

**RADFORD**  
**UNIVERSITY**

Office of Undergraduate  
Research and Scholarship



**9<sup>th</sup> annual**

**SUMMER RESEARCH  
CELEBRATION**

**Oct. 15, 2021**

# 9<sup>th</sup> annual

# SUMMER RESEARCH CELEBRATION

This past summer, 25 amazing student-faculty collaborative projects were funded through the Summer Undergraduate Research Fellowship (SURF) program. Today they will get the opportunity to tell their stories and accomplishments. We hope you are inspired to achieve similar results, adding to the knowledge and scholarship in your fields of study!

## Bonnie Auditorium

### ORAL PRESENTATIONS

- 9 a.m. - 9:30 a.m.** **Adam Downs** *"Modeling Pituitary Organogenesis"*
- 10 a.m. - 10:50 a.m.** **Jack Kulaga** *"Processing Unmanned Aerial System (UAS) Imagery for Change Detection of Geomorphic Features in an Alpine Glacial Basin, Northern Patagonian Ice Field (NPIF), Chile"*  
**Dakota Taylor** *"Sex and Gender Estimation in Forensic Anthropology and the Identification of Transgender Individuals"*  
**Carlos Wilensky** *"Efficiency of Multistage Pooling in Estimating the Prevalence of Multiple Diseases"*
- 11 a.m. - 11:50 a.m.** **Grace Atallah** *"The Luttrell Psalter: Creating Identity and Interpretive Communities"*  
**Hudson Crowe** *"Bridging Musical Worlds: Arranging Chopin's Preludes for Percussion Ensemble"*  
**Sofia Grochowski** *"Vehicle Road Effects on Animal Species"*
- 12 p.m. - 1 p.m.** **Brian Currin** *"Bee Community Assemblages in Agricultural and Natural Plots"*  
**Kaleb Martin** *"Fragmenting Disks Around Massive Young Stellar Objects"*  
**Haley Howerin** *"Lights, Noise, Nesting? Relationships Between Human Habitat Disturbances, Nest Site Preference, and Fledging Success in Cavity-Nesting Songbirds"*  
**Sam Williams** *"Weaknesses and Vulnerabilities of Internet of Things Devices"*
- 2 p.m. - 2:50 p.m.** **Montasia Braxton** *"A Mixed Methods Multidisciplinary Examination of Diversity in Education"*  
**Mia Purcell** *"The Prevalence of Pluralistic Ignorance within Environmental Attitudes: Ruling Out Alternative Explanations"*  
**Shane McClafferty** *"Affective Reactions to Situations in Measuring Extraversion and Neuroticism"*





**Artis Atrium | Reed Hall**

## POSTER PRESENTATIONS

- 3 p.m. - 4 p.m.** **Michaela Baker** *"Civic Engagement of Radford Students"*
- Kori Brown** *"Mutational Analysis of L361 in Beta-Glucuronidase: Investigation in Z77 Inhibitor Binding"*
- Grace Bryant** *"The Influence of Water in Studio Ghibli Films"*
- Sheridan Dean** *"Celebrity Influence on Stigma of Mental Health Disorders and Seeking Treatment"*
- Benjamin Dearborn** *"Expressing, Purifying, and Performing Assays on Variants of the Laccase Enzyme"*
- Kimber Duke** *"Behavioral Interpretations from Blunt Force Trauma Fracture Patterns in Medicolegal Investigations of Violent Death"*
- Sierra Felty & Chris Wozniak** *"A Range-wide Ectoparasitic Survey for Allegheny Woodrats"*
- Maia Grove** *"Examining Differing Mortality Rates for Black Americans in Small Metropolitan Counties of Virginia"*
- Zoe Hannabass** *"Long-term Alterations in Stress Markers Following Early-life Maternal Separation in Rodent Brain"*
- Gabriel Hessler** *"Anthracite Versus the Gut Biome of Gryllobates sigillatus, Dermestes maculatus, and Gromphadorhina portentosa"*
- Jordan Reddy** *"What Hasn't Killed You: Influence of Community Richness and Biogeophysical History on Resilience to Invasive Disruption in Microbial Biospheres"*
- Dakota Taylor** *"Sex and Gender Estimation in Forensic Anthropology and the Identification of Transgender Individuals"*
- Sam Williams** *"Weaknesses and Vulnerabilities of Internet of Things Devices"*



## FACULTY MENTORS

**Ms. Margaret Adams**

**Dr. Jeffery Aspelmeier**

**Dr. Chet Bhatta**

**Dr. Donna Boyd**

**Dr. Carlee Bradbury**

**Dr. Matthew Cataldi**

**Dr. Eric Choate**

**Dr. Jason Davis**

**Dr. Sarah Foltz**

**Dr. Dayna Hayes**

**Dr. Iuliia Hoban**

**Dr. Nicole Iannone**

**Dr. Ye Ra Jeong**

**Dr. Twange Kasoma**

**Dr. Heather Keith**

**Dr. Sarah Kennedy**

**Dr. Kimberly Lane**

**Dr. Sandra Liss**

**Dr. Karen Powers**

**Dr. Shamim Sarker**

**Dr. Ryan Sincavage**

**Dr. Premchand Uppuluri**

**Dr. Allyson Yankle**

## SUMMER RESEARCH COORDINATORS OURS

**Joe Wirgau, Director**

**Maggie Pate, Associate Director**

**Abby Hardbower, Graduate Assistant**

**Yasmine Tyler, Graduate Assistant**

**Leah Ellis, Executive Student Assistant**

**Maia Grove, Executive Student Assistant**

**Skylar Roberson, Executive Student Assistant**

**Members of the SURF Review Committee:**

Kevin Ayers, Niels Christensen, Tom Cruise, Nick Francis, Katie Garahan, Pam Jackson, Abhay Kaushik, Beth McClellan, Gini Weisz, Wesley Young

SPECIAL THANKS TO **CONFERENCE SERVICES AND UNIVERSITY RELATIONS**

