



ΒΕΤΑ ΒΕΤΑ ΒΕΤΑ
National Biological Honor Society
South Central Region



South Central Regional Convention April 5-7, 2019

Mt. Lebanon Retreat Center

Cedar Hill, TX

For more information, check out the
South Central Regional Convention website:

www.tribetasrc.com

FAQs (Frequently Asked Questions)

1. Where do we take our scrapbooks? We will have tables for scrapbook judging in the DBU House. Have your scrapbook there by midnight on Friday. Please remove it by Saturday night.

2. Is alcohol permitted on site? *Absolutely not!* It is a privilege for us to have these facilities available for our conference and it is our obligation to adhere to the rules and regulations of Mount Lebanon. Violators will be reported to their respective university administrators.

3. Is the awards ceremony "dressy"? We prefer that it be so, but you are not required to do so.

4. Are refunds available? No. It is the obligation of your chapter to deal with inevitable cancellations or changes of plans of its members.

5. How do we check out? You must report to the Grande to do so. We will check your facilities to ensure that you have thoroughly cleaned the premises, taken all trash out and removed any personal belongings that can be identified as originating from your chapter.

6. How do we get the materials for displaying our posters? On Saturday morning, you will find display easels and other mounting materials in the Texas Hall/Lone Star complex. Your poster is assigned a unique and specific number and will be tagged. (See program schedule).

7. What are the rules for oral presentations? You will get no more than 15 minutes including questions to make your presentation. Session moderators have been instructed to cut off presentations at the 15 minute mark. You must also have previously downloaded your presentation onto the Alpha Chapter computer Friday night before midnight at the DBU House.

8. What is the chapter introduction program scheduled for Friday night? It is your chance to introduce your chapter to everyone. Please do not exceed 7 minutes in your presentation. We will have a computer available for you to show a power point presentation if you like.

Table of Contents

Schedule of Events.....	1
National and Regional Officers.....	2
Greetings from the South Central Vice President of Tri-Beta	3
2019 Awards Ceremony Keynote Speaker	4
2018 Host Chapters.....	5
Participating Chapters.....	6
Convention Instructions	7
Oral and Poster Presentations Schedule.....	9-13
2019 Business Meeting Agenda.....	14
2018 Business Meeting Minutes.....	15
FAQs.....	17
Map of the Mt. Lebanon Retreat Center	back cover

For more information, check out the
South Central Regional Convention website:

www.tribetasrc.com

- A. Omicron Kappa nominates Iota Omicron for cohost
- B. All in favor, vote passes
- C. Election of regional student officers
 - A. President
 - i. Nu Eta nominates Julio Molina
 - ii. All chapters in favor of Julio Molina
 - iii. Julio Molina is elected
 - B. Vice President
 - i. Omicron Kappa nominates Erin Ramsay
 - ii. All chapters in favor of Erin Ramsay
 - iii. Erin Ramsay is elected
 - C. Secretary
 - i. Epsilon Sigma nominates Marisa Negley
 - ii. All chapters in favor of Marisa Negley
 - iii. Marisa Negley is elected
- D. Other new business
 - A. Epsilon Sigma makes the motion to make a regional Facebook page
 - B. Omicron Kappa seconds the motion
 - C. Nu Eta makes an amendment to have each chapter create their own chapter pages that will then be added to the southcentral regional Facebook group page
 - D. Delta Tau seconds the amendment
 - E. All chapters vote in favor, motion with amendment passes
- 9. Announcements
- 10. Closing Remarks by Regional President – Jonny Desposorio (Omicron Kappa)
- 11. Adjournment
 - a. Epsilon Sigma makes a motion to adjourn
 - b. Psi Mu seconds the motion
 - c. Meeting is adjourned

Schedule of Events

Friday, April 5

3:00 – 10:00 PM	Registration	DBU House
5:30 – 7:00 PM	Dinner	Dining Hall
7:30 – 11:00 PM	Chapter Introductions	Texas Hall (TXH)
Until 11:00 PM	Load Oral Presentations	DBU House
Until 11:00 PM	Leave scrapbooks for judging	DBU House
Until 11:00 PM	Leave E-books for judging	DBU House

Saturday, April 6

7:30 – 8:30 AM	Breakfast.....	Dining Hall
9:00 – 12:00 PM	Oral Presentations	TXH & LSR
11:45 – 12:45 PM	Poster set up	TXH & LSR
12:00 – 1:00 PM	Lunch	Dining Hall
12:45 – 1:15 PM	Pre-Judging of Posters.....	TXH & LSR
1:15 – 3:15 PM	Poster Presentations/Judging	TXH & LSR
3:30 – 4:30 PM	Regional Business Meeting	TXH
4:30 – 5:00 PM	Free Time	
5:00 – 6:30 PM	Banquet Dinner	Dining Hall
7:00 – 9:00 PM	Award Presentations.....	TXH
9:00-11:00 PM	Free Time	

Sunday, April 7

7:30 – 8:30 AM	Breakfast.....	Dining Hall
7:30 – 10:30 AM	*Departure	DBU House

*Participants **MUST** turn in your room key **AND** wait for a room check by a member of the Alpha or Nu Eta Chapter **BEFORE YOU CAN LEAVE!**

Beta Beta Beta National and Regional Officers

National Officers

National President:..... Dr. Steve Ropski
Gannon University (Erie, PA)

South Central Vice President:..... Dr. Adam Ryburn
Oklahoma City University

South Central District 1 Director:Dr. Charles Biles
East Central University

South Central District 2 Director: Dr. Ali Azghani
University of Texas at Tyler

National Secretary-Treasurer: Kathy Roush
University of North Alabama

South Central Student Officers

President.....Julio Molina – Nu Eta
University of the Ozarks

Vice President.....Erin Ramsay – Omicron Kappa
Dallas Baptist University

Secretary Marisa Negley – Epsilon Sigma
Angelo State University

2018 South Central Regional Business Meeting Minutes

1. Call to order – President, Jonny Desposorio (Omicron Kappa)
2. Welcome from South Central Regional President Jonny Desposorio (Omicron Kappa)
 - A. Welcome delegates
 - B. Officer Introductions
 - i. President, Johnny Desposorio – Omicron Kappa, Dallas Baptist University
 - ii. Vice President, M'Kayla Motley – Epsilon Sigma, Angelo State University
 - iii. Secretary, Marisa Thompson – Epsilon Sigma, Angelo State University
 - C. One Vote Per Chapter
3. Roll Call of Chapters – Secretary
 - Alpha
 - Delta Sigma
 - Nu Eta
 - Pi Alpha
 - Psi Mu
 - Delta Chi Delta
 - Delta Tau
 - Epsilon Sigma
 - Iota Omicron
 - Nu Delta Beta
 - Omicron Kappa
4. Vote to Approve 2017 Minutes
 - a. Nu Eta makes a motion to approve
 - b. Omicron Kappa seconds the motion
 - c. All chapters in favor, motion is passed
5. Report from District Director I: Dr. Charlie Biles – Psi Delta (ECU)
6. Report from District Director II: Dr. Ali Azghani – Kappa Xi (UT Tyler)
7. Report from Regional Vice President: Dr. Adam Ryburn – Alpha (OK City Univ.)
8. New Business
 - A. Selection of host chapter for 2019 South Central Regional Convention
 - A. Alpha nominates Nu Eta for host
 - B. All in favor, vote passes
 - B. Selection of co-host chapter for 2019 South Central Regional Convention

2019 South Central Regional Business Meeting Agenda

1. Call to order – President, Julio Molina (Nu Eta)
2. Welcome from South Central Regional President Julio Molina (Nu Eta)
 - A. Welcome delegates
 - B. Officer Introductions
 - i. President, Julio Molina – Nu Eta, University of the Ozarks
 - ii. Vice President, Erin Ramsay – Omicron Kappa, Dallas Baptist University
 - iii. Secretary, Marisa Negley – Epsilon Sigma, Angelo State University
 - C. One Vote Per Chapter
3. Roll Call of Chapters – Secretary
4. Vote to Approve 2018 Minutes
5. Report from District Director I: Dr. Charlie Biles – Psi Delta (ECU)
6. Report from District Director II: Dr. Ali Azghani – Kappa Xi (UT Tyler)
7. Report from Regional Vice President: Dr. Adam Ryburn – Alpha (OK City Univ.)
8. New Business
 - A. Selection of host chapter for 2020 South Central Regional Convention
 - B. Selection of co-host chapter for 2020 South Central Regional Convention
 - C. Election of regional student officers
 - President
 - Vice President
 - Secretary
 - D. Other new business
9. Announcements
10. Closing Remarks by Regional President
11. Adjournment

Greetings to the student delegates and faculty attending the 2019 South Central Regional Convention. Springtime in north central Texas is an exciting time both biologically and intellectually for TriBeta members. It is a time to renew old friendships and a time to forge new relationships. It is a time to gather for conducting the business of the region and most importantly, for the members to present formally the research conducted during the previous year.

Much effort goes into a successful convention, beginning with the host chapter. I would like to thank the Nu Eta Chapter at the University of Ozarks, for their leadership in the planning and organizing this convention. Dr. Coleman and Dr. Sconiers and their students have put a considerable amount of time and energy into setting up the program and scheduling events that make a convention operate smoothly. It is through the efforts of these members of the host and co-host chapters that the convention will be a success.

As always, we have a great line up of oral and poster presentations, representing all areas of the biological sciences. I thank all the students that are presenting their research this weekend and encourage you to consider presenting your research at the National Biennial Convention scheduled for June of 2020 in Columbus, GA. This weekend's winners of the Brooks and Johnson Awards, qualify for up to \$750 to support travel to this national convention.

I would also like to encourage our student researchers to take advantage of the funding and publishing opportunities for TriBeta members. This past year TriBeta awarded over \$65,000 in student research funding through the TriBeta Research Grant Program. Be on the lookout for an announcement for grant applications starting in August. I would especially like to invite students to submit their work to *BIOS* for publication. Details on grants and publication opportunities can be found by going to the TriBeta web page (www.tri-beta.org).

Finally, I'm sure we are all going to have an excellent time at Mt. Lebanon. Please don't hesitate to contact me this weekend if I can help make your TriBeta experience better. My email address is below. Take care and have a great convention.

Dr. Adam K. Ryburn
Southcentral Regional Vice President
aryburn@okcu.edu

Saturday Evening Awards Ceremony Keynote Speaker

Dr. Thomas Ilifee, Professor
Department of Marine Biology
Texas A&M University at Galveston.

“Diving discoveries of living fossil animals from submarine caves.”



Serpent Session – Lone Star Room (LSR)

1. Jennifer Abshire, Southwestern Oklahoma State University – *Pseudomonas syringae* motility appendages: roles in surface colonization and survival
2. Cuishan Deng, East Central University – The difference in leaf-tying caterpillar communities between forest edge and interior habitats
3. Alexa Benavides, Houston Baptist University – The Very Hungry Superworm: Superworms' ability to digest Polystyrene
4. Brendan Harrison, Southwestern Oklahoma State University – How sex ratios & population density affect sexual conflict over pairing duration in *Hyalella* amphipods
5. Mikaela Wilson, St. Edward's University – Evaluating the Effects of Inducing Autophagy in unc-33 Mutants
6. Nancy Huynh, Texas Wesleyan University – The effect of alcohol-containing mouthwash on *Streptococcus sobrinus* biofilm formation
7. Emily Falcon, University of Central Oklahoma – Documenting the Expansion of an Invasion of Mediterranean Geckos (*Hemidactylus turcicus*) at the University of Central Oklahoma and its Surrounding Area
8. Virginia Green, University of Dallas – Mortality during *Pseudomonas aeruginosa* chronic infection of *Drosophila melanogaster* dependent on mating experience of host
9. Shandis Fancher, University of Texas at Tyler – Determining the Mechanism of *Pseudomonas* Elastase Induced Activation of EGFR
10. Theresa Stein, Southwestern Oklahoma State University – The effects of stream order, season, and drainage on the abundance of two caddisfly families.

3. Kade Ezell, Southwestern Oklahoma State University – Antimicrobial activity of phytopathogen biosurfactants against human pathogens
4. Kia Baeza, St. Edward's University – Commonly Used Agricultural Pesticides and their Effect on the Immunological Function of Honeybee Populations
5. Susan McGuire, Texas A&M University - Corpus Christi – Investigating Nutrient and Organic Carbon Distribution in Wetland Ecosystems
6. Ruqea Saheb, Texas Wesleyan University – The Change in Oral Microflora in Response to Coffee Intake
7. Kayley Pate, University of Central Oklahoma – Analysis of Proliferation and Migration in Phenylalanine, Retinoic Acid, and 4-diethylaminobenzaldehyde Treated Cells
8. Vincent Phan, University of Dallas – Novel Therapeutics for Head and Neck Cancer
9. Rebecca Romero, West Texas A&M University – Current aspects of PM 2.5 and analyzing the aeroallergen of the Texas panhandle
10. Shayla Miller, Southwestern Oklahoma State University – The Battle of the Sexes: How female condition affects conflict over mate guarding duration in *Hyalomma* amphipods

Fish Session – Lone Star Room (LSR)

1. Zoey Stormes, Angelo State University – The Effects of HEPA Air Filters on Airborne Mold Spores in College Dormitories
2. Amanda Pang, East Central University – Growth Inhibition of *Chaetomium globosum* After Exposure to NSAIDs
3. Bailee Cummings, Southern Nazarene University – Mosquito Sampling and Arbovirus Surveillance in Oklahoma
4. Yesica Garcia, Southwestern Oklahoma State University – Isolating Rhizobacteria for Promoting Growth of Winter Wheat
5. Rachel Vargas, St. Edward's University – Hemocyte Protein Analysis as an Indicator of Immunological Response in *Tigrosa helluo* Following Leg Autotomy
6. Neha Amberkar, Texas A&M University - Texarkana – Microplastic Pollution in East Texas Freshwaters and Water Treatment Plants
7. Kaylee Ballard, The University of Tulsa – Next Generation Sequencing of *Staphylococcus* Species Isolated from Oklahoma Retail Mushrooms
8. Rebecca Wood, University of Central Oklahoma – Serologic Evidence of Viral Reactivation and Increased Disease Activity in Patients with Systemic Lupus Erythematosus
9. John Cantley, University of Texas at Tyler *Pseudomonas aeruginosa* Antibiotic Resistance Gene Profile in East Texas Clinical Isolates
10. Max Shaw, West Texas A&M University – Analysis of the amino acid content for beef, chicken and turkey bone broths
11. Jennifer Prophet, Southwestern Oklahoma State University – Timing of Avian Migration Onset Through the Oklahoma City Area 1995-2017 Using NOAA Weather Data

Host Chapters for 2019 beta beta beta South Central Regional Convention



The University of the Ozarks - Host Nu Eta

In 2005, the Nu Eta Chapter of BBB was established at University of the Ozarks in Clarksville, AR under the direction of Dr. Sean Coleman. University of the Ozarks is a private, Presbyterian liberal arts college in the river valley with approximately 872 students. Each year the Nu Eta chapter hosts “Science Day” at our University, an event aimed at recruiting and sharing the biological sciences with high school students from surrounding public school districts. Other events sponsored by Nu Eta include school supply drive, food drives, Valentine’s day grams, game nights, and more! Our chapter is rapidly growing and the number of students in our chapter conducting original research is increasing each year! We are excited to be hosting this year’s conference and hope that you enjoy this weekend!



Houston Baptist University - Cohost Iota Omicron

The Iota Omicron Chapter of Houston Baptist University, in Houston, TX, was founded in 2011 by Drs. Nicole Pinaire, Betty Thompson, and Hannah Wingate. Currently, Drs. Agnieszka Czopik and Lisa Ellis sponsor the club. HBU, founded in 1960, is a private, Christian liberal arts university with approximately 2000 undergraduates. The Iota Omicron chapter holds monthly Research Round Table discussions and weekly fundraising events, hosts guest speakers, and conducts multiple research projects. Iota Omicron won the District II Outstanding Chapter in 2016 and 2017 and HBU’s Organization of the Year in 2016 and Program of the Year in 2018. Iota Omicron is excited to co-host this year’s convention! Let’s all have a great time getting to know one another, discussing biological research, and sharing ideas for TriBeta events and activities.

Participating Chapters

District One Arkansas, Louisiana and Oklahoma

Alpha	Oklahoma City University	Oklahoma City, OK
Delta Sigma	Southwestern OK State University	Weatherford, OK
Delta Theta	Northwestern State University	Natchitoches, LA
Mu Kappa	Oral Roberts University	Tulsa, OK
Nu Eta	University of the Ozarks	Clarksville, AR
Omicron Phi	Southern Nazarene University	Bethany, OK
Pi Alpha	The University of Tulsa	Tulsa, OK
Psi Delta	East Central University	Ada, OK
Psi Mu	University of Central Oklahoma	Edmond, OK

District Two

Texas

Alpha Tau Chi	St. Edward's University	Austin, TX
Delta Chi Delta	TAMU - Texarkana	Texarkana, TX
Delta Rho	Austin College	Sherman, TX
Delta XI	West Texas A&M University	Canyon, TX
Epsilon Phi	TAMU - Corpus Christi	Corpus Christi, TX
Epsilon Sigma	Angelo State University	San Angelo, TX
Epsilon Tau	University of Dallas	Irving, TX
Iota Omicron	Houston Baptist University	Houston, TX
Kappa Xi	University of Texas at Tyler	Tyler, TX
Omicron Kappa	Dallas Baptist University	Dallas, TX
Sigma Theta	Texas Wesleyan University	Fort Worth, TX

Poster Presentations 1:15-3:15

(abstracts are viewable online)

Acorn Session – Texas Hall (TXH)

1. Emily Bedea, Southwestern Oklahoma State University – In-silico analysis and homology modeling of β -carbonic anhydrase from *Streptococcus sanguinis*, an opportunistic pathogen involved in subacute infective endocarditis.
2. Constance Green, East Central University – Finding Novel Antibiotic Producing Bacteria
3. Emily Hernandez and Elizabeth Gwartney, Oklahoma City University – The Enemy of my Enemy is my Friend: Mycobacteriophage and the Treatment of Drug-Resistant *Tuberculosis*
4. BreAnna Le, Southwestern Oklahoma State University – Investigating effects of innate immune agonists on co-receptor B7-H4 in B lymphocyte
5. Clay Clarkson, Texas A&M University - Corpus Christi – Quantifying the relationship between methane concentration and mcrA genes from a cultured *Methanobolus* spp. isolated from surfaces sediments of Tranquitas Creek, Kingsville Texas
6. Toi Nguyen, Texas Wesleyan University – Identification and Distribution of Wolbachia in Natural *Culex quinquefasciatus* Populations in Tarrant County, TX.
7. Kayle Patatanian, University of Central Oklahoma – Analysis of cardiac teratogenicity of phenylalanine using the avian model: the role of the focal adhesion pathway
8. Sophia Ostertag, University of Dallas – Coevolution of host-pathogen interactions in a *Pseudomonas aeruginosa* chronic infection model of *Drosophila melanogaster*
9. Julio Molina-Pineda, University of the Ozarks – Antioxidant Carbon Nanoparticle Results in Novel Auditory Response in Mice
10. Aubrey Howard, West Texas A&M University – Microscopic Characterization of the Aeroallergen and Reduction in Reduction Index on Using Air Purifiers With AHPKO and Plasma Nanotechnology
11. Dani Whiting, Southwestern Oklahoma State University – Raptor Perch Locations and Types in Southwestern Oklahoma

Bird Session – Texas Hall (TXH)

1. Nana Amponsah, Angelo State University – Predator Avoidance Behavior in *Physa acuta*
2. Sidney Lyons, East Central University – The effect of Iron Oxide Nano particles on development, and fluctuating asymmetry of *Zophobas morio* larvae

11:15-11:30 Anna Bailey, Oral Roberts University – Gene Annotation of the Hypothetical Protein-Coding Genes of *Chlamydia caviae*.

11:30-11:45 Joshua Holsing, Oral Roberts University – Antimicrobial Effects of Electrically Modified Lyophilic Silver Hydrosol in vitro and in vivo.

11:45-12:00 Taylor Miller, Oral Roberts University – Anti-cancer effects of compounds secreted by *Flammulina velutipes*.

Convention Instructions

Chapter Introductions

On Friday night, chapters get the chance to introduce their members and describe this past year's activities and accomplishments. Chapters are highly encouraged to use a PowerPoint presentation to supplement their introductions. Please keep introductions to 5-7 minutes in length.

Oral Presentations

Oral presentations will take place Saturday morning from 9:00-12:00 in three locations concurrent. Oral presentations should be uploaded to the Nu Eta computer (located at registration table at the DBU House) by 11:00pm on Friday. Oral presenters should bring presentations on a memory stick. Remote clickers will be available in order for presenters to advance slides. Moderators will also be available to advance slides on request. The time allotted for oral presentations is 15 minutes; which includes time for questions. Moderators will not allow you to go beyond 15 minutes.

Poster Sessions

Poster sessions will take place Saturday afternoon from 1:15-3:15. Posters can be setup between 11:45 and 12:45. Early judging (without presenters) will begin at 12:45pm. Easels, poster boards, and tacks are available for Poster Presenters.

Scrapbook Competition

All scrapbooks must be deposited at in the DBU House by 11:00 pm on Friday, to be eligible for judging. They may be picked up Saturday after the business meeting.

E-Book Competition

All E-Books should be uploaded to the Nu Eta computer in the DBU House by 11:00 pm on Friday, to be eligible for judging.

Cleaning Your Rooms & Checking Out

All chapters **MUST** check out with the host chapters. A member of Alpha Chapter or Nu Eta will inspect your room before you are cleared to leave. Rooms **MUST** be clean and **ALL TRASH** taken out and put into the proper trash receptacle prior to departure.

Oral Presentations Schedule

(abstracts are viewable online)

Balanos Session – Texas Hall (TXH)

9:00-9:15 Jillian Blake, Oral Roberts University – Attraction of swarming paper wasp sexuals (*Polistes* spp.) to the chemical attractant N-3-methylbutyl acetamide.

9:15-9:30 Mary Kadatska, Oral Roberts University – Effects of trinitrobenzene induced colitis on vasoactive intestinal peptide, calcitonin gene-related peptide and morphology of colon in rats.

9:30-9:45 Nicole Mountz, Oral Roberts University – Cytotoxic Effects of *Inonotus obliquus* Secretions on Non-Tumor and Tumor Cells

9:45-10:00 Abigail Sequeira, University of Dallas – Parasitic infection and exposure alters mate choice in *Potamopyrgus antipodarum*.

10:00-10:15 Joselyn Gutierrez, West Texas A&M University – The Effects of Summer and Winter Burning on Herpetofauna in a Sand Sage Prairie Ecosystem.

10:45-11:00 Erin Dempsey, East Central University – Plant Pathogenic Fungal Species on Melons from Guatemala.

11:00-11:15 Anthony Sanchez, St. Edward's University – UNC-33, a microtubule associated protein, plays a key role in neuronal autophagy

11:15-11:30 Jailene Canales, University of Central Oklahoma – Characterizing Early Developmental Defects in an Avian Model of Maternal PKU.

11:30-11:45 Hannah Butterfield, Austin College – Investigating Synergy Between PA28 γ and IKK ϵ .

11:45-12:00 Emma Thornburg, Austin College – Investigating the Positive and Negative Regulators of PA28 γ in Cancer.

Boudetase Session – Lone Star Room (LSR)

9:00-9:15 Angela Chen, Angelo State University – Atypical Expression of Cell Cycle Genes in a *Drosophila* Model of Alzheimer's Disease.

9:15-9:30 Katherine Collins, Austin College – Barriers to plant establishment from seed in tallgrass prairie restoration.

9:30-9:45 Blake Pate, Dallas Baptist University – Concordance of HPV genotyping between histopathology and trigger cytology.

9:45-10:00 Caitlyn Cutrer, Northwestern State University – Identifying *Leptospira* Interrogens in feral hog populations using the MALDI-TOF.

10:00-10:15 Selena Gomez, Oral Roberts University – Canine diets in the digital age: an examination of dog owner's feeding practices and external signs of health in dogs.

10:30-10:45 Jack Koszykowski, Oral Roberts University – The Effects of *Azadirachta indica* (Neem) Extract on RP62A *Staphylococcus epidermidis* Biofilm Formation.

10:45-11:00 Lois Nguapa, Oral Roberts University – Bioinformatic Prediction of Gene Function in *Streptobacillus moniliformis*.

11:00-11:15 Keith Tittle, Texas Wesleyan University – Species-area Relationships across Conserved lands in Texas: Does iNaturalist Work?

11:15-11:30 Julio Molina-Pineda, University of the Ozarks – Maternal Commensal Bacteria Inhibits Intrauterine ZIKV Infection and Fetal Growth Restriction in a Mouse Model.

11:30-11:45 McKayla Muse, University of Central Oklahoma – Analysis of Proliferation and Migration in Phenylalanine, Retinoic Acid, and 4-diethylaminobenzaldehyde Treated Cells.

11:45-12:00 Cristin Connor, University of the Ozarks – Temperature and the Variability of Vertebrae in *Dasyurus novemcinctus*.

Boax Session – DBU House

9:00-9:15 Faith Sawyer, Dallas Baptist University – MRSA: The Missing Link.

9:15-9:30 Fiorella Hernandez, St. Edward's University – Examining unc-33 expression using GFP transcriptional reporter.

9:30-9:45 Kaylee Ballard, The University of Tulsa – Influence of *Staphylococcus aureus* Co-Contamination On Survival of *Campylobacter* Strains At Low Temperature, Biofilm Formation, and Aerotolerance.

9:45-10:00 Brent Wesley, Angelo State University – Genetic Barcoding Analysis of Agave.

10:00-10:15 Monica A. Martinez, Austin College – Estradiol Effects on Hibernating Physiology of Ground Squirrels.

10:30-10:45 Minh-Nguyet Hoang, University of Dallas – Novel Glial Cells Affect Sensitivity to Nociception in Third Instar Larvae of *Drosophila melanogaster*.

10:45-11:00 Fernanda Hernandez Sanchez, University of the Ozarks – Novel Approaches for Investigating Cancer Growth Inhibition and Male Contraception by DEC-TEC and PROTAC.

11:00-11:15 Constance Byers, Texas A&M University - Texarkana – Microplastic Pollution in East Texas Freshwaters and Water Treatment Plants.