# THE TWELFTH ANNUAL UNDERGRADUATE RESEARCH SYMPOSIUM

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Conference Program April 27, 2019



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.

# H UNDERGRADUATE RESEARCH SYMPOSIUM

Sponsor Recognition	5
A Message from Our Faculty Advisor	
A Message from Our Co-Chairs	
About URS and the Elliott T. Bowers Honors College	9
Maps	10
Sessions:	
A - Oral-Media-Panel Presentations	<b>1</b> 6
B - Oral-Media-Panel Presentations	18
C - Poster Presentations	20
D - Oral-Media-Panel Presentations	27

ALL ORAL-MEDIA SESSIONS WILL BE HELD IN THE CHSS BUILDING. THE POSTER SESSION WILL BE HELD IN THE LSC EXPANSION, SECOND FLOOR.

# H. UNDERGRADUATE RESEARCH SYMPOSIUM

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	Lunch LSC Orange Ballroom
1:30-2:50	Session C, Poster Session LSC Expansion, Second Floor
3:00-4:20	Session D, Oral-Media Presentations
4:30-5:00	Closing Ceremony CHSS, Room C070

ALL ORAL-MEDIA SESSIONS WILL BE HELD IN THE CHSS BUILDING. THE POSTER SESSION WILL BE HELD IN THE LSC EXPANSION, SECOND FLOOR. **Schedule at a Glance** 



### The Undergraduate Research Symposium Is Sponsored By:

Elliott T. Bowers Honors College The E.U.R.E.C.A. Center

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





### The Texas State University System Board of Regents, 2019

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#### **Honors Council**

Kimberly Bell	Dean, Honors College
Rick Bello	Communication Studies
Maria Botero Jaramillo	Philosophy
Tamara Cook	Biology
Hannah Gerber	Education
Michelle Hoogterp	Newton Gresham Library
Barbara Kaminska	Art
Victoria Lantz	Theatre
Brian Loft.	Mathematics
Joyce McCauley	Education
Kenneth McIntyre	Political Science
Valerie Muehsam	Economics
Janet Mullings	Criminal Justice
	History
Jeffrey Wozniak	Biology
Pamela Zelbst	Management

#### A Message from Our Faculty Advisor

Welcome to the Twelfth Annual Undergraduate Research Symposium, hosted by the Ambassadors of the Elliott T. Bowers Honors College!

This conference provides a professional environment for all undergraduates at SHSU to 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 Honors Ambassador co-chairs Kayla McCarns, Lucero Nava, Lindsey Burcham, and Shani Gomez have worked extraordinarily hard over the past year to make this conference an ongoing success. This wonderful team worked over the summer to overhaul the URS website and registration module to ensure ease of navigation during the registration process. To encourage student success, they provided information links that covered the varied etiquettes of conference presentation, from dress to poster design. Additionally, they have organized several information sessions, sent out information packets to every faculty member on campus and they have chosen new merchandise, planned meals, and made decisions about next year's event. Ambassador Lucero Nava has also worked single-handedly on the design and organization of this year's program, providing invaluable advice and guidance. Again, this conference would not possible without the combined

effort of these highly motivated and professional corps of Ambassadors.

But these students are not the only ones who have dedicated themselves to furthering what is now 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 (E.U.R.E.C.A), and a kind contribution from Academic Affairs have helped to fund this event because they believe in promoting undergraduate research and in supporting the URS. 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. Biling

**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

Welcome to the 12th year of the Undergraduate Research Symposium! We and the Honors Ambassadors are excited to have a role in bringing this incredible experience to life for each and every one of you. Twelve years ago, this conference began with a grand total of 6 presenters and 15 attendees (including the six presenters)! With all of you here today, we have almost 215 presenters and over 400 attendees! To put it simply, we would like to thank you for helping us craft a growing experience into something even larger.

And why does this matter? Sure, the Undergraduate Research Symposium is a great way to get the feel for a professional conference - students find an attentive audience, receive professional feedback, and acquire experience in presenting their work. Of course, the Undergraduate Research Symposium also serves as a great method for building your resume or CV. Add free food and goodies to that equation,

and you already have plenty of reason to enjoy the event. However, the co-chairs feel that the greatest benefit of the Undergraduate Research Symposium stems from students' pride. There is nothing quite like sitting in a room with fellow SHSU students and seeing them showcase the amazing things happening within our university through the impressive and novel ideas taking flight within this conference. Each and every one of you is a part of this organic, incredible experience, and that is something to take immense pride in. 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 12th year of a program that we hope to see continue for a long time to come.

Enjoy your day!

Mayla M'Carns

Kavla McCarns **URS Co-Chair** 

Luno MAA

Lucero Nava **URS Co-Chair** 

**URS Co-Chair** 

Lindsey Burcham Shani Bonuz Lindsey Burcham Shani Gomez

**URS Co-Chair** 

### **Honors Faculty and Staff**

Dean

Associate Dean Associate Dean Assistant Dean Administrative Coordinator Student Assistant Student Assistant Student Assistant Student Assistant Student Assistant Student Assistant Student Assistant, Program Designer Student Assistant Student Assistant Kimberly Bell, Ph.D. Maria Holmes, Ed.D. Patrick Lewis, Ph.D. Tracy Bilsing, Ph.D. Connie Rodriguez Lauren Blossom Lindsey Burcham Shani Gomez Sean Hamilton Kayla McCarns Lucero Nava Michael Villanueva Bethany Leander

### The Undergraduate Research Symposium Faculty Committee

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

### **Honors College Ambassadors**

Kayla McCarns- President Lindsey Burcham- Vice President Shani Gomez- Secretary Brittiany Minor- Co-Historian Reneisha Gilder- Co-Historian

- Lorenzo Baeza Andrea Bui Elisha Daniels Stephen Griego Maria Hendrickson Brianna Hickman Logan Kennemer
- Bethany Leander Peiting Liu Lucero Nava Sneha Srikanth Gabriella Stunz Julio Valdez Noah Zavala

### **CHSS Concourse Floor**





### **CHSS First Floor**





### **CHSS Second Floor**





# **Session A** 9:00-10:20

#### ROOM **Religion & the Humanities** 206

The Difficulties and Hope of Trauma and Mental Illness **Carissa Baker** Faculty Advisor: Dr. Craig Henderson

#### Creature vs. Christ: A New Look at Mary Shelley's Frankenstein

Shea Hunter

Faculty Advisor: Dr. Kandi Tayebi

#### People, Places, and Things: Unity and Disunity of Early Christianity in The Vitae of Constantine and **Methodius**

**Yhaz Mhih Nhay Toliver** Faculty Advisor: Dr. Stephen H. Rapp Jr.

#### The Grail Questers: What Does it Take to be the Chosen One?

#### **Cassidy Harkins**

Faculty Advisor: Dr. Ralph Norris

#### ROOM 220

Criminal Justice & Criminology: Evaluation & Solutions

#### One and the Same? Evaluating the Unique Influence of Impulsivity and Sensation Seeking on Violent Offending and Violent Victimization from Adolescence to Young Adulthood

Lisa McBride, Amber Slover Faculty Advisor: Dr. Eric Connolly

#### **Child Support and the Effects of Punishment Gabrielle Adams**

Faculty Advisor: Dr. Benjamin Mitchell-Yellin

#### Solitary Confinement is Crippling: How to Fix a Broken System

Fizza Gilani

Faculty Advisor: Thomas Warren

#### The Nature of the Relationship between Crime and Geography

#### Kayla McCarns

Faculty Advisor: Dr. Michael Vaughn

ROOM

#### **Human Actions & Reactions** 226

#### Acquiring Perception from the InSide: An Interpretation of Side by Side with Motivic Analysis Lia Claus

Faculty Advisor: Dr. John Lane

#### **Religious Participation and Happiness: Data from Two Texas Studies**

#### **Kristen Gustafson**

Faculty Advisor: Dr. Gene Theodori

#### #NotMyPresident: Congressional Candidates' Tweets about Trump in 2016 and 2018 Mikki Woodard

Faculty Advisor: Dr. Heather Evans

#### The Importance of Soft Skills for College Graduates

**Cassee Prince** 

#### Faculty Advisor: Dr. Danica Schieber

# Session A 9:00-10:20

232 Race & Culture

**Civil War: The 54th Massachusetts Regiment Bram Sebio-Brundage** Faculty Advisor: Dr. Wesley Phelps

#### Neither Here Nor There: Migrant Aspirations and Behavior En-Route to the American Dream

Jesus Ayala Candia Faculty Advisor: Dr. Karen Douglas

**The Dawn of Mexican Americans** Jocelyn Tobias Faculty Advisor: Katherine Gaskamp

Affectionate Communication: Exploring Cross-Cultural Differences Taylor Butler Faculty Advisor: Dr. Lisa van Raalte

#### **ROOM 242A** Images of Women in Film & Literature

## Women of Action: A Qualitative Study of the Motivational Reasons for Women to be Violent in Entertainment Media in the United States and Japan

Julia Gernhart Faculty Advisor: Dr. Eryn O'Neal

#### The Representation of Justice in Desert Blood and other Crime Shows

Samantha Galvez Faculty Advisor: Dr. Montserrat Feu Lopez

#### William Blake: Misogyny and Mythology

Rebekah Primrose Faculty Advisor: Dr. Kandi Tayebi

#### Stolen Innocence: The Over-Sexualization of Latinas in Sandra Cisneros' The House on Mango Street

**Ruby Rodriguez** 

Faculty Advisor: Dr. Kandi Tayebi

# Session B 10:30-11:50

# **Criminal Justice in China**

#### An Examination of Chinese Police Cadet's Knowledge of Domestic Violence Makayla Mason Faculty Advisor: Dr. Brittany Hayes

The Effects of Intergenerational Transmission of Violence on the Attitudes and Perpetration of Domestic Violence in Chinese Police Cadets Camille Ingham

Faculty Advisor: Dr. Brittany Hayes

#### **ROOM 210** M. I. S.: An ACE Showcase

The Impact of Cloud Computing on Business Soo Jong Cho, Cameron Evans, Santos Karki, Saad Tabba Faculty Advisor: Dr. Kamphol Wipawayangkool

#### **On-premise Versus Cloud Software and Infrastructure Joshua Abshire, Travis Dixon, Nathan Hillger, Logan Huff** Faculty Advisor: Dr. Kamphol Wipawayangkool

#### **Cloud Computing Security Issues**

Kenneth Malone, Cameron Monnat, John Moreno, Torian Williams Faculty Advisor: Dr. Kamphol Wipawayangkool

#### **Big Data and Cloud Computing**

**Peyton Clark, Franklin Junay Lemus, Urja KC, Eduardo Martinez** Faculty Advisor: Dr. Kamphol Wipawayangkool

**ROOM 220**Biological & Chemical Innovation

Understanding the Network of Interactions in Microbial Communities Jeffrey Belanger, Lindsey Burcham, Madison Cowdrey Faculty Advisor: Dr. Todd Primm

**Observing Chemical Phenomena With New Eyes Diana Chavelas, Ashlyn Everhart, Shannon Miller** Faculty Advisor: Dr. Darren Williams

#### The Effects of DMSO in Dark-Anaerobic Conditions on the Growth of Rhodobacter sphaerodies Lorenzo Baeza

Faculty Advisor: Dr. Madhusudan Choudhary

The Effects of Cortisol on Nightmares and Sleep Quality in PTSD Kaitlynn Dawson Faculty Advisor: Dr. Courtney Banks

# Session B 10:30-11:50



**Critical Issues in Race & Disability** 

The Epistemology of Racial Ignorance & Cognitive Dissonance Rayya Gordon Faculty Advisor: Dr. Leamon Bazil

Dr. Tommy Curry, Race, and Forgiveness Jackson Bittick Faculty Advisor: Dr. Leamon Bazil

#### Mental Illness Across Defendants of Different Races: Competency to Stand Trial or Be Restored Brittiany Minor

Faculty Advisor: Dr. Jorge Varela

#### To Protect and Serve All

Sarah Ramirez Faculty Advisor: Dr. Nancy Stockhall

ROOM 242A

**Plants & Animals** 

#### **Olive Pomace as an Alternative Feed Source in Growing Chickens**

Ethan Carter Faculty Advisor: Dr. Mark Anderson

Evaniidae Antenna Sensilla Jeffrey Belanger Faculty Advisor: Dr. Jerry Cook

#### The Relationship of Monoterpene Gas Emission and Leaf Bud Break

Andrew Martinez Faculty Advisor: Dr. Chris Randle

# **ROOM**

Alternate Views

#### The Art of Code Switching

Lucero Nava, Michael Villanueva Faculty Advisor: Dr. Carlos Hernandez

#### The Indivisibility of Emotions Dalanie Aufill

Faculty Advisor: Dr. Maria Botero

#### Perception of Sports and Mental Health

David Tuel Faculty Advisor: Dr. Courtney Banks

#### Charlie: A Look Into the Making of an Original Musical Damien Drake, Alstrael Evans, Chelsea MacElvaine, Michelle Sosa Faculty Advisor: Kyle Craig-Bogard

### **Session C: Posters**

1:30-2:50

#### **ROOM 241B** Agriculture

#### Association of Adult Obesity Rates and Access to Resturants

Wyatt Denson, Meranda Mull, Ixel Romero, Samuel Runge, Hunter Tupa, Collin Wenze Faculty Advisor: Dr. Shyam Nair

Comparison of Physiological Responses to Exercise in Horses on a Conditioning Regimen Versus Inactive Horses Receiving a Yucca and Fenugreek (Digesta Well NRG) Dietary Supplement

#### Rachel Miller

Faculty Advisor: Dr. Jessica Bedore

Do Food Assistance Programs (SNAP) Benefit Availability Influence the Perceived Adult Food Insecurity? Annie Bailey, Christopher Boring, Tyler Minx, Caitlin Wesneski Faculty Advisor: Dr. Shyam Nair

#### How Does Access to School Food Assistance Programs Impact Food Insecurity Among Children? Matthew Anderson, Charles Cavanaugh, Maddie Costlow, Kalla Gaertner Faculty Advisor: Dr. Shyam Nair

Evaluation of an All-Natural Fermentation-based Feed Additive on Growth and Health of White-tailed Deer Fawns

Pui Chan Faculty Advisor: Dr. Kyle Stutts

#### Evaluation of an All-Natural Fermentation-based Feed Additive on Immune Response to Vaccination in Mature White-tailed Deer

#### Alyssa Barta

Faculty Advisor: Dr. Kyle Stutts

#### Influence of Food Store Proximity on Obesity Rate of Adults

Alyssa Doucet, Kaylee Enloe, Kyle Jahn, Evan Powell, Jonathan Soza Faculty Advisor: Dr. Shyam Nair

Relationship between Adult Food Insecurity and Distance to Stores Accepting SNAP Food Assistance Andrew Fleming, Katelyn Morgenroth, Travis Morgan, Brandon Slovak Faculty Advisor: Dr. Shyam Nair

#### Relationship between Adult Obesity Rates and Access to Recreation and Fitness Facilities Hunter Curry, Shelby Coogler, Rachael Hargarves, Max Joiner, Tyler Newsome, Wyatt Williams Faculty Advisor: Dr. Shyam Nair

**ROOM 241A** Biological Sciences & Chemistry

Assessing Historical Fish Community Structure using Taxonomic, Functional, and Historical-contemporary Data

#### **Edan Morag**

Faculty Advisor: Dr. Carmen G. Montana-Schalk

#### **Comparison of Human Decomposition in Climate Controlled Settings**

#### Megan Skinner

Faculty Advisor: Dr. Sibyl Bucheli

#### **Control Experiments for Studying DMTS Degradation**

#### **Christian McMurray**

Faculty Advisor: Dr. David Thompson

#### Design of Significant Learning Experiences in the Chemistry Laboratory: Understanding the Physical Properties of Aqueous Solutions Ivette Rodriguez Espinoza

#### Faculty Advisor: Adrian Villalta-Cerdas

### Does Urbanization Influence the Life History Parameters of the Western Mosquitofish (Gambusia affinis)? Janessa Estrada

Faculty Advisor: Dr. Carmen G. Montana-Schalk

#### Dynamic Covalent Exchange and Relative Stabilities of Benzodioxaboroles, Benzodiazaboroles, and Benz

Olivia Villanueva Faculty Advisor: Dr. Dustin Gross

#### Ecology of Cretaceous Dallas

Jakob Unruh Faculty Advisor: Dr. Patrick Lewis

#### Effects of Different Carbon Sources on the Growth of Rhodobacter sphaeroides

#### Noah Zavala

Faculty Advisor: Dr. Madhusudan Choudhary

### Extraction of Natural Products as an Introduction to Commonly used Laboratory Techniques, Polymer Materials, and Fluorescence in the Organic Chemistry Laboratory

Andrea Bui, My Phan Faculty Advisor: Dr. Adrian Villalta-Cerdas

#### Isolation and Partial Characterization of Novel Antibiotic Producing Soil Isolates

Luis Grado Faculty Advisor: Dr. Jeremy Bechelli

#### Niche Segregation Among Sunfishes (Lepomis spp.) in an East Texas Urban Stream

#### **Chelsea Veloso**

Faculty Advisor: Dr. Carmen G. Montana-Schalk

### Photocaging Technique for the Targeted, Spatiotemporally Controlled Release of Substances that Alter Hormone Metabolism

Kendra Ireland Faculty Advisor: Dr. Donovan Haines

#### Preparation and Identification of P450 Metabolites of Dextromethorphan

Ruby Lilredahl Faculty Advisor: Dr. Donovan Haines

#### Virtual Dissection

Amber Saleem Faculty Advisor: Dr. Patrick Lewis

# **241B** Business, Mathematics, & Engineering Technology

#### Behavioral Economics in the 21st Century: The Effectiveness of Governmental Behavioral Economic Units Michael McCarney

Faculty Advisor: Dr. Hiranya Nath

#### Going "GREEN" in the Petrochemical Industry Neisha Pander Faculty Advisor: Dr. Tamara Cook

#### Exploring the Graph Reconstruction Conjecture

David Schmitt Faculty Advisor: Dr. Ken Smith

#### Rectangular Ramsey Numbers

Julian Marquez Faculty Advisor: Dr. Timothy Trujillo

#### Smart Grid Infrastructure Development

Kali Johnson, Gerardo Rodriguez Faculty Advisor: Dr. Reg Pecen

# **241B** Criminal Justice & Psychology

41D
An Examination of Correctional Officer Work-Life Balance
Valeria Garza
Faculty Advisor: Dr. Harry Butler
Department of Corrections: Only One Mission? Lorena Mena Faculty Advisor: Kate Angulski
Examining Relationships between Criminogenic Thinking Patterns and Psychopathology Aysiah Garza Faculty Advisor: Dr. Jorge Varela
Intimate Partner Abuse Abroad and the Victim's Rights
Delaney Elrod Faculty Advisor: Dr. Nicole Niebuhr
Juvenile Competency to Stand Trial Standards
Taryn Meyer
Faculty Advisor: Dr. Steven Cuvelier
Psychopathy: The Good and the Bad
Cassandra Allen, Olivia Heide
Faculty Advisor: Stephanie Haugh
Sex Offender Registry: The Need For Reform Anna Nix
Faculty Advisor: Dr. Elisa Toman
Education, Humanities, & Social Sciences
A is for Apple - Animation for Developing Language Skills
Linda Gee, Shelby Switzer Faculty Advisor: Dr. Edward Morin
A Prisoner's World
Jasmine Silva
Faculty Advisor: Dr. Tracy Bilsing
Addressing the Cultural Process of Stereotyping among TESOL Preservice Teachers Emma Berthelsen
Faculty Advisor: Dr. Abdelilah Salim Sehlaoui
Becoming a World of Acceptance Valentina Rombado
Faculty Advisor: Dr. Ching-in Chen
David Koresh is Vernon Wayne Howell Cecilia Monreal
Faculty Advisor: Dr. Michael Demson
Emotional Broadcasting in High - Functioning Autism Gwendolyn Squires
Faculty Advisor: Dr. Ramona Noland
Identity, Power, Promise: Factors leading to the Fall of the Branch Davidians in Waco, Texas Sarah Shackelford Faculty Advisor: Dr. Michael Demson

Gabrielle Hernandez Faculty Advisor: Dr. Jeffrey Littlejohn Lynchings in Montgomery County Joseph Fairless Faculty Advisor: Dr. Jeffrey Littlejohn

Nation Building in Mexico Heather Howsmon Faculty Advisor: Dr. Jeffrey Littlejohn

**The Carefree Black Girl Movement** Joy Njagi Faculty Advisor: Dr. Ching-in Chen

#### The Effective Learning Strategies of Teaching Two - Digit Addition and Subtraction To Elementary Students Jillian Choquette, Amy Koncaba Faculty Advisor: Dr. Emma Bullock

**The Koresh Trance** Jada Morgan Faculty Advisor: Dr. Michael Demson

**The Underestimated Power of Charisma Erin Griffin** Faculty Advisor: Dr. Michael Demson

When Memes Become Weapons Grace ller Faculty Advisor: Dr. Olena Leipnik

**230** Health Sciences

Avoiding Perioperative Hypothermia Tamara Peirce Faculty Advisor: Dr. Mona Cockerham

#### **Blood Culture Contamination**

Alyssa Kruse Faculty Advisor: Dr. Mona Cockerham

#### Clostridium Difficile Screening Shelby Prewitt

Faculy Advisor: Dr. Mona Cockerham

**Clostridium Difficile Test Criteria** Ariana Porfidia Faculty Advisor: Dr. Mona Cockerham

Comparing Pain Scales Melissa O'Larey Faculty Advisor: Deborah Duncan

#### Compliance of Whiteboard Use in ED Breann Emshoff Faculty Advisor: Dr. Mona Cockerham, Samantha McBroom

Compliance with Sepsis Bundle Mikaela Johnson Faculty Advisor: Dr. Mona Cockerham, Deborah Duncan

#### Crucial Conversations in Nursing Eliver Tumbaga Faculty Advisor: Dr. Mona Cockerham

Decreasing CAUTI rates in the ICU Anthony Hernandez Faculty Advisor: Carlie Sharp, Deborah Duncan **Discharge Checklist Effectiveness** Elijah Bautista Faculty Advisor: Dr. Mona Cockerham

**Effects of Fall Bundles With Visual Cues Keisha Wiley** Faculty Advisor: Dr. Mona Cockerham

#### Fall Bundle with Patient Contract Haley Shankster Faculty Advisor: Dr. Mona Cockerham

#### Fall Prevention Education LaTrenda Thompson Faculty Advisor: Dr. Mona Cockerham

Hospital Acquired Pressure Ulcers Janecia Ford

Faculty Advisor: Dr. Mona Cockerham

#### Implementation of Fall Mats and Fall Contracts Nicole Toth Faculty Advisor: Dr. Mona Cockerham

#### Improved Handoff Communication Cassondra Koski Faculty Advisor: Dr. Mona Cockerham

Improving Anthropometrics Rosie Diaz Faculty Advisor: Dr. Mona Cockerham

Improving Antibiotic Administration Jeffrey Cadwallader Faculty Advisor: Dr. Mona Cockerham

#### Improving Call Light Responsiveness Maria Harbaugh

Faculty Advisor: Dr. Mona Cockerham
Improving Discharge Times and Identifying Barriers

Toni Scantlin Faculty Advisor: Deborah Duncan

Increased Sepsis Screening Compliance Galen Deleon

Faculty Advisor: Deborah Duncan, Julie Ruocco

#### Increasing Exclusive Breastfeeding Hanna Peterson

Faculty Advisor: Dr. Mona Cockerham

#### Indications for Indwelling Urinary Catheters

**Bobby Bates** Faculty Advisor: Dr. Mona Cockerham

#### Interruption in the Postpartum Unit Kris Cam

Faculty Advisor: Deborah Duncan

#### Labeling Tube Feedings

Turner DeVaney Faculty Advisor: Dr. Mona Cockerham

#### **Measurement of Blood Loss**

Elisabeth Shell Faculty Advisor: Dr. Mona Cockerham Measuring Obstetric Blood Loss Nohema Carrillo Faculty Advisor: Dr. Mona Cockerham

Medication Teach-Back Hannah Wheeler Faculty Advisor: Dr. Mona Cockerham

Music Impact on Premature Infants Ashley Egner Faculty Advisor: Elizabeth Kutchback

Music Therapy in Premature Infants Kara Deem Faculty Advisor: Dr. Mona Cockerham

**Neonatal Hypoglycemic Control Mallorie Madden** Faculty Advisor: Dr. Mona Cockerham

Nutritional Risk and the NRS-2002 Veronica Garza Faculty Advisor: Dr. Mona Cockerham

Oral Care in Ventilated Patients Ashton Guillory Faculty Advisor: Dr. Mona Cockerham

Oral Colostrum Priming Jessica Clayton Faculty Advisor: Dr. Mona Cockerham

Overcoming Compassion Fatigue Devyn Fitzpatrick Faculty Advisor: Dr. Mona Cockerham

#### Pain Control and Blood Pressure Natalie Newton

Faculty Advisor: Deborah Duncan, Darrell Jones

#### Pain Reassessment Compliance Alicia Hudgens Faculty Advisor: Dr. Mona Cockerham

Patient Communicated Fall Risk Cindy Huynh Faculty Advisor: Dr. Mona Cockerham

Patient Engagement and Perceptions on Fall Risks Keegan Smith Faculty Advisor: Dr. Mona Cockerham

Patient Focused Fall Prevention Emily Smith Faculty Advisor: Dr. Mona Cockerham

Patient Identification Compliance Tristyn Duffy Faculty Advisor: Dr. Mona Cockerham

Patient Identification via Wristband Validation and Compliancy Jordan Driskell Faculty Advisor: Dr. Mona Cockerham

Patient Inclusion Causing Less Falls Crystal Powers Faculty Advisor: Deborah Duncan Patient Perceived Fall Risks Morgan Dietz Faculty Advisor: Deborah Duncan

Patient Sitter Criteria Charday Williams Faculty Advisor: Dr. Mona Cockerham

#### Patient Understanding of Fall Risks Luz Garcia Faculty Advisor: Dr. Mona Cockerham

Personal Protective Equipment Vy Chau Faculty Advisor: Dr. Mona Cockerham

Postpartum Depression Assessment Victoria Mendoza Faculty Advisor: Dr. Mona Cockerham

Post-partum hemorrhage (PPH) risk assessment compliance Caley Walkoviak Faculty Advisor: Dr. Mona Cockerham

#### Reducing Central Line Infections Kayla Arrendell

Faculty Advisor: Dr. Mona Cockerham

Reducing Restraints Jennifer Holton Faculty Advisor: Dr. Mona Cockerham

Reducing Signs with Door Signage Courtney Roan Faculty Advisor: Dr. Mona Cockerham

#### Reviewing Presurgical Documents Victoria Webb

Faculty Advisor: Dr. Mona Cockerham

Surgical Checklist Compliance Quinlyn Rasmussen Faculty Advisor: Dr. Mona Cockerham

#### The Consent Form Dilemma Makayla Broadbent Faculty Advisor: Dr. Mona Cockerham

Triage Throughout Time Ashley Sowell

Faculty Advisor: Dr. Mona Cockerham

#### Venous Thromboembolism Prophylaxis Marion Zuniga

Faculty Advisor: Dr. Mona Cockerham

Verbal+Written Medication Education Taylor Munguia Faculty Advisor: Dr. Mona Cockerham

#### Video-Monitoring To Prevent Falls Frank Breckon Faculty Advisor: Dr. Mona Cockerham

#### Visual Cues and Early Sepsis Identification Marlen Salinas Faculty Advisor: Dr. Mona Cockerham

# Session D 3:00-4:20



Making the Student Experience a Better One

# Bibliotherapy: Supporting the Emotional Needs of Students through Literature Jamey Peersmann

Faculty Advisor: Dr. Lory Hass

#### The Relation Between Pets, Emotional Intelligence, and GPA in College Students

#### Rayne Horton

Faculty Advisor: Dr. Amanda Venta

#### ELL Stuggles and Strategies Camree Ulbricht Faculty Advisor: Dr. Mary Petron

The Benefits of Humor Usage in Our Everyday Lives Sarah Wagner Faculty Advisor: Dr. Frances Brandau

**ROOM 220** People and Politics

> Dr. Seuss: A Political Activist Melanie Hoover Faculty Advisor: Dr. Wesley Phelps

#### #MeToo? Exploring Inadequate Representation within Mainstream Feminist Social Justice Movements and Eradicating the "All Lives Matter" Approach to Solidarity

Destiny Caldwell Faculty Advisor: Dr. Katie Stockdale

#### Out of the Kitchen and into Congress: An Analysis of How Female Candidates Tweeted in 2016 Miranda Estrada

Faculty Advisor: Dr. Heather K. Evans

#### The Miseducation of Little Black Girls

Dajone Durham Faculty Advisor: Dr. M. Jade Zimpfer

#### ROOM

**Dystopia, Class, & Creativity** 

#### The Difference Between Ig<mark>noring & Ignora</mark>nce<mark>: The Foundatio</mark>n of Gilead

Alex Cook Faculty Advisor: Dr. Kandi Tayebi

### The Hierarchal Frameworks of Chaucer

Cassandra Allen Faculty Advisor: Dr. Darci Hill

#### "Cause of Gilead:" The Handmaid's Tale, Dystopian Society and Fairytales Madison Lindquist Faculty Advisor: Dr. Kandi Tayebi

#### Shaping Herstory: Ruth Page and An American Pattern Carlee Sachs-Krook Faculty Advisor: Dr. Jessica Ray Herzogenrath

### **Session D**

### 3:00-4:20

**Body of Evidence** 

#### Degradation of Human Cadaver Phalanges Using Household Chemicals

Margaret Spell

Faculty Advisor: Dr. Joan Bytheway

#### Does Hydrocephalus Interfere with the Estimation of Ancestry Derived from the Skull?

Jasmine Garcia Faculty Advisor: Dr. Joan Bytheway

The Post Mortem Intervals of Hair Banding Prevalent in Differentiating Period Rates withi<mark>n Euro</mark>pean

Ancestry

Teria Godwin-Pierce Faculty Advisor: Jennifer Keily

#### The Morphology of Ballistic Trauma Stephanie Baker

Faculty Advisor: Jennifer Keily

# **242A** Nature & The Machine

#### Effects of Hurricane Harvey on the Contamination of Water Supplies in Galveston, TX

Neisha Pander Faculty Advisor: Dr. Mahdi Safa

#### People's Perception of Leading Firms in Artificial Intelligence

Brianna Hickman, Julio Valdez Faculty Advisor: Dr. Karen Sherrill

#### Integrating State-of-the-art Technologies in Construction Management: Blockchain

Sylvia Baeza Faculty Advisor: Dr. Mahdi Safa

# 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.

**Camille Ingham, Makayla Mason** Faculty Advisor: Dr. Brittany Hayes

Kali Johnson, Gerardo Rodriguez Faculty Advisor: Dr. Reg Pecen

Jeffrey Belanger, Lindsey Burcham, Madison Cowdrey Faculty Advisor: Dr. Todd Primm

Stacey Lagrone Faculty Advisor: Dr. Chase Young

Linda Gee, Shelby Switzer Faculty Advisor: Dr. Edward Morin



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

Paulina Banas Kimberly Bell Tracy Bilsing Brian Blackburne Maria Botero Mack Campbell Madhusudan Choudhary Mona Cockerham Lee Courtney Deborah Duncan William Fleming Lory Haas Doug Haines Brittany Hayes Elisa Herrmann Maria Holmes Barbara Kaminska Jennifer Kiely Nick Lantz Jeffrey Littlejohn Zijun Luo Barbara Miles Shyam Nair Carroll Nardone Hiranya Nath Reg Pecen Todd Primm Mahdi Safa Linda Webster Kamphol Wipawayangkool

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# H UNDERGRADUATE RESEARCH SYMPOSIUM



