

**Louisiana Academy of Sciences
92nd Annual Meeting
Louisiana State University Alexandria**

MEETING-AT-A-GLANCE

7:45-8:30 AM	Continental Breakfast	Brumfield Caffey Ballroom
7:45-9:45 AM	Registration	Caffey Annex
8:30-8:40	Meeting Opening	Brumfield Caffey Ballroom
8:40-9:45 AM	Morning Keynote Address	Brumfield Caffey Ballroom
10:00-10:15 AM	Two-Minute Poster Competition Talks**	Mulder Hall (Room Listed)
	Computer Science / Mathematics and Statistics	144
	Material Science and Engineering	146
	Chemistry / Physics / Earth Sciences	221/223
	Zoology	226
	Agriculture / Forestry / Wildlife / Environmental Sciences	219
	Microbiology / Molecular Biology Biomedical Sciences	220/222
	Science Education / Social Sciences / Science and Humanities	224
10:15-11:45 AM	Oral Presentations*	Mulder Hall
	Computer Science / Mathematics and Statistics	144
	Material Science and Engineering	146
	Chemistry / Physics / Earth Sciences	221/223
	Zoology	226
	Agriculture / Forestry / Wildlife / Environmental Sciences	219
	Microbiology / Molecular Biology Biomedical Sciences	220/222
	Science Education / Social Sciences / Science and Humanities	224
11:45-12:30 AM	Poster Competition Displays and Poster Viewing**	Mulder Hall 145 and 147
	See pages for two minute talks for location of posters by topic	
12:30-2:15 PM	Lunch and Centennial Keynote Address	Brumfield Caffey Ballroom
2:30-4:45 PM	Poster Viewing	Mulder Hall 145 and 147
2:15-4:15 PM	Oral Presentations II	
	Computer Science	144
	Mathematics and Statistics	146
	Material Science and Engineering	146
	Chemistry / Physics	221/223
	Zoology	226
	Agriculture / Forestry / Wildlife / Environmental Sciences	219
	Microbiology / Molecular Biology Biomedical Sciences	220/222
	Science and Humanities	224
	Social Sciences	218
4:30-5:15 PM	Convocation, Business Meeting and Snacks	Brumfield Caffey Ballroom

* Morning oral presentations will be used primarily for judging of student competitions, with afternoon oral sessions used for non-competing presenters of all levels. **The Student Poster Competition has two components. Posters will be displayed and Poster Talks (2 min each) will begin at 11:30am in designated seminar rooms. Competitors will be available at their poster in the display room following the 2 min competition talks.

LAS 92

THE 92ND ANNUAL MEETING OF THE LOUISIANA ACADEMY OF SCIENCES

MORNING KEYNOTE ADDRESS

WIND! RAIN! STORMS! ICE! THE INTERPLAY OF HISTORY AND WEATHER IN EARLY LOUISIANA, 1699-1815

By Dr. Jerry Sanson
Chair and Professor of History and Political Science
Louisiana State University Alexandria

Iberville found the mouth of the Mississippi river when he was attempting to establish the first Louisiana settlement because of a storm. Thus the story of the colonization of Louisiana begins in 1699 with weather. Later we see that the occupation of New Orleans was delayed by about two years because a hurricane destroyed the original buildings. The fate of the Belize at Head of Passes illustrated the wisdom of Iberville's decision to build the first settlement at Biloxi, and British veterans of the Napoleonic Wars found the Battle of New Orleans one of the worst experiences of their military careers because of the unusually cold weather they encountered on the Plains of Chalmette.

LAS 92

THE 92ND ANNUAL MEETING OF THE LOUISIANA ACADEMY OF SCIENCES

CENTENNIAL DECADE KEYNOTE ADDRESS

PART I.

Sediments, Settlements, and Cyclones: The Anthropology of Louisiana Chenieres

By Dr. John P. Doucet
Dean, College of Arts & Sciences
Nicholls State University

Chenieres are geomorphic structures formed by remodeled shorefront sediments. First described as a feature of southwestern Louisiana by Russell and Howe (1935), chenieres are found worldwide as long, narrow beach ridges composed of sandy or shelly material. Plains of successive chenieres develop over time as a function of sediment progradation and antagonistic low energy wave action. In coastal Louisiana, chenieres formed by sediment spill from various prehistoric deltas of the Mississippi River challenged by the prevailing east-west Gulf shoreline current and remodeled by surges associated with tropical cyclones.

Chenieres along coastal Louisiana rise 2-6 feet above sea level and are conspicuous for their support of linear groves of live oaks amid vast coastal marsh, earning their name from historical Francophone populations (chêne = oak). These populations have utilized the unique attributes of Louisiana's cheniere plains for settlements based on farming or fishing subsistence. Grand Chenier and Pecan Island in the southwest and Cheniere Caminada in the southeast remain notable as early settlements, and each has coincidentally suffered destruction from historic hurricanes. In particular, the Great October Storm of 1893 made Cheniere Caminada the focal point of the second largest natural disaster on the North American mainland. This destructive hurricane led survivors to form distinctive settlement patterns away from the coast and along the lower reaches of Bayou Lafourche and across Barataria Bay. This study explores the unique, historical, ecological and economic relationship between chenieres and cheniere dwellers and how environmental changes have influenced modern settlement patterns of coastal Louisiana.

PART II.

The Geogenesis of Louisiana: Louisiana Premiere of a New Educational BTNEP Animation

By Dr. Gary LaFleur, Jr.
Executive Director, Center for Bayou Studies, Nicholls State University

The geologic genesis of Louisiana is a story of our shared pre-history that has far-reaching significance for many of our research and educational efforts. Last year we embarked on a project to create an animated version of how the break-up of Pangaea (Wegener, 1912) gave rise to the Gulf of Mexico, a meandering Mississippi River with cycling delta lobes (Kolb and Van Lopik, 1958), and the land mass currently designated as the state of Louisiana. Recent work by Van Arsdale and Cox (2007) suggests that the Mississippi embayment was triggered by shifting of the earth's crust across the Bermuda hotspot, followed by erosion to create a basin, which was filled by the Gulf of Mexico during glacial melting. In this address, we premiere an animated video of Louisiana geogenesis created by our B.F.A. graduate, Joey Blake, and sponsored by the Barataria-Terrebonne National Estuary Program (BTNEP) with support from the Center for Bayou Studies at Nicholls.

8:30-9:45

**Meeting opening and Morning Keynote Address
Brumfield Caffey Ballroom**

10:00 – 10:15 AM

Two Minute Poster Competition Talks

(Judging of posters for competition will occur from 11:45-12:30 in designated poster viewing rooms)

Computer Science / Mathematics and Statistics

2 Minute Talk 144 Mulder Hall

(Poster viewing in 145 Mulder 11:45-12:30)

- P02 Ayeni, F.,** S. Adubi, O. Sowunmi, and V. Mbarika (SUBR)
From Stand Alone Computers to Big Data Technology: Proposing a New Model for Information Technology Infrastructure Change Management
- P06 Muppirisetty, S.,** and M. Salam (SUBR)
Development of Web Based Online Quiz System
- P07 West, K.** and Y. B. Reddy (GSU)
Big Data Analysis and Document Selection
- P10 Maharjan, R.,** A. Findley, and P. Wiedemeier (ULM)
Web Based Tool to Show Restriction Endonuclease Digestions of Actinobacteriophages
- P11 Khadka, L.,** A. Findley, and P. Wiedemeier (ULM)
A desktop tool that identifies discrepancies between the PhagesDB and PET Actinobacteriophage databases

Materials Science and Engineering

2 Minute Talk 146 Mulder Hall

(Poster viewing in 145 Mulder 11:45-12:30)

- P13 Ahmed, Md. A.** and S. Tewari (LTU)
Effect of Acid Treatment and Metal Coating on the Performance of Carbon Aerogel/Fiber Paper Electrodes in Capacitive Deionization
- P14 Hossain, Md. I.,** N. Mueller, and A. Prabhu (LTU)
Development of a Multiplexed Electrochemical Microsensor Array for Simultaneous Monitoring of Reactive Oxygen Species and Antioxidants
- P15 Henderson, D.** and N. Seetala (LTU)
Magnetization Studies of $Mn_xZn_{1-x}-Fe_2O_4$ ferrites nanoparticles
- P16 LaCoste, J.** and H. Yan (ULL)
Synthesis and Characterization of Mesoporous CeO_2

Chemistry / Physics / Earth Science
2 Minute Talk 221/223 Mulder Hall
(Poster viewing in 145 Mulder 11:45-12:30)

- P20** **Bista, R.**, and S. Murru (ULM)
Rational design and synthesis of substituted chiral BINAM ligands for asymmetric catalysis
- P21** **Tran, K.**, M. J. Kim, and S. Murru (ULM)
Synthesis and Anti-microbial Evaluation of Five Membered Nitrogen Heterocycles
- P27** **Taylor, J.** and F. Ohene (GSU)
Density functional theory approach in using FTIR/NMR computational methods in evaluating the degradation behavior of epoxy polymers.

Botany / Zoology
2 Minute Talk 226 Mulder Hall
(Poster viewing in 147 Mulder 11:45-12:30)

- P29** **Tsaliki, M.**, Akobi, N., Meyer, H., and J. Hinton. (McSU)
An Interesting, Albeit Frustrating, Water Bear (Tardigrada) from Hawaii
- P30** **Cone, N.**, and N. Clay (LTU)
Temperature and Density-Dependent Effects on Growth and Survival of a Common Generalist Butterfly
- P31** **Bierbaum, E.** (Southeastern)
Comparative Morphology of Terminal Limb Development in *Amphiuma* Salamanders (Amphibia: Amphiumidae)

Agriculture, Forestry, Wildlife and Environmental Science
2 Minute Talk 219 Mulder Hall
(Poster viewing in 147 Mulder 11:45-12:30)

- P41** **Bird, D. K.** and R. Boopathy (Nicholls)
Water Quality, Bacteriological Survey, and Observation of Acquired Antibiotic Resistance in Bayou Lafourche, LA

Microbiology / Molecular and Biomedical Biology
2 Minute Talk 220/222 Mulder Hall
(Poster viewing in 147 Mulder 11:45-12:30)

- P43** **Scull, C.**, and A. Corbin (NiSU)
Title: Bacteriophage Capable of Lysing Drug Resistant *Klebsiella pneumoniae* Isolated from External Nares
- P44** **Cutrer, C.**, Simmons, A., Bringedahl, J., Laborde, L., and C. Lyles (NSU)
Identifying *Leptospira interrogans* in Feral Hog Populations Using MALDI-TOF
- P45** **Baudoin, N.**, Drope, Shelby, Juarez, J., Norman, K., and C. Lyles (NSU)
The Degradation of Acetaminophen Under Aerobic Conditions
- P49** **Straub, J.**, Beadle, E., Bunnell, B., and J. Newman (LTU and Tulane University)
The Role of MED31 in the Regulation of Mesenchymal Stem Cell State
- P50** **Pursell, I.** (LTU)
The Use of Biomimetic Hydrogels to Direct Stem Cell Differentiation for Tissue Engineering Applications

Science Education / Social Sciences / Sciences and Humanities
2 Minute Talk 224 Mulder Hall
(Poster viewing in 145 Mulder 11:45-12:30)

- P66** **Morris, A.** (LTU)
Digital Painting and Medical Illustration

10:15 – 11:45 am Oral Presentations I
Mulder Hall

(Bold lettering indicates presentation for student competition)

Computer Science / Mathematics and Statistics
144 Mulder Hall

- 10:15** **Clough, J.** (GSU)
Alarming the Ethical Hacking
- 10:30** **Hendrix, M.** and P. Smiley (GSU)
Object Recognition using H2O -R language
- 10:45** **Antoine, K. M.**, J. Richards, and P. Sreekumari (GSU)
A Secure Platform for Sharing Confidential Files using Two-Factor Authentication
- 11:00** **Bandaru, V. S.**, and M. Salam (SUBR)
Data Aggregation and Partial Processing of Big Data in Hadoop MapReduce
- 11:15 Yusoff, F. H., J. Landor, O. Ayo, G.W.B. Katchoua, F. Aquegho, T. Pruitt, (SUBR)
H. Alaba, F. Ayeni, and V. Mbarika
Social Media Presence Growth among Small Businesses: A Case Study
- 11:30 Wutofeh, W.C., N. Omoregbe, S. Nicholas-Omoregbe, F. Ayeni, and V. Mbarika (SUBR)
The Role of ICTs In Socio-Economic Development of the North West Region of Cameroon

**Materials Science and Engineering
146 Mulder Hall**

- 10:15 Miraz, A.,** R. Ramachandran, and C. Wick (LTU)
Computational study on failure near the interfacial regions of metal-ceramic systems under shear loading
- 10:30 Kharashi, K.** (LTU)
Enhanced Composite Porous Electrolytes NO_x Sensors
- 10:45 Prevo, C.** and N. Seetala (GSU)
Spark Plasma Sintering of High-energy Ball-milled Ultra High Temperature Ceramic Powders
- 11:00 S. Gyawali** (LTU)
Interaction of Metal nanoparticles on Silica Surface: A DFT Study
- 11:15 Tranter, S. (LTU)
Selective Capture of Nitrosylated Proteins via a PMMA Microfluidic Platform

**Chemistry / Physics / Earth Science
221/223 Mulder Hall**

- 10:15 Setijadi, C.,** G. Bello, and G. Dumancas (LSUA)
Development of a facile, convenient, and economical method for the direct determination of five carbohydrate sugars using partial least squares and Fourier transform infrared-attenuated total reflectance spectroscopy
- 10:30 Lewis, C.,** G. Bello, and G. Dumancas (LSUA)
Direct determination of oil content in binary mixtures of peanut and canola oils using partial least squares and attenuated total reflectance-Fourier-transform infrared spectroscopy
- 10:45 Manning, F.,** and S. Tewari (LTU)
Assessing the Relative Sea-level Change and its Impact on Coastal Louisiana's Levee Infrastructure using Geographical Information Systems
- 11:00 Ismael, T.,** A. Robinson, J. JnoBaptist, and P. Derosa (GSU and LTU)
DFT-MD investigation on Oxidation in CrCoFeNi High Entropy Alloy Surfaces
- 11:15 Chen, Y.,** and R. Beminiwattha (LTU)
Simulation of the radioactivity for the Moller experiment using FLUKA

**Agriculture, Forestry, and Wildlife / Environmental Science
219 Mulder Hall**

- 10:15 Belding, C.,** and R. Boopathy (NiSU)
Presence of Antibiotic Resistant Bacteria and Antibiotic Resistance Genes in the Coastal Waters of Southeast Louisiana
- 10:30 Brockmann, J.,** and G. LaFleur (NiSU)
Can Frog Call Surveys Help Us Determine the Ecological Health of a Freshwater vs. Brackish Marsh System?
- 10:45 Wallace, E.,** Ferrara, A., and Q. Fontenot (NiSU)
Comparison of Finfish Community Structure Between the Atchafalaya River Basin and the Upper Barataria Estuary, Louisiana
- 11:00 Boyd, C.,** Fontenot, C., Bossart, J, and B. Crother (Southeastern)
Follow-Up Survey of Herpetofuna in a Transforming Louisiana Wetland: 30 Years of Reptiles and Amphibians in the Manchac Wildlife Management Area
- 11:15 Smith, D.,** and C. Corbat (LSUA)
The Eastern Woodrat's Response to Size of Novel Objects
- 11:30 Van Dexter, S.,** R. Boopathy (NiSU)
Analysis of Termite Microbiome and Degradation of Phenol by Bacteria Isolated from Termite Gut

**Zoology
226 Mulder Hall**

- 10:15 Gauthier, Z.,** Mayeaux, M., Lange, M., and C. Doffitt (NSU)
Survey of Molluscan Hosts for Infection by Juvenile Digenetic Trematodes
- 10:30 Akobi, N.,** Tsaliki, M., Meyer, H., Jackson, K., Johansson, C., and R. Miller (McSU and Fresno City College and Baker University)
A New Species of Water Bear (Tardigrade) from The Old Dominion?
- 10:45 Rixner, A,** and Q. Fontenot (NiSU)
Comparison of Bowfin *Amia calva* Diets and Reproductive Cctivity in the Upper Barataria Estuary and Atchafalaya River Basin
- 11:00** Montgomery, M. (GSU)
The Effect of Acetyl-L-carnitine on Planarian Behavior and Motility

**Microbiology/Molecular and Biomedical Biology
220/222 Mulder Hall**

- 10:15 Grabert, R.,** and R. Boopathy (NiSU)
Effect of Antibiotics on Bacteria in Carbon and Nitrogen Removal from a Sewage Treatment Plant
- 10:30 Ostrowski, A.,** and E. Zou (NiSU)
Post-Ecdysial Carbonic Anhydrase Activity in the Epidermis of the Blue Crab, *Callinectes sapidus*, is Controlled by the Molting Hormone
- 10:45 Barnett, H.** (LTU)
Investigating the Role of Extracellular Cues of PEGDMA Hydrogel Biomaterials on Stem Cell Fate
- 11:00 Eddy, R.,** Pursell, I., Barnett, H., Whitehead, A., Lieu, M., Caldorera-Moore, M., and J. Newman (LTU)
Optimization and Characterization of the Osteogenic Differentiation of Human Mesenchymal Stem Cells on Tailorable Hydrogel Scaffolds
- 11:15 Lange, M.,** Gauthier, Z., Neketan, U., Allen, S., and C. Doffitt (NSU)
Presence of Helminthic Parasites in Northwestern Louisiana
- 11:30 Dantzler, M.,** and W. Conarro (Southeastern)
Does D1S6, D2S6, or Cysteine Play a Role in Slow Inactivation of Voltage-Gated Sodium Channels?

**Science Education / Social Sciences / Sciences and Humanities
224 Mulder Hall**

- 10:15 Boudreaux, M.** and J. Doucet (Nicholls)
Medical Forensics of an Historical Cypress Mill Town Pharmacy in Lafourche Parish
- 10:30 Ayeni, F.,** S. Craig, M. Adewunmi, V. Mbarika, and J. Caldero (SUBR)
A Mixed Methods Inquiry into the Quality of Instructional Designs and Use of Moodle Learning Management Systems: Case study of a Historically Black College and University
- 10:45 Gonzalez, A. (Loyola)
The Relationship among Parental Conditional Positive Regard, Emotion Dysregulation, and Anxiety in College Students
- 11:15 Ayeni, F. M. Diak, and V. Mbarika (SUBR)
A Review of Learning Techniques: Evidence from Practice Testing
- 11:30 Mbah, R. E. and A. Appeaning (SUBR)
An Evaluation Of Louisiana State Agencies' Understanding And Usage Of LaPAS
- 11:45 Nicholas-Omoregbe, O., N. Omoregbe, T. Pruitt, S. Okuboyejo, and V. Mbarika (SUBR)
Technology Adoption In A Historically Black College And University: An Empirical Study

11:45-12:30
Poster Competition Presentations and General Poster Viewing
(all student competitors must be at poster for judging)

12:30-2:15
Lunch and Centennial Keynote Address
Brumfield Caffey Ballroom

2:15-4:15 pm Oral Presentations

Computer Science
144 Mulder Hall

- 2:15 Sarkar, T. and J. Noguera (SUBR)
Student Tracking in Academic Years (STAY) System: Putting Mobile Analytics in Students Hands to Ensure Career Success
- 2:30 Tillery, C. L., C. Cummings, F. Ayeni, F. Ekanoye, and V. Mbarika (SUBR)
A Review of Cybersecurity in The United States of America
- 2:45 Lea, B., F. Ekanoye, F. Ayeni, and V. Mbarika (SUBR)
Cyber Security in Russia: Challenges and Prospects
- 3:00 Yari, F., S. Omoregbe, and V. Mbarika (SUBR)
The Impact of Information and Communication Technology on Socio-Economic Development of sub-Saharan Africa
- 3:15 Yusoff, F. H., J. Lando, S. Nicholas-Omoregbe, R. Mungwe, R. Chirewa, C. Donald, F. Ayeni, and V. Mbarika (SUBR)
Social Media Presence among Small Businesses: A Comparative Study between Baton Rouge and New Orleans
- 3:30 Drozdenko, B. (LTU)
Enabling Protocol Coexistence via FPGA Design Techniques for Wireless Transceivers
- 3:45 Turner, S. and P. Sreekumari (GSU)
Security Issues associated with Big Data in Cloud Computing and its Counter Measure
- 4:00 Reddy, Y. B., and J. Mesit (GSU)
Primary User Emulation Attack Detection Techniques in Cognitive Radio Network

Mathematics and Statistics
146 Mulder Hall

- 2:15 Curdy, Ashleigh (LTU)
Incorporating Spatial Hysteresis Damping into a Flexible Wing Micro Aerial Vehicle Model
- 2:30 Saint-Jean, D. and P. Derosa (LTU)
Dynamics of a Charge Carrier Driven by an Alternating Field in Materials with Impurities and Traps

**Materials Science and Engineering
146 Mulder Hall**

- 2:45 Van Houten, S. and B. Hollins (LTU)
Evaluating Paper Pretreatment for Optimization of Paper-Based Microfluidic Calcium Detection
- 3:00 Farrar, K. and B. Hollins (LTU)
Evaluating the Selectivity of CTP-Capped Gold Nanoparticles for Calcium in Paper Based Microfluidic Devices
- 3:15 Green, H. and B. Hollins (LTU)
Controlling Hydrophobic Barrier Depth in Paper Based Microfluidic Devices

**Chemistry
221/223 Mulder Hall**

- 2:15 Godwin, H., S. Jones, and R. Gaudet (NSU)
Metal Oxide Nanoparticles and Their Assembly Onto Macroscopic Structures
- 2:30 Srivastava, R., S. Swisher, and M. Miller (ULL)
Ruthenium (II)-pyrazole complexes as potential anticancer agent

**Physics
221/223 Mulder Hall**

- 2:45 Stroud, A., C. Muratore, R. Berry, G. Leuty, R. Rao, and P. Derosa (LTU, UDayton, Air Force)
Molecular and Electronic Interactions at the Graphene, MoS₂, SiO₂ Interface
- 3:00 Pathak, D. B. and R. Beminiwatha (LTU)
Optimizing shielding for the MOLLER Experiment: An Ultra-Precise Measurement of the Weak Mixing Angle
- 3:15 DeJarnette, H., E. Norris, and P. Derosa (LTU)
An Efficient Model for Charge Transport in Nanocomposites

**Agriculture, Forestry, and Wildlife/Environmental Science
219 Mulder Hall**

- 2:15 Bird, D., R. Boopathy (NiSU)
Water Quality, Bacteriological Survey, and Observation of Acquired Antibiotic Resistance in Bayou Lafourche, LA
- 2:30 Pruss, L., and C. Corbat (LSUA)
Improving Trapping Efficiency of the Eastern Woodrat
- 2:45 Pruet, T., and C. Corbat (LSUA)
Activity of the Eastern Woodrat As Related to Weather and Moon Phases
- 3:00 Morin, C., Adams, J., Holley, G., Keith, A., Jackson, P., and N. Clay (LTU)
RatSectProTM as a Natural Alternative for Reducing Red Imported Fire Ant Feeding and Nests
- 3:15 Sullivan, B. (USDA Forest Service Southern Research Station)
Louisiana Should Prepare for the Return of Southern Pine Beetle

Zoology
226 Mulder Hall

- 2:15 Meyer, H., and N. Akobi (McSU)
Predator and Prey Behavior in Two Species of Tardigrade, *Milnesium lagniappe* and *Macrobiotus acadianus*
- 2:30 Partin, M. (Southeastern)
A Puzzle to Piece Together- Does Traffic Noise Cause Physiological Stress in *Hyla chrysoscelis* (Anura: Hylidae)?
- 2:45 Beachy, C., Bynum, J., Wells, S., and J. Incandela (Southeastern)
The Larval Life History of the Southern Two-lined Salamander, *Eurycea cirrigera* (Caudata, Plethodontidae) in Southern Louisiana
- 3:00 Merchant, M., Hale, A., Breuggen, J., Harbsmeier, C., and C. Adams (McSU and Crocodile Specialist Group and Tampa's Lowry Park Zoo and Gladys-Porter Zoo)
Crocodiles Alter Skin Color in Response to Environmental Color Conditions

Microbiology/Molecular and Biomedical Biology
220/222 Mulder Hall

- 2:15 Edavettal, J. (LTU)
Characterizing Hippocampal Oxidative Stress in Sleep Restriction
- 2:30 Jones, C., and P. Hindmarsh (LTU)
The Use of Reactive Oxygen Sensitive Green Fluorescent Protein to Determine Reactive Oxygen Species Production in *E. coli* and *Candida albicans*
- 2:45 Jett, H., and C. Doffitt (NSU)
Proposal for a Survey of *Dirofilaria immitis* Prevalence and Resistance to Preventative Medications in Natchitoches, Louisiana, USA
- 3:00 Liu, M. (LTU)
The Role of Notch3 in Regulating Stem Cell State
- 3:15 Bencosme, E., and L. Porter (NSU)
Comparative Analysis of the Silencing Effects of Putative Immune Genes in *A. americanum* During Bacterial Infection
- 3:30 Lourigan, D. (Southeastern)
Hen Egg-White (HEW) Lysozyme in Water: Molecular Dynamics Simulation
- 3:45 Smith, S., and L. Porter (NSU)
Identification, Inter-Specific Sequence Analysis, and Cloning of the Delta-Latroinsectotoxin in the Brown Widow Spider (*Latrodectus geometricus*)
- 4:00 Decuir, F., and B. Hollins (LTU)
Novel Sleep Deprivation Method Using Vibration Table

**Science and Humanities
218 Mulder Hall**

- 2:15 Abam, C., F. Ayeni, and V. Mbarika (SUBR)
Economic Inequality and Poverty: The United States in Comparative Perspective
- 2:30 Yari, F., and V. Mbarika (SUBR)
Knowledge and perception of Telemedicine in Cameroon
- 2:45 Giguette, R. and R. Alexander (Nicholls)
Zeno's Paradox: How Accurately Does Geometry Model 3-Dimensional Space?
- 3:00 Doucet, J. (Nicholls)
Lincoln's Thalamus and Other Gray Matters--A Third Reading of Science Poetry

**Social Sciences
224 Mulder Hall**

- 2:15 Abam, C., F. Ayeni, and V. Mbarika (SUBR)
Economic Inequality and Poverty: The United States in Comparative Perspective
- 2:30 Mbah, R. E. (SUBR)
Cruel Choice: The Ethics And Morality Of The Death Penalty
- 2:45 Chirewa, R., N. Omoregbe, F. Ayeni, and V. Mbarika (SUBR)
Bridging the Gap in Financial Inclusion: A Review of Mobile Money in Kenya
- 3:00 Mireille, M., and V. Mbarika (SUBR)
Imbalance of Health workers in Sub-Saharan Africa
- 3:15 Njie, S., J. Landor, F. Ayeni, and V. Mbarika (SUBR)
Investigating How Government Policies Affect Diffusion and Adoption of ICT's in Developing Nations:
A Case Study of Cameroon
- 3:30 Landor, J. and Y. Fakhrul (SUBR)
Social Media Presence Growth among Small Businesses: A Case Study
- 3:45 Yari, F. and Victor Mbarika (SUBR)
Knowledge and perception of Telemedicine in Cameroon

2:15 – 4:30 pm
Poster Presentations

(Numbers in bold indicate that poster was chosen for student competition)

Computer Science
145 Mulder Hall

- P01 Katchoua, G., N. Omoregbe, F. Ayeni, S. Onyeidu, and V. Mbarika (SUBR)
Design of a Cloud Based Blood Bank Management Information System (BBMIS) for Cameroon's Health Care System
- P02 Ayeni, F.**, S. Adubi, O. Sowunmi, and V. Mbarika (SUBR)
From Stand Alone Computers to Big Data Technology: Proposing a New Model for Information Technology Infrastructure Change Management
- P03 Baniya, B., D. Thomas, N. Parrott, and D. Davis (GSU)
Knowledge Extraction and Classification of Music Genre
- P04 Ekanoye, F., F. Ayeni, F. Yusoff, and V. Mbarika (SUBR)
Promoting the concepts of Internet of Things with Smarthome in North Baton Rouge: A case of Scotlandville
- P05 Han, Y., and B. Drozdenko (LTU)
Air quality monitoring by Internet of Things
- P06 Muppirisetty, S.**, and M. Salam (SUBR)
Development of Web Based Online Quiz System
- P07 West, K.** and Y. B. Reddy (GSU)
Big Data Analysis and Document Selection
- P08 Williams, D. and J. Gardner (GSU)
Transmitting and receiving critical information from a mobile device to the cloud
- P09 Gade, A. and M. Salam (SUBR)
Survey on Internet of Things Applications
- P10 Maharjan, R.**, A. Findley, and P. Wiedemeier (ULM)
Web Based Tool to Show Restriction Endonuclease Digestions of Actinobacteriophages
- P11 Khadka, L.**, A. Findley, and P. Wiedemeier (ULM)
A desktop tool that identifies discrepancies between the PhagesDB and PET Actinobacteriophage databases

Mathematics and Statistics
145 Mulder Hall

- P12 VanderSchaaf, C. (LTU)
Developing a Simple Longleaf Pine Plantation Growth and Yield Model for the Gulf Region

Materials Science and Engineering
145 Mulder Hall

- P13** **Ahmed, Md. A.** and S. Tewari (LTU)
Effect of Acid Treatment and Metal Coating on the Performance of Carbon Aerogel/Fiber Paper Electrodes in Capacitive Deionization
- P14** **Hossain, Md. I.,** N. Mueller, and A. Prabhu (LTU)
Development of a Multiplexed Electrochemical Microsensor Array for Simultaneous Monitoring of Reactive Oxygen Species and Antioxidants
- P15** **Henderson, D.** and N. Seetala (LTU)
Magnetization Studies of $Mn_xZn_{1-x}-Fe_2O_4$ ferrites nanoparticles
- P16** **LaCoste, J.** and H. Yan (ULL)
Synthesis and Characterization of Mesoporous CeO_2
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