity and Localization"

Biochemistry and Molecular Biology

11:15 a.m.

Student: Da'Kuawn Johnson

Mentors: Dr. Christine Jacobs-Wagner, Dr. Rodrigo Arias Cartin "Characterization of the Bacteriophage CR30 Homolog (gp140)

of HarP"

Biochemistry and Molecular Biology

11:30 a.m.

Student: Jason Hughes

Mentor: Dr. Yanhui Liu

"Changes in Thin Film Metallic Glass Microstructures upon

Annealing in the Supercooled Liquid Region"

Chemical, Biochemical, and Environmental Engineering

11:45 a.m.

Student: Elise Adamson

Mentor: Dr. Russell Vance

"Recognition of Bacterial Ligands by the NAIP Immune Receptor"

Biochemistry and Molecular Biology

1 p.m.

Student: **Caitlyn Maczka**

Mentor: Dr. David Eisenmann

"Characterization of an Embryonic Skin Enhancer Element from

the C. elegans pax-3 gene"

Biological Sciences

1:15 p.m.

Student: Andreas Seas

Mentors: Dr. Alexey Kamenskiy, Dr. Jason MacTarggart

"Effects of Demographics and Risk Factors on the Elastic Strain

Energy of Human Superficial Femoral Arteries"

Chemical, Biochemical, and Environmental Engineering

1:30 p.m.

Student: Jack Slettebak

Mentor: Dr. Matthias Gobbert

"Using the HPCG Benchmark to Analyze Performance of the

Intel Xeon Phi"

Mathematics and Statistics

2 p.m.

Student: Shelbi Tippett

Mentor: Dr. Ruben Delgado

"Remote Sensing Monitoring of Canadian Wildfire Smoke and

its Impact on Baltimore Air Quality"

Mechanical Engineering

2:15 p.m.

Students: Seung Ho Choi, Hannah Carter

Mentors: Dr. Michael F. Summers, Mr. Joshua Brown

"Probing the Structure of the HIV-1 5'-L Monomeric Conformation

and Start Site Heterogeneity by NMR Spectroscopy"

Biochemistry and Molecular Biology

3 p.m.

Students: Mashhood Wani, Natalie Steenrod, Poornima Patel

Mentor: Dr. Minjoung Kyoung

"Sustain-O-Scope: Simple Compound Light Microscope"

Chemistry and Biochemistry

3:15 p.m.

Student: Michael Wolfe

Mentor: Dr. Jason Kestner

"Simulating Entanglement Dynamics of Singlet-Triplet Qubits

Coupled to a Classical Transmission Line Resonator"

Physics

3:30 p.m.

Student: Justine Lottermoser

Mentor: Dr. Ryan White

"The First Electrochemical, Aptamer-Based Sensor on a

Carbon Surface"

Biochemistry and Molecular Biology

