



20th ANNUAL MEETING OF THE LBRN

January 28-29, 2022

Friday January 28th, 2022

#	Name			Time
1	Introduction			
	Konstantin Kousoulas (PI) / Ramesh Subramanian (Program Coordinator)			12:40 - 12:45 PM
	Lakshmi Matukumalli - Program Director - Networks and Development Programs, DRCB, NIGMS			12:45 – 12:55 PM
	Steve Cutler - Interim Provost, University of South Carolina - LBRN EAC Chair			12:55 – 1:05 PM
	Name	Project Type	Title	Time
2	Nicolas Bazan – Director, Neuroscience Center of Excellence	Keynote	Redundancy and Resiliency Signaling for Neuronal Longevity Counteracts Alzheimer’s Onset.	1:10 - 2:00 PM
3	Urska Cvek / J. Steven Alexander	Women’s Health	Stability in Inflammatory Bowel Disease	2:05 - 2:30 PM
4	Nektarios Barabutis / Yogesh Saini	INBRE-COBRE	Protective Role of Activating Transcription Factor 6 (ATF6) against endothelial barrier dysfunction	2:35 - 3:00 PM

BREAK

3:00 - 3:10 PM

5	Charles Irvin - Director, Vermont Lung Center	Invited Talk	Scientific Misconduct: Crime & Punishment	3:10 - 4:00 PM
6	Poster Session I			4:00 - 5:00 PM
7	Poster Session II			5:00 - 6:00 PM

Saturday, January 29th, 2022

#	Name	Project Type	Title	Time
1	Oliver Garden - Dean, LSU School of Veterinary Medicine	Dean's Remarks	LSU Vetmed Overview	8:15 - 8:30 AM
2	Matt Lee - Interim Executive Vice President and Provost - LSU	Provost's Remarks	Welcome remarks	8:30 - 8:45 AM
3	Krzysztof Reiss - Program Director Center For Translational Viral Oncology	Keynote	Glioblastoma weak metabolic points as a target for new drugs with high potential for Blood Brain Barrier penetration	8:45 - 9:25 AM
4	Jean Christopher Chamcheu	Full	Development of fisetin as a novel inhibitor co-targeting PI3K/AKT/mTOR/Rac1 and IL-17A for Treating Psoriasis	9:30 - 9:55 AM
5	Georgios Matthaiolampakis	Full	miR-mediated Inhibition of Lung Cancer Progression	10:00 - 10:25 AM

BREAK

10:25 – 10:40 AM



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Saturday, January 29th, 2022 - Continued

6	Siva Murru	Full	Development of Pyrazoles and Pyrazolones as Anti-Cancer Agents: Design, Synthesis and Anti-Cancer Activity Studies	10:40 - 11:05 AM
7	Devaiah Kambiranda	Full	Proteasomes/immunoproteasome: Role of lipid rafts in compartmentalization / activation in e-cigarettes vapor exposed lung epithelial cells	11:10 - 11:35 AM
8	Kyle Piller	Full	Life in the fast lane: Testing for congruence among transcriptomic signatures	11:40 - 12:05 PM

LUNCH

12:05 - 1:00 PM

Student Flash Talks – 4 minutes each

10	Rizwana Begum	Summer	HSP70 and proteasomes coalesce in lipid rafts to regulate E-cigarette Vapor condensate induced inflammation	1:00 – 1:30 PM
11	Nandini Bidarimath	Summer	Pentachlorophenol induced transcriptome dynamics in human lung and liver Cells	
12	Chelsea Bock	Summer	Growth inhibitory and apoptotic effects of Graviola (Annona Muricata) fractions in human melanoma and non-melanoma skin cancer in vitro	
13	Eric Clifford	Summer	Drug Screen Trends in Emergency Rooms Among Childbearing-Aged Females	
14	Denzel El Hage	Summer	Development of a pH-sensitive liposome formulation for targeted delivery of anticancer pyrazolones in lung cancer cells	
15	Tithi Roy	LBRN	The dietary antioxidant Fisetin suppresses Psoriasis-like characteristics in vitro and in vivo in an imiquimod-induced dermatitis in Balb/c mice: Involvement of the central mTOR signaling pathway	
16	April Wright	Full	Modeling Heterogeneous Data Sources for Time-Scaling Phylogenetic Trees	1:35 - 2:00 PM
17	Srinivas Garlapati	Full	Mechanism of translation initiation in protozoan parasite Giardia lamblia	2:05 - 2:30 PM
18	Vonny Salim	Full	Elucidation of Plant-Derived Drug Biosynthetic Pathways and Molecular Mechanisms as Anticancer Agents	2:35 - 3:00 PM

Awards and closing remarks

3:05 - 3:20 PM

EAC meet with Steering Committee

3:25 - 4:10 PM



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LBRN Annual Meeting Poster Summary

iPosterSession Gallery https://lbrn2022am-lsu.ipostersessions.com/Default.aspx?s=lbrn_2022_gallery

ID#	Sess/Rm	Full Name	Poster Title:	Institution
1	I, Rm 1	Abubakar Abdulkadir	Comparative Bioinformatics and Conventional approach reveal some common signaling mediators in DE-particulate exposed A549 and BEAS-2B cells	SUBR
2	I, Rm 2	Mohammad Shohel Akhter	Growth Hormone Releasing Hormone Antagonists Protect Against LPS-Induced Endothelial Hyperpermeability	ULM
56	II, Rm 1	Duaa Alawad	Accurate identification of ncRNA-protein interactions using ensemble deep learning methods	UNO
4	II, Rm 2	Alexis Bardwell	Identification of Spore-Forming Bacteria in a Louisiana Salt Marsh	LATECH
5	II, Rm 3	David Basnet	N-Boc-hydroxylamine as a Boc-donor Agent for the Catalytic N-tert-Butoxycarbonylation of Pyrazoles and Indazoles	ULM
59	II, Rm 4	Rizwana Begum	HSP70 and proteasomes coalesce in lipid rafts to regulate E-cigarette Vapor condensate induced inflammation	SUBR
54	I, Rm 3	Julianna Berger	Comparing Solubility of the catalytic mutant in the lyase-isomerases MpeQ and MpeZ from Synechococcus sp. A15-62 and RS 9916	UNO
60	I, Rm 24	Nandini Bidarimath	Pentachlorophenol induced transcriptome dynamics in human lung and liver Cells	SUBR
6	I, Rm 4	Samuel Boateng	Pentachlorophenol induced transcriptome dynamics in human lung and liver Cells	SUBR
			Biological evaluation, in silico molecular docking and ADMET screening of a small library of phenolic compounds identified novel anti-skin cancer agents	ULM
57	II, Rm 5	Chelsea Bock	Growth inhibitory and apoptotic effects of Graviola (Annona Muricata) fractions in human melanoma and non-melanoma skin cancer in vitro	ULM
7	I, Rm 5	Mary Caldorera-Moore	Assessment of injectable chitosan-genipin hydrogels biomaterial biocompatibility	LATECH
8	II, Rm 6	Joseph Chaney	Applying the Brakes: Understanding the Role of the Conformational Changes in the Kinesin-5 on Processivity and Inhibition	XULA
58	II, Rm 7	Eric Clifford	Drug Screen Trends in Emergency Rooms Among Childbearing-Aged Females	LSUS
9	II, Rm 8	Karli Clifton	Electro-chemical Cyclization of Hydroxylchalcones for the Synthesis of Flavonoids	ULM
55	I, Rm 6	Loandi Cruz	Heterogeneous Cu@Hal catalyzed [3+2] cycloaddition reactions for the preparation of 1,2,3-triazoles	UNO
10	II, Rm 9	Urska Cvek	Disparities in Breast Cancer Treatment Outcomes: Improving Access with Health Informatics	LSUS
11	II, Rm 10	Devika Dua	Investigating Key COVID-19 Questions by Using Natural Language Processing on Scientific Publications	CCS (HS)
12	II, Rm 11	Samrat Dutta	Diagnostic Cancer Imaging In the Mid-Infrared Using Novel Contrast Agents	XULA
13	II, Rm 12	PJ Erba	Development of Methodology in Microbial DNA Isolation for Characterization of Soil Microbiome	LSUS
14	I, Rm 7	Anup Ghimire	EEG Based Motor Imagery Task Classification Utilizing Spatiotemporal Deep Learning for BCI Applications	SELU
15	I, Rm 8	Matthew Hayes	Complex Germline Structural Variant Discovery Via Discordant Cluster Normalization	XULA
16	II, Rm 13	Bennett Hibner	Computational Investigations Of Stereospecificity In Concerted Electrocyclic Reactions	SELU
17	II, Rm 14	Hunter Hollie	Design and Development of a Low-Cost High-performance Atomic Force Microscope (AFM)	SELU
18	II, Rm 15	Moses Ihachi	Aryl-fused (Imidazole, Pyrazine and Pyrrole) Boronated Dye Derivatives	SELU
19	I, Rm 9	Chelsey Jordan	Assessment of student appreciation for applied bioinformatics and computational drug discovery methods in a project-based course	LSUS
20	I, Rm 10	Supriya Karki	Developmental Stages of Olfactory Sensory Neurons in Neonatal Life vs. Adulthood	LSUS
21	I, Rm 11	Waheed Khan	Using computational drug repurposing methodology to identify promising bictegravir-based drug candidates for COVID-19	LSUS
22	II, Rm 16	Phillip Kilgore	Racial Disparities in COVID-19 Symptoms in Northern Louisiana	LSUS
23	II, Rm 17	Vladimir Kolesnichenko	Cancer-Specific Magnetic Imaging Agent	XULA
24	I, Rm 12	Khadeja-Tul Kubra	Activating transcription factor 6 modulates endothelial barrier function.	ULM
25	I, Rm 13	James Lee & Matthew Giblin	Heart rate variability and novel torpor states in tent-making bats	SELU
26	I, Rm 14	Laura Lee	Wastewater Analysis and Genomic Sequencing of SARS-CoV-2 Benefit COVID-19 Surveillance	LATECH
27	I, Rm 15	Chi Jing Leow	Accessing the congruency of DNA repair genes among killifishes with different life histories using QuantSeq	SELU
28	II, Rm 18	Raj Letchuman	Identifying Promising Drug Candidates Against SARS-CoV-2 Using Computational Drug Repurposing Methodology	CPM (HS)
29	I, Rm 16	Elahe Mahdavian	An interdisciplinary course on computer-aided drug discovery to broaden student participation in original research	LSUS
30	I, Rm 17	Ethan Manco	Patterns in Electroencephalograms during Meditation	LSUS
31	I, Rm 18	Pearl Merry	Virus-Induced Gene Silencing: In-Vivo Characterization of Anticancer Alkaloid Biosynthetic Genes in Medicinal Plants	LSUS
32	II, Rm 19	Ryan Miller	Whole Cell Biotransformation for Central Intermediate Formation in Anticancer Monoterpene Indole Alkaloid Biosynthetic Pathways	LSUS
33	I, Rm 19	Joseph Mondello	Computing Representative Protein Conformations from Molecular Dynamics Simulations	LSUS
34	I, Rm 20	Savannah Montgomery	Identifying Double Minutes Chromosomes within Hi-C and Deletion-Episomes	XULA
35	II, Rm 20	Derrick Mullins	Simulating Double Minute Chromosome and Phylogenetic Tree Evolution using Java	XULA
36	II, Rm 21	Christopher Murray	Alligators as Models for Human Pathology: Neuroendocrine Effects of Methyltestosterone Exposure	SELU
37	I, Rm 21	Kalani Myles	Computer-aided drug discovery for COVID-19 using virtual screening and molecular docking	LSUS
38	I, Rm 22	Jamie Newman	Canonical and Noncanonical Notch Signaling Regulates Adult Stem Cell State	LATECH
39	I, Rm 23	Keelin North	Metagenomic Profiling of Soil Microbiome from Anticancer Compound-Producing Plants	LSUS
41	II, Rm 22	Uchechi Owunna	Synthesis and Biological Evaluation of 1,3-Diarylpiprazoles: in vitro Cytotoxicity Studies on Human Melanoma and Non-melanoma Cancer Cells	ULM
42	II, Rm 23	Erika Perez	Topiramate treatment precipitates and accentuates physical symptoms of nicotine withdrawal in mice.	XULA
43	I, Rm 25	Stephanie Provenzano	Biochemical Characterization of Anticancer Alkaloid Methyltransferases in Medicinal Plant Camptotheca acuminata	LSUS



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ID#	Sess/Rm	Full Name	Poster Title:	Institution
44	I, Rm 26	Prerana Ramesh	Improving Patient Outcomes for Inflammatory Bowel Disease through Physician Interactions during Infusion Treatment : Symptomatic Review of Biologic Therapy in IBD (STABILITY)	LSUHS
45	II, Rm 24	Silvia Robert	Frequency domain approach for improvement of cochlear implant performance	SELU
46	II, Rm 25	Vonny Salim	Elucidation of Anticancer Alkaloid Biosynthetic Pathways in Medicinal Plants: Improved Solutions for Drug Development	LSUS
47	II, Rm 26	Jeffry Shultz	Identifying Lethal Alleles in Human	LATECH
48	I, Rm 27	Bryan Strong	Translation initiation factors from early-branching eukaryote Giardia lamblia can form multifactor complex in the absence of 40S ribosome in vitro	ULM
49	II, Rm 27	Shilpa Thota	Complex interplay between Hsp90 and Beclin-1 regulates TLR-4 mediated autophagy during Pentachlorophenol exposure-in vitro	SUBR
50	II, Rm 28	Billy Tran	Correlations Among Evaluator's Level of Training, Assigned HEART Scores, and Major Adverse Cardiac Events	LSUS
51	I, Rm 28	Marjan Trutschl	Bioinformatics Analysis of Large-Scale Neuroproteomic Data and Prediction of Neurovascular Change	LSUS
52	I, Rm 29	Yuri Voznyanov	Construction of a model cell line to test DNA replacement catalyzed by tyrosine recombinases	LATECH
53	II, Rm 29	Anna Wilson	Comparative transcriptomic analysis of GABAergic versus dopaminergic neuronal differentiation in mouse ES cells	SUBR