LAS 95

THE 95TH ANNUAL MEETING OF THE LOUISIANA ACADEMY OF SCIENCES

Saturday, March 13, 2021

Online Hosting by Louisiana Tech University

Louisiana Academy of Sciences
95th Annual Meeting

Louisiana Tech University

MEETING-AT-A-GLANCE

Friday, March 12, 2021
Click the Title of the Topic you would like to attend to be linked via Zoom

6:00-6:10 PM	**Meeting Opening**
6:15-7:00 PM	**Roundtable on Diversity, Equity and Inclusivity** **Graduate Student Led: How to Approach Peer Mentoring**
7:00-7:45	**Graduate Student Led: What to Expect When Applying for and Entering Graduate School** **Networking/ Collegial Conversations**

Saturday, March 13, 2021

Click the Title of the Topic you would like to attend to be linked via Zoom

8:30-8:40	**Meeting Opening**
8:40-9:45 AM	**Morning Keynote Address**
10:00-11:45 AM	**Two-Minute Poster Competition Talks**and Oral Presentations*** **(click on the subject area to be taken directly to the appropriate Zoom meeting room)** Computer Science / Cyber Security / Math and Statistics Material Science and Engineering Chemistry / Earth Sciences / Physics Botany / Zoology Agriculture, Forestry, and Wildlife / Environmental Sciences Microbiology / Molecular and Biomedical Biology Science Education / Social Sciences / Science and Humanities
11:45-12:45 PM	**Poster Viewing** and Time for Discussion with the Presenters** To speak with the Presenters: click on the subject area below to be taken directly to the appropriate Zoom meeting room Computer Science / Cyber Security / Math and Statistics, Chemistry / Earth Sciences / Physics Botany / Zoology, Agriculture, Forestry, and Wildlife / Microbiology / Molecular and Biomedical Biology, Social Sciences
1:00-2:30 PM	**Centennial Keynote Address**

2:45-4:30 PM **Oral Presentations II***
(click on the subject area to be taken directly to the appropriate Zoom meeting room)

Computer Science / Cyber Security / Math and Statistics
Zoology/ Botany/ Microbiology / Molecular and Biomedical Biology
Agriculture, Forestry, and Wildlife
Environmental Sciences
Science and Humanities

2:30-4:45 PM **Poster Viewing** and Networking**

Computer Science / Cyber Security / Math and Statistics, Material Science and Engineering
Chemistry / Earth Sciences / Physics

Or

Botany / Zoology, Agriculture, Forestry, and Wildlife / Environmental Sciences
Microbiology / Molecular and Biomedical Biology, Social Sciences

4:45-5:30 PM **Business Meeting and Awards Ceremony**

***** Morning oral presentations will be used for judging of student competitions and non-competing presenters, with afternoon oral sessions used for non-competing presenters of all levels.
**The Student Poster Competition has two components. Posters will be displayed on the Louisiana Academy of Sciences website (Click here for a direct link) and Poster Talks (2 min each) will begin at 10:00am in designated seminar rooms. Competitors will be available from 11:45-12:45 for discussion during the Poster Viewing Session

LAS Help Desk: If you are having trouble locating a room, connecting or other issues we may be able to help with try connecting with us by clicking the Help Desk link.

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6:00-6:10 PM
Pre-Meeting Opening and Welcome

6:15-7:00
Roundtable on Diversity, Equity and Inclusivity

Graduate Student Led: How to Approach Peer Mentoring

7:00-7:45
Graduate Student Led: What to expect when applying for and entering graduate school

Networking /Collegial Conversations

Saturday, March 13

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8:30-9:45
Meeting opening and Morning Keynote Address
CENTENNIAL KEYNOTE ADDRESS

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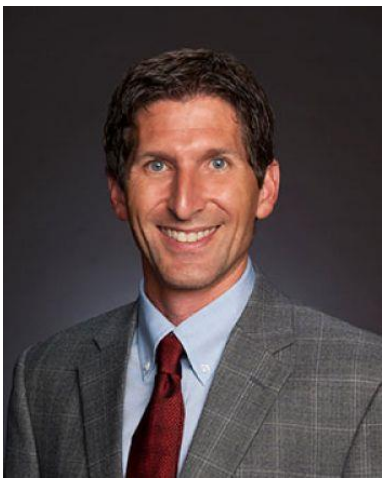
Building Social Justice into Protection and Restoration Planning: The Need for Transdisciplinary Research in Coastal Louisiana



Scott A. Hemmerling, Ph.D.
Director of Human Dimensions
The Water Institute of the Gulf

In recent decades, coastal management in Louisiana has evolved from a piecemeal approach focused on local area benefits to a large-scale, unified approach that relies heavily on numerical models to optimize project selection and location on a broad scale. While both regimes have strong science and engineering foundations, this evolution ultimately results in a shifting of the distribution of the benefits of protection and restoration to greater spatial and temporal scales. At the same time, the viewpoints of individual communities often have less influence on the planning process in unified, science-driven approaches, creating an increased potential for social and environmental injustices. This situation is beginning to change as transdisciplinary approaches to scientific research in coastal Louisiana have increasingly allowed for the input of qualitative local knowledge into numerical models, providing tangible ways to evaluate potential outcomes and shortcomings of ongoing and planned restoration and protection projects. Methods such as local knowledge mapping, spatial video geonarratives, participatory modeling, and competency groups have been used by researchers to collect, analyze, and map qualitative data with the goal of characterizing local community members' knowledge of the short- and long-term outcomes of coastal protection and restoration projects. Results provide a new, geographically targeted, evidence base for planning strategies. Regardless of the challenges, it is essential that coastal planners account for the local knowledge of coastal residents in a fully integrated manner to develop a more complete evidence base and guide the development of robust and socially just coastal protection and restoration plans.

10:00 – 11:45 AM
Two-Minute Poster Competition Talks and Oral Presentations

(Bold lettering indicates presentation for student competition)
(Click on the Name of the Subject Area to be linked via Zoom)

Computer Science / Cyber Security and Information Assurance / Mathematics and Statistics

2 min Poster Talks
Undergraduate Competition

P1 **Bradley Y.** and Y. Banadaki (SUBR)
Intrusion detection using auto AI

P2 **Davis D.**, B. Mullamuri, and Y. Banadaki (SUBR)
Simulation of quantum cheques circuits in five-qubit IBM Quantum Computer

P3 **Jaiyesi L.** and YB Reddy (GSU)
Identify malicious programming or weakness in web design

Graduate Competition

P4 **Bhandari U.**, C. Zhang, M. Rafi, J. Lei, C. Zeng, S. Guo, and S. Yang (SUBR/LSU)
Hardness prediction of refractory high-entropy alloys by machine learning with experimental validation

P5 **Rafi M.**, C. Zhang, J. Lei, U. Bhandari, and S. Yang (SUBR/LSU)
Yield strength prediction of refractory high entropy alloy using machine learning

P6 **Mullamuri B.**, D. Davis, and Y. Banadaki (SUBR)
Quantum programming languages – An Overview

Oral Presentations:
Undergraduate Competition

10:15 **Abdussalam I.**, M Salam, and Y. Banadaki (SUBR)
A perspective of machine learning in wireless sensor networks

10:30 **Francis M**., E. Francois, and P. Sreekumari (GSU)
Towards an Extensive Data Analysis of COVID-19 Cases and Deaths in the United States

10:45 **Brooks J.** and Y. Bonadaki (SUBR)
Differentiating Potentially Malicious Darknet Traffic from Benign Network Traffic Using Machine Learning

Graduate Competition

11:00 **Rafi, M.** and R. M Salam (SUBR)
Machine learning based anomaly detection in internet of things networks

11:15 **Ranjbar, S.** and Y. Bonadaki (SUBR)
Review of Machine Learning Applications in Depression

11:30 **Ghaemimood, S.**, R. Joubertm, and Y. Bonadaki (SUBR)
Application of Text-Mining and Image Processing Techniques on Developing Big Geological and Hydrological Data Sets

Materials Science and Engineering

Oral Presentations
Undergraduate Competition

10:15 **Audain, S.,** D. Roberts, H. Yang, N. Seetala, H. Wen, and S. Guo (GSU/LSU)
Effect of Cu composition on magnetization of laser heat treated SmCo/Cu powder mixtures

Regular Contributions

10:30 Khondoker M. (SUBR)
Characterization of help fibers for polylactic acid-based biocomposite

10:45 Billa, S., I. Hossain, C. Gong, T. Murray, L. Blaga, N. Moldovan, and P. Arumugam (TECH)
A multifunctional electrochemical biosensor probe for real-time glutamate and GABA detection.

11:00 Moore, T., H. Yang, R. Burell, and C. Peter (GSU)
Impact of laser pulse width on the melting of nanoparticles

11:15 McGibboney, C**.**, S. Yoshida, N. Fujishima, S. Takahashi, and T. Sasaki (SELU/NiigataU)
Progress on developing a general theory for fatigue with the field theory of deformation and fracture

Chemistry / Earth Science / Physics

2 min Poster Talks
Undergraduate Competition

P7 **Bergeron D.**, D. Wayment, P. White Jr., and D. Spaunhorst (NSU/USDA)
Dissipation of clomazone and pendimethalin in Southeastern Louisiana sugarcane soils

P8 **Lo M.**, S. Murru, H. Vo, A. Dahal, S. Singh, and S. Jois, (ULM) (ULM)
Synthesis and anticancer activity evaluation of 1,3-diarylpyrazol-5-ones as potential anticancer agents

P9 **Clifton, K.** and S. Murru (ULM)
Electro-chemical cyclization of hydroxychalcones for the synthesis of Flavonoids

Oral Presentations
Undergraduate Competition

10:15 **Davis, J.** and T. Sommerfeld (SELU)
Lifetimes of aromatic and non-aromatic alkaline earth trimer dianions

10:30 **Walls III T.**, M. Yanez Diaz**,** and P. Chanda (SELU)
Diastereoselective synthesis of syn- or anti-β-hydroxy-α-substituted phenyl carboxylic acid esters

Regular Contributions

10:45 Junk, T., D. Smith, D. Alexis and F. Fronzek (ULL/LSU)
Synthesis of novel heterocyclic organotellurium heterocycles and their properties

11:00 Lasater, A., and D. Rivera (Nicholls)
Nickel sulfide as a biosensory material

Botany / Zoology

2 Minute Poster Talks
Graduate Competition

P10 **Alterman A.** and T. Clay (Nicholls)
Baseline population information and habitat usage of box turtles (*Terrapene carolina*) within the chenier forest on Grand Isle, Louisiana

P11 **Beck T.** and J. Whitaker (Nicholls)
Response of the eastern oyster, *Crassostrea virginica*, to temperature and salinity changes

P12 **Crookston, C.** and C. Beachy (SELU)
Geographic variation in skeletal development of the Southern two-lined salamander

P13 **Maldonado B.** and C. Beachy (SELU)
Life history aspects of the three-lined salamander

Oral Presentations
Graduate Competition

10:15 **Foster C.** and J. Willis (Nicholls)
The effects of freshwater inundation depth and duration on the growth response and recovery of four marsh foundational species

10:30 **Woods A**. and J. Willis (Nicholls)
Interaction of wetland vegetation with microplastics in surface waters.

Regular Contributions

10:45 Lambiotte A. and J. Willis (Nicholls)
Effects of diversion-relevant salinity and hydrologic regimes on foundational marsh species (*Spartina alterniflora, Spartina patens, Typha latifolia*)

11:00 Nair P. (GSU)
Responses of *Arabidopsis thaliana* seedlings exposed to engineered metal and metal oxide nanoparticles

Agriculture, Forestry, and Wildlife / Environmental Science

2 Minute Poster Talk
Undergraduate Competition

P14 **Vuong O.**, W. Tangkham, and F. Lemieux (MSU)
Effects of Dark Rye, Cricket, and Pea Powders on the Properties of 3D-Printed Novel Mulberry Canjeero

Graduate Competition

P15 **Cortez J.** and**,** R. Boopathy (Nicholls)
Biodegradation of triclosan by bacteria isolated from the Thibodaux sewage treatment plant

P16 **Sallmann, D.**, S. David, and B. Piazza (Nicholls)
A comparison of floodplain restoration sites on the Mississippi River with a focus on gars (Lepisosteidae)

Oral Presentations
Undergraduate Competition

10:15 **Naquin, E.**, J.P. Daigle, and R. Boopathy (Nicholls)
Presence of multi-drug resistant pathogens and antibiotic resistance genes in waterways and sea food populations of rural southeast Louisiana, USA

10:30 **Pipkin, A.**, W. Tangkham, and F. LeMieux . (MSU)
Effect of three probiotic strains: Saccharomyces cerevisiae, Lactobacillus acidophilus and Pediococcus acidilactici on the properties of quinoa yogurt.

Graduate Competition

10:45 **Mire, M.** and E. Zou (Nicholls)
Effects in vitro of 20-hydroxyecdysone and chrysene on hepatopancreatic expression of a CYP4 gene in blue crab, *Callinectes sapidus*

11:00 **Bates, B.**, Q. Fontenot, and G. LaFleur (Nicholls)
Comparing abundance of fauna between terraces and a control marsh in a southeast Louisiana restoration project

11:15 **Bosco-Namwamba**, J, Y. Twumasi, R. Okwemba, B. Osimbo, J. Oppong, and C. Akinrinwoye (SUBR)
Using Google Earth/ArcGIS for temporal modeling of urban tree benefits, urban heat islands, land cover and flora inventory in East Baton Rouge.

Regular Contributions

11:30 Frimpong, D., A. Asare-Ansah, S. Amankwah, A. Yeboah, P. Loh, F. Owusu, Y. Twumasi, and J. Bosco-Namwamba (SUBR)
Urbanization and the emergence of slums: Case Study of Jamestown, Accra.

Microbiology / Molecular and Biomedical Biology

2 Minute Poster Talks
Undergraduate Competition

P17 **Sparkman, J.**, E. Meaney, S. Venigalla, J. Straub, and J. Newman (TECH)
The Influence of MED12 Knockdown on Adipogenesis

P18 **Toups, C.**, E. Naquin, C. Oubre, and R. Boopathy (Nicholls)
Presence of antibiotic resistant bacteria and antibiotic resistance genes in the migratory birds of Louisiana

Graduate Competition

P19 **Roy, T.**, S. Boateng, S. Mbeumi, R. Chamcheu, A. Walker, K. Kousoulas, S. Murru, and J. Chamcheu (ULM)
Synthesis and identification of new kinase inhibitors with anti-skin cancer activities via data-driven evaluation of fisetin analogs

P20 **Boateng, S.,** T. Roy, S. Banang-Mbeumi, R. Chamcheu, A. Walker, J. Fotie, and J. Chamcheu (ULM)
Synthesis and Biological Evaluation of a Small Library of Antimalarial-Derivatives Identify Novel Potent Anticancer Compounds

P21 **Mumphrey, J.,** T. Teach, and J. Newman (TECH)
Notch and Mediator work together to direct hASC self-renewal

P23 **Gaines, D.,** N. Crews, and G. Nestorova (TECH)
One-step nucleic acid sampling tool for genetic analysis on the International Space Station

Oral Presentations
Undergraduate Competition

10:15 **Lee. L.**, S. Venigalla, H. Barnett, P. Austin, J. Matthews, and J. Newman (TECH)
Wastewater Detection of SARS-CoV2

10:30 **Naquin, E.**, C. Oubre, H. Soorya, and R. Boopathy (Nicholls)
Effect of the sulfonamide class of antibiotics on a bacterial consortium isolated from an anaerobic digester of a rural sewage treatment plant

10:45 **Smith, D.**, L. Ma, J. Brunson, A. Gautreaux, G. Bruno, A. Bolton, A. Trosclair, B. DeOre, and H. Pitre (NWSU)
Survey of Aeromonas prevalence within the Natchitoches waterways

Graduate Competition

11:00 **Rinderle, C.** and J. Newman (TECH)
The Role of MED12 in Adipogenesis

11:15 **Cart, J.** and J. Newman (TECH)
The Role of Notch1 and Notch 3 in Adult Stem Cell Osteogenic Differentiation

11:30 **Hutson, H.**, K. Willis, C. Nwokwu, M. Maynard, and G. Nestorova (TECH)
Photon versus proton neurotoxicity: Impact on mitochondrial function and 8-OHdG base-excision repair mechanism in human astrocytes

Science Education / Social Sciences / Sciences and Humanities

Oral Presentations
Regular Contributions

10:15 Gary A. and M Malbrough (Youth Adv. Team)
Youth Development through Controlled Chaos

10:30 Lo, G (Nicholls)
Assessing the effectiveness of an interactive tutorial that utilizes explanatory questioning

Undergraduate Competition

10:45 **Naquin, E.**, C. Oubre, and J. Doucet (Nicholls)
Toward Molecular Mechanisms for Historical Houma Indian Curatives. II

11:45-12:30

Poster Viewing and Discussion with Presenters

(All Presenters for the Student Competition should be available at this time)

(click on "Poster Viewing" to be taken to an electronic version of the poster on the LAS website)

A list of all posters for each topic begins on page 11

To Discuss Posters with the Presenter, click on one of the subject area groups below:

Computer Science / Cyber Security / Math and Statistics, Material Science and Engineering
Chemistry / Earth Sciences / Physics

Or

Botany / Zoology, Agriculture, Forestry, and Wildlife / Environmental Sciences
Microbiology / Molecular and Biomedical Biology, Social Sciences

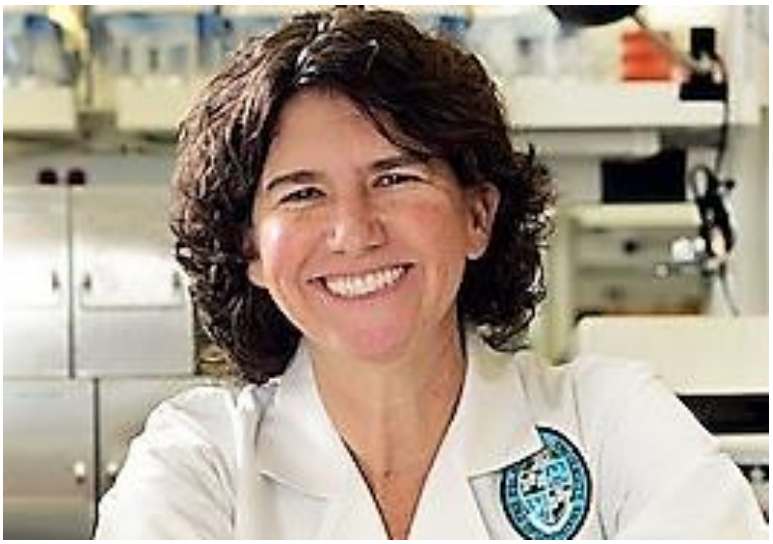
1:00-2:30 pm

CENTENNIAL KEYNOTE ADDRESS

click above to link to the address

CENTENNIAL KEYNOTE ADDRESS

From Variolation to RNA: How Vaccine Science Has Impacted Humankind



Lisa A. Morici, Ph.D.
Associate Professor
Department of Microbiology and Immunology
Tulane University School of Medicine

Throughout history, infectious diseases have threatened humankind. The Black Death, smallpox, and the current pandemic caused by SARS CoV-2 are just a few examples of the infectious diseases that have caused significant human morbidity and mortality over the past centuries. The discovery and development of vaccines is undoubtedly one of the greatest public health interventions in modern civilization. From the ancient use of variolation to the more recent introduction of messenger RNA vaccines, vaccine science has dramatically improved our ability to combat microbial pathogens. Significant advances in the physical and life sciences in past decades led to the production of a SARS CoV-2 vaccine in less than a year, a historic and unprecedented accomplishment. This address will celebrate the history of vaccine development and recent achievements and will identify remaining challenges, including anti-science movements, vaccine hesitancy, and misinformation spread through social media.

2:45-4:30 pm Oral Presentations

(Click on the Name of the Subject Area to be linked via Zoom)

Computer Science / Cyber Security and Information Assurance / Mathematics and Statistics

2:45 Namwamba, J., Y. Twumasi, R. Okwemba, B. Osimbo, C. Akinrinwoye, J. Oppong, S. Olwochi (SU/US Inter. U)
Applying the normal distribution generator to determine tolerance spans of modeled death rates of developed countries

3:00 White, A., G. White, C. Catherine, and Y. Reddy (GSU)
Tigris Communications

3:15 Avgin, H. and M. Salam (SUBR)
GPS spoofing attack detection in drone using machine learning

3:30 Roberson, S. and M. Salam (SUBR)
Safely scaling virtual private network for a major telecom company during pandemic

3:45 Posey, N. and B. Baniya (GSU)
Virtual Reality Simulation Application Break Free

4:00 Williams, S. and B.Baniya (GSU)
Skin Cancer Detection and Segmentation

Zoology / Botany/ Microbiology/Molecular and Biomedical Biology

2:45 Beachy C. (SELU)
How plethodontid lunglessness informs a perspective on ancestral state reconstruction for life cycle evolution

3:00 Brock T. and C. Beachy (SELU)
Maturation and metamorphosis in Patch-nosed salamanders

3:15 Rivera J. and B. Crother (SELU)
Using geometric morphometrics to evaluate the diversity within the genus Siren

3:30 Nwokwu, C., S. Ishaq Bari, H. Hutson, and G. Nestorova (TECH)
ExoPRIME: solid-phase immunoisolation and genetic analysis of pure intact exosome populations

3:45 Bradford A. and T. Woods. (Tulane)
Loss of insulin-like growth factor 1 receptor in vascular smooth muscle cells promotes increased mirna-221 and -222 in type 2 diabetes

4:00 Bassa, B. and R. Uppu (SUBR)
The unique SARS-CoV-2 variant of Louisiana

Agriculture, Forestry, and Wildlife

2:45 Bui, D., W. Tangkham, and F. LeMieux (MSU)
Effect of Cricket Powder on Shelf-Life of Fresh Pork Quality.

3:00 Sullivan, B., H. Munro, K. Gandhi (USDA-FS/UGA)
What makes a tree smell good to a pine beetle?

3:15 Twumasi, Y, E. Merem, J. Bosco-Namwamba, R. Okwemba, J. Wesley, J. Oppong, C. Akinrinwoye, K. LaCour-Conant (SUBR)
The Assessment of Dairy Production and Milk Use: The Case Africa Using GIS.

3:30 Falodun, D (SUBR-EBR)
Determination of the urban forest ecosystem structure and ecosystem benefits for the city of Baker Louisiana, using i-Tree Eco Model

3:45 Asare-Ansah, A., D. Frimpong, S. Amankwah, A., Yeboah, P. Loh, F. Owusu, Y. Twumasi, J, and Bosco-Namwamba (SUBR)
Monitoring aerosol concentrations in the Sahara Desert using Google Earth Engine.

4:00 Loh, P., S. Amankwah, F. Owusu, A. Asare-Anash, D. Frimpong, A. Yeboah, J. Oppong, Y. Twumasi, and J. Bosco-Namwamba (SUBR)
Impact of Urban Development on Sustainable Urban Forest Management: A land-cover change assessment in Accra, Ghana.

4:15 Owusu, F., Asare-Ansah, D., Frimpong, S. Amankwah, A. Yeboah, P. Loh, J. Oppong, Y. Twumasi, J. Bosco-Namwamba (SUBR)
Assessing the impact of climate change on the yield of pepper production in Louisiana

Environmental Science

2:45 Siska, P. and M. Kudlac (LSUS/Slovak Tech)
Spatial coincidence model for matching the spatial distribution of cancer and the natural rock radioactivity.

3:00 Gary, L., K. Fitzmorris, R. Reimers, and S. Sherchan (Tulane)
Rapidly evolving WBE (Wastewater-Based Epidemiology) for COVID-19.

3:15 Dasgupta, P. and D. Roy (SELU/Alcorn State)
An analysis of occupational exposures and lung related diseases in Louisiana.

3:30 Oppong, J., Y. Twumasi, J.B. Namwamba, R. Okewemba, and C. Akinrinwoye (SUBR)
Disaster management and risk reduction in slum communities in Accra, Ghana.

3:45 Oppong, J., Y. Twumasi, J.B. Namwamba, R. Okewemba, and C. Olufunke (SUBR)
Growth management as a tool for waste management in the Accra metropolitan area in Ghana

4:00 Namwamba, J.B., K. Abdollahi, Y. Twumasi, B. Osimbo, C. Olufunke, and J. Oppong (SUBR)
Spatial and temporal non-casual correlational modeling for atmospheric data and its application in estimating ambient air-cooling benefits by urban trees in urban environments in United States.

4:15 Oppong, J., Y. Twumasi, J.B. Namwamba, R. Okewemba, and C. Akinrinwoye (SUBR)
Environmental justice concerns in mining communities in Ghana: the case of Kenyashi

4:30 Akinrinwoye, C., Y. Twumasi, J. Bosco, J. Oppong, B. Osimbo, and R. Okwemba (SUBR)
An analysis of climate and land cover changes Baton Rouge, Louisiana

Science and Humanities

2:45 Doucet, J. (Nicholls)
Ecological Anthropology of a Louisiana Marshland Village

3:00 Giguette, R. and A. Alexander (Nicholls)
How Do Humans Compute Meaning?

3:15 Busby, A. (Nicholls)
Two Cultures, One Classroom: An Examination of a Class on Art and Science

3:30 Doucet, J. (Nicholls)
A Bacilli on the Bononi: A Fifth Reading of Science Poetry.

3:45 LaFleur, G., G. Engeron, H. Dicharry, B. Crochet, E. Venable, and M. Robichaux (Nicholls)
A Bestiary of Physiological Models to Highlight the Value of Comparative Biology

2:45 – 4:45 pm

Poster Viewing and Discussion with Presenters

(Presenters may or may not be available at this time)

To interact with presenters of posters click on one of the subject area groups below.

Computer Science / Cyber Security / Math and Statistics, Material Science and Engineering
Chemistry / Earth Sciences / Physics

Or

Botany / Zoology, Agriculture, Forestry, and Wildlife / Environmental Sciences
Microbiology / Molecular and Biomedical Biology, Social Sciences

To view an electronic copy of any poster click "Poster Viewing" to go to the LAS website. To look at posters in a specific subject area, click the main topical headings in the "Poster Listing by Subject Area"

Poster Listing by Subject Area

Clicking on these links will take you to a PDF copy of the poster. Click one of the two sections above to zoom meet with authors!

Computer Science / Cyber Security and Information Assurance / Mathematics and Statistics

P1 **Bradley Y.** and Y. Banadaki (SUBR)
Intrusion detection using auto AI

P2 **Davis D.**, B. Mullamuri, and Y. Banadaki (SUBR)
Simulation of quantum cheques circuits in five-qubit IBM Quantum Computer

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Identify malicious programming or weakness in web design

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Hardness prediction of refractory high-entropy alloys by machine learning with experimental validation

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Yield strength prediction of refractory high entropy alloy using machine learning

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Quantum programming languages – An Overview

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Dissipation of clomazone and pendimethalin in Southeastern Louisiana sugarcane soils

P8 **Lo M.**, S. Murru, H. Vo, A. Dahal, S. Singh, and S. Jois, (ULM) (ULM)
Synthesis and anticancer activity evaluation of 1,3-diarylpyrazol-5-ones as potential anticancer agents

P9 **Clifton, K.** and S. Murru (ULM)
Electro-chemical cyclization of hydroxychalcones for the synthesis of Flavonoids

P26 Chansey, C., K. Boudreaux, I. Pal, and M. Jadhav. (ULL)
Micrometeorite Hunting in Lafayette, Louisiana.

P27 Rattanachai,B and D. Rivera (NSU)
Microwave-assisted synthesis and characterization of CuS nanostructures: towards the development of a luminescence-based biosensing material.

P28 Smith, C., V. Thalangamaarachchige, K. Boggavarapu and N. Dissanayake (MSU)
Dissolution of Biomass with ionic liquids

P29 Anyanwu, A. N. Dissanayake, K. Boggavarapu, and V.Thalangamaarachchige (MSU)
Ionic liquids as cellulose solvents

P30 Fierro, J., V. Thalangamaarachchige, N. Dissanayake and K. Boggavarapu (MSU)
Organocatalysis using imidazole-based ionic liquids

P31 Vaughan, H. and S. Meissner (MSU)
GC-MS Analysis of E-Cigarettes and Vapes: Unexpected In Situ Formed by-Products and their Proposed Chemical Mechanisms and Methods to Minimize Toxicant Formation in E-Cigarettes

P32 Xavior, A.J., V. Thalangamaarachchige, K. Boggavarapu and N. Dissanayake (MSU)
Chitin extraction using ionic liquids.

P33 Emami, E., M. Agbo, A. Thomas, S. Reliford, B. Peco, S. Giglio, and B. Bauers (SELU)
Mathematical modeling of pyrophosphate sensing by a supramolecular assembly.

P34 Qamar, R., D. Barnes, Z. Mckean, L. Griffin-Scudari, and C. Petho (SELU)
Characterization and Purification of P. falciparum Hypoxanthine-Guanine-Xanthine Phosphoribosyltransferase (HGXPRT) From Recombinant E. coli.

P35 Vo, H., S. Murru, M. Lo, A. Dahal and S. Jois (ULM)
Microwave assisted synthesis of five and six membered nitrogen heterocyclic compounds and their biological evaluation:

P36 B. Peco, A. McCullough, S. Primeaux, and P. Chanda (SELU)
Boron-mediated syn and anti-selective aldol reactions of N,N-dialkylphenylacetamides.

Botany / Zoology

P10 **Alterman A.** and T. Clay (Nicholls)
Baseline population information and habitat usage of box turtles (*Terrapene carolina*) within the chenier forest on Grand Isle, Louisiana

P11 **Beck T.** and J. Whitaker (Nicholls)
Response of the eastern oyster, *Crassostrea virginica*, to temperature and salinity changes

P12 **Crookston, C.** and C. Beachy (SELU)
Geographic variation in skeletal development of the Southern two-lined salamander

P13 **Maldonado B.** and C. Beachy (SELU)
Life history aspects of the three-lined salamander

P37 Samples C. (SELU)
The impacts of wild boar (*Sus scrofa*) on vertebrate communities of wet longleaf pine ecosystems

Agriculture, Forestry, and Wildlife / Environmental Science

P14 **Vuong O.**, W. Tangkham, and F. Lemieux (MSU)
Effects of Dark Rye, Cricket, and Pea Powders on the Properties of 3D-Printed Novel Mulberry Canjeero

P15 **Cortez J.** and**,** R. Boopathy (Nicholls)
Biodegradation of triclosan by bacteria isolated from the Thibodaux sewage treatment plant

P16 **Sallmann, D.**, S. David, and B. Piazza (Nicholls)
A comparison of floodplain restoration sites on the Mississippi River with a focus on gars (Lepisosteidae)

P39 Gray, K., and T. Clay (Nicholls)
Bycatch Community Assemblage During Diamondback Terrapin Sampling.

P40 Honan, C (SELU)
Injuries in Testudines and How They Differ Across Species, Sex, and Age

P41 Amankwah, S., F. Owusu, A. Boatemaa, D. Frimpong, A. Yeboah, P. Loh, J. Oppong, Y. Twumasi, and, J. Namwamba (SUBR)
Monitoring the extent of Illegal Mining (Galamsey) in Ghana.

P45 Crosby, D. and J. Bosco-Namwamba (SUBR)
Utilization of college campus urban forest in boosting students' academic life and success

Microbiology / Molecular and Biomedical Biology

P17 **Sparkman, J.**, E. Meaney, S. Venigalla, J. Straub, and J. Newman (TECH)
The Influence of MED12 Knockdown on Adipogenesis

P18 **Toups, C.**, E. Naquin, C. Oubre, and R. Boopathy (Nicholls)
Presence of antibiotic resistant bacteria and antibiotic resistance genes in the migratory birds of Louisiana

P19 **Roy, T.**, S. Boateng, S. Mbeumi, R. Chamcheu, A. Walker, K. Kousoulas, S. Murru, and J. Chamcheu (ULM)
Synthesis and identification of new kinase inhibitors with anti-skin cancer activities via data-driven evaluation of fisetin analogs

P20 **Boateng, S.,** T. Roy, S. Banang-Mbeumi, R. Chamcheu, A. Walker, J. Fotie, and J. Chamcheu (ULM)
Synthesis and Biological Evaluation of a Small Library of Antimalarial-Derivatives Identify Novel Potent Anticancer Compounds

P21 **Mumphrey, J.,** T. Teach, and J. Newman (TECH)
Notch and Mediator work together to direct hASC self-renewal

P23 **Gaines, D.,** N. Crews, and G. Nestorova (TECH)
One-step nucleic acid sampling tool for genetic analysis on the International Space Station

P46 Hebert, M. and C. Struchtemeyer (MSU)
Monitoring the prevalence of methicillin resistant Staphylococcus aureus on common surfaces in a university biology building

P47 Mathkour, M., E. Gissom (LUNO)
Sex Differences in Hippocampal Morphology and Hippocampal-Dependent Learning Strategy in Prepubertal Rats.

Mathematics and Statistics

P24 McGibboney, C. (SELU)
Geometries of the Riemann Zeta Function

Materials Science and Engineering

P25 Bari, S., L. Reis, and G. Nestorova (TECH)
Lab-on-a-chip immunosensor for the quantification of TNF-α: experimental results and 3D numerical simulation of heat transfer

Social Sciences/ Science and Humanities

P48 Messina, A. and E. Varela (LOYOLA)
The relation between traumatic exposure type, negative cognitions, and social impairments

P49 Saulsman, C. and E. Zucker (LOYOLA)
Interpersonal distance, evaluation apprehension, and state anxiety in college students

P50 Andia Jara, P. and M. Silverstein (LOYOLA)
Stress, coping, and resilience in parents of children with Autism Spectrum Disorder

P51 Chiasson, L. and J. Plaisance (Nicholls)
A comparison of levels of burnout in occupational therapists in Louisiana

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- To encourage and conduct scientific discussions; to publish and disseminate scientific material; to conduct all enterprises deemed to promote the causes of science; to foster the applications of science to the problems of humanity.
- To encourage and assist teachers in Louisiana's elementary and secondary schools with the caliber of instruction necessary to generate and maintain an interest in all areas of science.
- To be an active voice representing science in both higher education and K-12 in Louisiana.

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Dr. Kamran Abdollahi Memoriam

Dr. Kamran Abdollahi joined Southern University in 1992. He was a full-time tenured professor and Program Leader of the Urban Forestry and Natural Resources Department, College of Agriculture. He served as Program Leader/Chair and Graduate Director, 2006 to 2019; Project Director and Authorized Technical Representative for SU USDA-McIntire-Stennis Program, 2009 t0 2019; Project Director for the SU USDA-Renewable Resources Extension Act (RREA) Program, 2006-2019; and Project Director for 20 National Research, Teaching and Training Projects, 1992-2019. His academic credentials include a doctorate and an M.S. from Austin state University, Texas; a B.S. from Pennsylvania State University (Penn State), University Park, Pennsylvania, and several specialized certificates from various institutions. His national professional leadership roles include: National President, Arboricultural Science and Education Academy, ISA, 2012-2014; National Fellow, Society of American Foresters; National Advisory Council Member to the USDA Secretary of Agriculture, National Urban and Community Forestry Advisory Council (NUCFAC), 2009-2013 and 2015-2018; National Chair, Urban Forestry TWG, Society of American Foresters (SAF), 2009-2011 & 2016- 2019; National Executive Committee Member, National Association of University Forest Resources Programs (NAUFRP), 2009-2012 and 2013-2019; National Chair, 1890 McIntire-Stennis Coordinating Council, 2011-2016; National Committee Member, Society of American Foresters (SAF) Accreditation Committee. 2009-2012; National Council Member on the SAF National Accreditation Committee. 2008; and several other national roles. He has been serving on the Editorial Board of the Journal of Arboriculture & Urban Forestry, and as a Reviewer for several other journals. At the state level, he also played seral roles: Member, LA Governor's Advisory Panel for the Environmental Quality (LEAP); Director for Louisiana, International Society of Arboriculture (ISA), 1999-2002; Division Chair, Agriculture and Forestry, Louisiana Academy of Sciences, 2016-present; State Chair, Louisiana SAF; Council Member, Louisiana Urban Forestry Council, 2016-2020; and Executive Board Member, Louisiana Urban Forestry Council (LUFC), 1999-Present. Dr. Abdollahi was a commending professor, a distinguished colleague, and above all, and an upstanding human being.