

The office of **Research and Individualized Student Experiences (RISE) at SUNY Oswego** serves to encourage and facilitate scholarly and creative activities that enhance educational experiences and prepares students for their career path. Our mission is to support a wide range of mentored, self-directed work that is designed to enable students to apply the knowledge learned in classes.

#### **Opportunities for students:**

**RISE Travel Grants:** up to \$250. RISE offers support for students presenting work at conferences

**Student Minigrants:** up to \$300. Grants are designed to support students in their research or creative efforts by granting small funds for independent projects that are not associated directly with course work

For more info, visit www.oswego.edu/rise or contact rise@oswego.edu

# Schedule

# September 17, 2021 | Sheldon Ballroom

2 - 3:30 p.m. — Poster Presentation and Refreshments

### Among the programs represented are:

The Faculty-Student Challenge Grant, Faculty and Student SCAC and Mini-Grants, Provost Faculty Research and Creative Activities Fellowship, Early Start Program and Undergraduate Research Assistant Grants.

## PRESENTATION TOPICS

1. Decontaminating Nebraska's Water Supplies with Uranium—Peptide Bonding

Lauren E. Samson (1), Esha Mishra (2) and Cody Schultz (2) (1) SUNY Oswego, (2) University of Nebraska at Lincoln

2. A Novel Scintillator Detector: Rare Earth Doped Lithium Tetraborate

Katherine A. Shene (1), Lauren Samson (1) and Peter Dowben (2) (1) SUNY Oswego, (2) University of Nebraska at Lincoln

3. A Numerical Case Study of a Polar Low in the Norwegian Sea During a Cold—Air Outbreak

Yonggang Wang, Ethan Weisberger, Matthew Rolph, Madeleine Crean and Michael Pagnanelli — *SUNY Oswego* 

4. Amended in Action: A Six—Part Audio Series

Michael J. Riecke — SUNY Oswego

5. Analysis of Degradation Pathways for a Biodegradable Plastic

Johann Roque, Kyle Burley and Matthew Baker — *SUNY* Oswego

6. Causes and Consequences of Nest Predation in Northern Cardinals (*Cardinalis cardinalis*) in Rural and Urban Habitats

Shyla R. Luna and Daniel T. Baldassarre — SUNY Oswego

 Characteristics and Climatology of Arctic Cold—Air Outbreaks: Insights from COMBLE Observations and Numerical Simulations

Michael Pagnanelli, Madeleine Crean, Ethan Weisberger, Matthew Rolph and Yonggang Wang — *SUNY Oswego* 

8. Comparing Song Repertoires in Urban vs. Rural Northern Cardinals

Brooke D. Goodman and Daniel T. Baldassarre — *SUNY Oswego* 

9. Discover Wellness: A Successful Employee Wellness Program During a Pandemic

Whitney D. Kmetz and Shannan J. Hall - SUNY Oswego

 Exploring Imagined Interactions Theory and Threatened Identities: A Follow—Up Interview Study

Andrea J. Vickery and Elena R. Jones — SUNY Oswego

11. Exploring the Use of Latent Fingerprint Analysis to Differentiate Female Subjects from Male Subjects

S. Barnes, M. Gysbers and S. Haddadi — SUNY Oswego

12. Idealized Modeling of Lake Effect Precipitation Bands

Ethan A. Weisberger and Steven T. Skubis — SUNY Oswego

13. Insights on the Manual Syllabary of Japanese Sign Language (Nihon Shuwa)

J. Ann (1), A.M. Nonaka (2) and K. Sagara (3) (1) SUNY Oswego, (2) University of Central Missouri, (3) National Museum of Ethnology, Osaka, Japan

14. Interior Luminosity Curves of Cepheid Variables

Michele Manno — SUNY Oswego

 Investigation of the Molecular Mechanism of KrsB—Mediated Adhesion in Dictyostelium discoideum

Palina Saljanin and Yulia Artemenko - SUNY Oswego

# PRESENTATION TOPICS

16. Laser Frequency Stabilization Technique Based on Direct Absorption Signal of a Temperature Stabilized Rubidium Vapor Cell

Mayank Giri, Fiona Wee and Priyanka Rupasinghe — *SUNY Oswego* 

17. Linearized Stellar Pulsation Calculations for 3
Types of Variable Stars

Hugh Randall (1), Anthony Chalmers (2) and Nick Proietti (3) (1) SUNY Oswego, (2) SUNY Binghamton, (3) Rice University

18. Lithium Tetraborate as a Neutron Scintillator

Lauren E. Samson (1), Katherine Shene (1) and Elena-Maria Echeverria (2) (1) SUNY Oswego, (2) Oklahoma State University

19. Living in the City Makes Northern Cardinals
Change Color

Daniel T. Baldassarre and Denis A. Ramos — SUNY Oswego

20. Machine learning estimate for distance modulus to Messier 3

Selim Kalici, Hugh Randall and Michele Manno — *SUNY* Oswego

21. Metallophilic Interactions of d^10 Metals with N—Heterocyclic Carbene Mimics

David M. George Jr and Thomas M. Brown — *SUNY Oswego* 

22. Microaggressions in the workplace: A systematic literature review

Michele Thornton, Kristin L. Sotak, Steven E. Abraham and Fadi Gaye — *SUNY Oswego* 

23. Molecular Cloning of Red Fluorescent Protein Tagged RalGDS

Kelsey, E. Roberts and Yulia Arkemenko — *SUNY Oswego* 

24. Progress Towards Developing A Fully Automated Data Analysis

Navya Amaratunga and Priyanka M. Rupasinghe – *SUNY Oswego* 

25. Regulation of Ras—Associated Protein—1 By Kinase Responsive to Stress B in Dictyostelium discoideum

Tiffany Flores and Yulia Artemenko — SUNY Oswego

26. Remote Instruction: Development of a Peer Code Review Platform

Tamaike Brown — SUNY Oswego

27. Reverberations, for Shakuhachi and Electronics

Paul Leary — SUNY Oswego

28. Role of Filamin's Actin Binding and Dimerization Domains in Mechanosensation.

Sarah Buckler, Aaron Cole and Yulia Artemenko – *SUNY Oswego* 

29. Testing For Esterase Activity In Enzyme 4Q7Q.

Namrata Pokharel and Julia Koeppe — SUNY Oswego

30. The House Is on Fire but We Kept the Burglars
Out: Racial Apathy and White Ignorance in
Pandemic—Era Immigration Detention

Kim Ebert (1), Wenjie Liao (2), Joshua Hummel (1) and Emily Estrada (3)

(1) North Carolina State University, (2) Rochester Institute of Technology, (3) SUNY Oswego

31. The Organization of Obsidian Exchange in Middle Postclassic period Sauce and Its Hinterland in Veracruz. Mexico

Alanna E. Ossa — *SUNY Oswego* 

32. Oswego KidsTech: K—6 STEM Activities and Online Synchronous Instruction

Karin Dykeman, Mark Springston and Hunter Sabella – *SUNY Oswego* 

33. Expression and Purification of Complement Factor
H for Protein Interaction Studies

Michael W. Scott, Chelsea M Gomez and Julia Koeppe -— *SUNY Oswego*