UNLV Office of Undergraduate Research

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2018 Summer Research Symposium

University of Nevada, Las Vegas
Student Union
August 3rd
11:30 A.M. - 2:00 P.M.
Symposium Schedule

11:30 am  Lunch and Check-In
           UNLV Student Union Ballroom

11:45 am  Opening remarks:
           Dr. Sharon Young, Acting Director, Office of
           Undergraduate Research
           Dr. Andrew Hanson, Acting Dean, Honors
           College

12:00 pm  UNLV Alumna Ngantu Le

12:15pm   Lightning Talks:
           UNLV Student Union 207 and 209
           Poster Talks:
           UNLV Student Union 208

1:45pm    2018 OUR Outstanding Undergraduate
           Researcher Award
           - Sophia Araujo-Hernandez
           - Kimberly Gonzalez (Honorable Mention)

           2018 OUR Outstanding Faculty Mentor Awards:
           - Dr. Anna Smedley-López, Director of
             Student and Community Engagement
           - Dr. Levent Atici, Associate Professor,
             Department of Anthropology
           - Dr. Miriam Melton-Villanueva, Assistant
             Professor, Department of History

           Prize Drawing Give-aways
1 "Acute Gloss Progression Alters the Ratio of Translocator Protein Expressed on Different Glial Cells"
Jorge Carrera, School of Life Sciences
Faculty Mentor: Dr. Dustin Hines

2 "Building a Better Convention"
Thuon Chen, College of Hospitality
Faculty Mentors: Dr. Robert Rippee & Dr. Mehmet Erdem

3 "Undocumented Students in Higher Education: Resilience, Resources and Perceptions"
Esmeralda Cruz Lopez, Department of Sociology
Faculty Mentor: Dr. Anna Smedley-López

4 "The Role of PK11195 in Pruning Neural Circuity"
Manuel de Cespedes, Department of Psychology
Faculty Mentor: Dr. Dustin Hines

5 "Characteristics and Health Behaviors"
Tamara Hassan, Department of Psychology
Faculty Mentor: Dr. Jennifer Rennels

6 "Investigation of Mexican-American Attitudes towards Pet Dogs"
Deisy Landeros, Department of Anthropology
Faculty Mentors: Dr. Shelly Volsche & Dr. Peter Gray

7 "Predictors of Adolescents’ Stem Major Interests"
Ei T. Myint, Department of Economics
Faculty Mentor: Dr. Rachael Robnett

8 "Altered Fine Motor Coordination as an Early Predictor for Murine Models of Rett Syndrome"
Ya Eun Nam, School of Life Sciences
Faculty Mentor: Dr. Dustin Hines

9 "Examination of Neuronal Circuity in the Enteric Nervous System"
Renee Olney, Department of Chemistry and Biochemistry
Faculty Mentor: Dr. Dustin Hines

10 "The Pathology of Las Vegas"
Sandra Perez, Department of Sociology
Faculty Mentor: Dr. Si Jung Kim

11 "The Mind of Cixous: Cases of Différence"
Alexander Valle, Department of English
Faculty Mentor: Dr. Jarret Keene

12 "When is Cultural Appropriation in Art Acceptable?: An Analysis of the Assumptions and Premise of Cultural Appropriation in Art, and its Conditions"
Winnie Wu, Department of Art
Faculty Mentor: Dr. Aya Louisa McDonald
13 "Identifying New Materials for Practical Hydrogen Storage"
Tia Chai, Department of Chemistry and Biochemistry
Faculty Mentor: Dr. Paul Forster

14 "Impact of CVN Hammer Size"
Leopold H. Falkensammer, Department of Civil and Environmental Engineering and Construction
Faculty Mentor: Dr. Ryan J. Sherman

15 "Premature Fatigue Failure of Cantilever Sign Structures"
Paulyna Garcia, Department of Civil and Environmental Engineering and Construction
Faculty Mentor: Dr. Ryan J. Sherman

16 "Metal Complexes Derived from FeCOONa and DTBbpy Ligands"
Natalie Johns, Department of Chemistry and Biochemistry
Faculty Mentors: Dr. Frederic Poineau & Dr. Samundeeswari Balasekaran

17 "Density Functional Theory based Analysis and Investigation of Solid Zirconium"
Cameron Kirk, Department of Physics and Astronomy
Faculty Mentor: Dr. Eunja Kim

18 "Resolution of Low Coverage Region of Paenibacillus larvae Bacteriophage Ulf Genome"
Corina Ledbetter, School of Life Sciences
Faculty Mentor: Dr. Christy Strong

19 "Analysis of Pressure Distribution and Non-Hydrostaticity within the Diamond Anvil Cell"
Maranatha Malonzo, Department of Physics and Astronomy
Faculty Mentor: Dr. Ravhi Kumar

20 "Sun-Driven Environmental Remediation"
Xavier Morgan-Lange, Department of Mechanical Engineering
Faculty Mentor: Dr. Jaeyun Moon

21 "Additively Manufacturing a New Model Bridge Competition"
Tristan Osorio, Department of Civil and Environmental Engineering and Construction
Faculty Mentor: Dr. Ryan Sherman

22 "The Future of Lake Mead"
Jimmy Salazar, Department of Physics and Astronomy
Faculty Mentor: Dr. George Rhee

23 "Synthesis of Diallyl Ethers with BPANHTF"
Heidi Kim, School of Life Sciences
Faculty Mentor: Dr. Jun Yong Kang

24 "Metallography and Phase Analysis of RERTR Fuel Foils"
Annita Martinelli Becker, Department of Mechanical Engineering
Faculty Mentor: Dr. Thomas Hartmann
1 "A Comparison of Ground Reaction Force During a Standing Back Tuck Compared to a Vertical Jump"
Shaun Andersen, Department of Kinesiology & Nutrition Sciences, Shannon Curtin & Victor Sarmiento, Department of Computer Science, & Edward Dakay, School of Life Sciences
Faculty Mentor: Dr. John Mercer

2 "Differences in Ground Reaction Forces of a Counter Movement Jump and a Standing Back Tuck: Automated Data Set Processing"
Shannon Curtin & Victor Sarmiento, Department of Computer Science, Shaun Andersen, Department of Kinesiology & Nutrition Sciences, & Edward Dakay, School of Life Sciences
Faculty Mentor: Dr. John Mercer

3 "Fashion History"
Kassandra Andicoechea, Department of History
Faculty Mentor: Dr. Deirdre Clemente

4 "Variation in Vessel Diameter Across an Environmental Gradient within the Hyper-variable Woody Genus Metrosideros on O‘ahu"
Morgan Arias, School of Life Sciences
Faculty Mentors: Dr. Elizabeth Stacy & Dr. Paul Schute

5 "Weathering Products in Soils Formed on Ultramafic Bodies"
Benjamin Azua, Department of Geoscience
Faculty Mentor: Dr. Elisabeth Hausrath

6 "Polar Alignment of a Circumbinary Disc around 99 Herculis"
Eric Becerril-Blas, Department of Physics and Astronomy
Faculty Mentor: Dr. Rebecca Martin

7 "Indel Rate Estimation Sequences Between Protein Domains"
Dylan Barth, School of Life Sciences
Faculty Mentor: Dr. Mira Han

8 "The Role of Non-B DNA in Bacillus Subtilis Stationary Phase Mutagenesis"
Tara Carney, Dominican College
Faculty Mentor: Dr. Eduardo A. Robleto

9 "GABA Changes in a Mouse Model of Alzheimer’s Disease"
Renzo Chuapoco, Department of Psychology
Faculty Mentor: Dr. Jefferson Kinney

10 "Alterations in GABA Related Signaling in an Immunocompromised Mouse Model"
Chelsea Tran, School of Life Sciences
Faculty Mentor: Dr. Jefferson Kinney

11 "Effects of Cholesterol on Development and Triglyceride Content of Drosophila"
Diamond Clay, School of Life Sciences
Faculty Mentor: Dr. Allen Gibbs

12 "Mfd Protects Cells Against Oxidative Stress"
Natalie Contreras, School of Life Sciences
Faculty Mentor: Dr. Eduardo Robleto
13 "Probing the Metabolism of “Planoflexus” and its Possible Symbioses with Thermophilic Plants"  
Jonathan K. Covington, School of Life Sciences  
Faculty Mentor: Dr. Brian P. Hedlund

14 "The Diversity of Bacteria Found in Distichlis Spicata at High Temperatures"  
Leanna Little Dog, School of Life Sciences  
Faculty Mentor: Dr. Brian P. Hedlund

15 "Magnesium Isotope Investigation of Hawaiian Lava"  
Clarisa Del Toro Contreras, Department of Geoscience  
Faculty Mentor: Dr. Shichun Huang

16 "The Search for Metastable Phase in Manganese Disulfide (MnS2)"  
Dylan Durkee, Department of Physics and Astronomy  
Faculty Mentor: Dr. Ashkan Salamat

17 "Transposon Expression in Neurodegenerative Disease Models"  
Aser Garcia, Tarleton State University  
Faculty Mentor: Dr. Mira Han

18 "Evaluating Long-term Change in Soil Seed Banks, Fertile Islands, and Rare Plant Communities in the Eastern Mojave Desert"  
Emily Gelbart, School of Life Sciences  
Faculty Mentor: Dr. Scott Abella

19 "Muscle Activity During a Sprint Start with and without Track Spikes: A Case Study"  
Mufaro Hungwe, Department of Kinesiology & Nutrition Sciences  
Faculty Mentor: Dr. John Mercer

20 "Identifying Stem Cells for Vertebrate Eye Regeneration"  
Joel Jimenez Vargas, School of Life Sciences  
Faculty Mentor: Dr. Kelly Tseng

21 "Implementation of an Efficient Transposon Expression Quantification Algorithm"  
Brian Klaer, Department of Electrical and Computer Engineering  
Faculty Mentor: Dr. Mira Han

22 "Nutrient-dependent Biofilm Formation in OprF Mutants of Pseudomonas Aeruginosa"  
Alexi Kibbe, Nevada State College  
Faculty Mentor: Dr. Boo Shan Tseng

23 "Petrographic Study of Lava from Ulleungdo Island, Republic Of Korea"  
Hyejeong Lee, Department of Geoscience  
Faculty Mentors: Dr. Shichun Huang & Dr. Minghua Ren

24 "Cultural Impacts on Perception of Auditory Rhythm and Tempo"  
Jared Leslie, Department of Psychology  
Faculty Mentor: Dr. Erin E. Hannon

25 "Use of Vancomycin to Protect Hamsters from Clindamycin-Induced Colitis"  
Tiffany Mata, School of Life Sciences  
Faculty Mentor: Dr. Ernesto Abel-Santos

26 "Comparative Validity of Two Techniques for Center of Pressure Measurements"  
Conner Neilsen, Department of Mechanical Engineering  
Faculty Mentors: Dr. Mohamed Trabia & Dr. Janet Dufek
27 "Selective Separation of Cesium Fission Product Using β-diketones"
Hannah Patenaude, Department of Chemistry and Biochemistry
Faculty Mentors: Dr. Frederic Poineau & Dr. Samundeesvari Mariappan Balasekaran

28 "Accuracy of Phage Genome Annotation Methods"
Alicia Salisbury, School of Life Sciences
Faculty Mentor: Dr. Philippos Tsourkas

29 "Saponite Synthesis and Dissolution with Implications on the Aqueous History of Mars"
Arlaine Sanchez, Department of Geoscience
Faculty Mentor: Dr. Elisabeth Hausrath

30 "The Impact of Dance Experience and Cultural Background on the Perception of Musical Tempo"
Tanya Serrano, School of Life Sciences
Faculty Mentor: Dr. Erin E. Hannon

31 "Predicting KRAB-ZFP Binding Motifs in Co-Expressed Transposon Sequences"
Jessica Shah, Ed. W. Clark High School and Jessica Wu, West Career and Technical Academy
Faculty Mentor: Dr. Mira Han

32 "Further Characterization of K. Marxianus B0399 Inhibitory Activity Against Candida Albicans"
Caroline M. Thomas, High Point University
Faculty Mentor: Dr. Brian P. Hedlund

33 "Amino Acid Synthesis at Extreme Conditions"
Sindi Torres, School of Life Sciences
Faculty Mentor: Dr. Michael Pravica

34 "Use of Laryngeal Ultrasound in the Vocal Pedagogy Laboratory"
Daniel Chigoyenetche, School of Music
Faculty Mentor: Dr. Kimberly James

35 "Calculating the Modal Mineralogy of Aubrite Meteorites Using X-ray Computed Tomography"
Zoe Wilbur, Department of Geoscience
Faculty Mentor: Dr. Arya Udry

36 "The History and Pedagogical Practices of Civil War Reenactment Bands"
Marlee Witt, School of Music
Faculty Mentor: Dr. Jonathan Lee

37 "Genetic Effects on Transposon Expression"
Brion Wong and Christopher Choung, Department of Computer Science
Faculty Mentor: Dr. Mira Han

38 "Predicting Material Properties using Radial Distribution and Machine Learning"
David Zagaceta, Department of Physics and Astronomy
Faculty Mentor: Dr. Qiang Zhu

39 "Intergenerational Disparities in Extremist Tendencies in Germany"
Reese Zavala, Department of Political Science
Faculty Mentor: Dr. Chris Jensen

40 "Conservation Genetics of Sigmodon Arizonae along the Lower Colorado River Including the Recolonization of an Extirpated Population in Nevada"
Dartanyon Jones, Howard University
Faculty Mentor: Dr. Sean Neiswenter
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ACKNOWLEDGEMENTS

A special thank you to our student volunteers!

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