

THE FIFTEENTH ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM

Conference Program
April 23, 2022

Undergraduate Research Symposium



Undergraduate Research Symposium
HONORS COLLEGE
SAM HOUSTON STATE UNIVERSITY

**Hosted by the Elliott T. Bowers
Honors College Student Ambassadors**



Honors Ambassadors are the face of the Elliott T. Bowers Honors College. They often meet with visiting regents, political representatives, or other dignitaries. During special Honors events, the Ambassadors play important roles as hosts and greeters, table leaders, or panel participants.

Being an Ambassador involves taking on certain responsibilities--the willingness to give up time, often in the evenings or weekends--in the interest of supporting Honors College events. Ambassadors need to be able to represent the college and the university well, both in deed and word. There are 20 ambassadors representing every class and every academic college at the University.



Undergraduate Research Symposium
HONORS COLLEGE
SAM HOUSTON STATE UNIVERSITY

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**ALL ORAL-MEDIA SESSIONS WILL BE HELD IN THE CHSS BUILDING.
THE POSTER SESSION WILL BE HELD IN THE LSC.**



Undergraduate Research Symposium
HONORS COLLEGE
SAM HOUSTON STATE UNIVERSITY

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|--------------------|--|
| 8:00-8:45 | Registration & Breakfast CHSS, First Floor |
| 8:45-8:55 | Welcome and Opening Remarks CHSS, Room C070 |
| 9:00-10:20 | Session A, Oral-Media Presentations |
| 10:30-11:50 | Session B, Oral-Media Presentations |
| 12:00-1:15 | Session C, Poster Session LSC |
| 1:30-3:30 | Lunch, Closing, and Awards Ceremony LSC Orange Ballroom |

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The Undergraduate Research Symposium Is Sponsored By:

Elliott T. Bowers Honors College

The E.U.R.E.C.A. Center

Sam Houston State University

The URS especially thanks Dr. Hiranya Nath
for his generous Assam Scholarship.



The Texas State University System Board of Regents,

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William F. Scott, Regent, *Nederland*
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Honors Council

| | |
|------------------------|---------------------------|
| Kimberly Bell | Dean, Honors College |
| Maria Botero Jaramillo | Philosophy |
| Tamara Cook | Biology |
| Brandy Doleshal | Mathematics |
| Hannah Gerber | Education |
| Jason Ingram | Criminal Justice |
| Praphul Joshi | Population Health |
| Barbara Kaminska | Art |
| Victoria Lantz | Theatre |
| Joyce McCauley | Education |
| Kenneth McIntyre | Political Science |
| Ashton Mouton | Business |
| Janet Mullings | Criminal Justice |
| Benjamin Park | History |
| Kevin Sweeny | Business |
| Jeffery Wozniak | Biology |
| Hannah Menendez | Newton Gresham Library |
| Barna Abed el Satar | Family & Consumer Science |

A Message from our Faculty Advisor

Welcome to the Fifteenth Annual Undergraduate Research Symposium, hosted by the Ambassadors of the Elliott T. Bowers Honors College! This conference provides a professional environment in which student scholars can share their past, current, and ongoing research. Because national studies have shown that undergraduates who participate in research are better communicators and more effective leaders, the URS acts as a springboard for post graduate success. Several of our past participants have gone on to experience inspiring professional endeavors which have had their foundation at this conference. For those faculty who have worked closely with their students during preparation for the URS, this accomplishment is a source of enormous gratification. The URS also underscores Sam Houston State University's designation as an R2 institution, one which is dedicated to research.

These past two years forced great change. We were able to shift the last two symposiums to a virtual platform in order to continue our mission and our scholarship awards. I would like to acknowledge those Ambassador co-chairs without whom the virtual events could not have been successful: Lucero Nava, Sean Hamilton, Julissa Alvarez, Anubhav Thakur, and current President of the Ambassadors Olivia Heide. The current co-chairs Olivia Heide and Yadira Martinez have spent this past year hard at work organizing workshop sessions and practice sessions, encouraging participation, and making sure this live event marks a celebration of SHSU undergraduate research. Their passion for this event, their dedication to research, and their hard work stand as a hallmark for future Ambassador co-chairs. I thank them for their continuing support and guidance.

It is to the co-chairs' credit that we have a new design and motto. Our former owl has been replaced by a maze, and our new motto reads: The intricate path to discovery begins with research. If you look closely at the image of the URS maze, you will recognize that there is one consistent path to the center, no matter how convoluted it might seem at first glance. Consider that this image

represents both the research process as well as the attendant self-discovery within that process. Through research we not only question, discover, and create scholarship, but we also come to understand our own potential within scholarly communities. Symbolically we enter the maze, make the turns, and work our way to the center, to discovery.

These students are not the only ones who have dedicated themselves to furthering what is a nation-wide effort to promote undergraduate research. Others have been just as vigorous in their support, including faculty advisors who have helped students with their research, family and friends who have come to show their support, faculty and graduate student volunteers who have devoted their Saturday to giving presenters feedback, staff members who have been working overtime to ensure that everyone is fed, given gift bags, directed to the right rooms, and checked in properly. The Honors College, the Center for Enhancing Excellence in Research Experiences and Creative Activities (EURECA), and generous support from SHSU fund this event because promoting undergraduate research is powerful and affirming. We recognize and deeply appreciate their active support of this endeavor. Finally, we would like to thank Dr. Hiranya Nath, Professor of Economics, for his very generous Annual Assam Scholarship Award.

Today's conference celebrates what is best about Sam Houston State University: our students, our commitment to excellence in active learning, and our dedication to undergraduate research.

Tracy E. Bilsing

Dr. Tracy Bilsing

*Faculty Advisor, Co-Chairs and URS Faculty Committee Chair
Assistant Dean, Elliott T. Bowers Honors College*



URS History and Mission Statement

In 2008, the Honors College Student Ambassadors began the Undergraduate Research Symposium (URS). The goal was two-fold: to share research with fellow students and to gain experience in preparation for future conferences. Today, the URS continues to provide a forum where all SHSU undergraduate students can present their research to others in a professional environment while giving students the opportunity to gain expertise in their field and to receive feedback from other scholars and members of the academic community. Additionally, the URS offers three \$500 awards: The Assam Scholarship for Honors Research Award, The Honors College Award for Best Overall Oral-Media Presentation, and the Honors College Award for Best Overall Poster. Other awards include honorable mention awards, the E.U.R.E.C.A. Award for Best FAST Oral Media Presentation, and the E.U.R.E.C.A. Award for Best FAST Poster. The URS is supported by the faculty and staff of the Elliott T. Bowers Honors College.



A Message from our Co-Chairs

We would like to welcome you to the 15th annual Undergraduate Research Symposium at Sam Houston State University and thank you for your interest and participation, helping us craft a growing experience into what it is today after an impactful year. The 14th annual Undergraduate Research Symposium brought many challenges due to the pandemic in which we learned to adapt in order to be able to provide the experience you will witness today during such critical times. This year, our team is more than delighted to bring to you the first Undergraduate Research Symposium post pandemic. Fortunately, last year's Co-chairs (Julissa Alvarez, Anubahv Thakur, and Olivia Heide) along with our fantastic advisor (Tracy Bilsing) were capable of overcoming such challenges faced during the pandemic. Through this we were able to host a virtual symposium and recognize all the hard work done by so many inquiring students. This year, our team (Co-chairs Olivia Heide and Yadira Dominguez and Faculty Advisor Tracy Bilsing) is more than delighted to bring to you the first Undergraduate Research Symposium post pandemic. The Undergraduate Research Symposium is one of the many ways that Bearkats are able to make their educational experience more valuable. The symposium allows students to enrich their minds with research, through conducting their own and asking important questions and/or experiencing the work of fellow peers. Along with the many other scholastic benefits, this professional conference serves as a wonderful tool in resume

building, and experience in public speaking and presentations. Discussion of research is a wonderful way to engage the mind as a scholar, and it also offers students a unique opportunity to connect with like minded individuals and faculty networking. Fostering research has always been an aim within the Honors College here on campus, and we are happy to say that for 15 years we have been able to promote and grow the undergraduate research community here at SHSU.

Above all, the undergraduate research symposium provides students with an unmatched sense of pride in their academic endeavors. The symposium acts as a stepping stone into a higher level of thinking and an entry point to a community centered around academic prosperity. The atmosphere of this event, and the mission behind it, is unforgettable as you can feel these students' passion for their research being brought out and contributing to our world's knowledge and discoveries. We encourage all of you, especially students, to continue asking questions and thinking critically. We like to say that whether it be as a first time or veteran presenter, an ambassador or volunteer, an advisor or faculty moderator, an administrator or supportive audience member, we all have an integral part to play in making this one-of-a-kind event a success. Thank you for your unique contribution to the 15th annual Undergraduate Research Symposium that we hope to see grow and continue for many years to come.

Olivia Heide
URS Co-Chair

Yadira Dominguez
URS Co-Chair

Honors Faculty and Staff

| | |
|-------------------------------------|----------------------|
| Dean | Kimberly Bell, Ph.D. |
| Associate Dean | Maria Holmes, Ed.D. |
| Associate Dean | Patrick Lewis, Ph.D. |
| Assistant Dean | Tracy Bilsing, Ph.D. |
| Administrative Coordinator | Connie Rodriguez |
| Administrative Associate II | Abigail Roberson |
| Student Assistant | Edward Agsunod |
| Student Assistant | Jessica Bilsing |
| Student Assistant | Haley Cook |
| Student Assistant | Cecilia Hendrickson |
| Student Assistant | Alexander Kinsel |
| Student Assistant. Terry Scholars | Morgan Marsh |
| Student Assistant | Ashlyn Uva |
| Student Assistant, Program Designer | Huda Yousif |

The Undergraduate Research Symposium Faculty Committee

Dr. Tracy Bilsing
Dr. Lydia Fox
Dr. Maria Holmes
Dr. Patrick Lewis
Dr. Pamela Zelbst

Honors College Ambassadors

| | | |
|---|-------------------|-----------------------|
| Olivia Heide- <i>President</i> | Sydney Berenzweig | Morgan Marsh |
| Arturo Aguero- <i>Co-Vice President</i> | Haley Cook | Marianne Mendoza |
| Ashlyn Uva- <i>Co-Vice President</i> | Yadira Dominguez | Sebastian Morales |
| Christie Padron- <i>Secretary</i> | Mishael Ennis | Nicholas Polk |
| Cecilia Hendrickson- <i>Historian</i> | Alexis Gilbert | Amanda Rincon Morales |
| | Lucy Hendrickson | Chloe Rodrigues |
| | Maria Hendrickson | Brian Lopez Romero |
| | Madeline Lee | Alexander Salazar |
| | Y Luong | Mariana Velandia |
| | | Taylor White |

Session A

9:00 - 10:20

ROOM 232 Plants and Large Environments

Tissue Analysis of Aquaponic Grown Lactuca sativa “Romaine” After Nutrient Supplementation in the Form of Calcium Hydroxide

Austin Holmes

Faculty Advisor: Dr. Timmothy Pannuk

Fire and Flood Hazards on the Big Island of Hawaii

Hailey Richardson

Faculty Advisor: Dr. Ava Fujimoto-Strait

Space vs The Environment

Brady Baker, Kayla Frietsch

Faculty Advisor: Dr. Michael Demson

ROOM 242A EURECA FAST Panel

The purpose of the FAST Awards program is to encourage the participation of undergraduate students in discipline-specific scholarly or creative work. Each funded undergraduate team supports 1-3 students working together on a single scholarly or creative project under the mentoring of either one Sam Houston State University faculty member or an interdisciplinary team of 2 or more SHSU faculty members. The student teams in this panel will engage in a discussion, sharing their experiences provided through the grant.

Kayley Neill, Danielle VanderKay

Faculty Advisor: Dr. Basem Boutros

Bailey Mills

Faculty Advisor: Dr. Montse Feu

Laura Bianchi

Faculty Advisor: Dr. Maria Botero

ROOM 252 Focus on Self-Care

Stress Survival Guide

Jennifer Benitez , Janneaha Woods

Faculty Advisor: Dr. Adannaa Alexander

Burnout in Music Therapy Students

Taylor White

Faculty Advisor: Dr. Carolyn Moore

An Overview of Suicidality in American Teenagers

Joshua Crosby

Faculty Advisor: Dr. Courtney Banks

Effects of Lighting Design on Health

Daniel Gates

Faculty Advisor: Dr. Terry Waugh

Session A

9:00 - 10:20

ROOM 242B Biological Actions and Reactions

Predictive Distribution Modeling of *Chrysodeixis chalcites* (Tomato Looper)

Nicolas Galle

Faculty Advisor: Dr. Christopher Randle

Drosophila Tumor Model with Observable Muscle Wasting and Sarcomere Breakdown Starting with Myosin Heavy Chain Mislocalization

Ellen Thompson

Faculty Advisor: Dr. Mardelle Atkins

The Activity of the Yorkie/Scalloped Transcription Factor Complex Prevents Death of Cells With Defects in ATP Synthase

Felix Oppong-Adjei

Faculty Advisor: Dr. Mardelle Atkins

The Activity of the Yorkie/Scalloped Transcription Factor Complex Prevents Death of Cells With Defects in ATP Synthase

Brianna Pipkins

Faculty Advisor: Dr. Mardelle Atkins

ROOM 226 Envisioning Prison

Elizabeth Fry: A Quaker's Mission to Radically Reform Prisons

Heather Davis

Faculty Advisor: Dr. Michael Demson

Prison House of Language: Analysis of Jordan Peele's Get Out with reference to Frantz Fanon and Ian F. Haney Lopez

Kathleen Simmons

Faculty Advisor: Dr. Michael Demson

Alternative Consequences for Youth Crimes: An Analysis of Restorative Justice Practices for Youth in America

Meghan Koza

Faculty Advisor: Dr. Stuti Kokkalera

ROOM 220 Covid Continues

Organizational Interventions to Reduce Physician during the COVID-19 Pandemic

Payton Schoolcraft

Faculty Advisor: Dr. Stephen Brown

COVID-19 and Labor Force Flows

Mackenzie Hesse

Faculty Advisor: Dr. Raisa Sara

SHSU Educator Preparation Program COVID-19 Response Study

Cherokee Ford

Faculty Advisor: Matthew Fuller

Session B

10:30 - 11:50

ROOM 242A The Human and The Animal

Distinctions in Interpersonal Influence Tactics Between Psychopathic Personality Traits and the Big Five

Chloe Rodriguez

Faculty Advisor: Dr. Adam Natoli, Dr. Jared Ruchensky

The Effects of Abstinence-Only Sexual Education on Young Adolescents

Sydney Berenzweig

Faculty Advisor: Dr. William Edgington

The Species Headache

Jacob Davis

Faculty Advisor: Dr. Maria Botero Jaramillo

The Evolution of Morality in Non-Human Animals

Laura Bianchi

Faculty Advisor: Dr. Maria Botero Jaramillo

ROOM 242B The Body and its Discontents

The Impact of Social Media on Dietary Behaviors and Body Image of College Students: A Qualitative Approach

Kayley Neill, Danielle VanderKay

Faculty Advisor: Dr. Basem Boutros

Electroconvulsive Therapy and the Effects on 20th Century Women

Kailee Smith

Faculty Advisor: Dr. Scottie Buhler

Differences in the Association between Religiosity and Physical Health in College Students

Sterling Murray

Faculty Advisor: Dr. Adam Natoli

Hawkeye, Buckley and PTSD

Destiny Whitaker

Faculty Advisor: Dr. Tracy Bilsing

ROOM 226 Safety and Sustainability

Development of Augmented Reality Navigation Application for College Library

Louanne Mozer-Sallo

Faculty Advisor: Dr. Ulan Dakeev

Electrical Wiring and Design

Melanie Montejano, Jonovan Fountain, Cody Glass

Faculty Advisor: Dr. Terry Waugh

Sustainable Development and the Environmental Impacts on Building

Caden Whigham; Bailey Eikenhoff; Weston Dew; Daniel Moon

Faculty Advisor: Dr. Terry Waugh

Session B

10:30 - 11:50

ROOM 220 Virus: Searching for Answers

The Impact of COVID-19 on Students' Mental Health

Chukwunazaekpele Ejikeme

Faculty Advisor: Dr. Courtney Banks

The Untold Truth of HIV/AIDS

Kevin Manzano, Jr.

Faculty Advisor: Dr. TzeLi Hsu

Sex Six Feet Apart: How Coronavirus Changed Intimacy

Hema Iyer

Faculty Advisor: Dr. Audrey Petty

Zoomed Out and Mentally Logged Off: The Impact of Virtual Fatigue During COVID-19 on College Students' Co-curricular Experiences

Clarisa Galindo

Faculty Advisor: Dr. Renee Gravois

ROOM 215 Great Chemistry!

Exploring the Reactivity of a Baeyer-Villiger Monooxygenase from *Thermocrispum Municipal* Expressed in *E. coli*

Alexus Ramirez-Wiggins

Faculty Advisor: Dr. Meagan Hinze

Expression of a Baeyer-Villiger Monooxygenase from *Thermobifida fusca* in *E.coli* and Analysis of Reactivity

Parker Bennett

Faculty Advisor: Dr. Meagan Hinze

Thermodynamic Studies of Dyes' Adsorption of Magnetite-carbon Nano-onions Composites for Environmental Remediation Applications

Sandra Simmons

Faculty Advisor: Dr. Adrian Villalta-Cerdas

ROOM 232 Changing Ourselves

Analysis of Tinder from a Biological Perspective

Eydie Thilbert

Faculty Advisor: Dr. Maria Botero Jaramillo

CEO Humility and Inclusive Internal and External Environments

Jordan Jessop

Faculty Advisor: Dr. Tiffany Maldonado

Neuromarketing

Yadira Martinez

Faculty Advisor: Dr. Gary Payne

The Developing Perception of Tattoos in Professional Fields

Amanda Rincon Morales

Faculty Advisor: Dr. Aaron Lynne

Session B

10:30 - 11:50

ROOM 252 Race and Racism

Youth Racial and Ethnic Microaggression Experiences and Responses

Skylar Clark, Gloria Moctezuma

Faculty Advisor: Dr. Courtney Banks

Racial Bias and Systemic Racism in Healthcare

Krystal Deochoa

Faculty Advisor: Dr. Krystal Deochoa

Evolution of Protest and Resistance: Rooted in the Great Migration(s)

Joyce Cuinisia

Faculty Advisor: Austin Dixon

K-Dramas and Designated Survivor: Analyzing a Korean Remake

Ayooluwa Bola

Faculty Advisor: Dr. Grant Wiedenfeld

ROOM 210 Handling Cultural Expectations

Parental Investment in Today's Society

Emily Shands

Faculty Advisor: Dr. Maria Botero Jaramillo

Machismo and Its Impact on Sex Education

Valeria Flores

Faculty Advisor: Dr. Tracy Bilsing

The Effects of DMSO in Dark-Anaerobic Conditions on the Growth of Rhodobacter sphaeroides

Lorenzo Baeza

Faculty Advisor: Dr. Madhusudan Choudhary

Crisis in Paradigms

Sarah McCourt

Faculty Advisor: Dr. Thomas Brommage

Religion and Perfectionism

Faith Little

Faculty Advisor: Dr. Adam Natoli

Session C

12:00 - 1:15

ROOM 241A Agriculture

Biomass Production by Cover Crops in an Organic Cotton Production System

Seth Cardenas, Irene Salvador

Faculty Advisor: Dr. Shyam Sivankutty Nair

Chronic Wasting Disease and Its Relevance in the Agriculture Feed Market

Gabrielle Knotts

Faculty Advisor: Dr. Philip Urso

Does type of Fertilizer influence Methane and Nitrous Oxide Emissions from Agricultural Fields?

Trent Huff, Hayden Reeves, Joshua White, Holland Helton

Faculty Advisor: Dr. Shyam Sivankutty Nair

Effect of Cover Crop Biomass Application on Greenhouse Gas Emission from Organic Cotton System

Luke Wallace, Garrison Koehn, Taylor Pennington

Faculty Advisor: Dr. Shyam Sivankutty Nair

Effect of Cover Crops on Methane and Nitrous Oxide Emissions from Organic Cotton System

Emily Alvarado, Collin Kelly, Brady Harris

Faculty Advisor: Dr. Shyam Sivankutty Nair

Effect of Nitrogen Fertilizer and Compost on Carbon Dioxide Flux in Agricultural Fields

Ashley Sherrod, Ella Barch

Faculty Advisor: Dr. Shyam Sivankutty Nair

Impact of Cover Crops on Carbon Dioxide Flux in Organic Cotton System

Brady Gully, Braden Kram, Mathison Merecka

Faculty Advisor: Dr. Shyam Sivankutty Nair

Impact of Cover Crops on Soil Aggregate Stability

Jasmine Moynahan

Faculty Advisor: Dr. Shyam Sivankutty Nair

Influence of Cover Crops on Soil Respiration in Agricultural Fields

Ethan Hammit

Faculty Advisor: Dr. Shyam Sivankutty Nair

ROOM 241A Biological Sciences & Chemistry

Adsorption isotherms, kinetic, and thermodynamic studies of magnetite-charcoal: linearized and non-linearized modeling of experimental data in general chemistry

Raul Zablah Vasquez

Faculty Advisor: Dr. Adrian Villalta-Cerdas

Chemical composition of copper-tin-aluminum alloys from a system of three equations in three variables via non-destructive sample analysis

Ariel Van-Sertima

Faculty Advisor: Dr. Adrian Villalta-Cerdas

COVID-19 in Various Body Organs

Taylor White

Faculty Advisor: Dr. Juan Daza

Session C

12:00 - 1:15

Enzyme Purification and Catalytic Expression of Cycloalkanone Monooxygenase (CAMO) from *Cylindrocarpon radicola*

Nicole Wicmandy

Faculty Advisor: Dr. Meagan Hinze

FoxO Activation Status in Cachexic Muscles of a *Drosophila melanogaster* Tumor Model

Grace Stegemoller

Faculty Advisor: Dr. Mardelle Atkins

Investigating the Effect of Microgravity on Growth Characteristics and Element Accumulation in *Rhodobacter sphaeroides* for Bionanoparticle Synthesis

Sabrina Vasquez

Faculty Advisor: Dr. Madhusdan Choudhary

Isolation and Characterization of Exosomes Secreted by Triple Negative Breast Cancer Cells

Nia Harris

Faculty Advisor: Dr. Umesh Sankpal

Morphometric Characterization of a Hybrid Gecko from Puerto Rico

Olivia Heide

Faculty Advisor: Dr. Juan D. Daza

Stream flow drives organic matter dynamics in Harmon Creek

Danielle Grabert, Marlyn Hernandez

Faculty Advisor: Dr. Amber Ulseth

Synthesis of substrates and standards to probe Baeyer-Villiger Monooxygenase reactivity

Michael Lara

Faculty Advisor: Dr. Meagan Hinze

The notochord canal in the tokay gecko (*Gekko gecko*: Gekkonidae: Squamata)

Caeli Richard

Faculty Advisor: Dr. Juan Daza

Why Is my Corgi Short? – An investigation into the genetics of canine dwarfism

Brooke Chippi

Faculty Advisor: Dr. Mardelle Atkins

ROOM **241A** Business, Mathematics, & Engineering Technology

Harnessing IOT Technology for the development of wearable contact tracing solutions

Rex Acharya, Louanne Mozer-Sallo

Faculty Advisor: Dr. Rasheed Amar

Development of Virtual Reality Robotics Laboratory Simulation

Lain Sowell

Faculty Advisor: Dr. Ulan Dakeev

Fire protection in buildings

Oskar Garcia

Faculty Advisor: Dr. Terry Waugh

Fire Safety In Buildings

Mitchell Hargraves, David Edwards

Faculty Advisor: Dr. Terry Waugh

Session C

12:00 - 1:15

ROOM
241B Criminal Justice & Psychology

A Look at the Causes of Recidivism and Exploring Potential Solutions

Ashley Dingler

Faculty Advisor: Dr. Xavier Serna

Comparing Serial Killers Using the Five Factor Model of Personality

Madeline Lee

Faculty Advisor: Dr. Laura Drislane

Differentiating Unburned Smokeless Powders through Visual and Chemical Analysis

Daniel Do

Faculty Advisor: Dr. J. Tyler Davidson

Evaluation of mGluR 2/3 Receptor Agonist LY404039 for Anxiolytic Effects

Gwendolyn Wright

Faculty Advisor: Dr. Stephen White

Evaluation of the mGluR5 Antagonist 2-methyl-6(phenylethynyl)-pyridine (MPEP) for Antidepressant Effects in an Avian Model of Treatment-Resistant Depression

Sequoia Smith

Faculty Advisor: Dr. Stephen White

I believed that it was normal

Makiya Owens

Faculty Advisor: Dr. Owens

Masking deception in the COVID-19 pandemic

Adriana Lopez

Faculty Advisor: Dr. Daniella Cash

Negative Affect and Observation Mindfulness Associated with Skin Picking

Carrie Devlin

Faculty Advisor: Dr. Chelsea Ratcliff

Perceived stress, disinhibition, and alcohol use among college students

John Cromb

Faculty Advisor: Dr. Chelsea Ratcliff

The History and Stigmatization of Borderline Personality Disorder and Evaluation of Symptomology in Relation to Everyday Interactions

Sarah Weeks

Faculty Advisor: Dr. Jaime Anderson

Traumatic Experience and Variability in DSM-5 PTSD Diagnostic Clusters

Tyler Barnes

Faculty Advisor: Dr. Tyler Matthew Barnes

Session C

12:00 - 1:15

ROOM 241B Education, Humanities, & Social Sciences

Fire Prevention in Commercial Buildings

Manuel Calzada, Dylan Gates, Tristan Waggoner, Christian Frohne

Faculty Advisor: Dr. Terry Waugh

The Possibilities are Endless (Except When They're Not): The Evolution of Character Creation in Dungeons & Dragons

Zachary Adams, Ashlyn Uva

Faculty Advisor: Dr. Nicolas Lantz Dr. Victoria Lantz

Evolution of Protest and Resistance: Rooted in the Great Migration(s)

Cuinisia Joyce

Faculty Advisor: Dr. Austin Dixon

Pride's Paltry Feast; in Sir Gawain and The Green Knight

Paige Nelson

Faculty Advisor: Dr. Kimberly Bell

ROOM 241B Health Sciences

Grade 3 Acromioclavicular Sprains: Surgical or Conservative Intervention Effects on ROM

Matthew Lord

Faculty Advisor: Dr. Mary Williams

The Effects of Body Posture on Cardiopulmonary Restoration During Immediate Recovery After Submaximal Exercise

Emily Telg, Kyndal Kutac, Emma Ritzberger

Faculty Advisor: Dr. Patrick Davis

Using functional hop tests following ACL reconstruction to make return to participation decisions: A Literature Review

Ally McKendree

Faculty Advisor: Dr. Mary Williams



The Honors College Ambassadors would like to thank our faculty moderators for taking the time to share their expertise with our student scholars.

Hiranya Nath

Anna Miromanova

Madhu Choudhary

Stuti Kokkalera

Tracy Bilsing

Bram Sebjo-Brundage

Matthew Griffin

Bob Anderson

Carlos Barron

Raisa Sara

Stephanie Baker

Shyam Nair

Thomas Meagher

Javior Ramos

Montse Feu

Rachel Lambert

Basem Boutros

Thomas Brommage

J. Tyler Davidson

Lee Courtney

Barbara Kaminska



Undergraduate Research Symposium
HONORS COLLEGE
SAM HOUSTON STATE UNIVERSITY

THE INTRICATE PATH TO DISCOVERY BEGINS WITH RESEARCH



Elliott T. Bowers Honors College
SAM HOUSTON STATE UNIVERSITY

MEMBER THE TEXAS STATE UNIVERSITY SYSTEM