

# 2024 SVSU Student Showcase Program

April 26, 2024

**Welcome | Malcolm Field Theatre**

**2:00pm – 2:15pm**

**Oral Presentations | C 220**

**2:30pm | Reflecting on the United States Institute of Theatre Technology Conference**

Zoe Gilbert, Eric Durette, Tyler Obermiller, Lela Murray, Emma Koch

Mentor: Dr. Peggy Mead-Finizio

Theatre | Arts & Behavioral Sciences | SVSU Theatre Department and Foundation Resource Grant

Travel/Cultural Experience

**2:45pm | Breaking the Chains: The Untold Story of Black Women and Intersectional Victimization**

Gabrielle Norris

Faculty Mentors: Dr. Julie Keil

Political Science | Arts and Behavioral Sciences

Research Activity

**3:00pm | How Does Death Anxiety Influence Our Material Attachments?**

Holly Schaub, Tyler-James Head, Mya Landis, Kaitrin Kraly

Mentor: Dr. Travis Pashak

Psychology | Arts & Behavioral Sciences | Honors Program and Undergraduate Research Research Activity

**3:15pm | The UK-Rwanda Deal and its Legality**

Alexandra Parks

Faculty Mentor: Dr. Julie Keil

Political Science | Arts and Behavioral Sciences

Research Activity

**3:30pm | The phylogeography of two North American fishes, *Macrhybopsis meeki* and *Macrhybopsis storeriana***

Colton Bragg

Faculty Mentor: Dr. Cal Borden

Biology | Science, Engineering, & Technology | Undergraduate Research

Research Activity

## **Oral Presentations | C 222**

### **2:30pm | My Summer working on Capitol Hill**

Isiah Sageman

Faculty Mentor: Dr. Kenneth Jolly

Political Science | Arts and Behavioral Sciences

Travel/Cultural Experience

### **2:45pm | Martin Luther King Jr. in His Commitment to the Social Gospel**

Rylee Livesay

Faculty Mentor: Dr. Kenneth Jolly

History | Arts and Behavioral Sciences

Research Activity

### **3:00pm | Challenging the Jim Crow Sphere; Black Women Opposing Post-War Violence**

Madalynn Paquette

Faculty Mentor: Dr. Kenneth Jolly

History | Arts & Behavioral Sciences | Black Studies

Research Activity

### **3:15pm | Similarities in self-perceptions of procrastinators across the U.S. and China**

Lila Duvendack, Julia Lange

Faculty Mentor: Dr. Ranjana Dutta

Psychology | Arts & Behavioral Sciences

Research Activity

### **3:30pm | Chasing museums**

Soumaya Larbi

Mentor: Dr. Pat Shelley

Psychology | Arts and Behavioral Sciences

Travel/Cultural Experience

## **Oral Presentations | C 223**

### **2:30pm | Effective Characteristics of Alternative Certification Programs in Teacher Education**

Carl Sztuczko

Mentor: Dr. James Tarr

Teacher Education | Education

Research Activity

### **2:45pm | Roberts-Gilbertson Fellowship: Action in the Community**

Julia Lange, Ashley Hoffman, Emma Lobodzinski, Ole Leishnig, Camyrn McGee, Teagan Petschar, Tunisia Smith, Ryan Baker, Alexis Glumm, Ethan Glider

Roberts-Gilbertson Fellowship

Faculty Mentors: Dr. Julie Foss and Dr. David Nichols

Community Engagement

**3:00pm | Bean Beetle Transgenesis: A Pathway to Advance Research and Education in Biology**

Gauge Eiser

Faculty Mentor: Dr. Jorge Paredes-Montero

Biology | Science, Engineering, & Technology | Undergraduate Research

Research Activity

**3:15pm | Understanding the Mechanism of Lipopolysaccharide (LPS) Induced Hemolysis of Whole Blood**

Brendin Broeders, Benjamin Rene, Jordan Nowicki, Nathan Siemen, Ashwin Mudaliyar

Faculty Mentor: Dr. James McEvoy

Biology | Science, Engineering, & Technology | Undergraduate Research

Research Activity

## Performance | Emeriti Room

### **2:30pm | The BATS Project: Understanding Life in a Women's Shelter, An Interdisciplinary Student Project**

#### **AKOFENA (Swords of War) Courage, Valor**

Brianna Istok, Caleb Ciner, Shalay Neveau, Sophia Collins, Howard McLean, Dana Samalik, Emerson Romanchuk, Philip Hilmon, Isabel Losa, Mariah Hall, Grant Norman, Josh Lumbreras, Alana Osuna, Florence Ashworth

Faculty Mentors: Dr. Rosina Hassoun, Dr. Michael Mosher, Dr. Joseph Ofori-Dankwa, and Dr. Dave Rzesutek

Collaborator: The Mustard Seed Shelter

Youth Participant: Brayden Beson (Eric Beson & Kymberlie Oserhoth, Kolleen Beson, parents Business, Arts, Theatre, and Sociology (BATS) | Foundation Community Engagement Grant Community Engagement

### **2:50pm | The BATS Project: Understanding Life in a Women's Shelter, An Interdisciplinary Student Project**

#### **ESE NE TEKREMA (Teeth & Tongue) Interdependence, Relationships**

Amelia Hoag, Chase Valuet, Emily Salgado, Kailee Sandoval, Angela Lauer, Paige Tuckerman, Riley Will, Katelynn Bell, Javon Sutton, Alisha Moore, Haily Fitch, Alivia Somers, Rachel Petty

Faculty Mentors: Dr. Rosina Hassoun, Dr. Michael Mosher, Dr. Joseph Ofori-Dankwa, and Dr. Dave Rzesutek

Collaborator: The Mustard Seed Shelter

Youth Participant: Natalia Luke (Nicole Dyer & Ali Smith, parents)

Business, Arts, Theatre, and Sociology (BATS) | Foundation Community Engagement Grant Community Engagement

### **3:10pm | The BATS Project: Understanding Life in a Women's Shelter, An Interdisciplinary Student Project**

#### **ANANSE NENTAN (Spider Web) Wisdom, Creativity**

Rhea Schultz, Ella Yantz, Michael Zaroni, Lila Duvendack, Brandi Wright, Thomas Arnold, Alex Dubowski, Danielle Woodard, Salina Kunwar, Aanchal Khadka, Rebecca Sweetie Gohil, Larrisa Fuester-Diener

Faculty Mentors: Dr. Rosina Hassoun, Dr. Michael Mosher, Dr. Joseph Ofori-Dankwa, and Dr. Dave Rzesutek

Collaborator: The Mustard Seed Shelter

Youth Participant: Londyn Newton (Lonnie Newton & Re'Nisha Newton, parents)

Business, Arts, Theatre, and Sociology (BATS) | Foundation Community Engagement Grant Community Engagement

## **Performance | Malcolm Field Theatre**

### **2:30pm | Chamber Composition Performance**

Matthew Kovalcsik, Victor David, Jacob Weisenbach, Dylan Messenhimer, Anna Palmiter

Faculty Mentor: Dr. Colin Wood

Music | Arts and Behavioral Sciences | Music 312 - Music Analysis course

Creative Endeavor

### **3:05pm | 20th Century Chamber Composition Performance**

Andrea Heaton, Connor Woolf, Autumn Edgerton, Melody Woods, Sophia Moskal

Faculty Mentor: Dr. Colin Wood

Music | Arts and Behavioral Sciences | Music 312 - Music Analysis course

Creative Endeavor

## **Poster Presentation | Curtiss Hall – Groening Commons**

**2:15pm – 4:00pm**

**1 | Botz Fellowship is a privately funded by distinguished SVSU alumna, Janet Botz. Botz Fellowship focuses on Career Readiness by illustrating the eight career readiness competencies as set forth by the National Association of Colleges and Employers, to aid students pursuing a degree in the College of Arts and Behavioral Sciences.**

Shonda Booker, Kara Harbour, Cole Machiela, Maximillian Olivarez, Alexander Parks, Danielle Woodard

Faculty Mentors: Dr. Ranjana Dutta, Dr. Kimberly Lacey and Lizzi Hubble-Radosa

Psychology | Arts and Behavioral Sciences | Career Services

Leadership

**2 | Pronoun Usage as a Safety Cue for College Students**

Keri Maricle

Faculty Mentor: Dr. Deborah Ward

Psychology | Arts and Behavioral Sciences

Research Activity

**3 | No More FoMO? The Fear of Missing Out in Contemporary Social Media Use**

Brooklyn Karg, Keri Maricle, Sarah Velasco, Zach McEvoy, Maia Clynick

Faculty Mentor: Dr. Joe Weaver

Psychology | Arts and Behavioral Sciences

Research Activity

**4 | Survey of Contemporary Historical Jesus Research**

Ryan Baker

Faculty Mentor: Dr. Paul Teed

History | Arts and Behavioral Sciences

Research Activity

**5 | 2024 Economics Games**

Sara Haupt, Hannah Duford, Kailie Peck, Zakaria Abden

Faculty Mentor: Dr. Kylie Jaber

Accounting, Law, and Finance | College of Business

Community Engagement

**6 | Developing a Herd Feeding Management System for Livestock**

Andrea Grifka

Faculty Mentor: Dr. Hillary Mellema

Management & Marketing | College of Business | Undergraduate Research

Research Activity

**7 | Cross-Discipline Research to Improve Baseball Sliding Safety Equipment**

Zenelee Cruz, Matthew Montroy

Faculty Mentor: Dr. Hillary Mellema

Management & Marketing | College of Business

Research Activity

**8 | A Model of Envy Process in a Job Search Context: Envy and Resume Fraud as a Response to Job Search Progress Comparison**

Abigail Walk

Faculty Mentor: Dr. Jaewoo Kim

Management & Marketing | College of Business

Research Activity

**9 | The Impact of Ethanol Production on Food and Feed Prices in the Midwest**

Avery Claybaugh

Faculty Mentor: Dr. Kevin Meyer

Economics | College of Business

Research Activity

**10 | Carbon Offset Programs and Farmer Decision Making**

Ethan Gilder

Faculty Mentor: Dr. Kevin Meyer

Economics | College of Business | Economics 303

Research Activity

**11 | Hex Bar Deadlift as a Post Activation Performance Enhancement Warm-up Strategy for Golf Club Head Speed**

Amanda Ehrlich, Parker Dietzel

Faculty Mentor: Dr. Gena Guerin

Collaborator: Dr. Merrick Lincoln

Kinesiology | Health and Human Services | Undergraduate Research

Research Activity

**12 | Landmine Punch: Exercise Technique and Programming Applications**

Jared Gross, Micah Cretsinger, Colin Cornwell

Faculty Mentor: Dr. Merrick Lincoln

Collaborator: Joeseeph Neal, CSCS\*D

Kinesiology | Health and Human Services

Research Activity

**13 | Using ArcGIS to Visualize the Rabies Experience in Bay County**

Grace Boak

Faculty Mentor: Dr. Julie Commerford

Collaborator: Dr. Thomas Bender, Bay County Health Department

Public Health and Health Sciences | Health and Human Services

Community Engagement

**14 | Sources and Perceived Stress in Nursing Students**

Erica Garcia, Natalie Bargardi, Erin Segerstrom

Faculty Mentor: Dr. Elizabeth Roe

Nursing | Health and Human Services

Research Activity

**15 | An optimized DNA extraction and purification method for minute insects**

Samantha Igaz, Olivia Konsdorf, Clayton Robinson

Faculty Mentor: Dr. Jorge Paredes-Montero

Public Health and Health Sciences | Health and Human Services | Undergraduate Research  
Research Activity

**16 | Global Characterization of Endosymbiont Meta-Communities Associated with Whitefly Super-Bug species.**

Ella Randolph, Guido Galarza, Michael Carter, Olivia Konsdorf

Faculty Mentor: Dr. Jorge Paredes-Montero

Biology | Science, Engineering, & Technology | Undergraduate Research  
Research Activity

**17 | The Effects of Drought on Competitive Interactions Between Barley and Corn**

Jeneva Tomaszewski

Faculty Mentor: Dr. Brian Maricle

Biology | Science, Engineering, & Technology | Undergraduate Research  
Research Activity

**18 | Effects of intraspecific competition on growth and production in potatoes**

Sarah Veale, Tori Ott

Faculty Mentor: Dr. Brian Maricle

Biology | Science, Engineering, & Technology  
Research Activity

**19 | The Effect of Nitrogen Addition on Competition in Barley and Pea**

Emma Wright

Faculty Mentor: Dr. Brian Maricle

Collaborator: Dr. Hannah Fazekas

Biology | Science, Engineering, & Technology  
Research Activity

**20 | The Effect of Light on Directionality of Growth in Pothos Plants**

Isabella Goulette

Faculty Mentor: Dr. Brian Maricle

Biology | Science, Engineering, & Technology  
Research Activity

**21 | Comparing water potentials in plants and soil across SVSU campus locations.**

Anthony Oswald

Faculty Mentor: Dr. Brian Maricle

Biology | Science, Engineering, & Technology  
Research Activity



**22 | The impact of proximity to water on the water potential of Austrian pine (Pinus nigra) leaves**

Ean Gauthier

Faculty Mentor: Dr. Brian Maricle

Biology | Science, Engineering, & Technology

Research Activity

**23 | Synthesis, characterization, and electrochemical analysis of synthetic biomolecule models containing ruthenium with hydroxamate and/or nitrosyl ligands**

Alexis Glumm, Kent Brown, Emily Jaremba

Faculty Mentor: Dr. Adam Warhausen

Chemistry | Science, Engineering, & Technology

Research Activity

**24 | Analysis of Tetracycline Removal in pH-controlled Environments with Varying Forms of Biochar**

Warren Jacobs, Zach Adelberg

Faculty Mentor: Dr. Adam Warhausen

Chemistry | Science, Engineering, & Technology | Undergraduate Research

Research Activity

**25 | Characterization of Microbial Communities Within Sediment and Water Samples from the Saginaw Bay Watershed**

Avie Krauss

Faculty Mentor: Dr. James McEvoy

Collaborator: Saginaw Bay Environmental Science Institute, Dr. David Karpovich, Dr. Hannah Fazekas

Biology | Science, Engineering, & Technology

Research Activity

**26 | Electric Bike Utilizing Dynamic Braking**

Lucas Smith, Eric Cassiday, Brycen Halfmann, Mitch McDowell

Faculty Mentor: Dr. Rajani Muraleedharan

Electrical & Computer Engineering | Science, Engineering, & Technology | Undergraduate Research

Research Activity

**27 | Empowering Food Security using Sensor-based Pantry Inventory Management to Foundation Community Engagement Grants**

Nicholas Armstrong, Dedrick Lewis, Marek Belgiorno, Roy Sweet, Zachary Franzel

Faculty Mentor: Dr. Rajani Muraleedharan

Collaborator: The Salvation Army

Computer Science | Science, Engineering, & Technology | Undergraduate Research

Research Activity

### **28 | Electric Vehicle Accumulator for CFR**

Cameron Guettler, Robert Hutchinson, Sean McClary, Ethan Jones

Faculty Mentor: Dr. Rajani Muraleedharan

Collaborator: Cardinal Formula Racing

Electrical & Computer Engineering | Science, Engineering, & Technology

Research Activity

### **29 | Control System for Autonomous Type 1 Diabetes Management Device**

Marek Belgiorno

Faculty Mentor: Dr. Rajani Muraleedharan

Electrical & Computer Engineering | Science, Engineering, & Technology | Honors

Program and Undergraduate Research

Research Activity

### **30 | Exploring the Use of Large Language Models for Topic Modeling: A Case Study on World Cup 2022 Tweets**

Maxwell Yaw, Basheer Qolomany

Faculty Mentor: Dr. Aos Muluwaish

Computer Science and Information Systems | Science, Engineering, & Technology |

Honors Program and Undergraduate Program

Research Activity

### **31 | A Single Stage Corona Wind Generator**

Andrew Herzog, Matteo Capotosti

Faculty Mentor: Dr. A K M Monayem Mazumder

Mechanical Engineering | Science, Engineering, & Technology

Research Activity

### **32 | Crayfish use multiple sensory cues to detect predatory threats**

Gaige Stopjik

Faculty Mentor: Dr. Arthur Martin

Biology | Science, Engineering, & Technology | Undergraduate Research

Research Activity

### **33 | Synthesis of C-Glycosides for Potential Future Treatment of Type II Diabetes**

Ian Schetter, Gaige Stopjik

Faculty Mentor: Dr. Jennifer Chaytor

Chemistry | Science, Engineering, & Technology

Research Activity

### **34 | Circuit design and programming for Hall effect sensor for tactile and non-tactile applications**

Flora Szklenar, James Grigg

Faculty Mentor: Dr. Mohammad Ashraf Khan

Electrical & Computer Engineering | Science, Engineering, & Technology | Undergraduate Research

Research Activity

### **35 | Is Room Temperature Preparation of Electrocompetent Bacteria Superior to Conventional Approaches?**

Owen Wallace

Faculty Mentor: Dr. Sylvia Fromherz

Biology | Science, Engineering, & Technology | Undergraduate Research  
Research Activity

### **36 | Understanding How Microplastics Affect Cells: Development of Novel Molecular Tools for a Model Aquatic Species, Tetrahymena pyriformis**

Erica Behnfeldt

Faculty Mentor: Dr. Sylvia Fromherz

Biology | Science, Engineering, & Technology | Undergraduate Research  
Research Activity

### **37 | Synthesis of Gold Nanostructures**

James Bodrie

Faculty Mentor: Dr. Kavindya Senanayake

Biology | Science, Engineering, & Technology | Undergraduate Research  
Research Activity

### **38 | Modification of a Commercially Available Antibiotic to Avoid Ring Cleavage and Enhance Activity**

Cameron Campbell, Raegan Pitlanish

Faculty Mentor: Dr. Stephanie Brouet

Collaborators: Dr. Michael Coote and Dr. Tami Sivy

Biology | Science, Engineering, & Technology | Undergraduate Research  
Research Activity

### **39 | Progress Towards Ultrashort Pulses from Diodes**

Connor Henning, Ben Sincissen

Faculty Mentor: Dr. Christopher Nakamura

Physics | Science, Engineering, & Technology | Undergraduate Research  
Research Activity

## **Student Showcase Ends**

**4:00pm**