

2024 Faculty Sustainable Development Research Summit

WELCOME

March 8th, 2024

8:30 am – 1:00 pm



WiFi - LitePublic Wireless
Password- lights@lite

2024 Faculty Sustainable Development Research Summit

Opening Remarks

Dr. Ramesh Kolluru

Vice President for Research, Innovation, and
Economic Development



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Dr. Ramesh Kolluru
Vice President Research, Innovation
& Economic Development

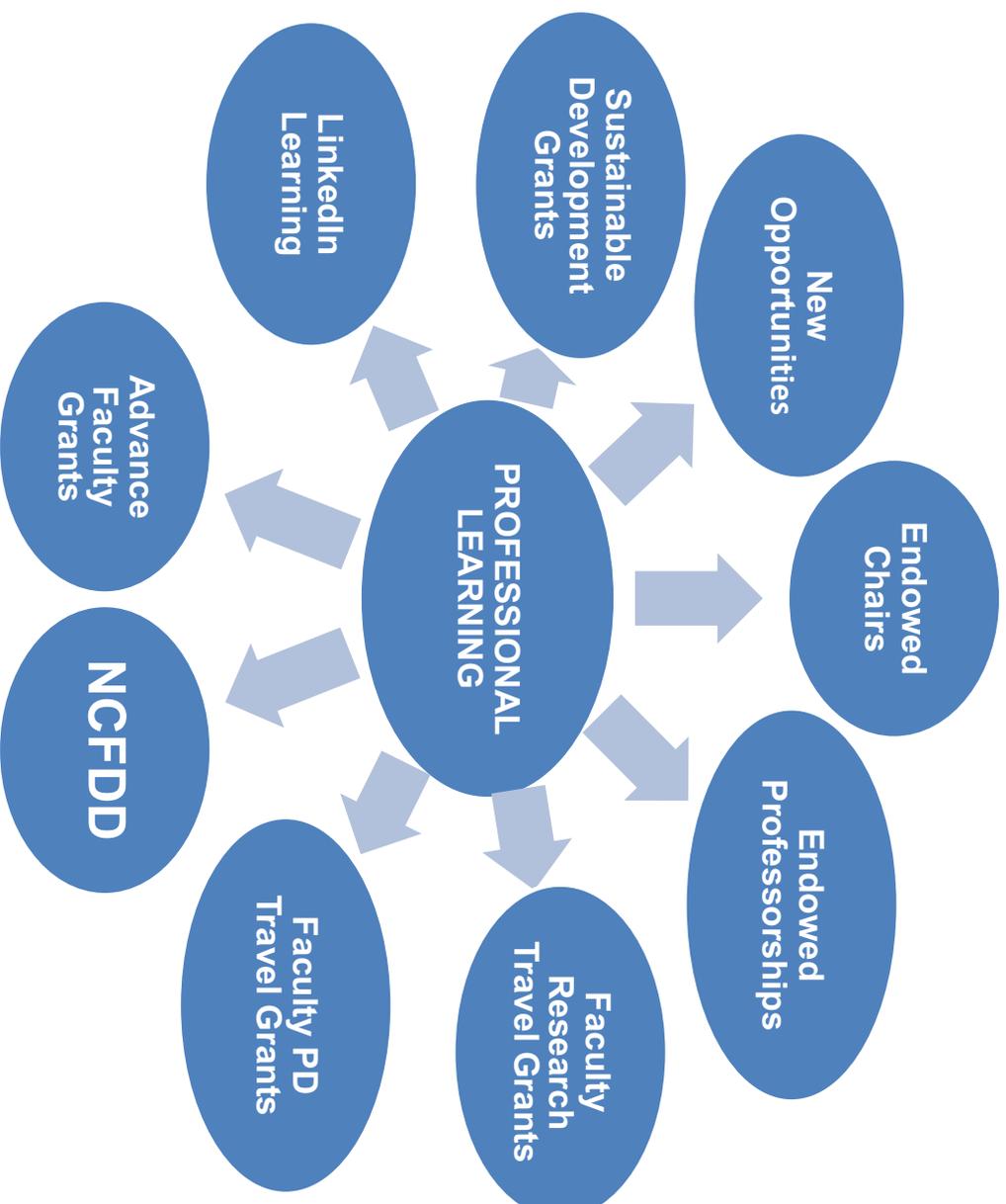


Dr. Dianne Olivier

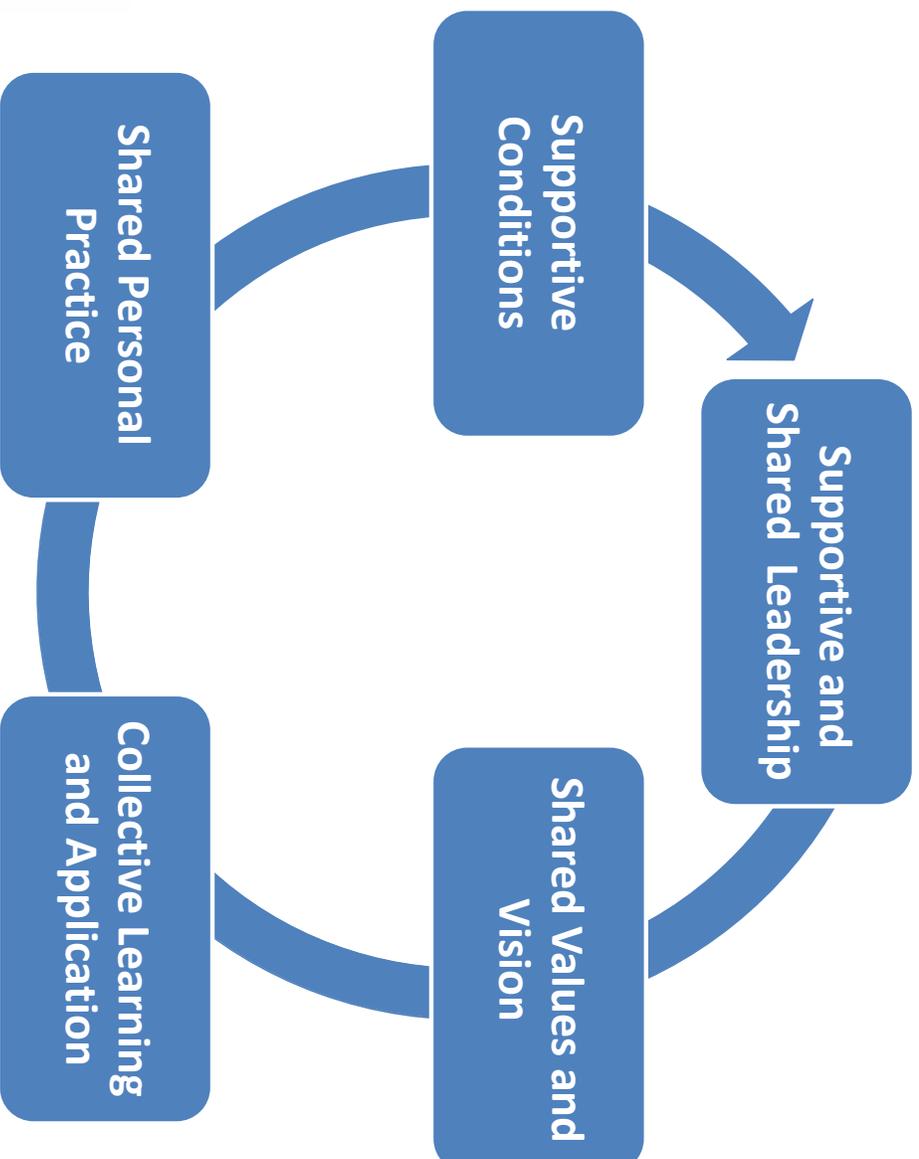
*Associate Vice President for Academic Affairs
Office of Student & Faculty Excellence
Professor of Educational Leadership*



Faculty Initiatives



Learning Community



Dr. Brian Bolton

Professor of Finance

Dwight W. Andrus, Jr. / BORSF

Eminent Scholar Endowed Chair in Finance



**2024 FACULTY SUSTAINABLE
DEVELOPMENT RESEARCH SUMMIT**

THANK YOU!

Dwight W. Andrus, Jr.

The Entire Andrus Family

The Board of Regents

President Joseph Savoie

The University of Louisiana at Lafayette Foundation

Brian Bolton

Professor of Finance

Dwight W. Andrus, Jr. / BORSF

Eminent Scholar Endowed Chair in Finance

Our Values

These are the values that drive our research and motivate us to explore, learn, and discover.



Sustainability

Our campus is a living lab for innovative research in watershed management, solar power, energy conservation, and environmental restoration.



Diversity & Equity

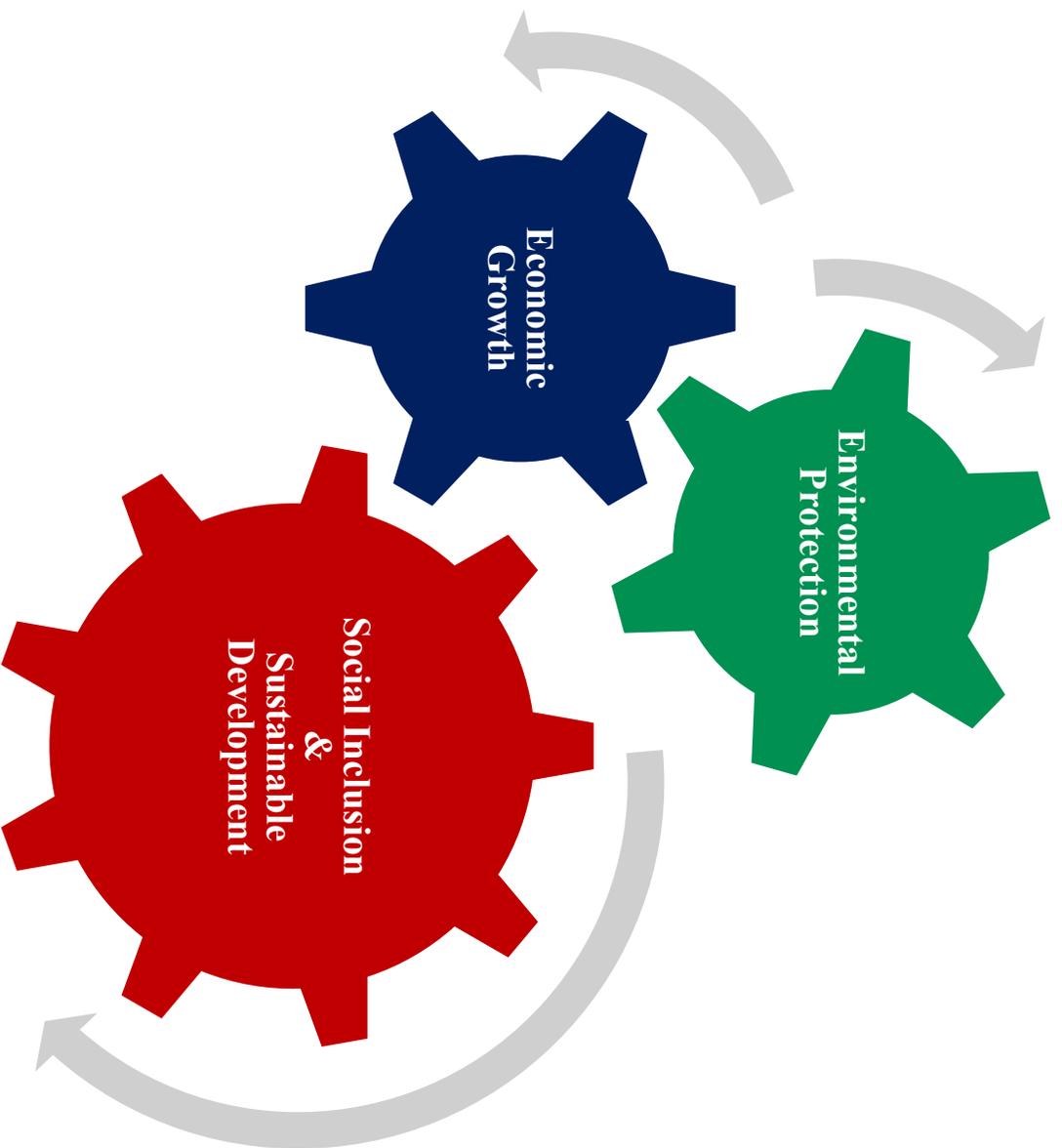
We recognize and value differences across society and across disciplines. Our research aims to improve diversity and equity in culture, opportunity, literacy, and design.



Social & Economic Development

Through our research, we're leaders in shaping policy, advancing educational practices, improving health care, attracting businesses, and preserving our cultural heritage.





THE UNITED NATIONS' 17 SUSTAINABLE DEVELOPMENT GOALS (SDGs)

1 NO POVERTY



2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



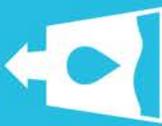
4 QUALITY EDUCATION



5 GENDER EQUALITY



6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



10 REDUCED INEQUALITIES



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



17 PARTNERSHIPS FOR THE GOALS



**2024 FACULTY SUSTAINABLE
DEVELOPMENT RESEARCH SUMMIT**

THANK YOU!

Dr. Dianne Olivier

Associate Vice President for Academic Affairs
Office of Faculty Affairs
Professor of Educational Leadership

Dr. Mary Farmer-Kaiser

Dean of the Graduate School
Professor of History

Kiwana McClung

Chief Diversity Officer
Professor of Architecture and Design
SLEMCO/IEQSF Regents Professor in Art & Architecture II

Dr. Gretchen Vanicor

Director of Sustainability

Dr. Phillip de Mahy

Assistant Dean of
the Graduate School

**2024 FACULTY SUSTAINABLE
DEVELOPMENT RESEARCH SUMMIT**

THANK YOU!

**Research, Innovation &
Economic Development**

Ramesh Kolluru
Kumer Das
Geoff Stewart
Christine Payton
Tatum Moss

Travis Carmouche
Jonathan Shirley
Kevin Guillory
Jennifer Ercoin & the Entire
Graduate School Team
Melanie Sam
Shirlane Sam

2024 FACULTY SUSTAINABLE DEVELOPMENT RESEARCH SUMMIT

THANK YOU!

1. **Heather Stone:** *"Isle of Memories: Stories of the Jean Charles Choctaw Nation"*
2. **James Albert:** *"Documenting Body-Shape in Riverine Fishes"*
3. **Emad Habib:** *"Fostering Flood-Resilient Communities: Integrating Hydrodynamic Modeling, Socio-Economic Risk Assessment, and Inclusive Communication"*
4. **Liz Skilton:** *"The Sustainability of Coastal Restoration: Tracking Community Understandings of Restoration Projects at 5 or More Years"*
5. **Emily Kane:** *"You'll Never Look at a Roadside Ditch the Same After This! Small, Boring Fish Make a Big Impact on Pest Control!"*
6. **David Kim:** *"Duration of Flood Risk Perception and Recommendations for Sustainable Development: Climate Change, Natural Disaster, and Community Education for Preparation"*
7. **Ling Fei:** *"Electrochemical Energy Technologies for Carbon Neutrality / Negativity"*
8. **Yu Wang:** *"Development of Novel Water Purification Materials for the Removal of Perfluorinated Substances (PFASs)"*
9. **Tori Flint:** *"Literacies Beyond Bars: (Re)claiming and (Re)imagining Identities Through Multimodal Family Literacy Practices"*
10. **Liane Hancock:** *"Serving the Under-served: Building Resiliency for Manufactured Homes across the Coastal South"*
11. **Yung-Hsing Wu:** *"Reading Race with Oprah – and Our Students"*
12. **Manyu Li (Presented by Ayodeji Adegoke):** *"Cultivating a Sense of Belonging for Inclusive and Equitable Education: From Research to Application"*
13. **David Squires:** *"'Proof That We Ever Was': Exhibiting the Ernest J. Gaines Center Collection"*
14. **Christine Weill, with Ryan Nelson & Holly Damico:** *"Investigating Our Legacy: Twenty Years of Language and Literacy Projects in Southwest Louisiana"*
15. **Marietta Adams, with Aimee Barber, Amanda Mayeaux & Nathan Roberts:** *"Lactation Policies and the K-12 Teacher Workforce: A Law and Policy Analysis to Determine a Model Policy to Encourage and Support the Recruitment and Retention of Female Teachers"*
16. **Stephanie Arceneaux:** *"Education of Nursing Students on Human Trafficking Improves Knowledge"*
17. **Emily Sandoz:** *"Promoting Appetitive Learning of Consensual, Empowered Vulnerability: A Contextual Behavioral Conceptualization of Intimacy"*
18. **Randy Gonzales:** *"Filipino Food, Louisiana Ingredients"*
19. **Emily Blosser:** *"Food for Thought – Teaching the UN Sustainability Goals in Sociology 494: The Sociology of Food and Eating"*

2024 FACULTY SUSTAINABLE DEVELOPMENT RESEARCH SUMMIT

8:00-8:30	Coffee & Snacks in the Atrium
8:30-9:00	Welcome & Opening Remarks Ramesh Kolluru, Dianne Olivier & Brian Bolton
9:00-9:30	Ambassadors' Research Presentations
9:30-10:00	Research Presentations – Focus on Environmental Protection
10:00-10:30	Coffee Break & Breakout Sessions The breakout sessions will be in the LEED Center
10:30-11:05	Research Presentations – Focus on Social Inclusion
11:05-11:45	Research Presentations – Focus on Health, Wellness & the Human Element
11:45-12:15	Breakout Sessions – in the LEED Center
12:15	Boxed Lunch Provided
12:20-12:40	Special Announcements (about more awards and money) Introduction of the Graduate Student Research awards



LINK TO FULL DETAILED SCHEDULE

Isle of Memories: Stories of the Jean Charles Choctaw Nation

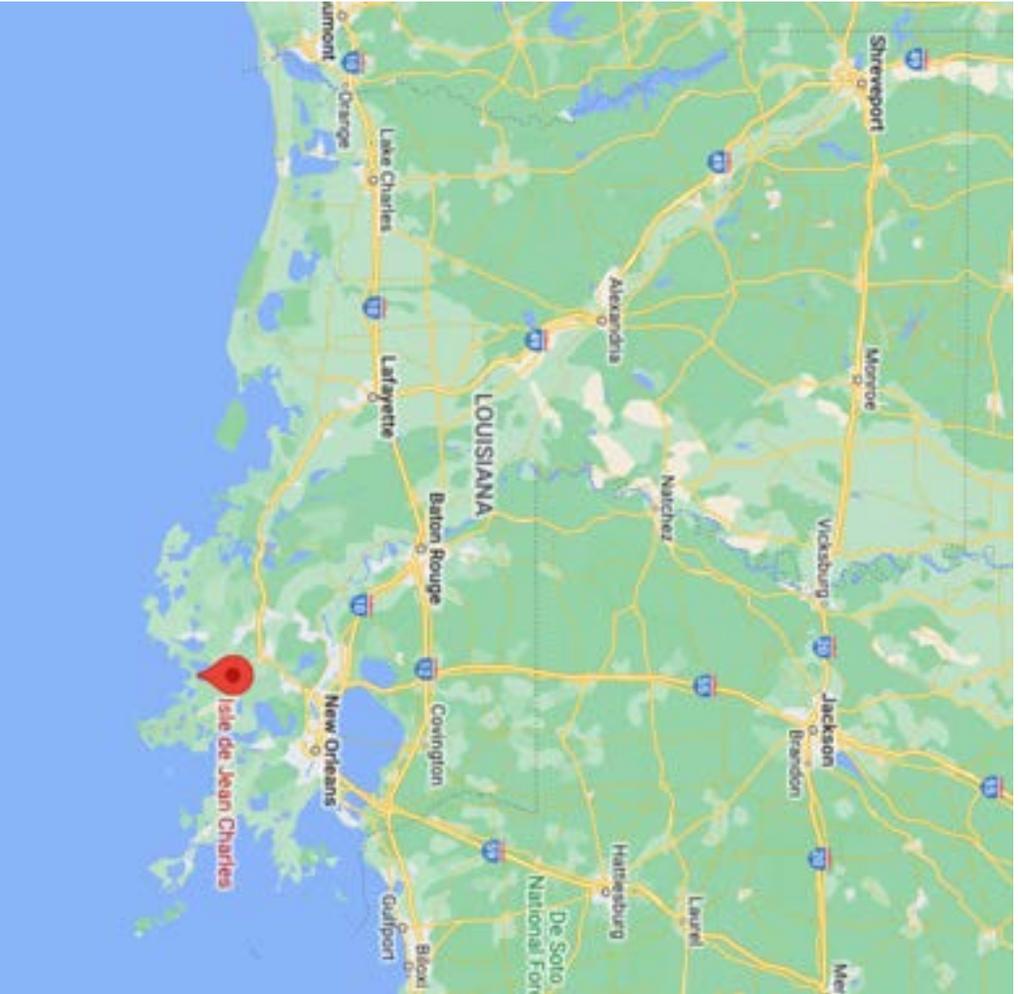
Dr. Heather N. Stone

Associate Professor

College of Education and Human Development

University of Louisiana at Lafayette







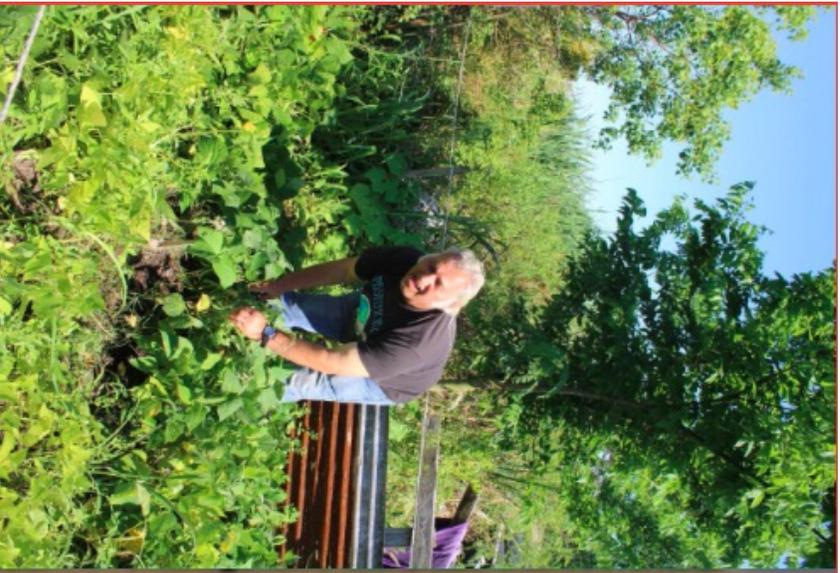
1963

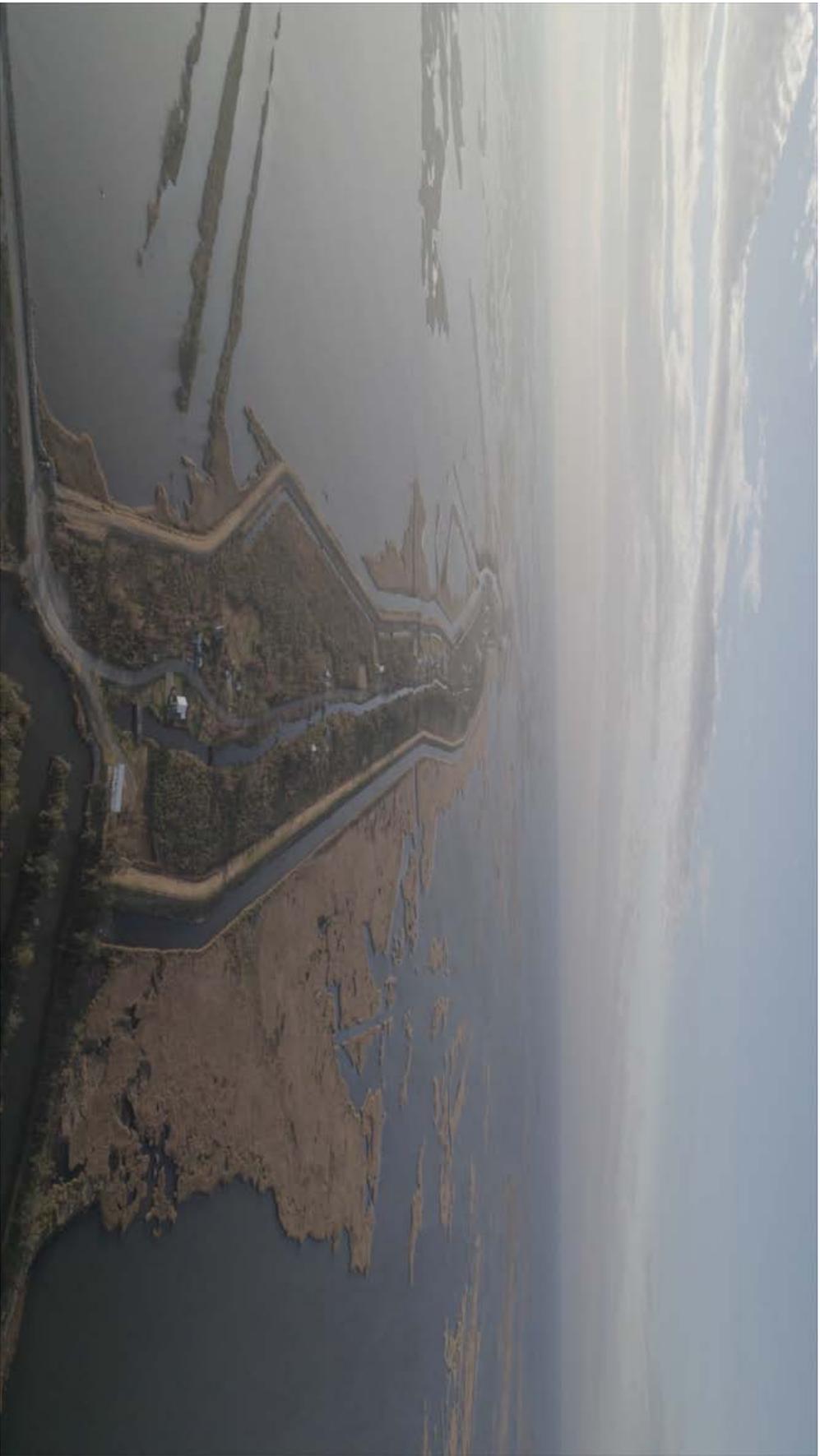


2024









Isle of Memories: Stories of the Jean Charles Choctaw Nation

Dr. Heather N. Stone

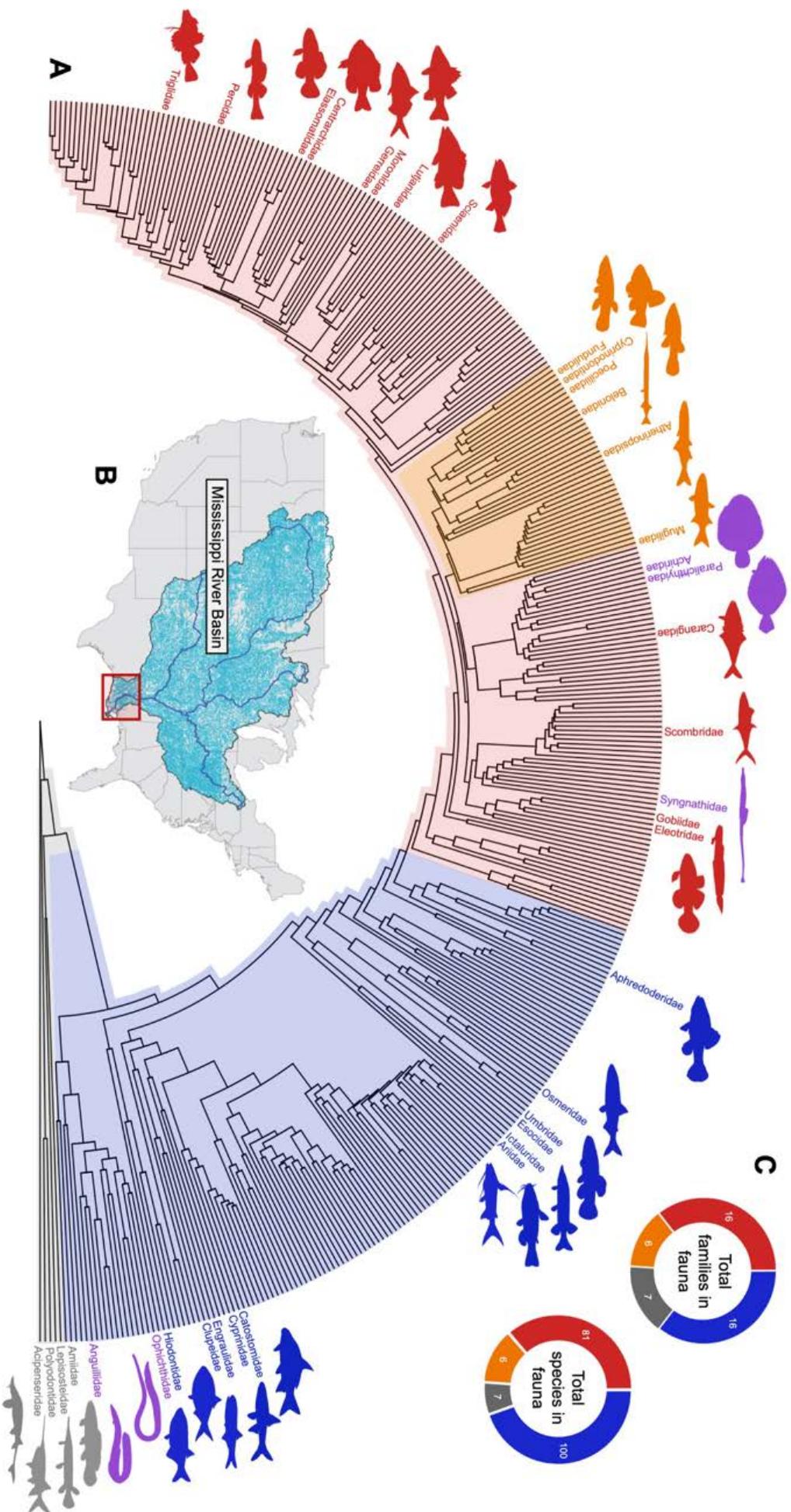
Associate Professor

College of Education and Human Development

University of Louisiana at Lafayette



Question: How to measure biodiversity?

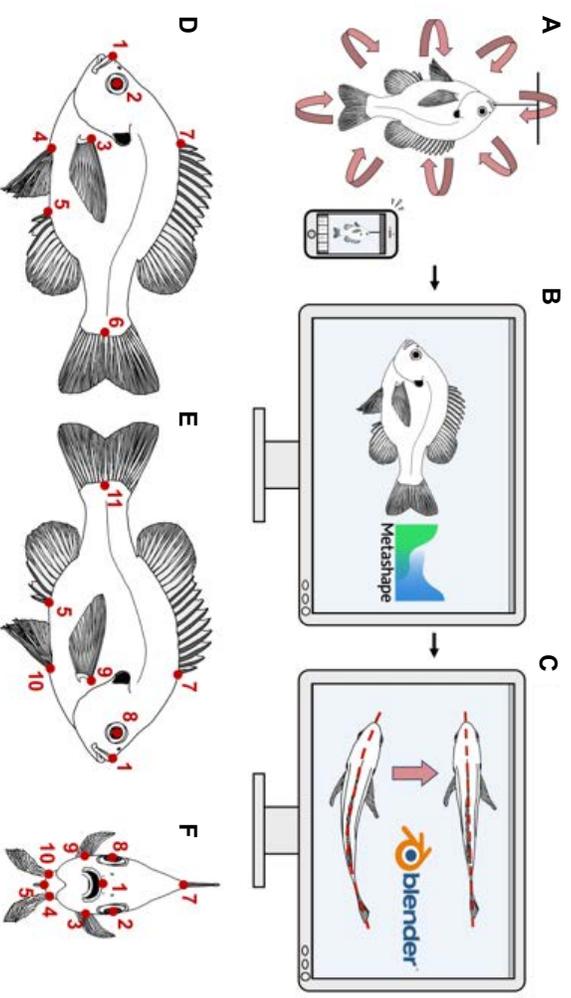


Methods

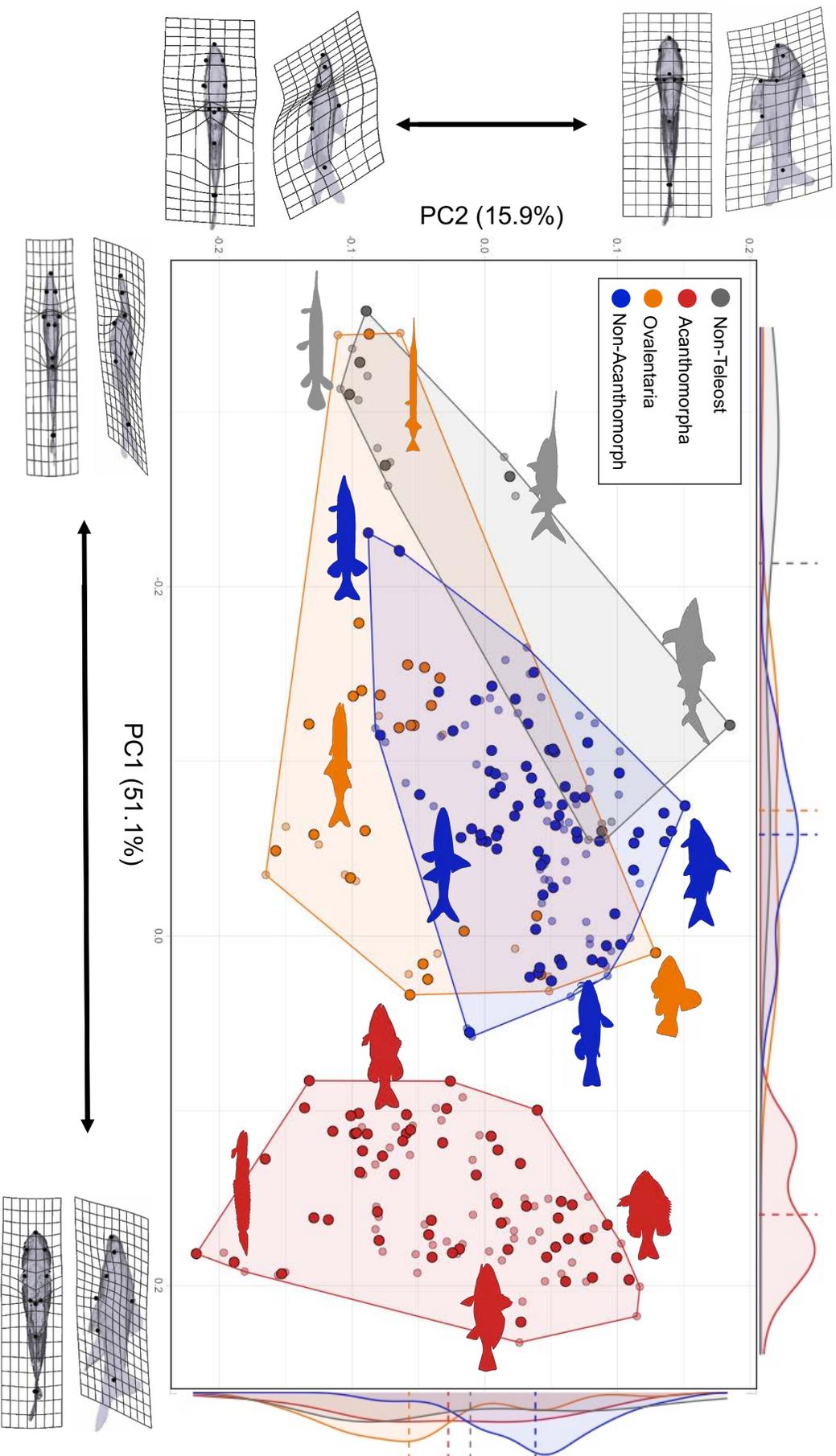
3D photogrammetry



Digital shape corrections
Homologous landmarks
Multivariate statistics



Results: Morphospace



Fostering Flood-Resilient Communities

Overall Objective

How can advances in hydroinformatic technologies empower flood-prone communities to engage in and support effective flood mitigation strategies?

Emad Habib, PhD, PE

www.ourfloodrisk.org

Collaborators: Mohamed Elsadani, Brian Miles, Robert

Miller, Trung Do Liz Skilton, Anna Osland, Stephen

Barnes, Emma Wills, Thi Diep



LOUISIANA
WATERSHED
FLOOD CENTER

HISTORY,
GEOGRAPHY, &
PHILOSOPHY

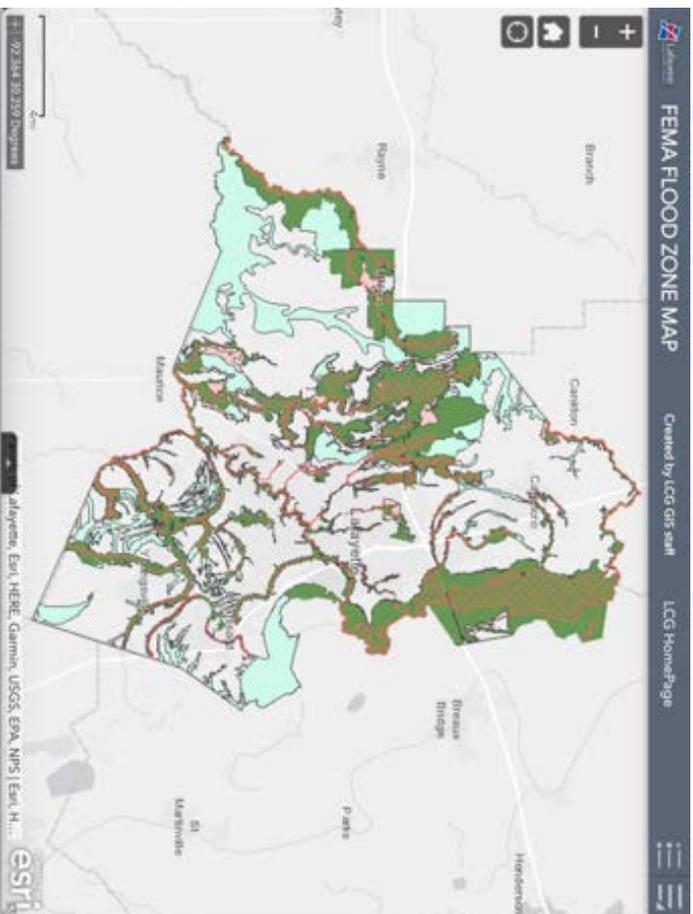
BLANCO PUBLIC
POLICY CENTER

CIVIL
ENGINEERING



grant # 2125472

Current flood information promote **static and individualized perception of flood risk**, create a **false sense of security**, and lead to **social and cultural divides**.



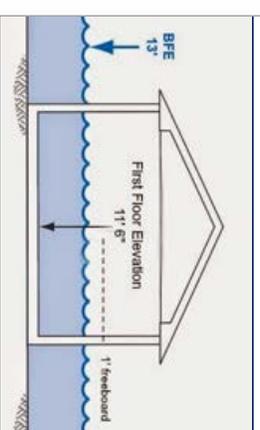
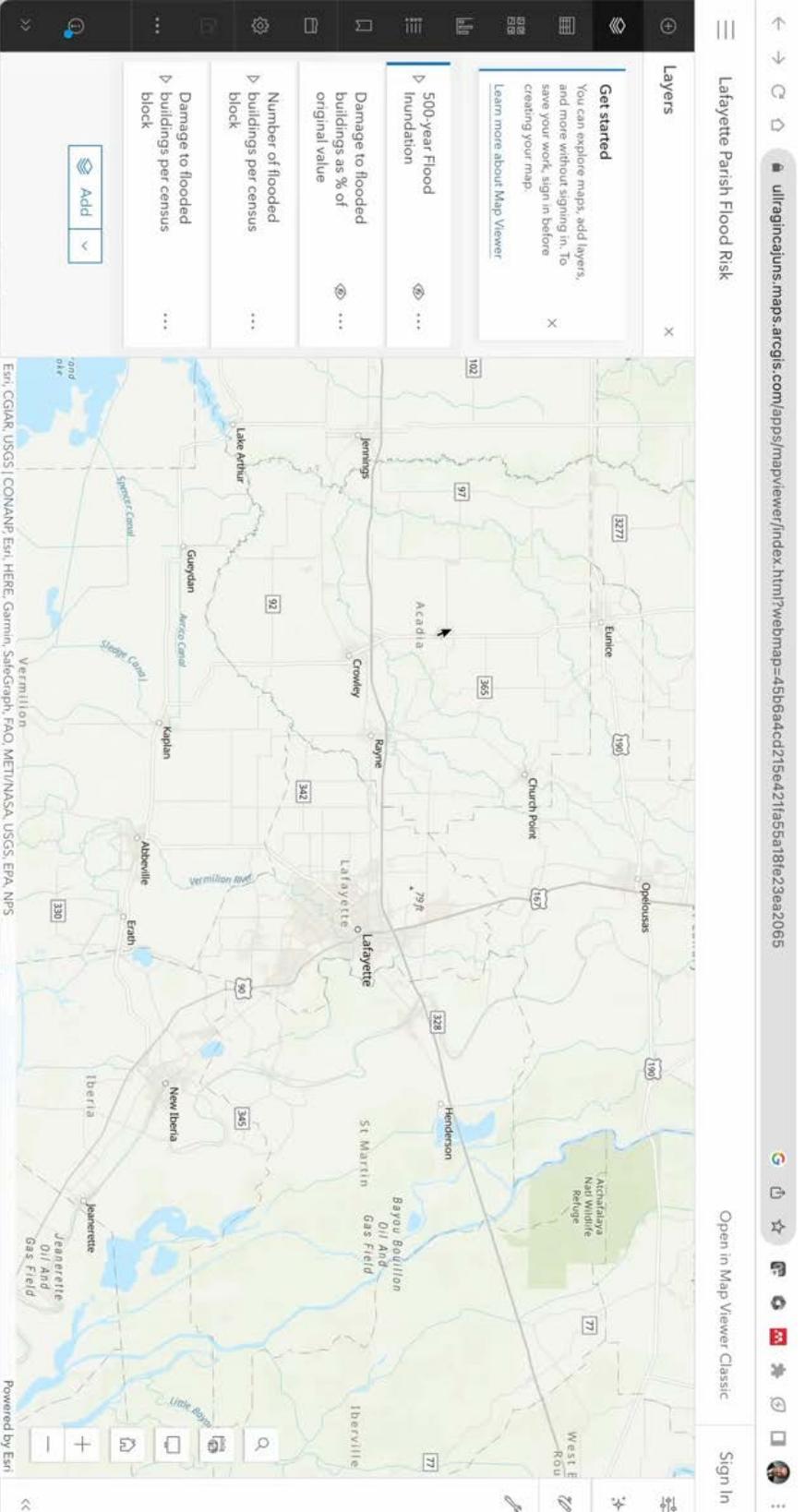
Listening to communities

FOCUS GROUPS

WORKSHOPS

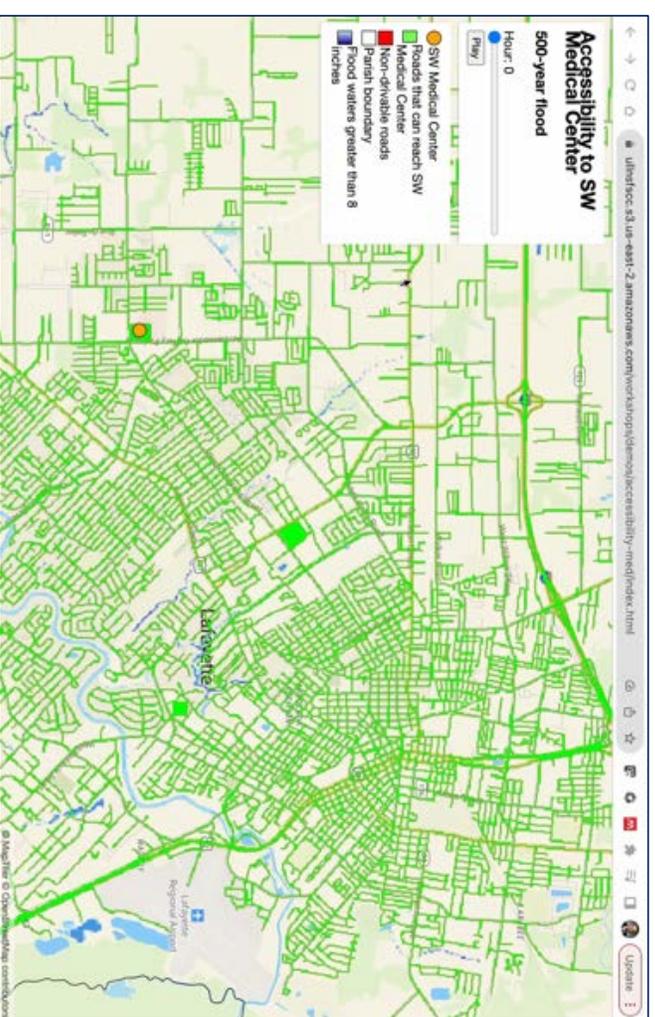
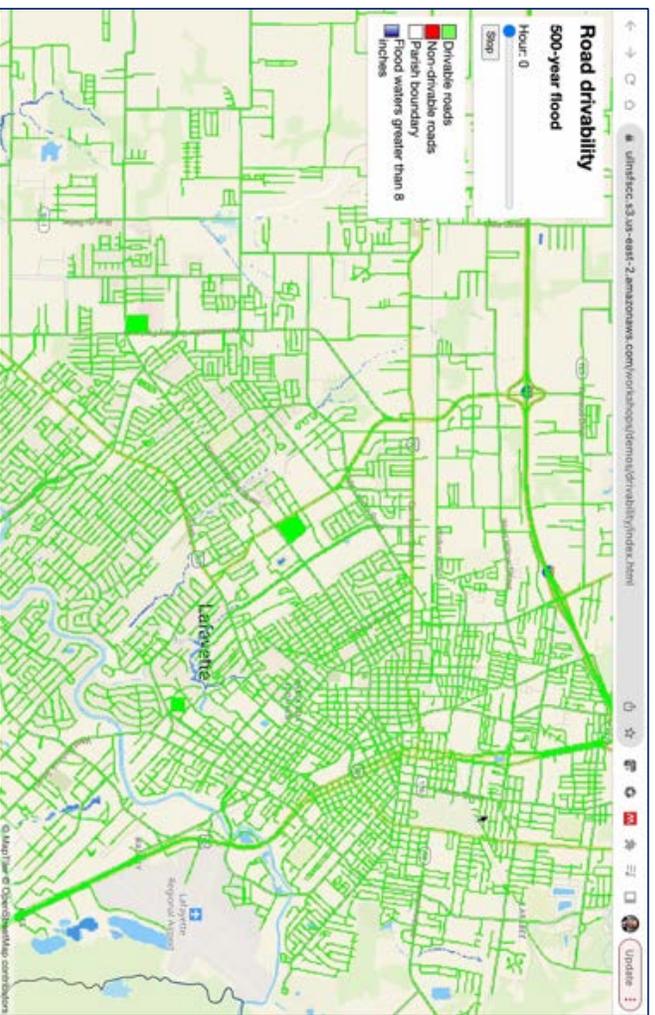
Communities need flood informational tools that **harvest local knowledge**, **quantify dynamic risk at local scales**, **broaden risk perception**, and use **equitable metrics**.

What does it mean for my Home?



Use flood risk metrics that translate impacts into *Individual Scales*

Impact on Transportation and Accessibility



Develop flood informational tools that communicate *impacts* at both *Individual and community scales*

Extreme Climate and Communities at Play:

We need a paradigm shift in how we deal with **climate risk**, both as scientists and communities



We need to use **co-creation approaches** to develop **equitable solutions** that help communities adapt to extreme events

Communities need tools that **harvest local knowledge**, **quantify dynamic risk at local scales**, **broaden risk perception**, & use **equitable metrics**

We need to invest in **civic partnerships**, including **media organizations**

<https://ourfloodrisk.org>

habib@Louisiana.edu

The Sustainability of Coastal Restoration:

Tracking Community Understandings of Restoration Projects at 5 or More Years

Liz Skilton, PhD

Associate Director of Research, Blanco Public Policy Center
Associate Professor of History



Kathleen Babineaux Blanco
Public Policy Center

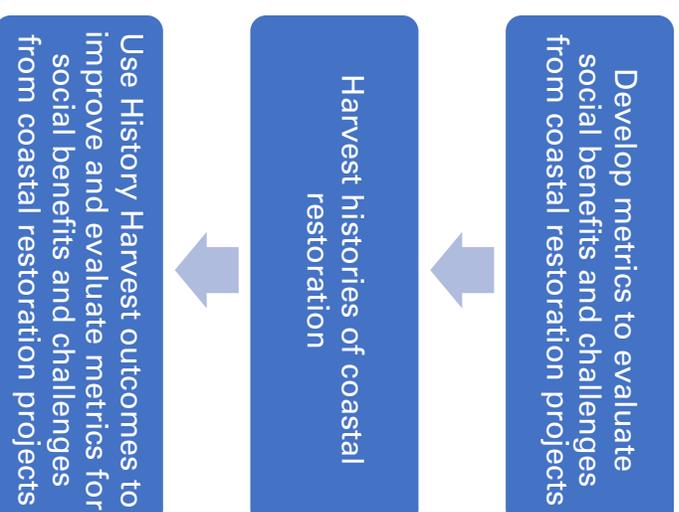


The Project (Spring 2023)

Purpose

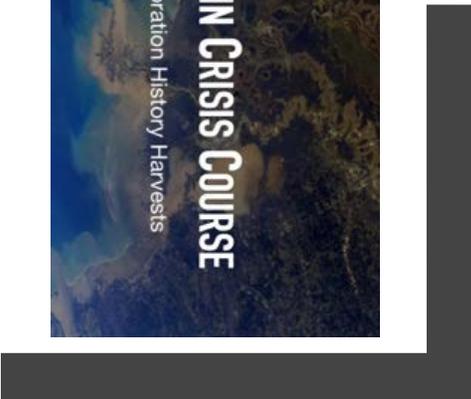
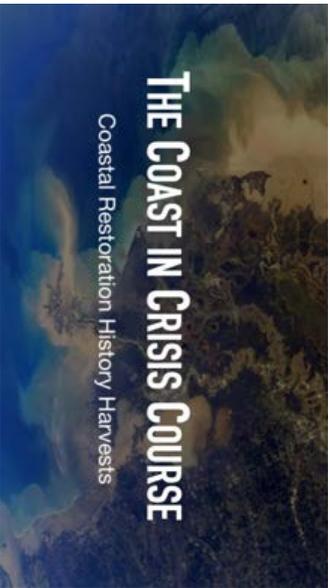
- Louisiana's coastal restoration projects are a key component of creating a thriving coast for Louisiana's communities, ecosystem, and economy
- There is effort to engage community groups in planning and implementation of coastal projects, yet limited research on community perspective/impact after completion
- Future coastal projects and policies will benefit from improved understanding of community impact from constructed projects

Approach



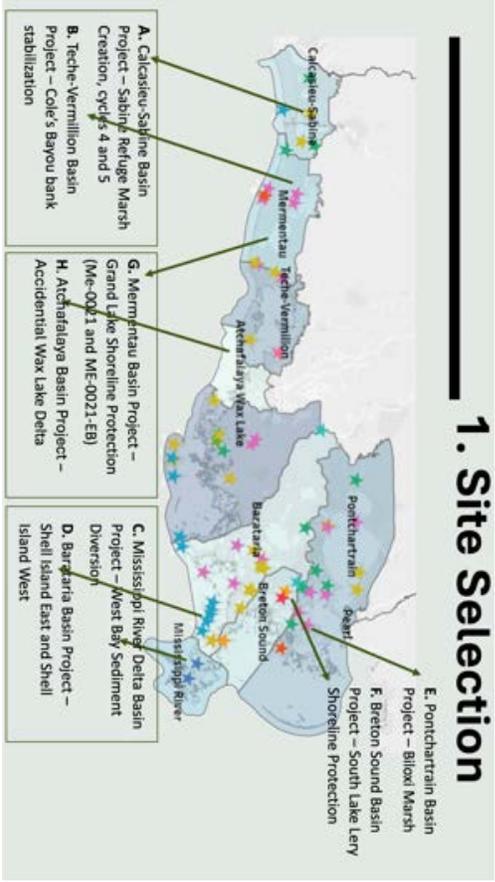
Funding Provided By:





The Research (Jan-Mar 2023)

1. Site Selection



Undergraduate Projects: Podcast & Website (May 2023)



Listen to the podcast [here](#).



View the website [here](#).

Graduate Student Outcome I: Poster for State of the Coast (1st Place!) & Panel Presentation (Jun 2023)

As part of an upper-level history course, students from the University of Louisiana at Lafayette harvested oral histories from coastal community members to gather their insights about the impacts of coastal restoration. Participants offered accounts of their experiences with erosion and restoration, an element often overlooked by the Coastal Master Plan. We visited coastal restoration sites, with community members and coastal experts at the various locations to interview people about their understandings of restoration projects in existence for 5 or more years. Between January and March 2023, we traveled across the Louisiana Coast: Poydras/Trin Biondi Marsh and Lake Lery, Mardi Gras Pass Project, Wax Lake, Sabine Refuge Superior Canal, and Vermilion Bay. Below are the details of what we found at each site, and our recommendations for ways to better involve communities in restoration projects in the future.

Calcasieu-Sabine Basin Marsh Creation Project (Feb 24)
A marsh creation site located on the Sabine Refuge and west of the main canal. The purpose is to restore marshland that eroded from salinity intrusion.



Themer Noted in Interviews:

- Landowners:** Coastal communities have been largely uninvolved in projects to avoid land loss because of their cultural and personal connections to the environment.
- Historians at Benchmarks:** People have their own memories of coastal erosion dependent upon their experiences with storms.
- Where the Projects Are:** Most projects are geographically isolated from the communities they benefit.
- People:** Lived experiences are people's primary source of information on the topic of coastal restoration and erosion instead of formal education.

Coastal Crisis Through the Lens of Community Collaborators: UL Lafayette Department of History, Kathleen Biano Public Policy Center, Restore the Mississippi River Delta Coalition, and the Louisiana Coastal Community Members. Poster Presenters: Kaiser Reed, Benjamin Vidrine, Thanh Vo, and Emma Willis

Community members provided input, and we selected certain quotes at three restoration sites. The quotes are representative of larger themes that we noticed across all sites.

Mentors Basin Project (March 3)
The project aims to stop the shoreline of Superior Canal up to Tcho Point on Grand Lake from eroding via a rock barrier.
"It's important to preserve the coastline and the things like water that hold it in its person helps you to understand and learn about what's happening along the coast in Louisiana in terms of land loss and restoration work." (Community Member interviewed on Site)

Archdiocese Basin Project (Feb 17)
As the Archdiocese of River combines to deposit soil in its basin, CRPA focuses on the land development. The site is a long, straight canal that ends in a series of median-sized, flat banks.



Takeaways From the Research:

- The **landowners** and **historians** distributed by their culture and lifestyle tied to the coast is an **unappreciated resource**.
- Despite this, **organizations often fail to communicate with the communities** these projects affect, leaving those on the coast to base their knowledge of coastal change around their own personal experiences, which are usually limited to major events like storms.
- Participants directly expressed the need for more formal education** about coastal restoration projects, whether the project is newly constructed or in existence for several years, and recommended bringing community members to these sites for this education.

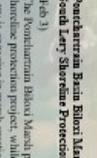
Recommendations Based on Our Findings

We recommend **fostering the cultural connections that communities** maintain with coastal environments, **applying it to restoration projects**, and **encouraging direct civic engagement** with restoration sites.

This requires **organizations involved in restoration efforts to develop deeper relationships and open dialogue** with the coastal residents, by **expanding** coastal perspectives beyond disaster recovery.

Ultimately, **coastal communities want to be involved with restoration sites** to understand the role these efforts play in the coastal ecosystem and **better incorporate restoration organizations into the efforts and form of coastal life.**

Poydras Marsh Short Marsh and Sand Lery Shoreline Protection Project (Feb 3)
The Poydras Marsh Short Marsh project is a shoreline protection project, while Lake Lery is engaged in marsh creation.
"I don't think that the average Louisiana that lives on the coast is going to care of the amount of projects going on, the cost of these projects, how successful they are." (Community Member interviewed on Site)



Maintaining Delta & Barataria Basin Project (Feb 10)
The Mardi Gras Pass Project has been active for 10+ years and sees sediment deposition as its main force of combating the coastal crisis and building up land in certain areas.



Terre-Vermilion Basin Project (Mar. 10)
Creation of 365 acres and maintenance of 85 acres of freshwater marsh using sediment from Vermilion Bay.
"If we don't do this, then, South Louisiana is just going to go away! I mean, we're already fighting an uphill battle." (Community Member interviewed on Site)

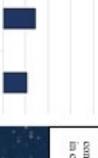


Fig. 1: This graph accounts for the communities' attitudes towards continued inhabitation on the coast. In it, the numbers do not leave heavily outweigh those to stay, emphasizing the continued difficulties faced by residents of the region.

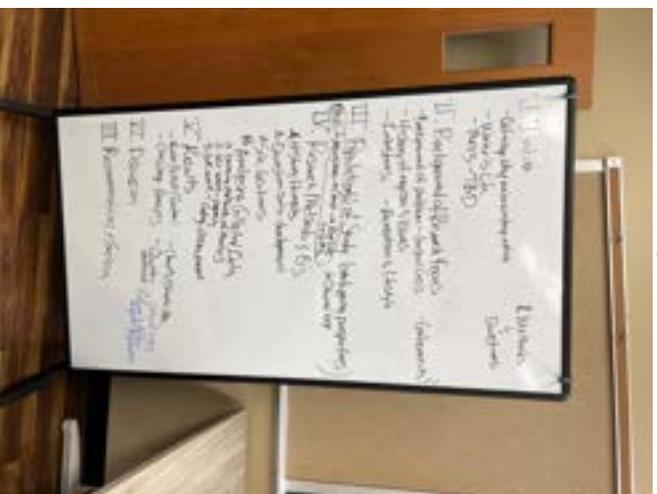
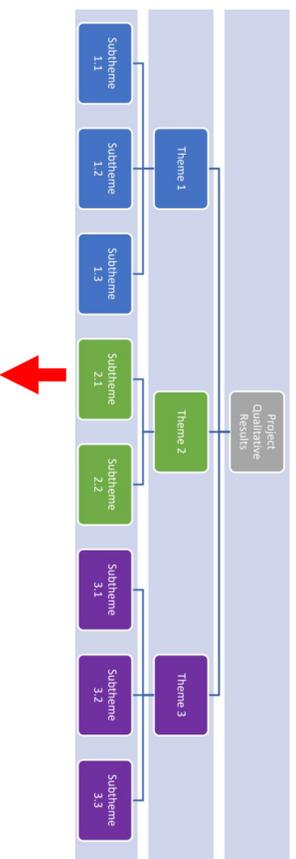
Reason to Stay	Reason to Leave
16	31

Fig. 2: This graph lists concerns from community members. Said concerns compound the coastal crisis in communities' eyes.

Types of Concerns	Times Mentioned
Hurricanes/Compens	82
Insurance/Oil & Gas	32
Leaves	29
Program	21

References:
UL Lafayette Coastal Restoration History Harvest Interviews collected January-March 2023 at various sites.

Graduate Student Outcome II: Qualitative Coding & Journal Article (Aug-Oct 2023)



Funding Provided By:



Watching it Wash Away, Watching it Grow: Evaluating Community Perspectives on Long-Term Coastal Restoration Projects in Louisiana

Authors: Liz Skilton^{1,2*}, Anna C. Osland², Chenhan Shao^{2,3}, Kaiser Reed¹, Benjamin Vidrine¹, Thanh Vo¹, and Emma Willis¹

¹Department of History, Geography and Philosophy, University of Louisiana at Lafayette

²Kathleen Babineaux Blanco Public Policy Center, University of Louisiana at Lafayette

³Department of Urban Studies and Planning, Massachusetts Institute of Technology

*Corresponding Author can be reached at lizskilton@louisiana.edu (ORCID: 0009-0002-7541-151X)

Word Count (including required elements): 7,768



Questions?

Liz Skilton, PhD

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UNIVERSITY of
LOUISIANA
L A F A Y E T T E

Kathleen Babineaux Blanco
Public Policy Center

Dr. Gretchen Vanicor
Director of Sustainability
Office of Sustainability



You'll Never Look at a Roadside Ditch the Same After This!

Small, Boring Fish Make a Big Impact on Pest Control



Emily Kane

University of Louisiana at Lafayette



The Kane Lab

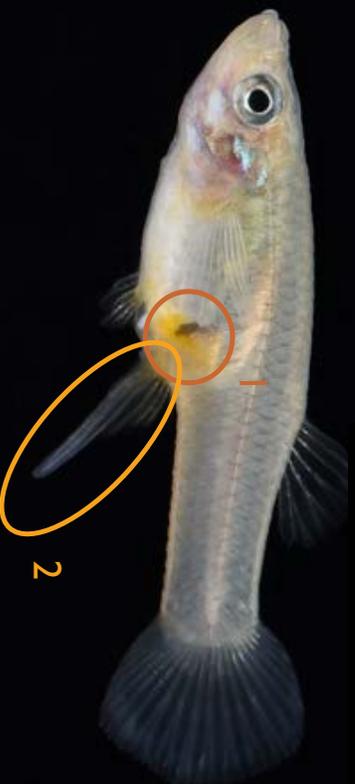
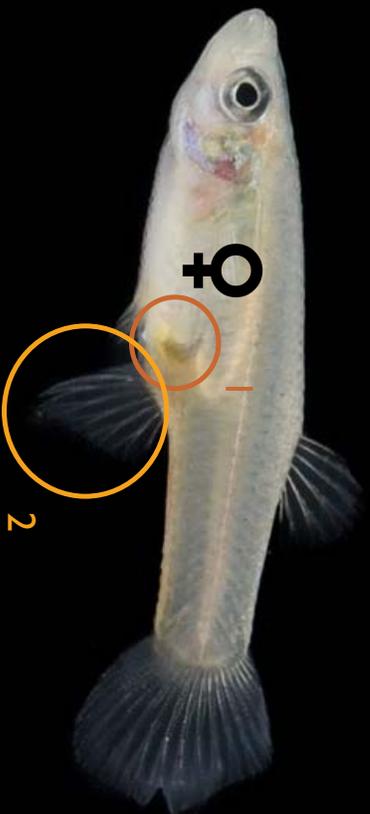
"Battle of the Bites: Mosquitofish vs Mosquitos"



Mosquitoes suck.

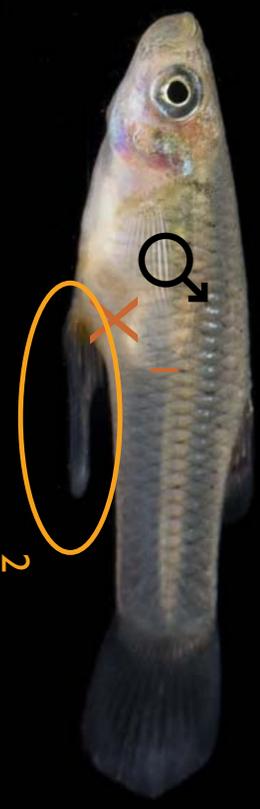
Short-term:

1-2 day survival at higher concentrations



Long-term:

Reduced prey capture and health at lower concentrations



THANK YOU!

Students: Shubham Yadav, Adeline Fogle

Nigel D'Souza, Gonzaga University

Kevin Caillouët and Nick Delisi, St. Tammany Parish
Mosquito Abatement

David Martin and Herff Jones, Iberia Parish Mosquito
Abatement

Video: JF Imagery, JFImagery.com

Funding: St. Tammany Parish Mosquito Abatement, ULL
Sustainable Development Grant



emily.kane@louisiana.edu | www.thekanelab.com | Twitter: @KanelabUL



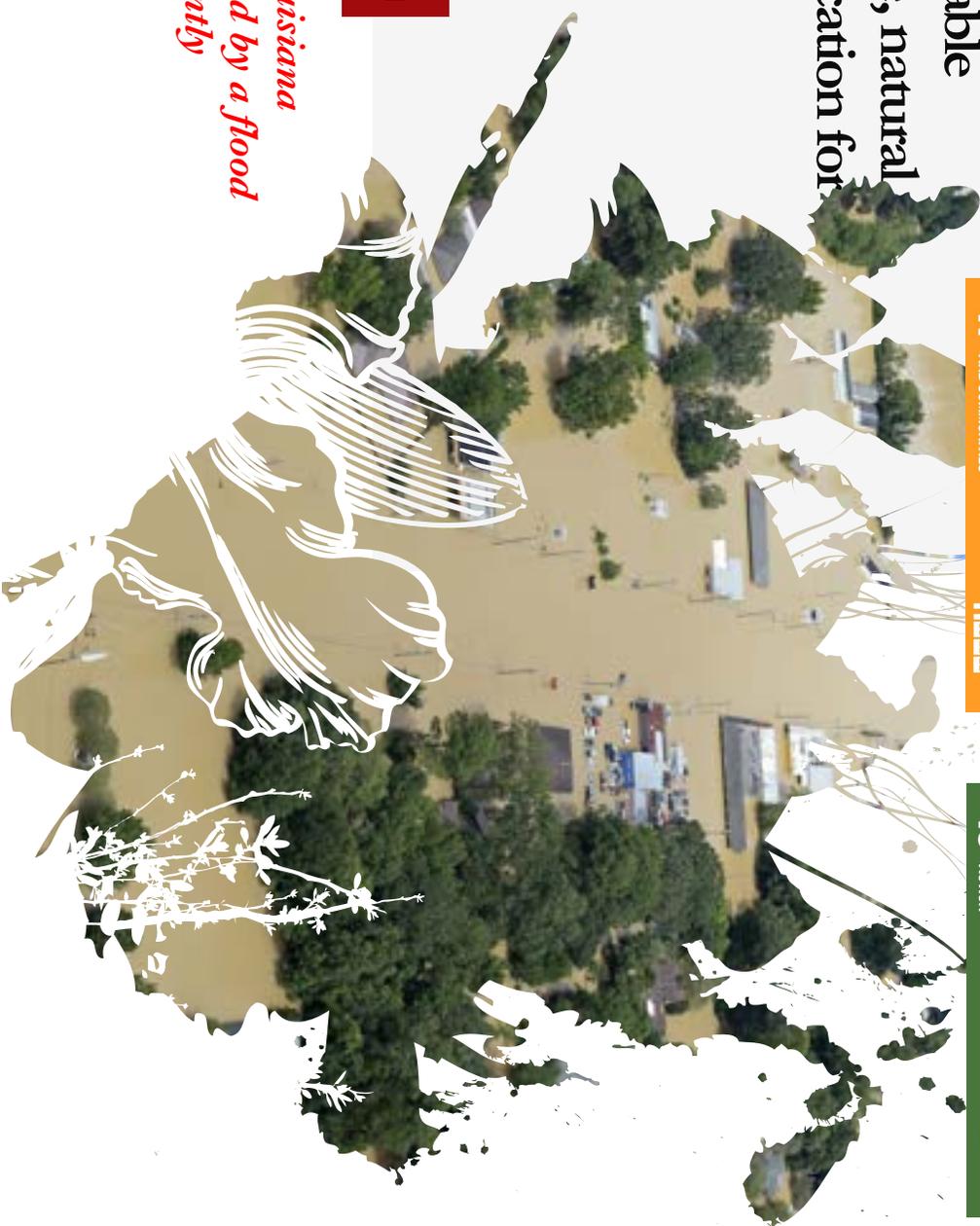
Duration of flood risk perception and recommendations for sustainable development: Climate change, natural disaster, and community education for preparation

Dr. D. K. David Kim

(do.kim@louisiana.edu)

UNIVERSITY OF LOUISIANA AT LAFAYETTE
DEPARTMENT OF COMMUNICATION
College of Liberal Arts

“How long do people in Southwest Louisiana remember their harsh experience caused by a flood that is one of the region’s most frequently occurring natural disasters?”



4 QUALITY EDUCATION



11 SUSTAINABLE CITIES AND COMMUNITIES



10 REDUCED INEQUALITIES



13 CLIMATE ACTION



- Measure: Public risk perception attitude (PRA) has changed over three years after the historically damaging flood in 2016.

$$\text{PRA} = \text{Perceived Susceptibility} + \text{Perceived Severity}$$

Susceptibility: Individuals' beliefs about their vulnerability to a risk/threat,

Severity: Perception of the seriousness of a risk/threat.

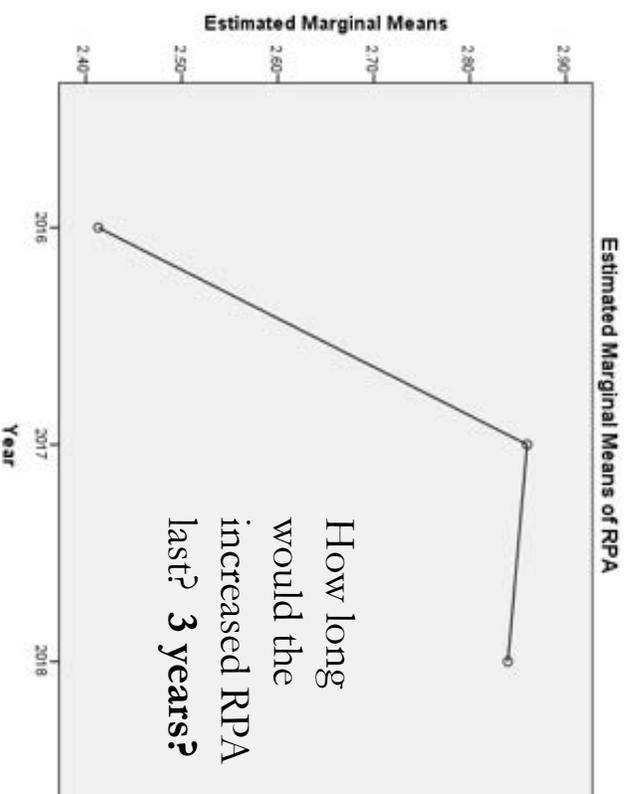
(Source: Rimal & Juon, 2010; Rimal & Real, 2003)

Categories by groups

- 1) Living in a flood zone?
- 2) Flood insurance?
- 3) Flood victims?
- 4) Business owners?
- 5) Homeowners?
- 6) Dependents?
- 7) Male or Female?
- 8) Age?
- 9) Perceived income?
- 10) Education level

(Each category has 2 groups of people)
10 categories x 2 groups = 20 Groups

Data Collection in October 2016, 2017, & 2019



11 SUSTAINABLE CITIES AND COMMUNITIES



Interpretations of Findings and Discussion

13 CLIMATE ACTION



- » Crisis Preparation is needed!
- » In comparison with PRA in the first year, PRA increased in the 2nd year and was maintained in the 3rd year: **People realized how the recovery after a flood could be hard as it took a long time and enormous effort and inconvenience.**

- » Some demographic groups showed more fluctuating PRA:
 - People of higher AGE & lower level of EDU./ ECON.

4 QUALITY EDUCATION



10 REDUCED INEQUALITIES



Agenda-Setting



Scientific Info.



Organizational Interventions



Electrochemical Energy Technologies for Carbon Neutrality/Negativity

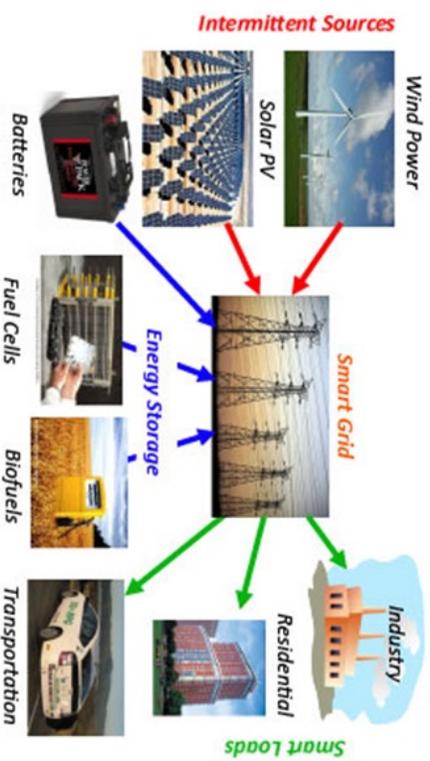
Dr. Ling (Jessica) Fei

Assistant Professor

Department of Chemical Engineering

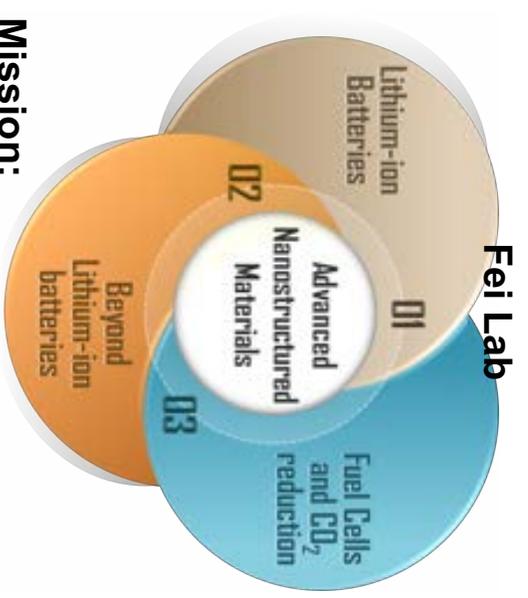
University of Louisiana at Lafayette





Materials Challenges:

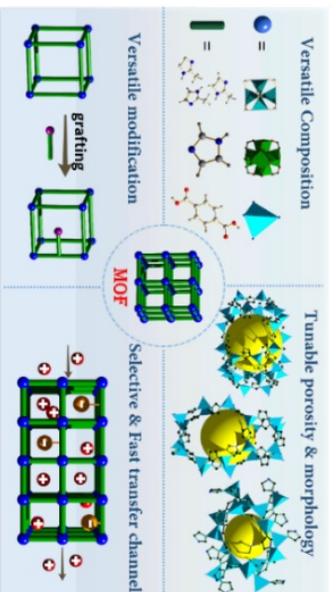
- Insufficient activity/stability/capacity
- Limited earth reserve (e.g. Li, Co, Pt)
- Safety issues



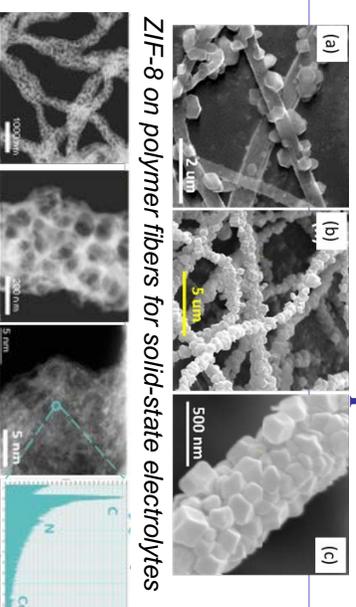
Mission:

- Provide innovative materials solutions for advancing electrochemical technologies
- Educate and equip highly skilled workforce for society

Metal-Organic Frameworks

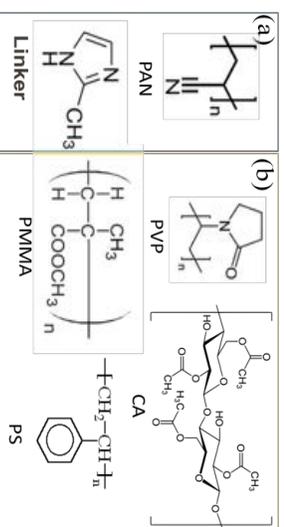


Functional Composites



Polymers

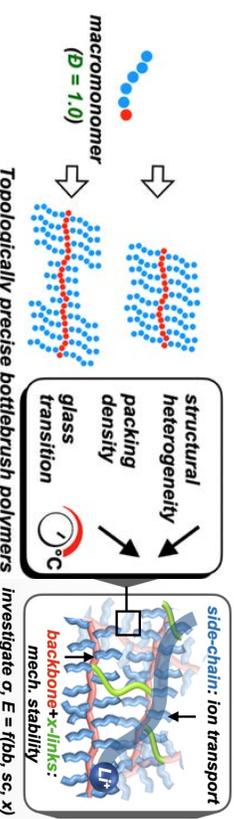
a. Commercially available polymers



b. Block polymer



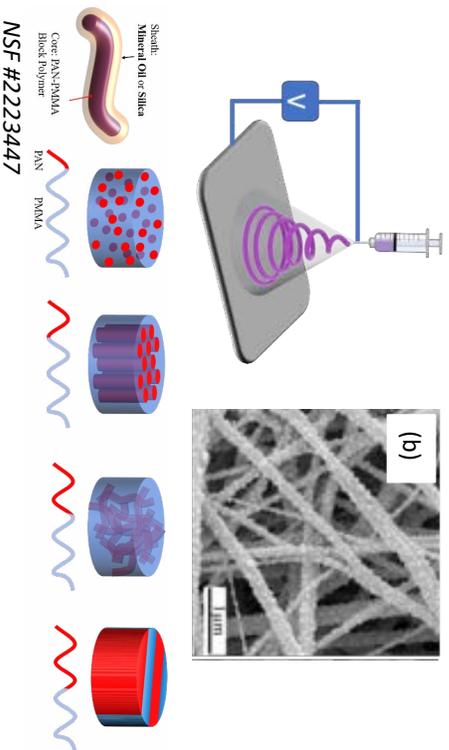
c. Bottle brush polymer



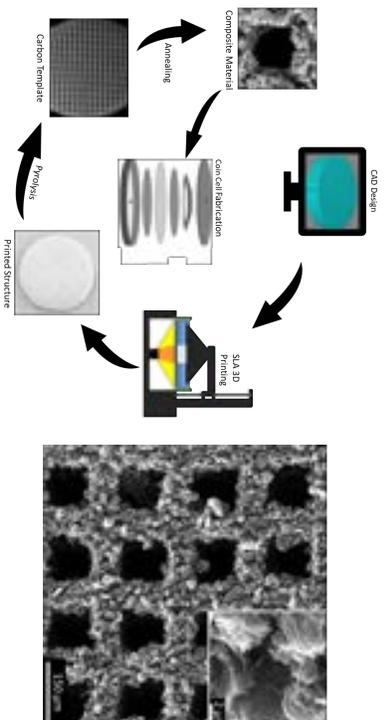
Lawrence et al. JACS Au 2022, 2, 4, 898–905

Key Methods

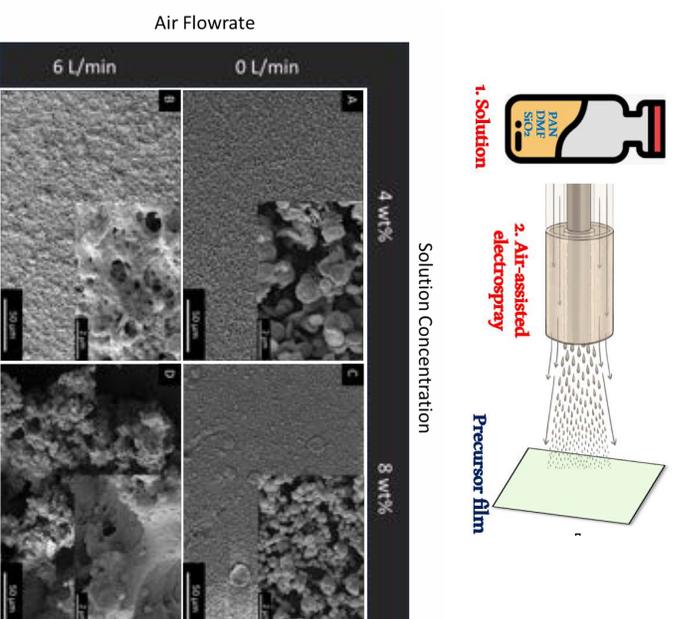
1. Electrospinning



3. 3D Stereolithography Printing

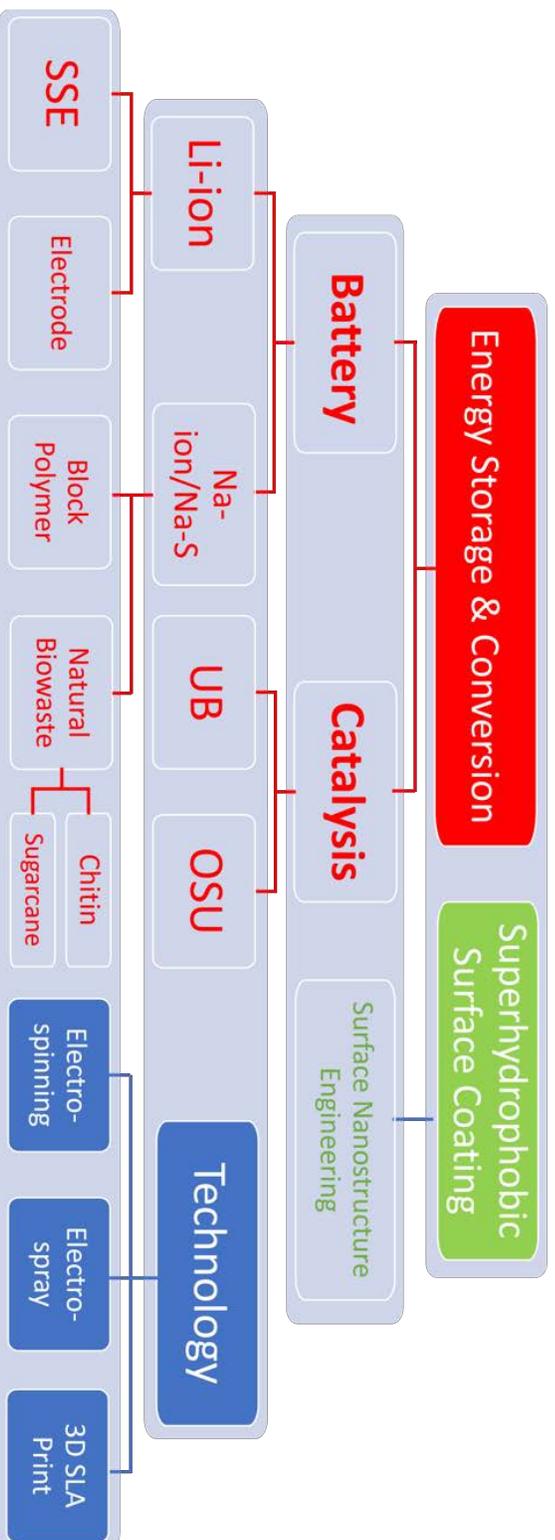


2. Air-assisted Electro spray

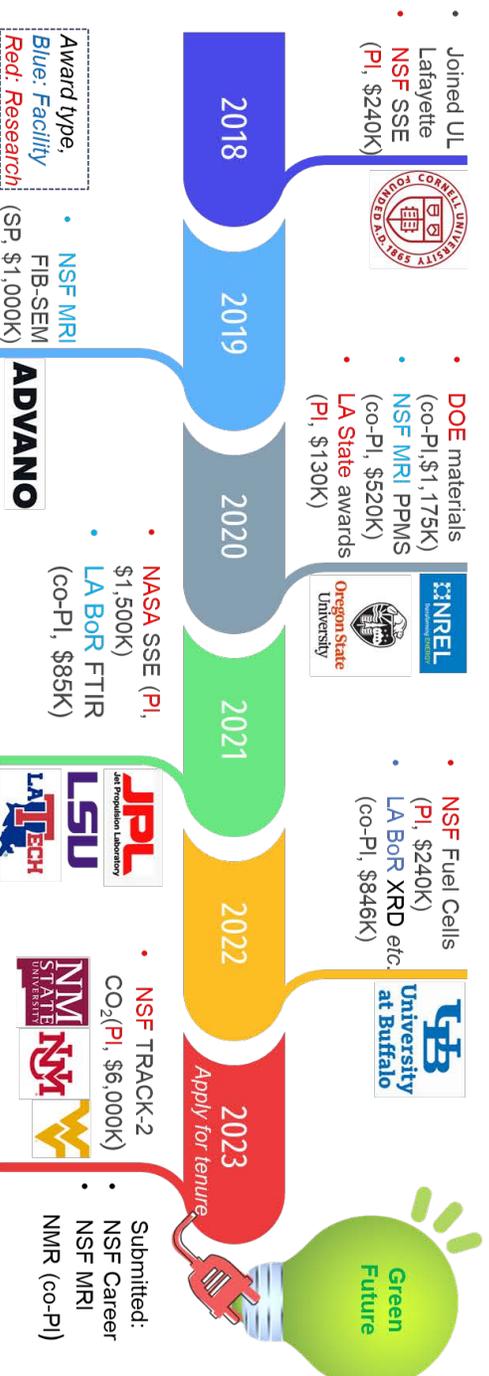


By integrating building block materials engineering with fabrication methods, we enable diverse materials design for a wide range of applications.

Fei Lab: Materials Science and Engineering



Over \$8M Research Funds



Thank YOU!

ling.fei@louisiana.edu



Development of Novel Water Purification Materials for the Removal of Perfluoroalkyl Substances (PFAS)

University of Louisiana at Lafayette

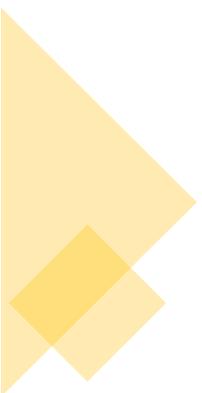
2024 Faculty Sustainable Development Research Summit



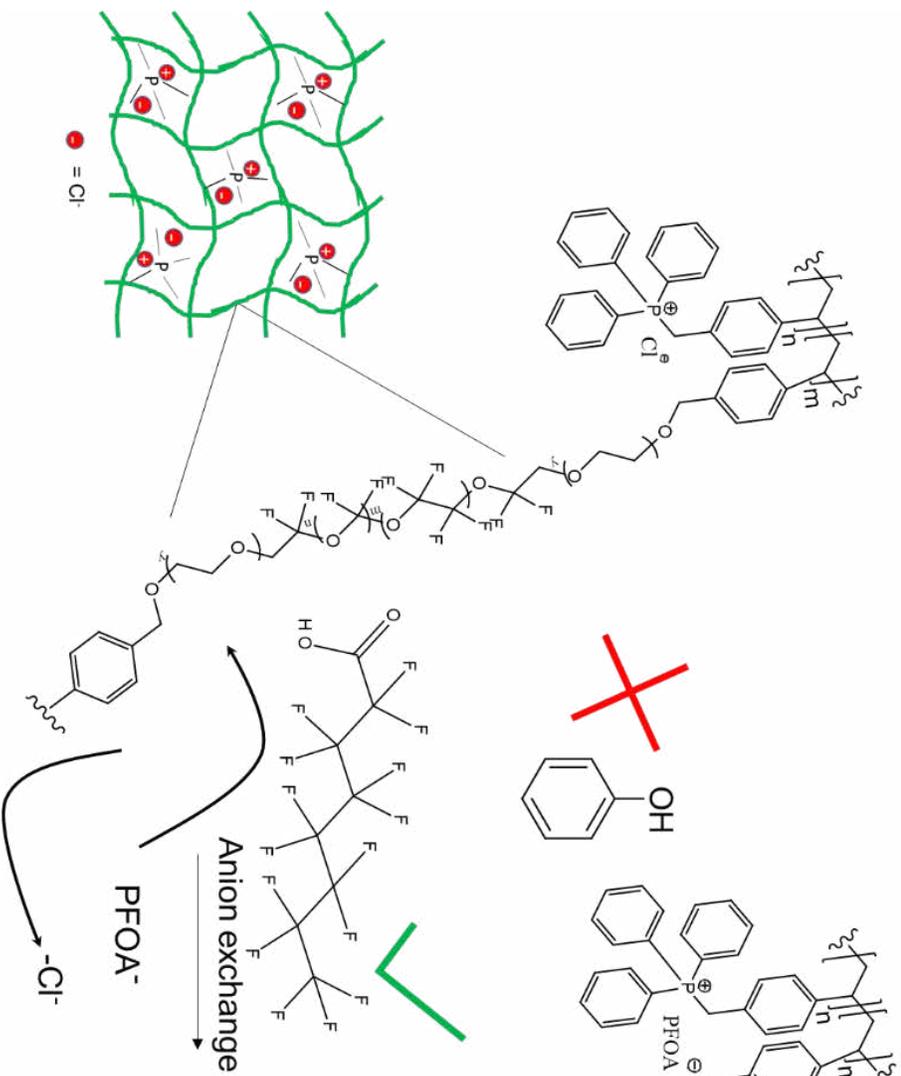
Yu Wang & Samuel Antwi

Department of Chemistry

03/08/2024



Perfluoroalkyl Substances (PFAS) Adsorbent



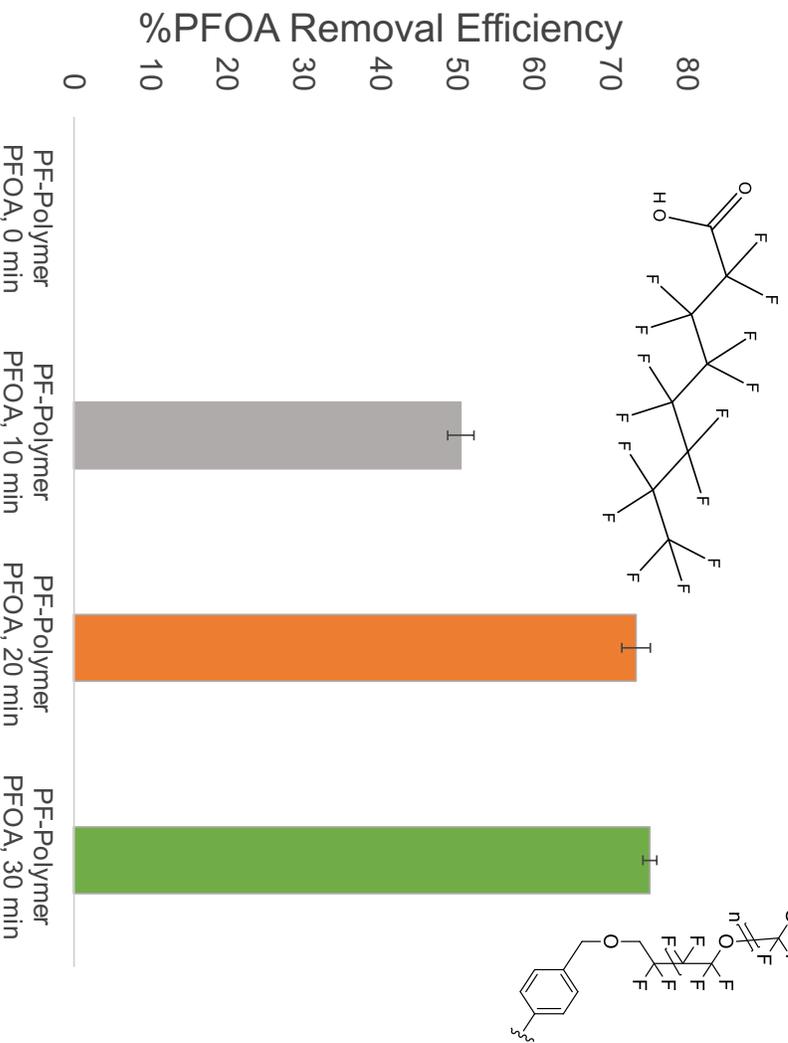
Favorable Vander Walls
 forces of attraction are posited for PFOA
 Favorable interaction with PF anion exchange
 polymer (i.e., perfluoro species like each other)

Perfluoroalkyl Substances (PFAS) Adsorbent

Fast removal of PFOA is seen in presence of the polymer

[isorbent] = 650-1000 mg/L;
[PFOA]₀ = 1.84 mM in DDI

pH ~ 3.15, HPLC detection at 210 nm

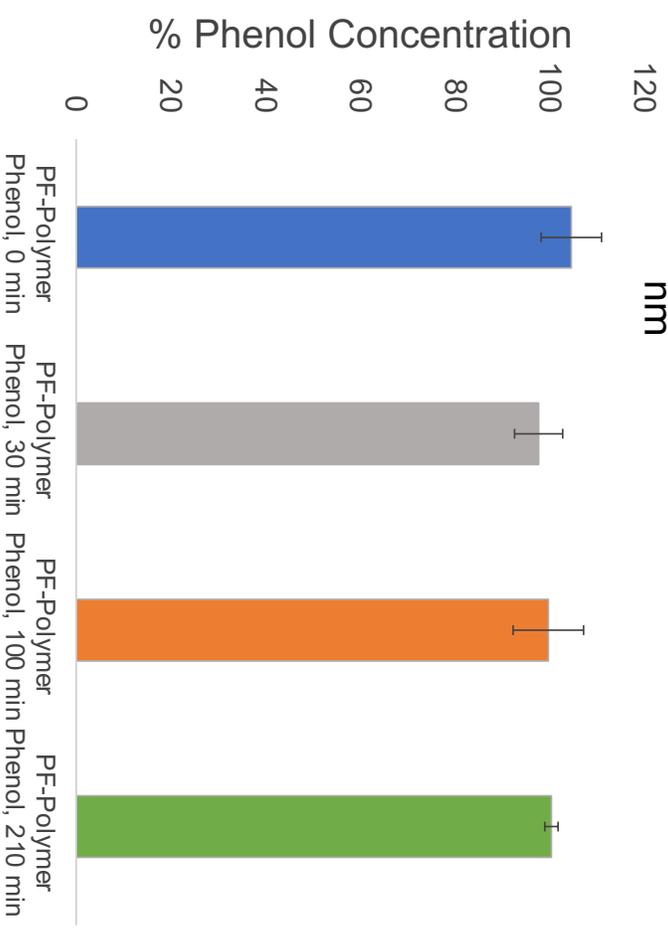


No removal of phenol is observed in presence of the polymer

[isorbent] = 650-1000 mg/L;

[Phenol]₀ = 1.50 mM in DDI

pH ~ 3.00, HPLC detection at 280 nm



Development of Novel Water Purification Materials for the Removal of Perfluoroalkyl Substances (PFAS)

University of Louisiana at Lafayette

2024 Faculty Sustainable Development Research Summit



Yu Wang & Samuel Antwi

Department of Chemistry

03/08/2024

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Breakout Sessions & Coffee Break

Coffee & calories are in the Atrium

Breakout sessions are in the LEED Center

- Each of the previous presenters will find a corner – in the conference room, the training room, the classroom or the lounge area.
- This is your chance to connect with the researchers and ask all of the questions you didn't get to ask during their brief presentation
- Jonathan Shirley, Kevin Guillory & the LEED Center Team can help you find a room and corner.

Presentations will resume in here at 10:30



Kiwana McClung

Chief Diversity Officer

Office for Campus Diversity

Professor of Architecture and Design

*SLEMCO/LEQSF Regents Professor in Art &
Architecture II*



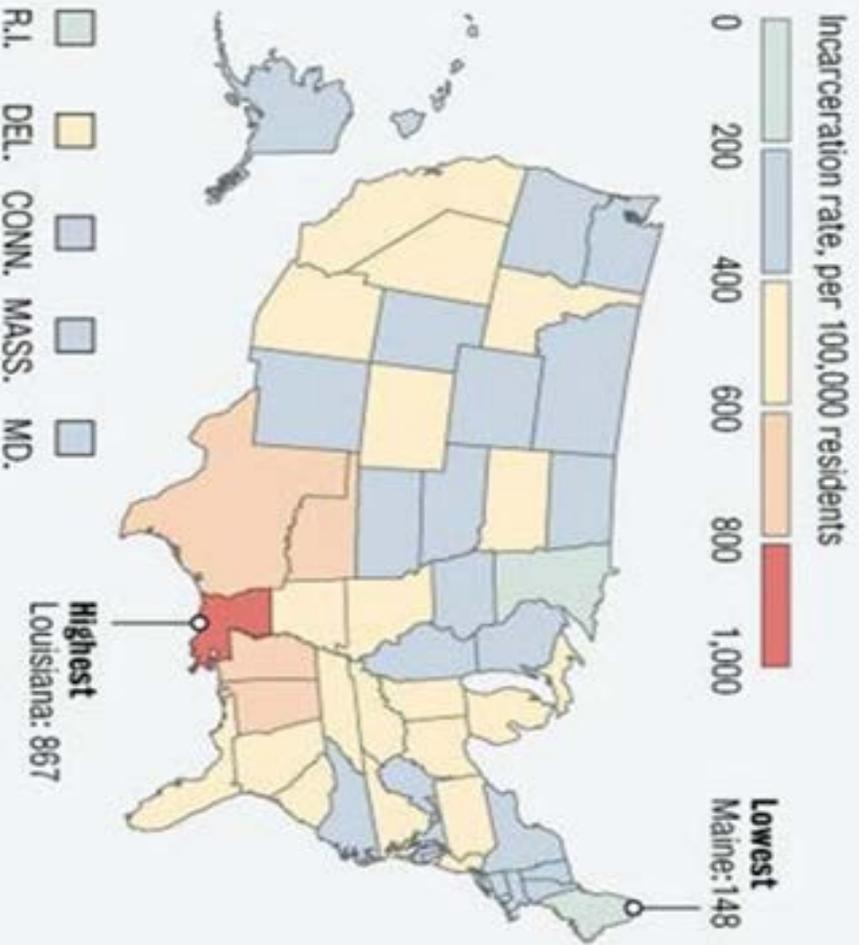
Literacies Beyond Bars: (Re)Claiming and (Re)Imagining Identities through Multimodal Family Literacy Practices

Tori K. Flint, Ph.D.

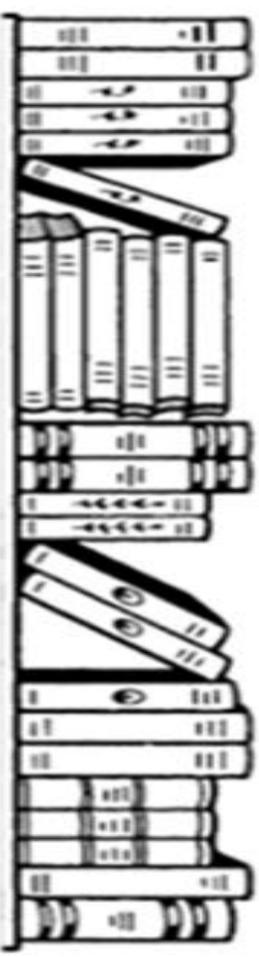
Department of Curriculum and Instruction (EDCI)
College of Education & Human Development

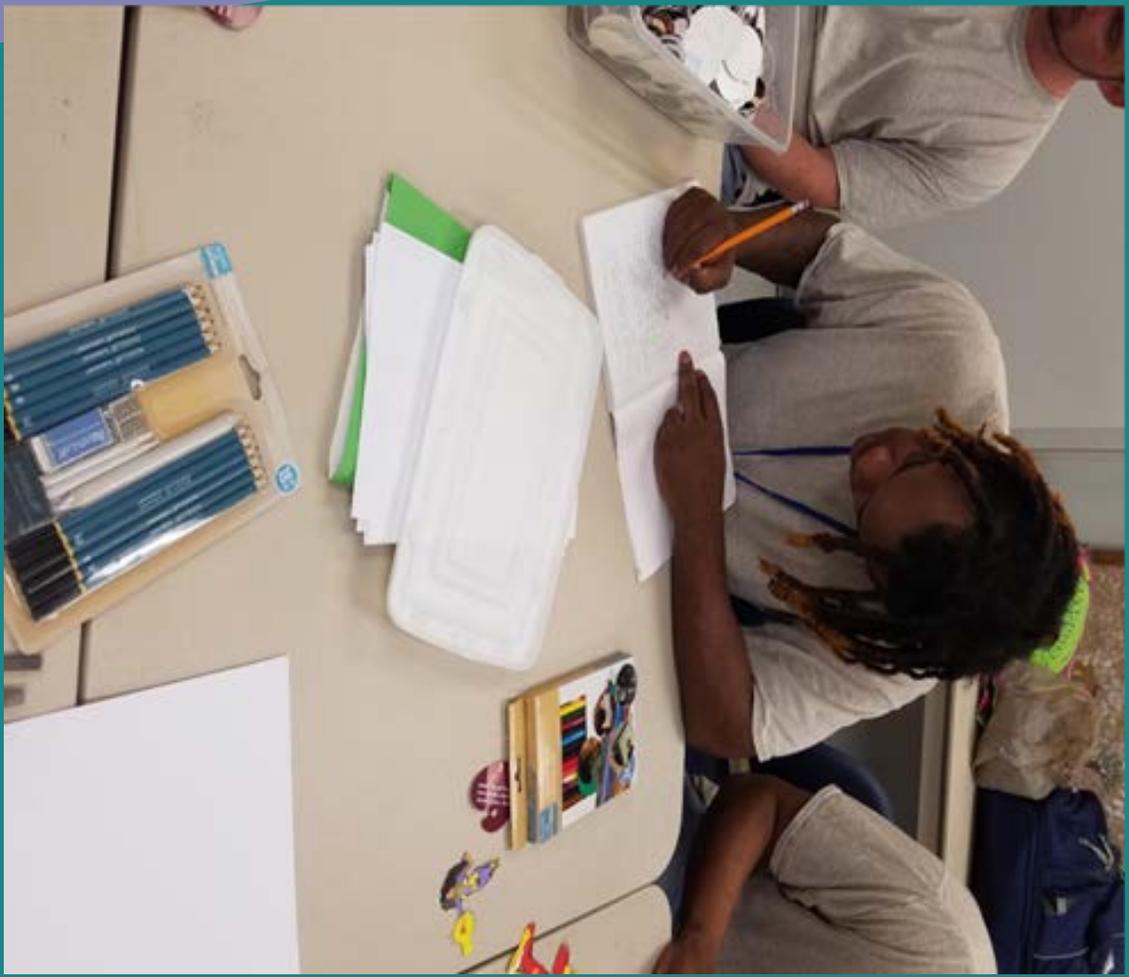
Sustainable Development Research Summit 2024
University of Louisiana at Lafayette

STATE INCARCERATION RATES count only people who are serving time



Louisiana Storybook Project







Literacies Beyond Bars: (Re)Claiming and (Re)Imagining Identities through Multimodal Family Literacy Practices

Tori K. Flint, Ph.D.

Department of Curriculum and Instruction (EDCI)

College of Education & Human Development

Sustainable Development Research Summit 2024

University of Louisiana at Lafayette

Serving the Under-served: Building Resiliency for Manufactured Homes across the Coastal South

Liane Hancock
Associate Professor
School of Architecture and Design
College of the Arts



FACULTY SUSTAINABLE DEVELOPMENT
RESEARCH SUMMIT 2024

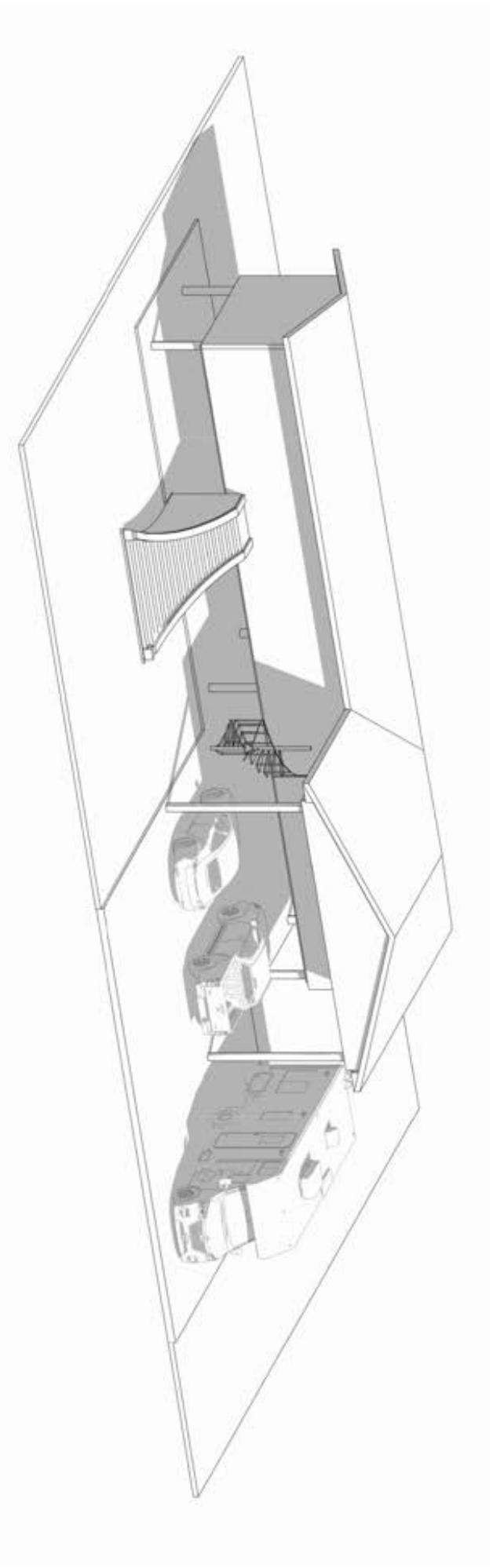


Retrofit Manufactured Homes Delcambre, LA



Liane Hancock, Associate Professor
Mehdi Ghial, Assistant Professor
Alyce Deshotelis, Visiting Assistant Professor
Student Researchers: Salomon Rodriguez, Rachel Helminger

Retrofit Manufactured Homes Erath, LA



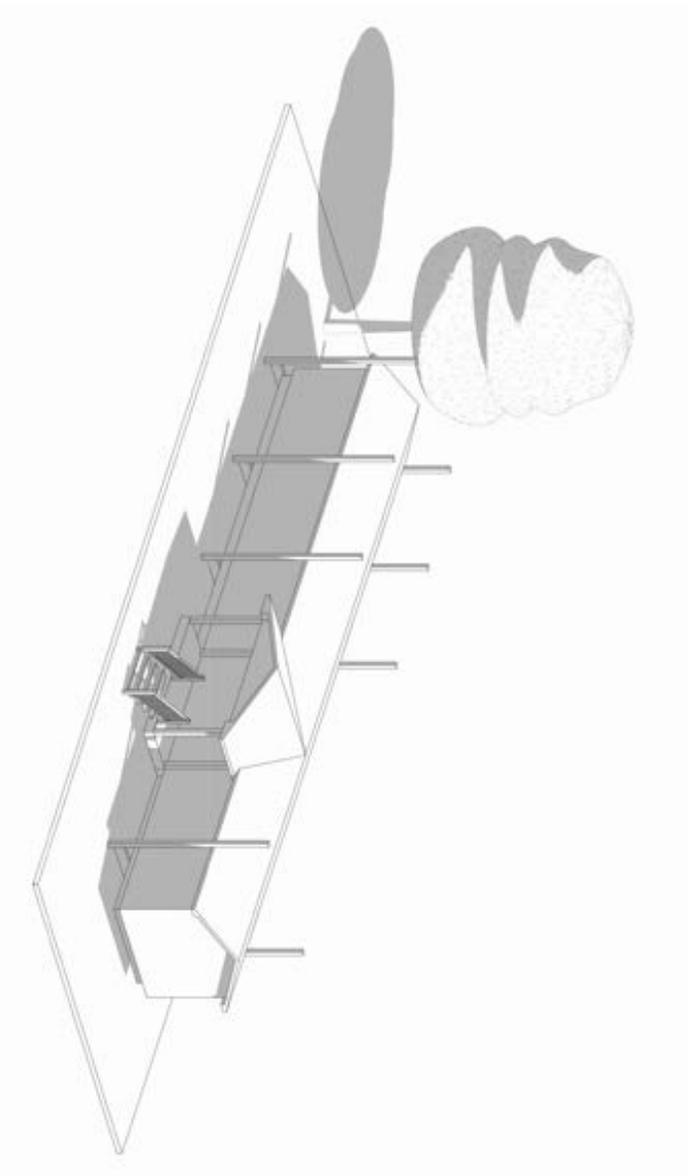
Liane Hancock, Associate Professor
Mehdi Ghial, Assistant Professor
Alyce Deshotelis, Visiting Assistant Professor
Student Researchers: Salomon Rodriguez, Rachel Helming

Retrofit Manufactured Homes Cameron Parish vs Lake Larto



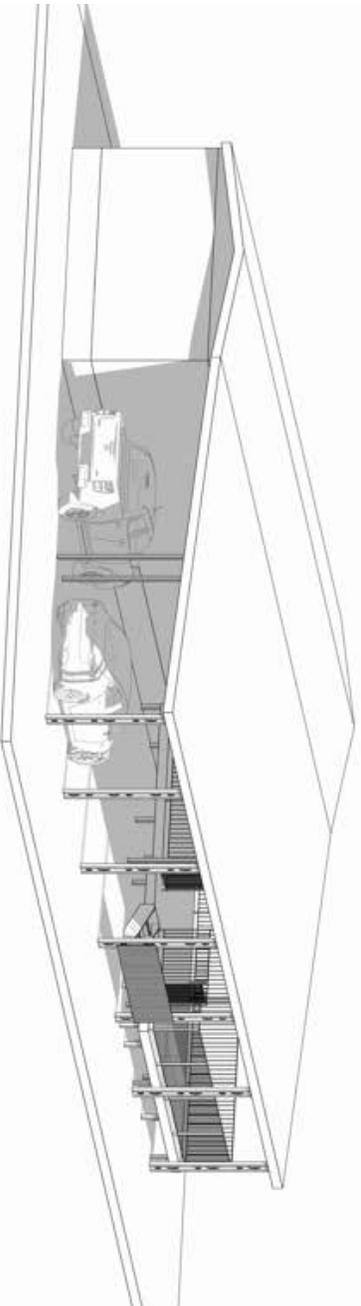
Liane Hancock, Associate Professor
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Alyce Deshotelis, Visiting Assistant Professor
Student Researchers: Salomon Rodriguez, Rachel Helming

Retrofit Manufactured Homes Lake Larto, LA



Liane Hancock, Associate Professor
Mehdi Ghial, Assistant Professor
Alyce Deshotelis, Visiting Assistant Professor
Student Researchers: Salomon Rodriguez, Rachel Helming

Retrofit Manufactured Homes Roosevelt, AZ



Liane Hancock, Associate Professor
Mehdi Ghial, Assistant Professor
Alyce Deshotelis, Visiting Assistant Professor
Student Researchers: Salomon Rodriguez, Rachel Helming

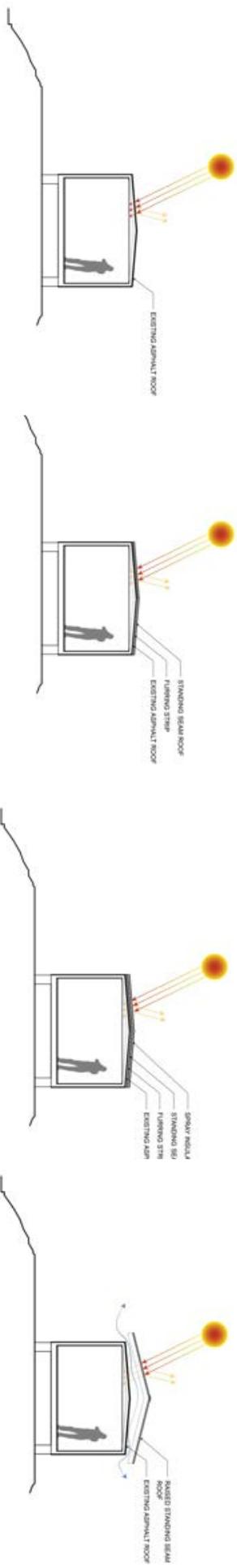


Retrofit Manufactured Homes
Leadville, CO



Liane Hancock, Associate Professor
Mehdi Ghial, Assistant Professor
Alyce Deshotelis, Visiting Assistant Professor
Student Researchers: Salomon Rodriguez, Rachel Helming

Retrofit Analysis: First Phase

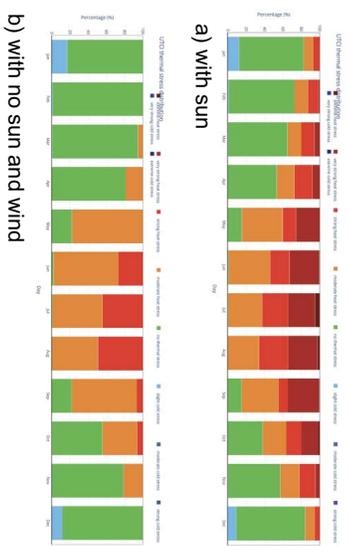
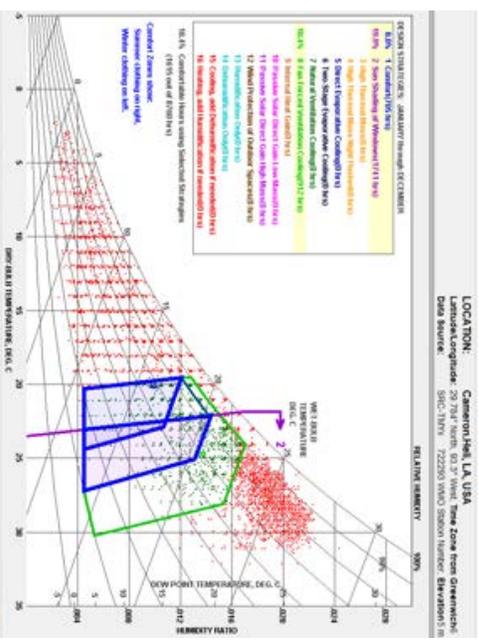


Existing asphalt roof

Standing seam roof installed over asphalt roof

Standing seam roof installed over asphalt roof, with sprayed foam insulation on top

Standing seam roof installed with airspace above asphalt roof



Thermal Stress distribution for outdoor thermal comfort in Louisiana



Psychrometric Chart for Louisiana thermal comfort zone and best strategies to expand the comfort zone



Liane Hancock, Associate Professor
 Mehdi Ghial, Assistant Professor
 Alyce Deshotelis, Visiting Assistant Professor
 Student Researchers: Salomon Rodriguez, Rachel Helminger

Retrofit Manufactured Homes
Possible Partners



Department of Energy: National Laboratories



Department of Housing
and Urban Design



Department of
Agriculture



Clayton Home Builders



Liane Hancock, Associate Professor
Mehdi Ghial, Assistant Professor
Alyce Deshorels, Visiting Assistant Professor
Student Researchers: Salomon Rodriguez, Rachel Helminger



JumpintoSTEM:

- A building science competition for undergraduate and graduate students
- Creative ideation competition
- Emphasis on diversity, increasing representation by students from backgrounds that are underrepresented in STEM
- Students who win the Final Competition receive a paid summer internship at a national laboratory



Liane Hancock, Faculty Advisor
Gabe Hoggard, Parker Vice, Zackery Trahan
Student Team

jump into STEM



ULL Student Team:
Gabe Hoggard, M.Arch Fall '23, Summer internship '24, ORNL
Parker Vice, M.Arch Fall '24, Summer internship '23, PNNL
Zackery Trahan, M.Arch Fall '24, Summer internship '23, NREL



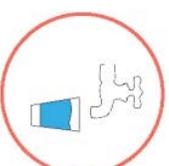
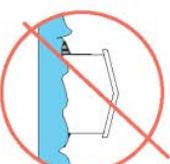
Liane Hancock, Faculty Advisor
Gabe Hoggard, Parker Vice, Zackery Trahan
Student Team



PATENT (Provisional Patent Application) WEATHER PROTECTION SYSTEMS

BACKGROUND

Technical Field
[0001] Provided herein are weather protection systems that can provide protection for a building from inclement weather and other adverse environmental conditions.



JumpintosStem Final Competition
Winning Team:
Mais Bruh..... It's Da Cajuns Sha
University of Louisiana at Lafayette



Liane Hancock, Faculty Advisor
Gabe Hoggard, Parker Vice, Zackery Trahan
Student Team



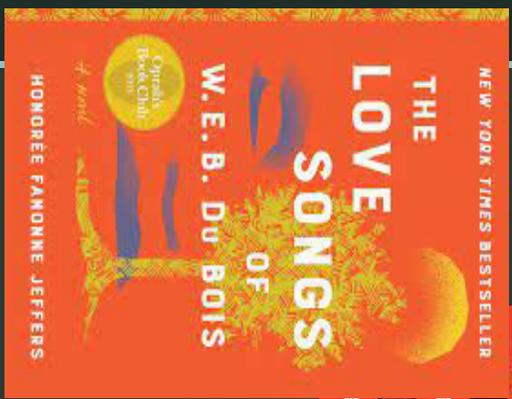
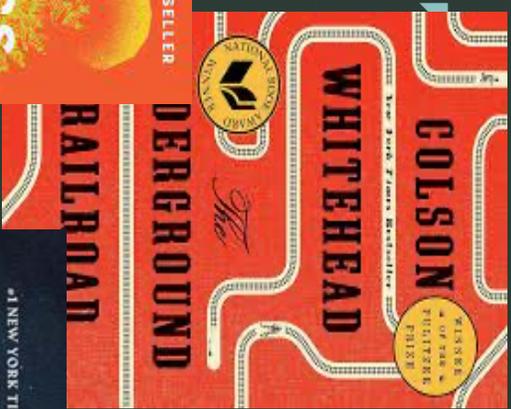
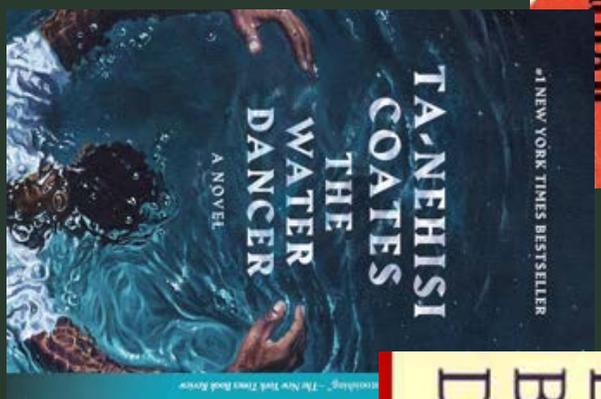
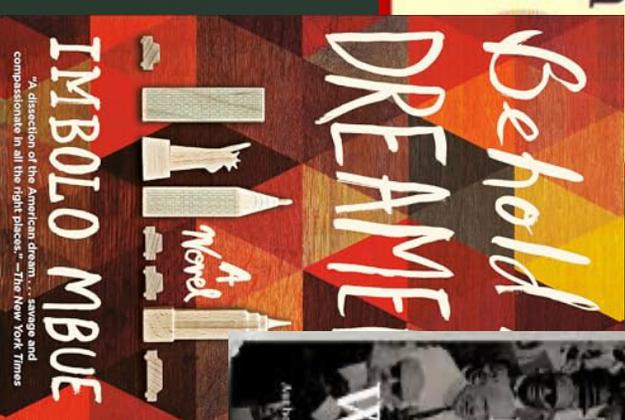
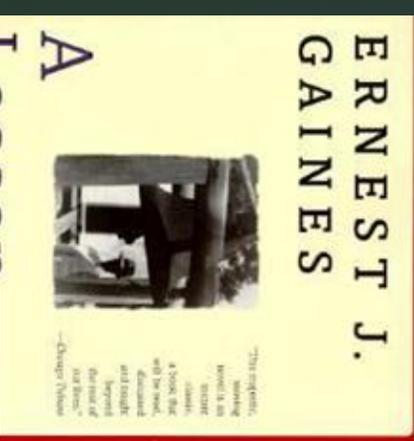
**Reading
Race
with Oprah
& Our Students**

Yung-Hsing Wu
Department of English

Sustainable Development Summit 2024



Oprah 2.0



Ladi Opaluwa

Through this circumvention, the OBC pointed the reader's attention, if not away from race, at least not in its direction.

Kaylin Ambrose

For conferring that stamp of approval onto a Black text also places the hard-earned emotional investment of her predominantly white, female audience at risk.

Bek Credeur

OBC does not necessarily ignore race on principle, but privileges Oprah's experience of reading it, how it makes her feel.

Yamane Hill

Oprah not only sugar coats race, but spins it into a human experience that we all share.

Camille Duhon

This framing allowed OBC to hook its readers in with the premise of an interesting novel, encouraged them to buy the book, and ultimately brought them toward facing the persisting issues that slavery has had a hand in creating in today's United States once they read it.

Cheylon Woods

The message Oprah wanted to send with the selection of *A Lesson Before Dying* is clear; racism can be overcome by personal accountability and understanding of one another.



Cultivating a sense of belonging for inclusive and equitable education: From research to application

Manyu Li

Associate Professor, Department of Psychology,
College of Liberal Arts

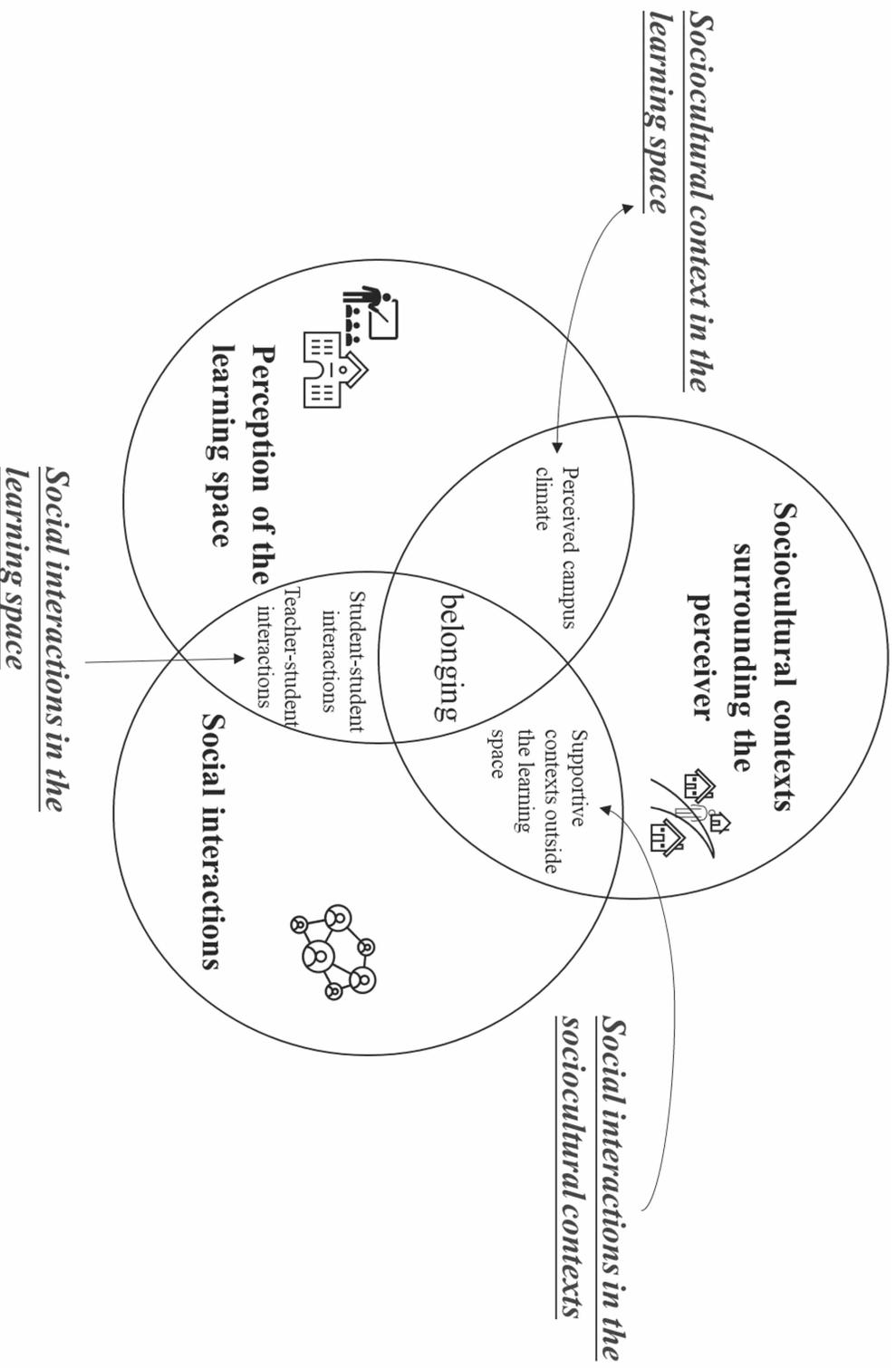
Presenter:

Ayodeji S. Adegoke

MS in Psychology Candidate

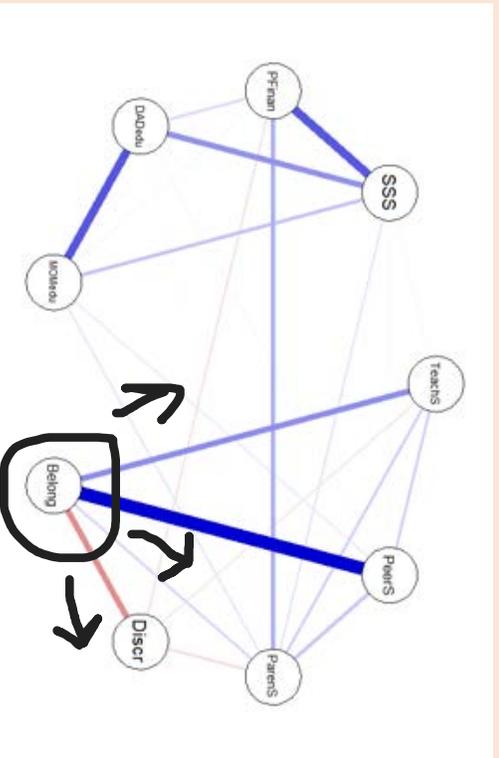
Data Science Application in Social and
Community Psychology (DAISO) Research Lab

The affordance ecology framework in educational setting, modified from Young and Cleveland (2022)



Study 1: How does belonging connect to other campus climate factors?

Gaussian Graphical Model revealed that **belonging** in the academic setting had the **highest network strength** among all the sociocultural indicators included, centrally connecting all other indicators.



Also, **Belonging is negatively connected to perceived discrimination** experienced on campus.

Li, Johnson, & Adegoke (minor revision)

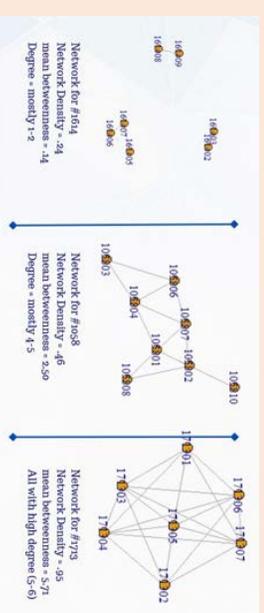
Study 2: What makes students feel belonged?

An egocentric social network approach was used to examine students' greater support network and to **explore network characteristics** that contribute to students' success.

1. Diversity of support network matters!



2. High network betweenness relates to high sense of belonging.

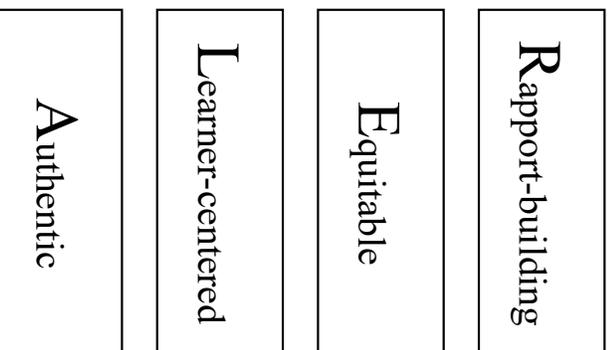


Li & Adegoke (in preparation)

Study 3: How can we extend the findings to applied setting?

Rapport-building, Equitable, Learner-Centered, Authentic Computational Social Science (RELACSS) framework

- STEM anxiety
- “out of place”
- Achievement gaps



- ↑ belonging
- ↑ inclusivity
- ↑ motivation
- ↑ success



Li (2023, Frontiers in Education)

Northwestern State U
Xavier University
UL Lafayette

Future plans:
basic and applied research side-by-side to build theoretical knowledge of belonging and to increase understanding of belonging on inclusive STEM education



Cultivating a sense of belonging for inclusive and equitable education: From research to application

Manyu Li

Associate Professor, Department of Psychology,
College of Liberal Arts

Presenter:

Ayodeji S. Adegoke

MS in Psychology Candidate

Data Science Application in Social and
Community Psychology (DAISO) Research Lab

“Proof That We Ever Was”

Exhibiting the Ernest J. Gaines Collection

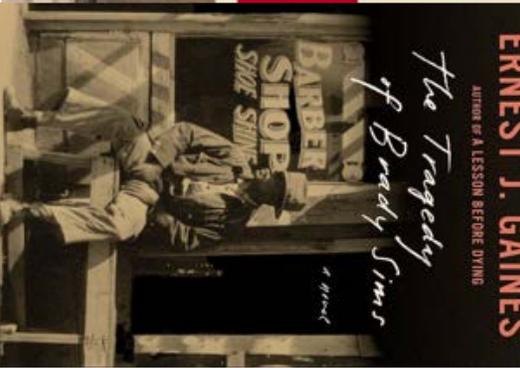
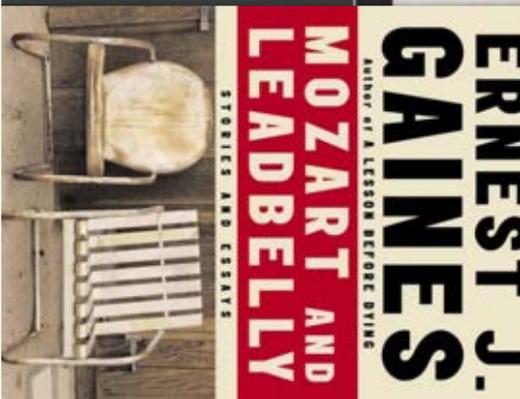
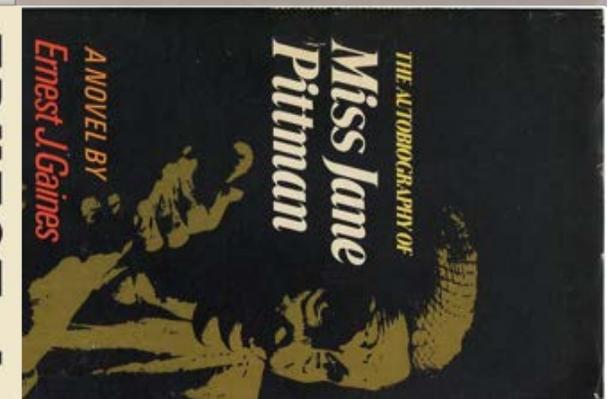
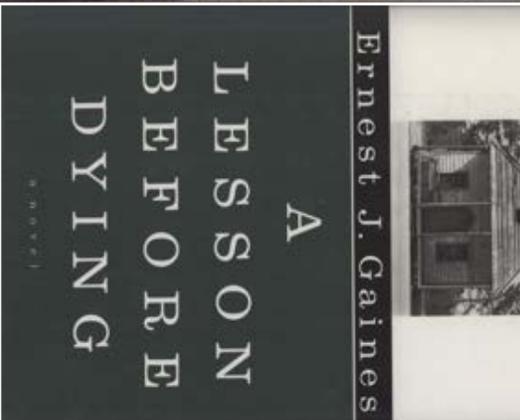
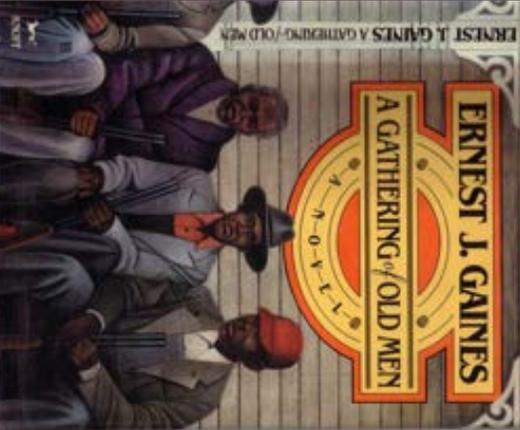
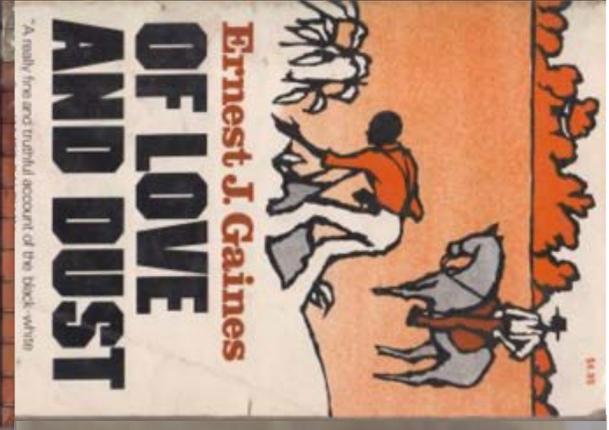
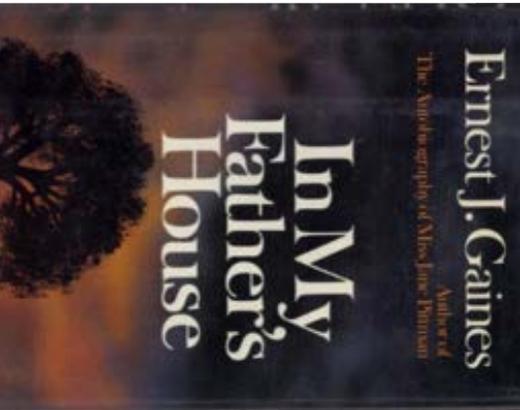
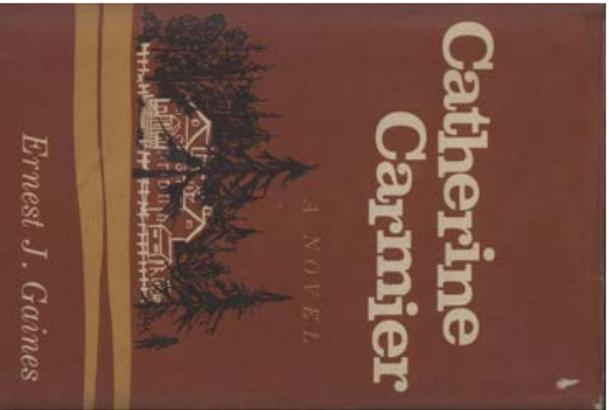
David Squires

Associate Professor of English

<http://davidsquires.org/scalar/> (select “view all”)



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OF
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L a f a y e t t e





“Proof that we ever was.”



Scalar

Self-published Books

Search

View All



Keys to the Archive: A Lesson Before Dying
David Squires



Keys to the Archive: A Gathering of Old Men
David Squires



Keys to the Archive: Miss Jane Pittman
David Squires

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INTERIORITY

Novels have given us a rich sense of subjective experience. This entry explores the extent to which Miss Jane participates in the tradition of dramatizing inner life.

[Continue](#)

INTERSECTIONALITY

Intersectionality offers a way to understand social identity as a complex construction of overlapping categories. This entry draws on the concept to analyze Miss Jane's experience in relation to two different white women.

[Continue](#)

(38)

The Collections

"Luzana?" Miss Jane screamed out. "Me and this little boy been doing all that walking, and we still in Luzana?"

You sure?"

"Yes, I'm sure," the white ^Woman said. "And if I was you, I'd head right on back where you come from."

"No'm, we ain't going back there," Miss Jane said.

Miss Jane said one of the niggers stepped forward and drawed his hand back and said, "Don't you tell Misses what
 If she say y'all go back. Y'all go back."

The Gaines Center's collections consist of various drafts of Gaines's published work, correspondence, production and publicity materials, translated editions, and reviews. The subseries of *Miss Jane Pittman* materials tracks the novel's full lifecycle from an early, aborted draft to reviews of the television-movie adaptation. The *Miss Jane Pittman* collection fills over one-hundred folders—about two-cubic feet—and consists mostly of manuscript and typescript drafts.

back!
Of the Place with!
Or the Place -

"All right," I said, looking at him. He was sitting over there grinning with confidence. "A hundred against six," I said. "A hundred against the boys on the lane, and a hundred against life." *Or Marshall vs. Rivers in a 3rd of the place with.*

"And if he get either, or either got him, which I'm sure will happen before mid-night, as sure as my name is John Henry Marshall, you'll pay me three hundred dollars-- is that the bet?"

"That's the bet," I told him. "Huh."

"That's like taking candy from a baby," Jack said.

"Unless you know something about this world I don't know?"

"It's possible," I said. "Huh."

"I've never made three hundred dollars easier in my life," Jack said. "Merle, you're my witness. And you, too, Jarey. Remind me to give you one or two bucks when I collect."

Neither one of them answered him. I went back to looking through the album. I was looking at the picture of him as a boy with Grandpa Kate--because it was Grandpa Kate who named him Mathusala--Mathusala Jack. Later, the ones in the quarters shortened it to Pathu, and Pathu is what he was called all his life. He was same age as Brother, two years older than me, and four older than Jack. We all grew up together, played together, and fought one another. Both Grandpa Kate and Daddy Dan told him to hit back when anybody insulted him, and that meant me or Brother or Jack. Daddy

back!
Of the Place with!
Or the Place -

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INTRODUCTION



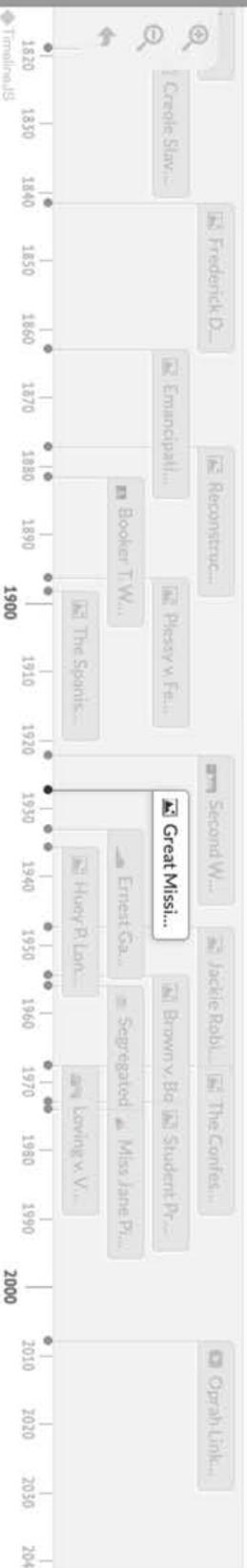
Second Wave Ku
Klux Klan
MARCH 18, 1922



APRIL 1, 1927
**Great Mississippi Flood
of 1927**

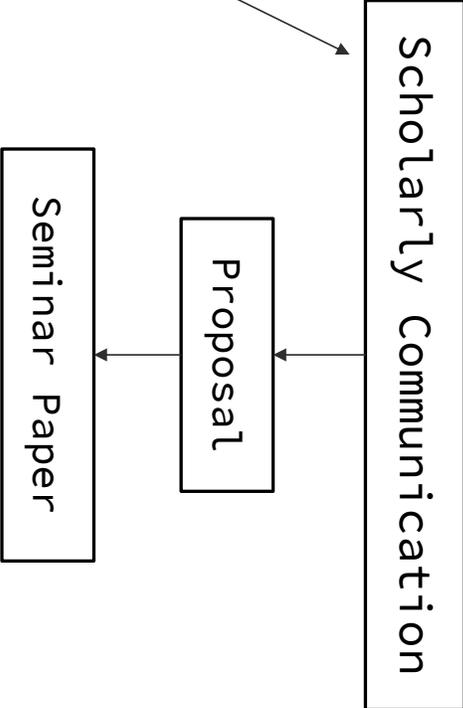
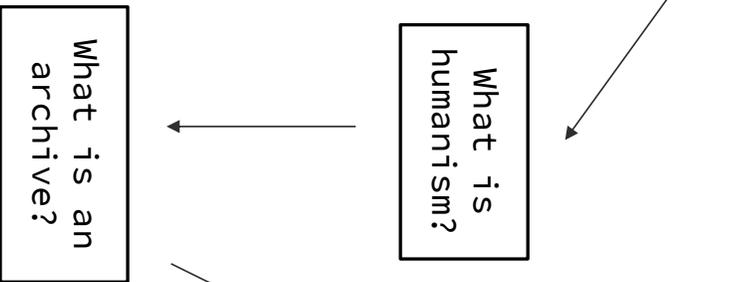
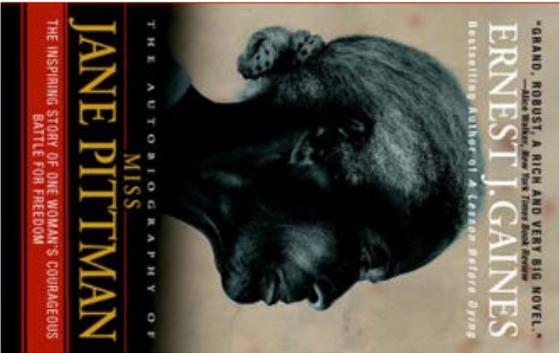
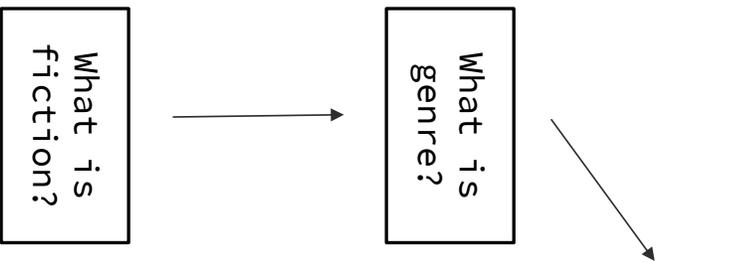
The Great Mississippi Flood of 1927 inundated 27,000 square miles in Arkansas, Mississippi, and a majority of the Mississippi Delta, including twenty parishes in Louisiana. This picture shows flooding in Melville, LA from the Atchafalaya River, a distributary of the Mississippi.

Ernest Gaines Born
JANUARY 15, 1933



Historical Context for the Novel





Research Methods Course Schema

writers such as Turgenev, Chekhov, de Maupassant, Joyce, and others. These were the writers I had to study while a student at San Francisco State in the fifties. I wish that the works of black writers had also been included in the curriculum when I was in school, but none were. I under-

“Well,” I said, “I probably would say I write for the black youth in the South. I hope that in my writing I can help them find themselves.”

your books?”

“I don’t write for any particular group, Mr. Stegner,” I said. “I just try to write well and hope that somebody will buy it.”

He said, “Suppose someone held a gun to your head and asked you again: Who do you write for?”

“Well,” I said, “I probably would say I write for the black youth in the South. I hope that in my writing I can help them find themselves.”

“Suppose the gun were still there,” he persisted, “and he asked you who else you wish to reach.”

My answer was the best I could offer then—or now: “In that case,” I told him, “I would have to say I write also for the white youth of the

My answer was the best I could offer then—or now: “In that case,” I told him, “I would have to say I write also for the white youth of the South. To help them see that unless they know their neighbors of 300 years, they know only half of their own history.”

Dr. Mary Farmer-Kaiser
Dean of the Graduate School
Professor of History



*Investigating Twenty Years of Language
and Literacy Projects in Southwest
Louisiana*

Dr. Christine Weill
Assistant Professor

Dr. Ryan Nelson
Professor
Department Head

Dr. Holly Damico
Associate Professor
Hawthorne-BORSF Endowed Professor III

Communicative Disorders, College of the Liberal Arts

Investigating Twenty Years of Language and Literacy Projects in Southwest Louisiana



louisiana.edu



Lactation Policies
and
the K-12 Teacher Workforce

Nathan Roberts, Amanda Shuford Mayeaux,

Aimee Barber, and Marietta Adams

College of Education and Human Development



TEACHER SHORTAGE

According to Louisiana Workforce Commission data:

- Statewide, these data show an annual need of 4,003 with annual growth projected to be 124 positions each year over the next ten years (LaWorks.com, 2022).

According to the Louisiana Department of Education Workforce

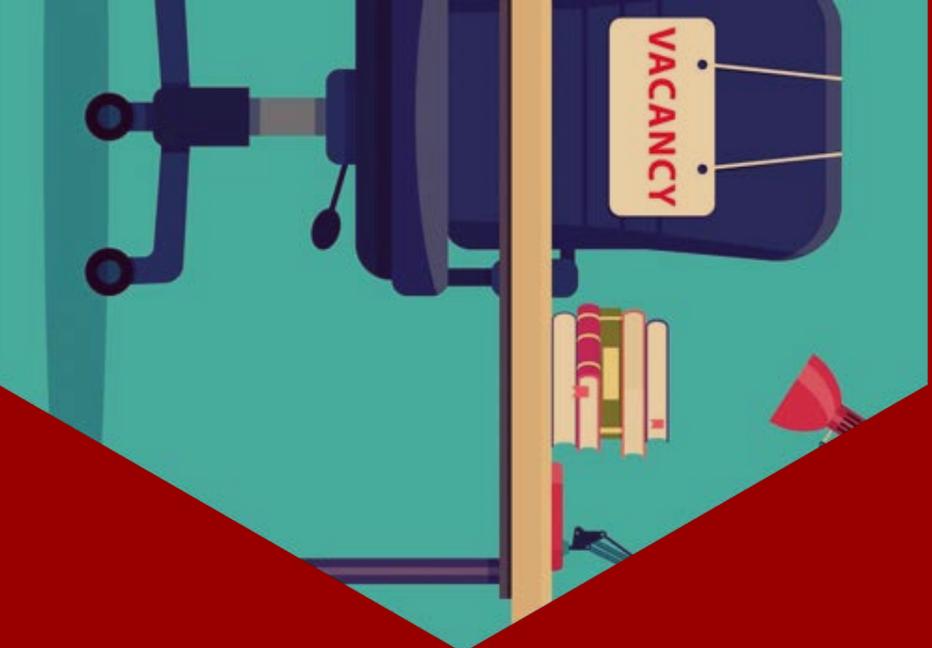
Report:

- 37% of teachers will leave the profession within the first 5 years.



TEACHER RETENTION STUDY

- Mixed methods study to investigate
 - Original purpose, connections to purpose
 - Contributing factors to possibly leaving the profession
 - Ideas for pathways forward, preparation, and change
- Initial Study: 93 responses, 78% from Louisiana
- Larger district study in progress: >1500 responses





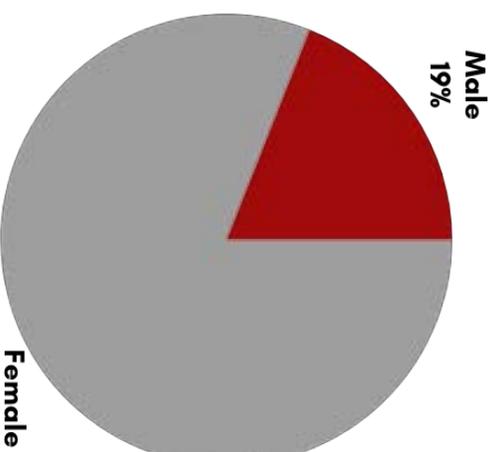
Goals of Study

- Educator-generated solutions
- Co-developed Action Plans
- Address Policy when Needed
 - Sample: Lactation Policy



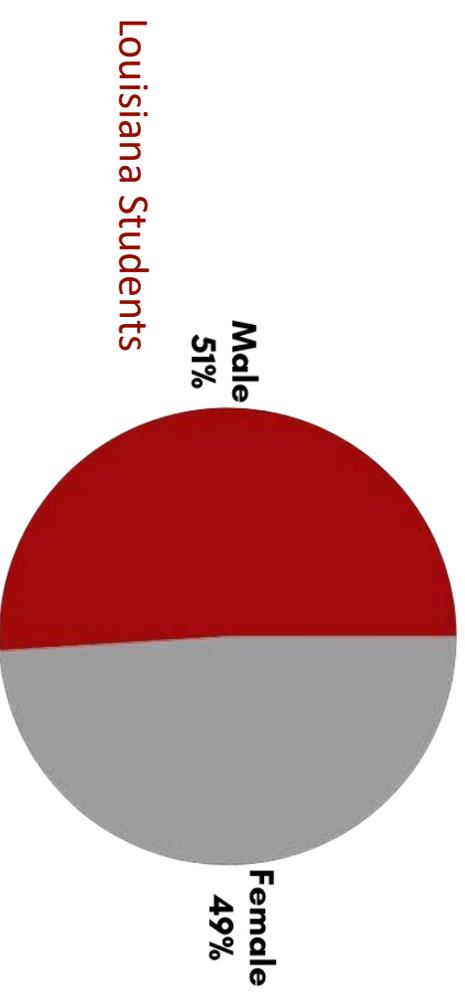
Teacher Retention

Who is choosing to teach?



Louisiana Teachers

Why are they choosing to teach?



Louisiana Students

Why are they leaving?

“ Reasons for Original Purpose for Teaching

“I also loved the schedule my children were really small at the time and I wanted to be present for them.”

“Finding a profession where I shared the same schedule as my son saved me from having to find/pay for child care.”

“I also loved the schedule of a teacher as someone who would be a working mother.”

A theme found was that teachers find the schedule appealing and conducive to having a family.

“I was a single mother and decided that I wanted to have a schedule that would be best to raise a child.”

“In addition to fitting my family schedule, I have a personal love of learning, was deeply involved in my own children's education.”

“I have always wanted to become an educator because I wanted to make a difference. I also loved the schedule my children were really small at the time and I wanted to be present for them.”

Participant's Combined Selections of Major Contributing and Somewhat of a Contributing Factor

Issue	Teacher's Selecting Issue as Major Contributing Factor	Teacher's Selecting Issue as Somewhat of a Contributing Factor	Total
	Factor	Contributing Factor	
Excessive workload	73%	25%	98%
Micromanagement from District or State Administration	48%	49%	95%
Undervalued Professional capabilities or talents	53%	41%	94%
Too much focus on standardized testing and data	49%	43%	92%
Lack of respect for the teaching profession	58%	33%	91%
Physical and/or emotional stress	61%	29%	90%
Underpaid	53%	35%	88%
Lack of accountability or support for students' behavior	57%	29%	86%
Lack of autonomy (decision making power) in curriculum and instruction for students	55%	30%	85%

Top 5 Issues Contributing to Attrition

- Excessive Workload
- Micromanagement
- Undervalued capabilities
- Too much focus on standardized testing and data
- Lack of respect



Sample Impact

- Lactation Policy
 - Health benefit to mother and child
 - Paid parental leave (return too early)
 - Coverage issue - Establish plan prior
 - Space & break time
 - Unsupportive policies make teachers choose



UNIVERSITY *of*
LOUISIANA
L A F A Y E T T E *

**Dr. Stephanie P. Arceneaux, DNP, MSN,
APRN, ANP-C**
College of Nursing and Health Sciences

Sustainability Development Faculty Research Grant

Five

Sustainable Goals addressed: Five & Eleven

Achieve

Goal 5: Achieve gender equality and empower all women and girls.

Make

Goal 11: Make cities and human settlements inclusive, safe, resilient, and sustainable.

Sustainable Development Goals

THE SUSTAINABLE DEVELOPMENT GOALS



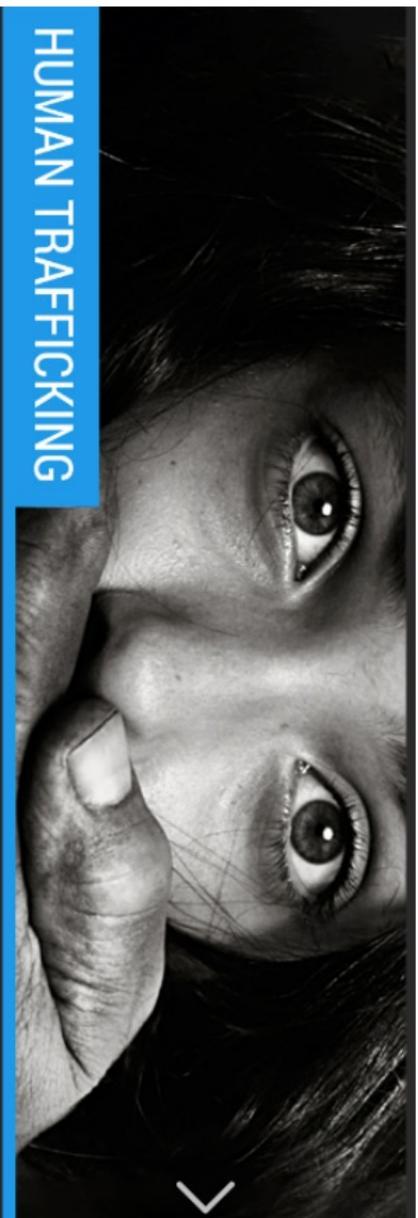
Education of Nursing Students on Human Trafficking

Improves Knowledge

- **Study Design**- Quality Improvement Initiative
- **Sample** – Convenience Sample of Senior Nursing Students; NURS 403 & NURS 418 cohorts
- **Intervention**- Nursing students completed the HT Education Module with pretest/posttest assessments via PROTECT Instrument in Moodle
- **Outcome Measures**- perceived knowledge of Human Trafficking (HT), actual knowledge of HT, and confidence in caring for HT victims.

Moodle Book

Human Trafficking Education Module



1. Introduction to HT Education -Audio Recording

Data Analysis



International Women's Day- March 8



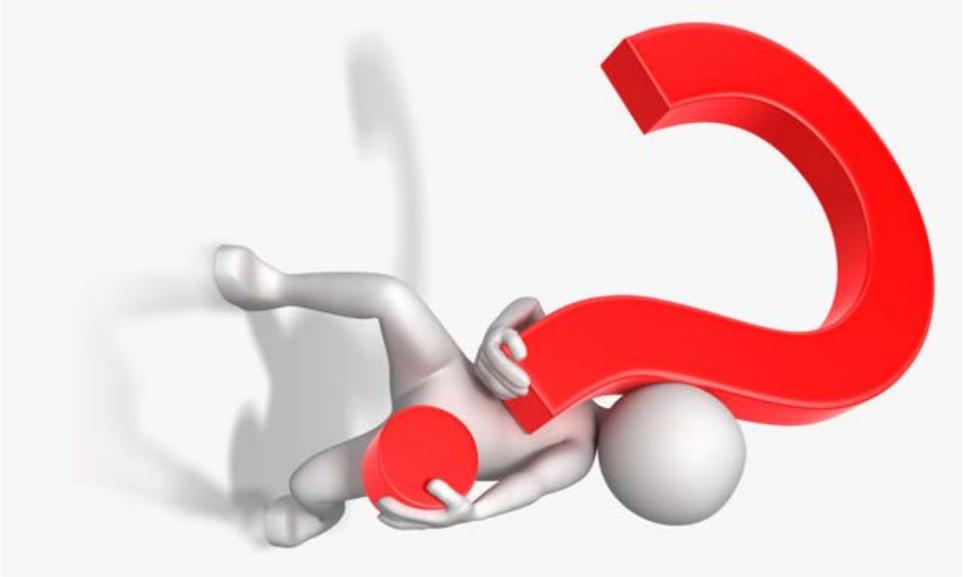
Hand Signal for Human Trafficking



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Questions?



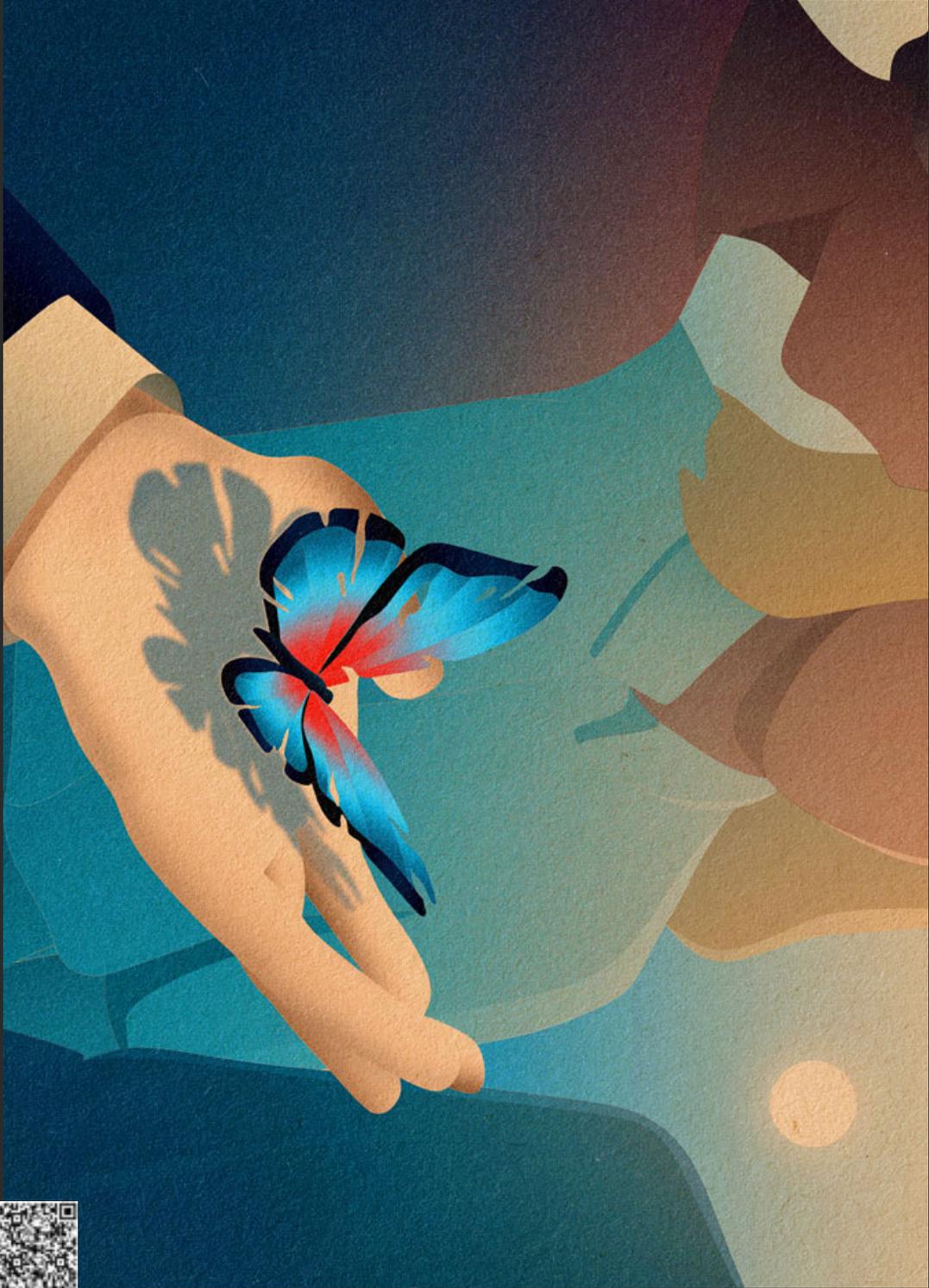
Promoting
appetitive learning
of consensual,
empowered
vulnerability:

A contextual
behavioral
conceptualization of
intimacy

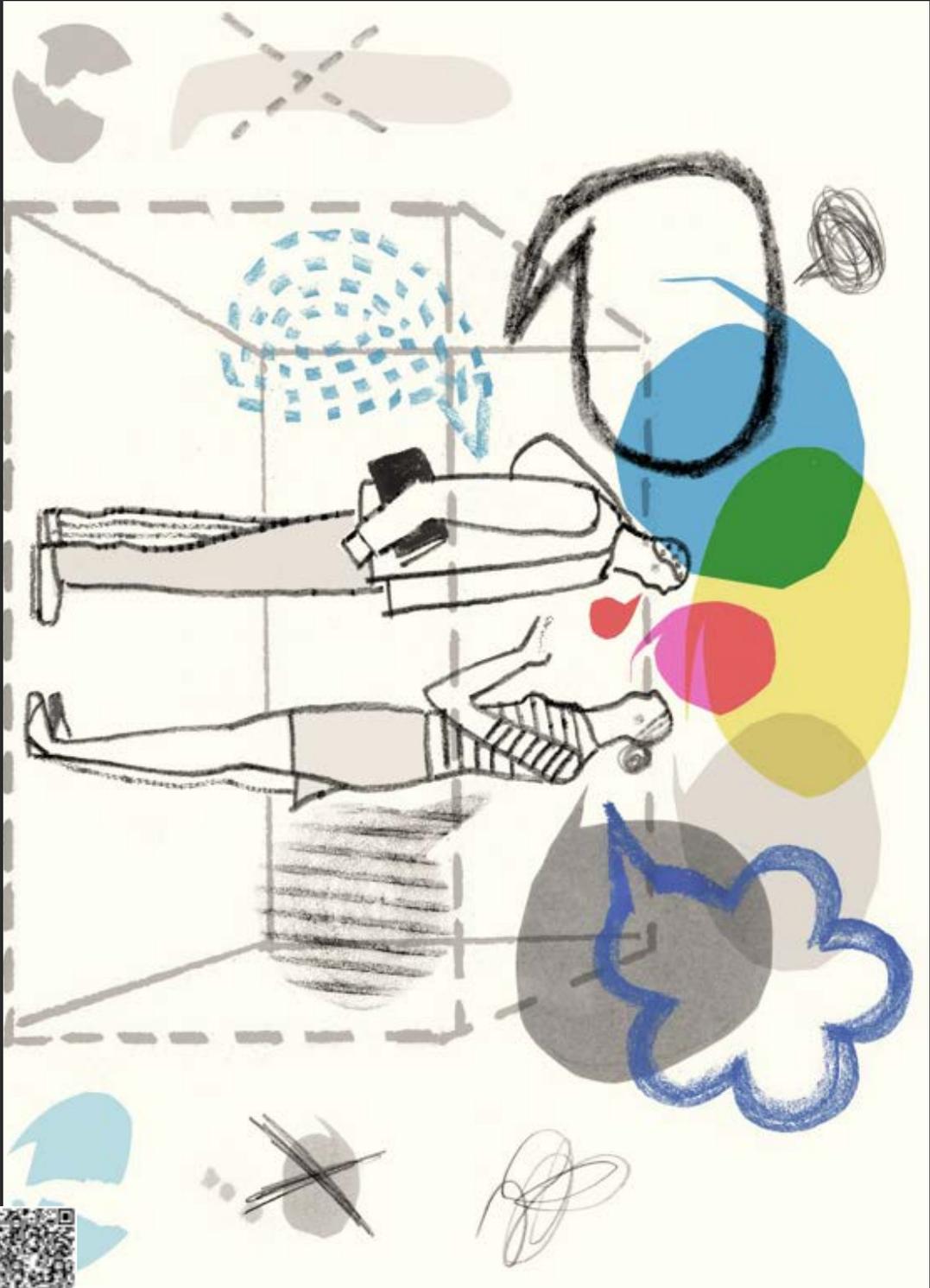
Emily K. Sandoz, Ph.D.,
University of Louisiana at Lafayette

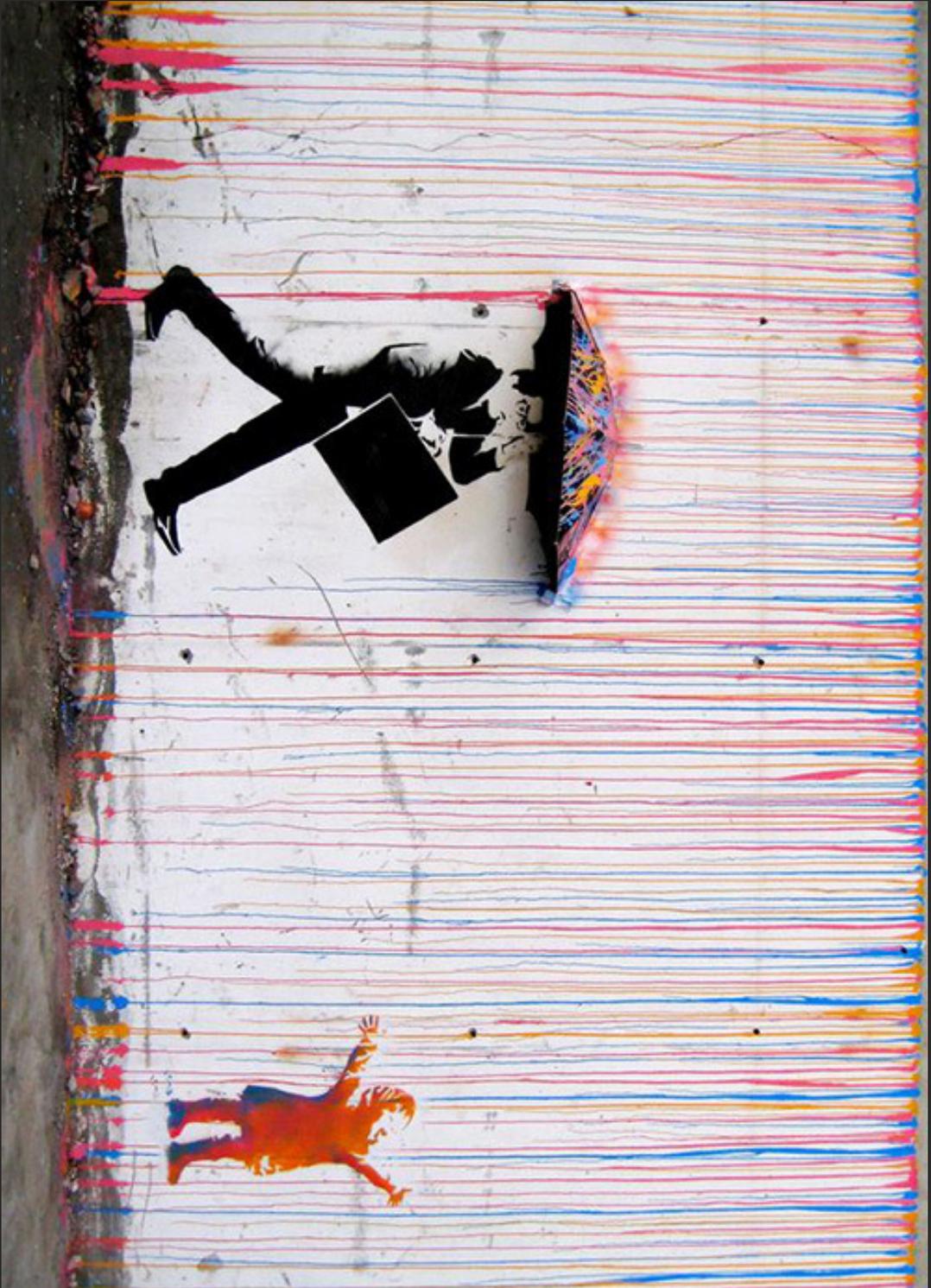


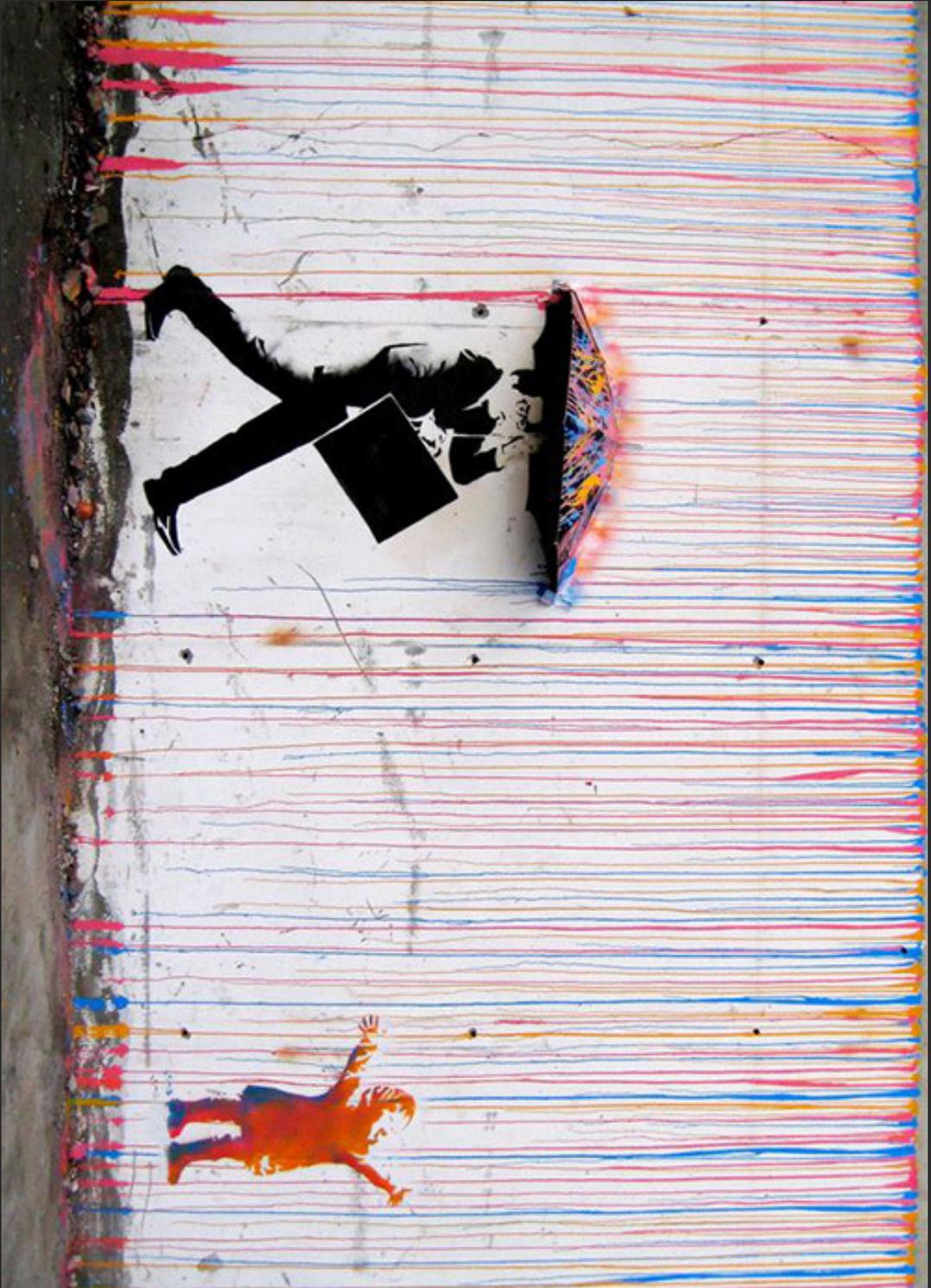


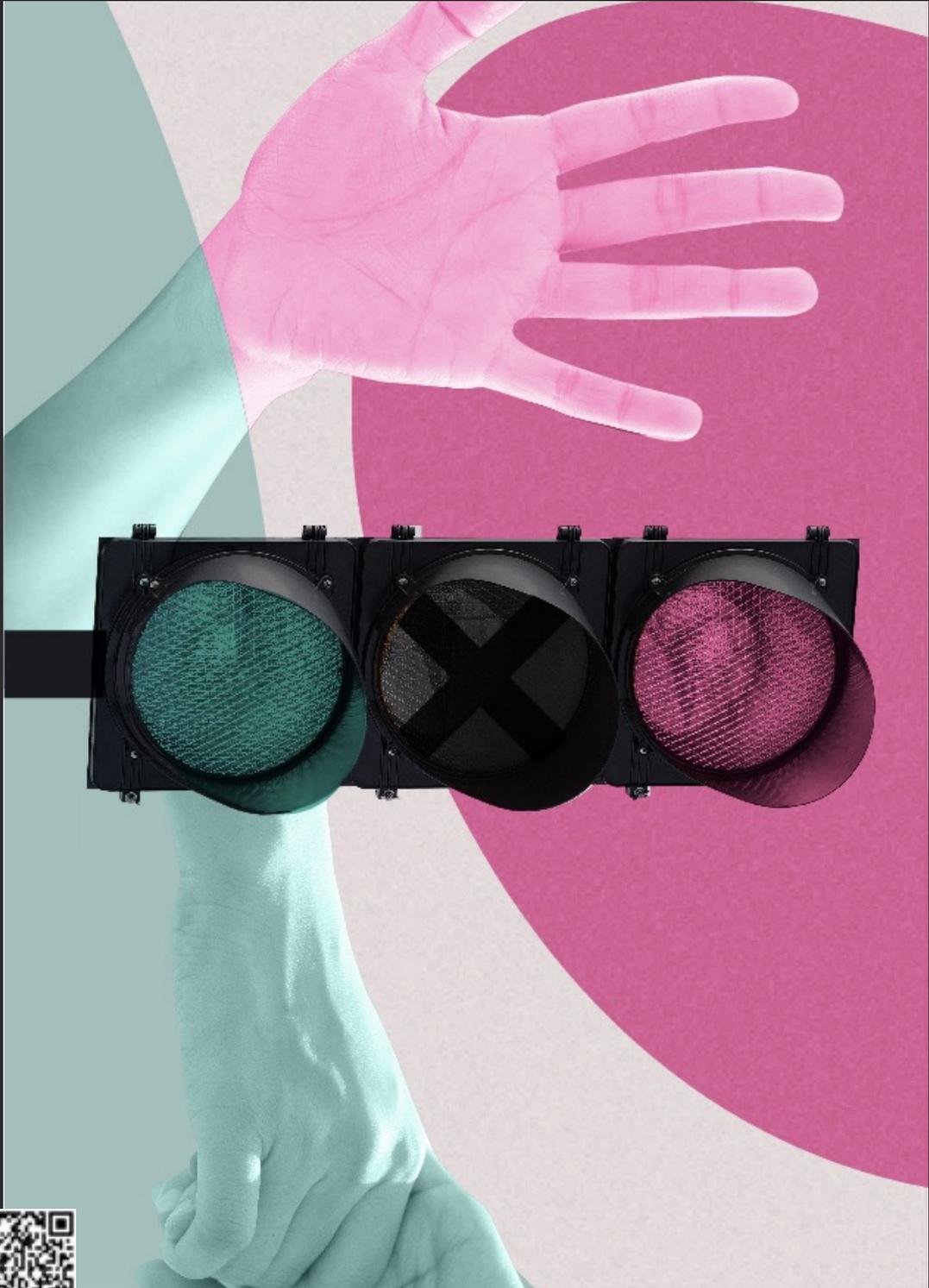




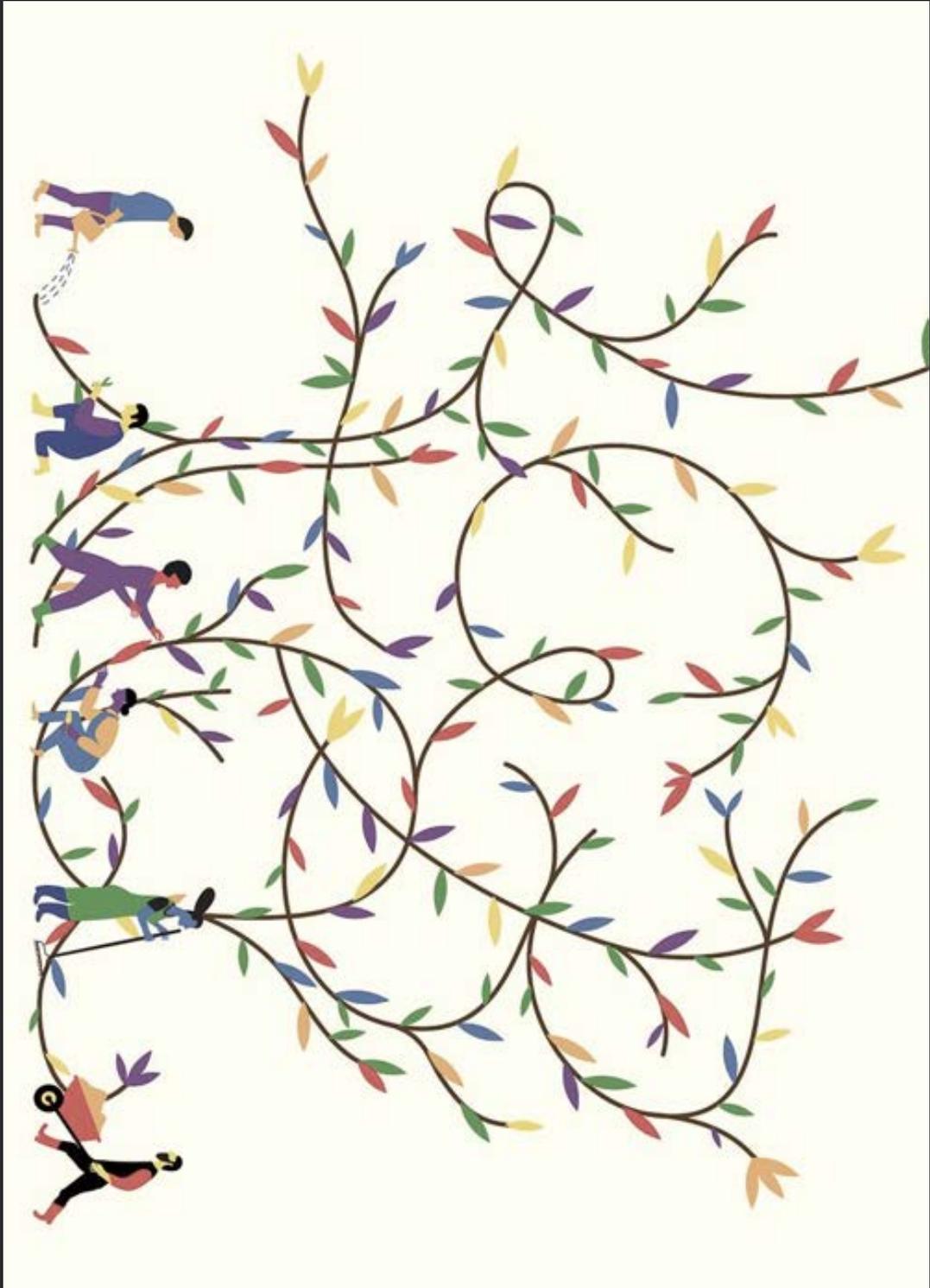


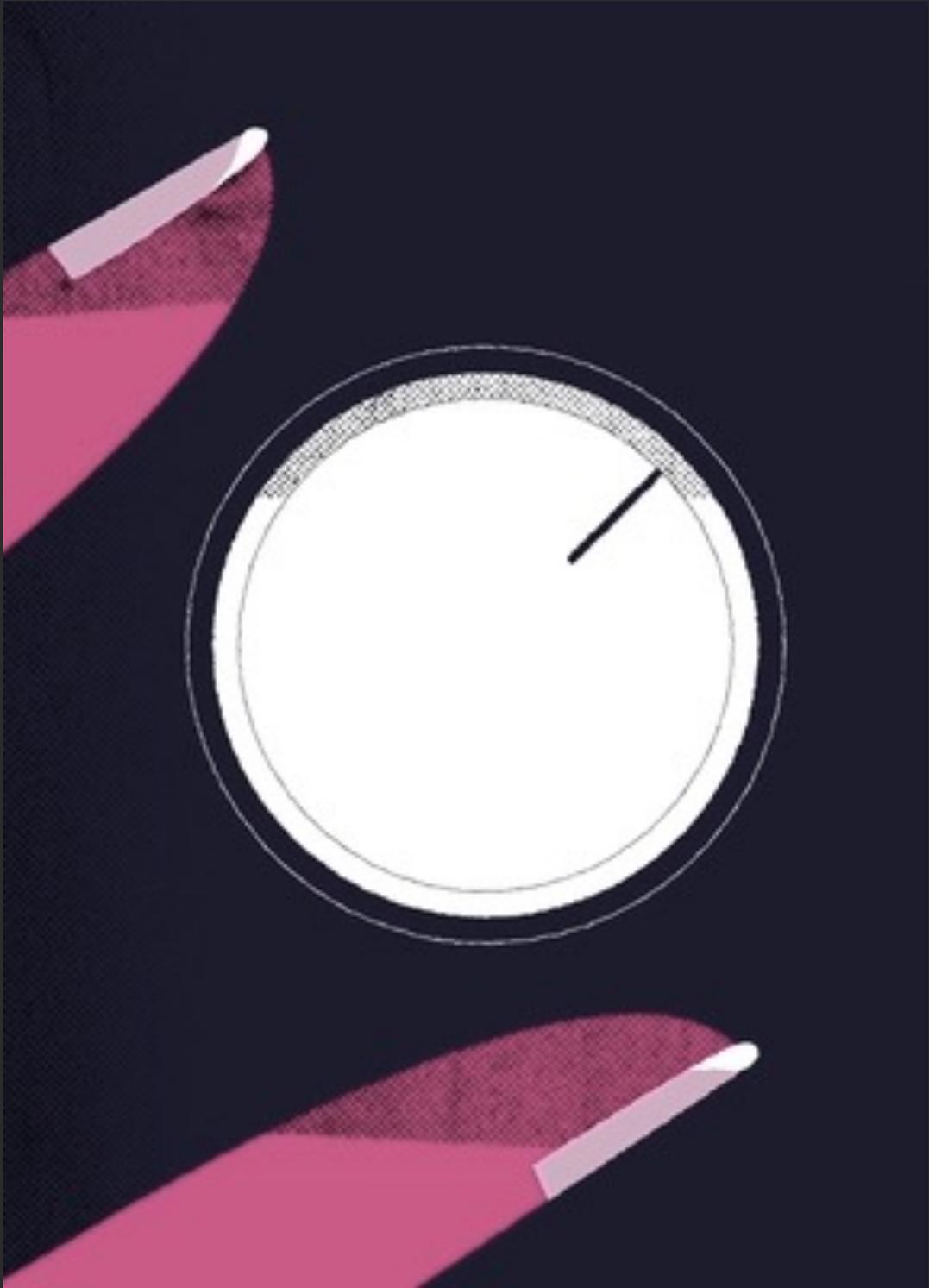


























Promoting
appetitive learning
of consensual,
empowered
vulnerability:

A contextual
behavioral
conceptualization of
intimacy

emily.sandoz@louisiana.edu

Filipino Food, Louisiana Ingredients

From St. Malo to the Southern Garden:
The History and Foodways of Filipinos in Louisiana

Randy Gonzales



Philippines



St. Malo, La.





St. Malo (1883)

Indigenous Filipino Dishes



Kinilaw



Paksiw



Sinigang

Kinilaw



Oyster



Shrimp



Trout Roe

Food for Thought:

**Teaching the UN Sustainability Goals in Sociology 494:
The Sociology of Food and Eating**

Emily Blosser

Assistant Professor of Sociology

Food for Thought Podcast

UN Sustainability Goals: 2,3,5,10,13,15

Topics Covered:

1. Food Insecurity
2. Cajun Food and Identity
3. Food Waste and Climate Change
4. Food Systems and Climate Change
5. Food, Mental Health, and Well-Being
6. Gender Inequality and Food
7. Prison and Food



Podcast Sessions

Scheduled Sessions:

1. Cajun Food and Identity
2. Prisons and Food
3. Gender Inequality and Food
4. Food Insecurity in Louisiana

Sessions I am Seeking Speakers for:

1. Food Waste and Climate Change
2. Food Systems and Climate Change
3. Food, Mental Health, and Well-Being



Assessment

Students reflect on the topics covered in podcasts through structured assignments and writing prompts.

Students discuss podcast topics in forums and through a final project.

A publication is planned for *Teaching Sociology* on using podcasts to teach the UN SDGs.



**2024 FACULTY SUSTAINABLE
DEVELOPMENT RESEARCH SUMMIT**

THANK YOU!

HEATHER STONE	TORI FLINT	MARIETTA ADAMS
JAMES ALBERT	LIANE HANCOCK	AIMEE BARBER
EMAD HABIB	YUNG-HSING WU	AMANDA MAYEAUX
LIZ SKILTON	MANYU LI	NATHAN ROBERTS
EMILY KANE	AYODEJI ADEGOKE	STEPHANIE ARCENEAUX
DAVID KIM	DAVID SQUIRES	EMILY SANDOZ
LING FEI	CHRISTINE WELLS	RANDY GONZALES
YU WANG	RYAN NELSON	EMILY BLOSSER
	HOLLY DAMICO	

Breakout Sessions & Lunch

Breakout sessions are in the LEED Center

Each of the previous presenters will find a corner – in the conference room, the training room, the classroom or the lounge area.

Boxed lunches will be available in the Atrium

Closing Remarks will resume in here at 12:20

Please do not leave.

These announcements are pretty exciting and we will take a few minutes to recognize 22 amazing graduate student researchers.



Creativity, Innovation, or Entrepreneurship

Call For Proposals: Research Grants

Creativity, Innovation, Entrepreneurship

Faculty and/or Graduate Students

Submission Process *Resembles* SDG

Questions:

josh.bendickson@louisiana.edu



More Sustainable Development Awards!

Call For Proposals – Round #3:

More research awards for research related to Sustainable Development – environmental protection, economic growth & social inclusion.

Open to all UL Lafayette researchers – faculty, staff, grad students, post-docs, undergraduate students, anyone (except Brian Bolton)

Application process will open April 15 - right after Josh's application window closes.

Questions: brian.bolton@louisiana.edu



**2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS**

Program Launched December 1, 2023

93 proposals submitted

26 graduate programs represented

22 award recipients to

Receive \$2,000 each & Present on April 12

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Jahidul Alam

English (Ph.D.)

Francis Bacon and Early Modern Environment:

Exploring How Salomon's House Refutes His Anthropocene

SDGs 6, 12, 13, 14, 15, 16

Faculty Reference: Clancy Ratliff

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Leticia Andrus

Educational Leadership (Ed.L.D.)

*Diversity Beyond Borders: A Literature Review of the Representation of International
Students in Diversity Discourses in American Universities*

SDGs 4, 8, 16, 17

Faculty Reference: Sebnem Cilesiz

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Bipin Bastakoti

Environmental Resource Science (M.S.)

*Assessing Soil Health and Environmental Sustainability Focusing on
Soil Map Units and Land-Use Change in Vermilion-Teche Basin, Louisiana*

SDGs 2, 8, 13, 15

Faculty Reference: Durga Poudel

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Presious Batubo

Earth and Energy Science (Ph.D.)

*Analyzing Sedimentary Deposits to Reconstruct Medium-sized
Paleo-Tsunami using Deep Neural Networks*

SDGs 9, 11

Faculty Reference: Gabriele Morra

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Katarina Brankovic

Francophone Studies (Ph.D.)

*Building a Culture of Inclusivity, Diversity, and Accessibility:
Advancing Sustainability at the University of Louisiana at Lafayette*

SDGs 4, 11, 16

Faculty Reference: Carol Landry

**2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS**

Markashia Brown

Educational Leadership (Ed.L.D.)

*What do we already know about the Financial Literacy of
Women & First-Generation African-American Women Students*

SDGs 4, 5, 8, 10

Faculty Reference: Amanda Mayeaux

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Redemer Buatsi

Communication (M.S.)

*Reporting Rape in the United States - A Content Analysis
of Media Coverage of Rape in the State of Louisiana*

SDGs 3, 5, 16

Faculty Reference: Patricia Holmes

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Kirsten Cases

Architecture (M.Arch)

*Reclaiming Neglected Infrastructure
Through Stabilizing Carbon Dynamics*

SDGs 7, 8, 9, 11, 12, 13, 15, 17

Faculty References: Corey Saft & Olivia Pontiff

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Allison Comeaux

Educational Leadership (Ed.L.D.)

*How Do Post-Secondary Disability Service Accommodations
in the U.S. Impact Educational Attainment*

SDGs 4, 16

Faculty Reference: Amanda Mayeaux

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Anamika Das

English (M.A.)

*Application of Natural Semantic Metalanguage in cross-cultural meaning analysis:
Comparing the usage of Bangla happy greetings with American English*

SDGs 4, 10, 16, 17

Faculty Reference: Mark Honegger

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Shayan Ebrahimi

Systems Engineering (Ph.D.)

Accelerating Decarbonization through Digital Twinning

SDGs 7, 9, 12

Faculty Reference: Farzad Ferdowsi

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Kubiat George

Engineering: Chemical (M.S.)

*Synergistic effect of UV and condensation on the degradation of carbon black reinforced
EPON-IPD thermosets with high enthalpy storage of shape memory*

SDGs 2, 6, 9, 11

Faculty Reference: Bill Chirdon

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Holly Heafner

Environmental Resource Science (M.S.)

Environmental inequities and lead toxicity:

A geospatial and demographic evaluation of soil contamination in Lafayette, LA

SDGs 3, 4, 10, 11, 16

Faculty Reference: Anna Paltseva

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Atif Khan

Engineering: Civil (M.S.)

*Utilization of Sugarcane Bagasse Ash and
Rice Husk Ash in sustainable construction bricks*

SDGs 7, 8, 9, 11, 12

Faculty Reference: Md. Jamal Khattak

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Farooq Azam Khanzada

Systems Engineering (Ph.D.)

*Does Automated Enforcement at Signalized
Intersections Truly Enhance Safety?*

SDGs 11

Faculty Reference: Xiaoduan Sun

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Deepak Jain Veerendra Kumar

Systems Engineering (Ph.D.)

*Advancing Soiling Loss Predictions
in PV Systems with Enhanced Models*

SDGs 7, 13

Faculty Reference: Terry Chambers

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Tyrell Lassair

Earth and Energy Science (Ph.D.)

Urban Agriculture as a Strategy to

Increase Food Access and Alleviate Food Insecurity

SDGs 2, 3, 4

Faculty Reference: Anna Paltseva

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Lillian Mambiri

Systems Engineering (Ph.D.)

*Bio-fabrication via Stereolithography of 4D Polycaprolactone-based Scaffolds
for Osteogenesis, Angiogenesis and Tumor Mechanobiology*

SDGs 1, 3, 10, 12

Faculty Reference: Dilip Depan

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Mahpara Mashiyat

Earth and Energy Science (Ph.D.)

*Observations of structural and functional changes in mineral
and organic soil wetlands caused by saltwater intrusion events in Louisiana*

SDGs 13, 14, 15

Faculty Reference: Jorge Villa

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Taslima Supty

Biology (M.S.)

*Impact of Childhood Adversity on Neuroinflammation:
Exploring the Connections & Implications*

SDGs 3, 4, 8, 11, 16

Faculty Reference: Karen Smith

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Jon-Patric Veal

Psychology (M.S.)

How Variations in Perspective Taking

Can Mediate the Effects of Empathy on Implicit Racial Bias

SDGs 10, 16

Faculty Reference: Emily Sandoz

2024 GRADUATE STUDENTS
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS

Renee Vincent

English (Ph.D.)

When DNR Means 'Do Not Rescue':

Hurricane Katrina and Medical Inequity within Disaster

SDGs 9, 11, 13, 15, 16, 17

Faculty Reference: David Squires

**2024 GRADUATE STUDENT
SUSTAINABLE DEVELOPMENT
RESEARCH AWARDS**

**Graduate Student
Sustainable Development
Research Summit**

Friday, April 12

8:30-2:00pm (roughly)

LITTE Center

**University of Louisiana at
Lafayette**



ACADEMIC SHOWCASE



Office of the Vice President
for Research, Innovation, and
Economic Development

Tuesday

March 12

8:30-11:30am

Student Union

Hallways &

Atchafalaya

Ballroom