



PANGAEA Program Overview

Time	Activity	Location
8:00 am - 9:00 am	Registration & Breakfast/Coffee	ELA 344
8:30 am - 8:50 am	Welcome and Introductions	ELA 344
9:00 am - 10:20 am	Paper Session I, II, III (concurrently)	ELA 311 (I), ELA 312 (II), ELA 315 (III)
9:30 am – 10:30 am	Graduate Program Information Session (concurrently with paper sessions)	ELA 384
10:30 am - 11:45 pm	Paper Sessions IV, V, VI (concurrently)	ELA 311 (IV), ELA 312 (V), ELA 315(VI)
12:00 pm - 1:00 pm	Lunch Break	ELA 344
1:05 pm - 2:05 pm	Degrees to Dollars (Come meet our alumni!)	ELA 116
2:10 pm - 3:00 pm	Poster Session	ELA Third Floor (Coffee and snacks provided in the ELA 1 st floor hallway)
3:05 pm - 4:05 pm	GEOBOWL	ELA 116
4:10 pm – 4:30 pm	Awards Ceremony	ELA 116

Notes to PANGEA presenters and participants:

1. Paper sessions will take place in ELA 311, ELA 312, and ELA 315.
2. Each presentation will be **10 minutes**, with an additional **5 minutes** for Q&A (15 minutes total).
3. Be sure to have a digital copy of your presentation available before your scheduled time.

DETAILED PANGEA PROGRAM

8:00am - 9:00am REGISTRATION & BREAKFAST

Room: ELA 344

8:30am - 8:50am WELCOME TO PANGEA

Room: ELA 344

Hosts: Diane Nuñez and Kaya Johnson

9:00am - 10:20am

PAPER SESSIONS I & II & III (CONCURRENTLY)

Paper Session I: Environmental and Climate Change

Room: ELA 311

Judges and hosts: Dr. Tom Ptak, Dr. Shelly Wernette

9:00-9:15 David Zarazua

Natural Protected Areas: Strategy for Adaptation to Climate Change

9:15-9:30 Binay Thapa

Impacts of Climate Change: On Indigenous Agricultural Communities in Nepal's Upland Regions

9:30-9:45 Josiah Watson

Rising Sea Levels: Areas of Risk Posed by Wastewater Treatment Plants and Coastal Landfills

9:45-10:00 Prabish Khadka Chhetri

Glacier Mass Balance, Runoff, and Area Changes in the Annapurna Conservation Area: Climate Trends and Future Projections

10:00-10:15 Tighearnan Juarez Murphy

Geomorphic Response to: Salt Cedar Management in the Upper Brazos River

Paper Session II: Water Resources & Sustainability

Room: ELA 312

Judges and hosts: Dr. Brandon Radoman Shaw, Dr. Ron Hagelman

9:00-9:15 Alain Elegbe

Water Justice in The Republic of Benin: Spatial Analysis of Unequal Access to Drinking Water

9:15-9:30 Adriana Montoya

Dismembering a River: Deterioration of Social Connectivity with the Rio Grande in El Paso, Texas

9:30-9:45 Brock Burford

Turning Water to Wine: An Analysis of Texas Wine Industry Water Efficiency

9:45-10:00 Donald Karr

The State of Water: A Multi-Aquifer Investigation into the Connection of Groundwater and Surface Water in the Nueces River Basin

10:00-10:15 Elizabeth Kubacki

Future Development and Riparian: Connectivity Networks in Texas, USA

Paper Session III: Borders Migration & Social Justice

Room: ELA 315

Judges and hosts: Dr. Jennifer Devine, Dr. Alberto Giordano

9:00-9:15 Diane Nuñez & Tay Villaseñor

Complex Boders, Complex (Im)mobilities: Migration to the Rio Grande Valley

9:15-9:30 Luisa Amato Caye

The Limits on Cross Border Cooperation: A Spatial Analysis of the Tri Border Region

9:30-9:45 Nirvana Heidarian

AI and Digitization of Borders: Power, Surveillance, and Inequality in U.S.-Mexico Migration Management

9:45-10:00 Michael Seaborn

A Spatial Understanding of Displacement: Measuring and Mapping Neighborhood Change in San Marcos, Texas

10:00-10:15 Hilary Ansah

Mapping Food Access in Gentrifying East Austin: A Spatial Analysis of Changing Urban Foodscapes

9:30am – 10:30am

Graduate Program Information Session

Room: ELA 384- Interested in attending grad school? Come learn about our graduate programs!

10:30am – 11:45am

PAPER SESSIONS IV, V & VI (CONCURRENTLY)

Paper Session IV: Urbanization and Transportation

Room: ELA 311

Judges and hosts: Dr. Rosie Ray, Dr. Edwin Chow

10:30-10:45 Easton Moore

Small Transit, Big Impact: Determining Success for Low-Speed Electric Vehicle Microtransit Programs in Small-Medium Sized Texas Cities

10:45-11:00 Yubin Lee

Exploring the Spatiotemporal Patterns of Shared Bicycle Usage: A Case Study of MetroBike in Austin, Texas

11:00-11:15 Md Munir Mahmud

Geospatial Inquiry on Urban Heat Island Effect and Urban Density of Rangpur Metropolitan City, Bangladesh

11:15-11:30 Anupa Bhatta

Analyzing Spatial Inequalities and Exposure to Urban Blue and Green Spaces Across Geodemographic Segmentations in Denton, Texas, USA

Paper Session V: Hazards & Energy Justice

Room: ELA 312

Judges and hosts: Dr. Soe Myint, Dr. Rebecca Davio

10:30-10:45 Marie White

The Ancient Environments of New Mexico: Using geoarchaeological methods to understand Holocene human-environment interactions

10:45-11:00 Josh Knolla

Three Method Tsunami Vulnerability Analysis of the United States East Coast

11:00-11:15 Fahmina Binte Ibrahim

Spatially Aware Machine Learning for Flood Risk Mapping: A Comparative Analysis of RF and GWR-RF in Houston

11:15-11:30 Jong-Ku Park

Energy Injustice in Solar Energy Network: The Appropriation of Green Discourse in Rural South Korea

11:30-11:45 **Jake Strachura**

Understanding NIMBY Attitudes Towards Energy Development of Texas State Students

Paper Session VI: Social & Cultural Geography

Room: ELA 315

Judges and hosts: Dr. Injeong Jo, Dr. Nancy Li

(This session has one **virtual** presenter from an online program)

10:30-10:45 **Samantha Serrano (presentation on Zoom)**

The Impact of Advance Placement on Academic Growth: High School Trajectories and the Role of Social and Cultural Capital in AP Human Geography

10:45-11:00 **Ayomide Famewo**

A Taste of the Unfamiliar: An Explorative Study Examining Cultural Dimensions of Food Insecurity Among International Students at Texas State University (USA)

11:00-11:15 **Emmanuel Aklie**

Spatial Patterns of Life Expectancy: A Fine-scale Level Analysis of Socioeconomic and Environmental Determinants

11:15-11:30 **Nicole Anguiano**

Reverse Gentrification and the Power of Direct Real Estate Investment

11:30-11:45 **Heather Swienton**

Children's Perspectives in Cartography: A Mental Map Experiment

12:00pm – 1:00 pm

LUNCH BREAK

Room: ELA 344 – Lunch will be available for pick-up for registered presenters and attendees.




1:05pm – 2:05 pm

DEGREES TO DOLLARS

Room: ELA 116 - Come meet our Alumni!

Curious about where a **geography degree** can take you? Join us for an engaging Career Panel Discussion, where **alumni from the Texas State Department of Geography and Environmental Studies** will share how they turned their passion for geography into rewarding careers. This panel will provide valuable insights into your future possibilities.

Why Attend?

-  Discover how geography skills apply to real-world careers.
-  Learn about job opportunities in GIS, sustainability, planning, and beyond.
-  Network with professionals who were once in your shoes.

2:10 pm – 3:00 pm

POSTER SESSION: ELA Third Floor

Judges: Dr. Denise Blanchard, Dr. Brian Cooper, Dr. Sam Krause, Dr. Benjamin Zhan, Dr. Nate Currit, Dr. Eric Sarmiento, Dr. Jason Julian, Dr. Su Han, Dr. Yihong Yuan

Undergraduate Student Poster Presenters

- 1. Avery Bouskila**
Protecting the Appalachian Goliath: A GIS-Based Investigation for Habitat Suitability of Hellbenders within the Great Smoky Mountains
- 2. William Moore**
Sustainability Analysis of Potential Bike Share Dock Sites in Edwardsville, Illinois
- 3. Jaydon Allison**
The Texas Courthouse and Reflection of Economic Vitality
- 4. Mikael Lopez**
Monitoring Grapevine Health and Validating Plume Models for Herbicide Drift Mitigation
- 5. Michael D. White & Rusty Tolliver**
Inclusionary Zoning and Other Solutions to the Affordable Housing Crisis
- 6. Elizabeth McNamara**
SWAAG Transportation Plan

Graduate Student Poster Presenters

- 7. Pingping Wang**
GALAX: An Interpretable AutoML-Enhanced Geographically Weighted Model for Spatial Heterogeneity
- 8. Hiram Zagala**
What Powers Texas
- 9. Babak Heidari**
Examining Spatiotemporal Changes in Forest Extent and Environmental Variables Patterns Within the Colorado River Basin
- 10. Md Tousif Tanzir**
Assessing Drought Risk in Central Texas Using an Integrated AHP- GIS Framework with AI and Human Expert Perspectives
- 11. Julie Brooks**
Fire, Energy, and Environmental Hazards: Situating Assemblage Theory Within Participatory Research on Adaptive Capacity
- 12. Lidia Roy**
Spatio-Temporal Analysis of Domestic Violence in Austin, TX (2012-2023)
- 13. Sadia Islam Ritu**

Assessing the Distribution of Invasive Species in the Balcones Canyonlands Ecoregion

14. Farhaan Cooverji

Regional Water Balance Analysis for Quantifying Snow Water Supply in a Snow-Dominant Watershed, Montana, USA

2:10pm – 3:00pm

COFFEE BREAK (Concurrently with the Poster Session)

Room: ELA First Floor Atrium

3:05 pm – 4:05 pm

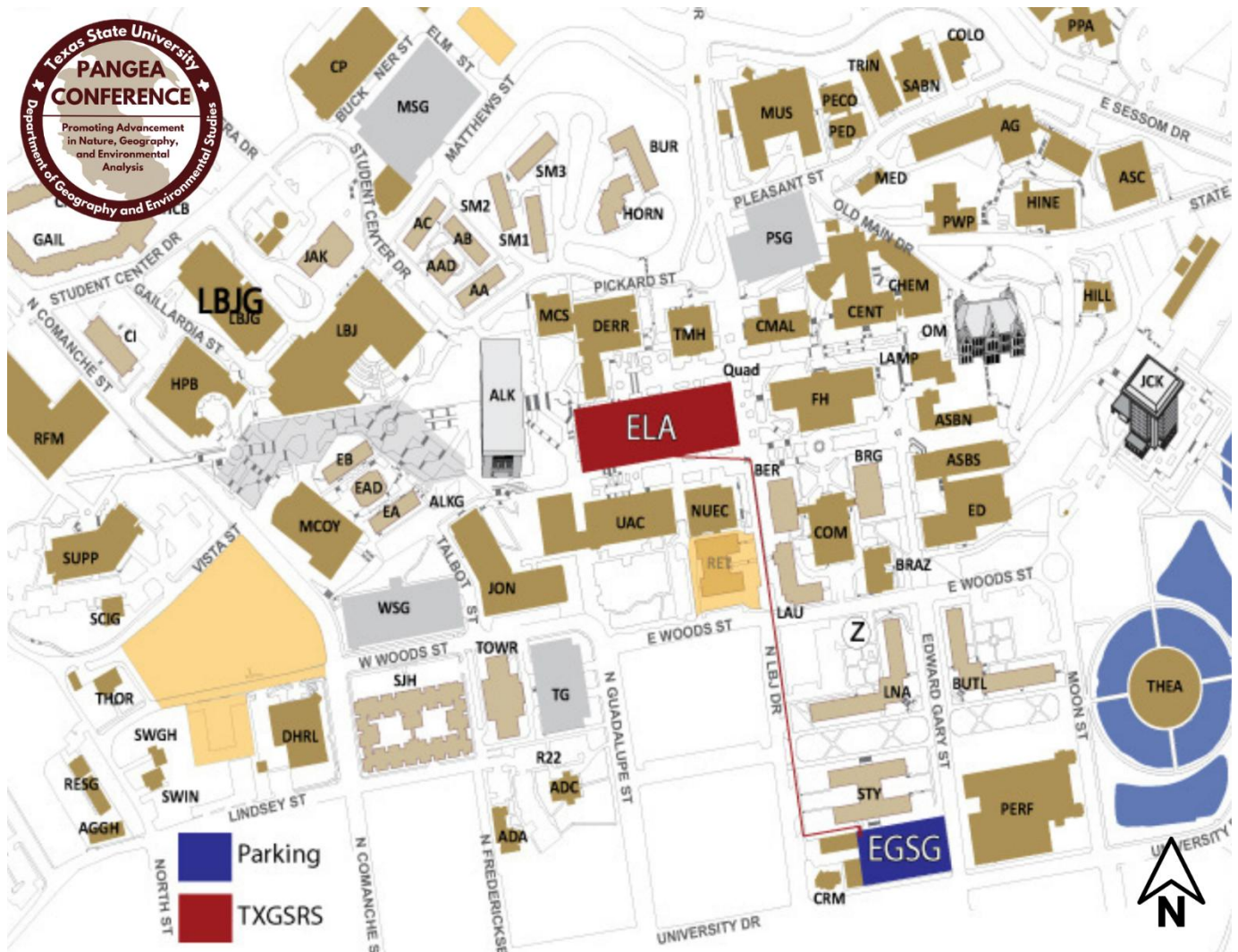
GEOBOWL

Room: Meet in Room ELA 116 for Instructions

4:10 pm – 4:30 pm

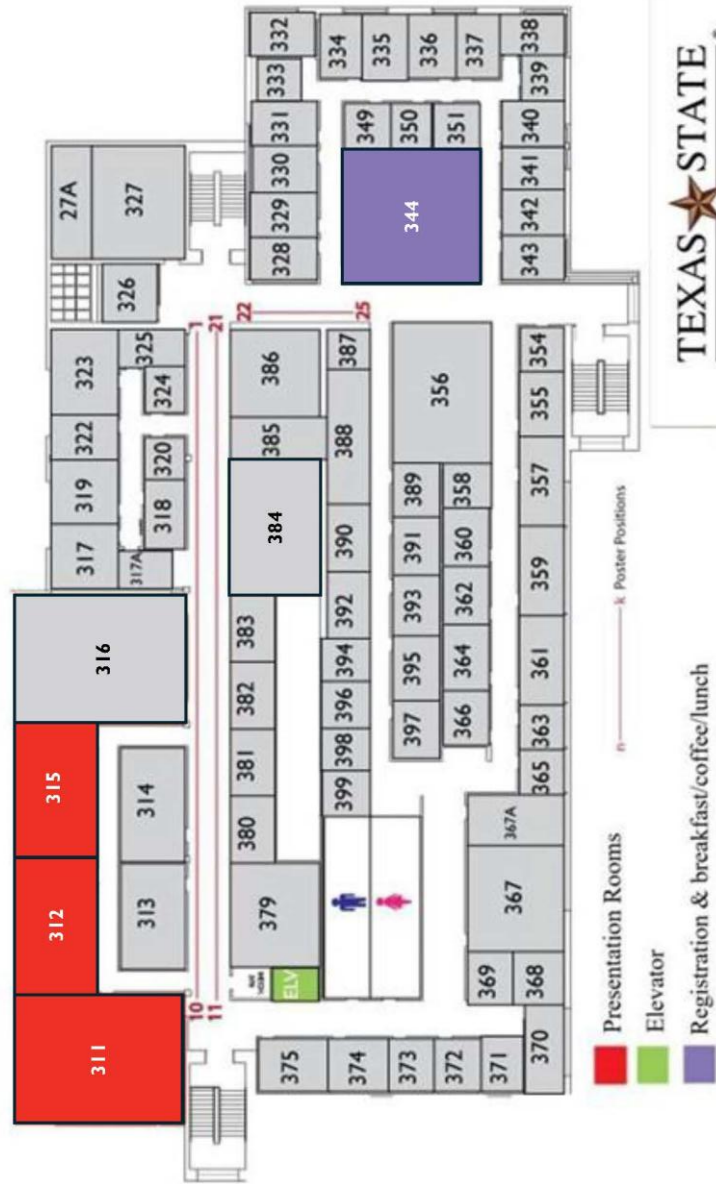
AWARDS CEREMONY

Room: ELA 116



We have parking vouchers for out-of-town/non-TXST attendees who come to the symposium. We recommend parking in the Edward Gary St Garage (EGSG). The parking ticket obtained at the garage gate can be exchanged for a voucher at registration.

Evans Liberal Arts 3rd Floor



PANGEA Planning Committee, 2024-2025

Faculty Advisors:

Dr. Yihong Yuan
Dr. Christi Townsend

Staff Advisors:

Allison Glass-Smith
Kelly Laxson
Charles Robinson

PhD Co-Chair:

Diane Nuñez

Masters Co-Chair

Kaya Johnson

Student Committee:

Luisa Caye
Erin Farina
Nirvana Heidarian
Joshua Knolla
Elizabeth Kubacki
Keenon Lindsey
Easton Moore
Garret Pugh
Ethan Reed
Tay Villaseñor

Special Thanks To:

Texas State Department of Geography and Environmental Studies faculty, staff, and students
for their support, attendance, and participation!

Dr. Jennifer Jensen, Department Chair
Dr. Ron Hagelman III, Graduate Coordinator

All faculty who served as judges, advisors, and session moderators

Geography Department Staff:

Kelly Laxson
Charles Robinson
Allison Glass-Smith
Dan Hemenway
Katie Webb
Stephanie Avila

Department of Geography and Environmental Studies student workers and student volunteers