Oral Presentations

University Center, Room 312

Session I
Faculty Moderator: Muruhan Rathinam, Mathematics

9:15 – 9:30 a.m. Michael Herder  
“Violin Performance Studies”  
Professor Airi Yoshioka, Mentor

9:30 – 9:45 a.m. Shilpa Gadwal  
“Effects of High-level Troleandomycin Resistance in the 23S Ribosomal RNA of D. radiodurans on Ribosome Function”  
Professor Janice Zengel, Mentor

9:45 – 10:00 a.m. Julie Fields  
“Exploring Patient Characteristics in Treatment Decision-making among Black and White Physicians in the United States”  
Vence Bonham, Mentor

10:00 – 10:15 a.m. Yuriy Sverchkov  
“Modeling Flagellar Growth as a Stochastic Process”  
Professor Muruhan Rathinam, Mentor

10:15 – 10:30 a.m. Tamika John  
“Evaluating the Effects of Regulatory T-Cell Epitopes on B-cell MHC Class II Presentation”  
Professor David Scott, Mentor

Session II
Faculty Moderator: Tamra Mendelson, Biological Sciences

10:30 – 10:45 a.m. Olubukola Ojewoye  
“Flexibility - Not Just for Gumby Anymore”  
Professor Katherine Seley-Radtke, Mentor

10:45 – 11:00 a.m. Uzoma Iheagwara  
“The Intracellular Trafficking Pathway of MHC II Molecules is Altered in the Absence of Invariant Chain”  
Professor Suzanne Ostrand-Rosenberg, Mentor
## Oral Presentations

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<th>Title</th>
<th>Mentor</th>
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<tr>
<td>11:00 – 11:15 a.m.</td>
<td>Benyam Kinde</td>
<td>Biochemistry and Molecular Biology</td>
<td>“Toward the 3D Structure of the Core Encapsidation Signal, a Critical Component for Replication of a Model Retrovirus”</td>
<td>Professor Michael Summers, Mentor</td>
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<td>11:15 – 11:30 a.m.</td>
<td>Alexandria Scott</td>
<td>Biological Sciences</td>
<td>“Converting Phylogenetic Differences between Species into Time”</td>
<td>Professor Tamra Mendelson, Mentor</td>
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<td>11:30 – 11:45 a.m.</td>
<td>Shayla Shorter</td>
<td>Biological Sciences</td>
<td>“How Does TRAIL Affect T-Cell Function?”</td>
<td>Professor Violeta Rus, Mentor</td>
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### Session III

**Faculty Moderator:** Marc Zupan, Mechanical Engineering

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<tr>
<td>1:30 – 1:45 p.m.</td>
<td>Joshua Betz</td>
<td>Psychology</td>
<td>“Backpropagation Analysis of Silent Cerebrovascular Disease and Cognitive Function in a Community-Dwelling Adult Sample”</td>
<td>Professor Shari Waldstein, Mentor, Professor Tülay Adali, Mentor</td>
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<td>1:45 – 2:00 p.m.</td>
<td>Devin Burns</td>
<td>Mechanical Engineering</td>
<td>“Mechanical Properties of Electroformed Fused Deposition Modeled-Copper-Nickel Hybrid Materials”</td>
<td>Professor Marc Zupan, Mentor</td>
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<td>2:00 – 2:15 p.m.</td>
<td>Brandon Johnson</td>
<td>Mechanical Engineering</td>
<td>“Improving Mechanical Properties of PMMA Bone Cement with Nano and Micro Particles”</td>
<td>Professor Tim Topoleski, Mentor</td>
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<td>2:15 – 2:30 p.m.</td>
<td>Anna An</td>
<td>Music</td>
<td>“Adventure in Learning the Language of Music”</td>
<td>Professor Airi Yoshioka, Mentor</td>
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