2020 Undergraduate Research Symposium
Note to Students

Thank you for submitting your posters for this year's Symposium. We are excited to showcase the amazing research that you have been working on here at Idaho State University. Go Bengals!
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Mentor: Dr. Samantha H. Blatt

Anthropology

Title: Ida-Howl: Improving Canid Species Identification From Skeletal Remains

Presenter: Joseph T. Do

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Co-author(s): Dr. Erin Rasmussen, Luis R. Rodriguez

Mentor: Dr. Erin Rasmussen

Biomedical Science

Title: Effects of Mindful Eating on Delay and Probability Discounting for Food in Food-Insecure Women

Presenter: Kathryn W. Rose

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Co-author(s): N/A

Mentor: Dr. Rob Watkins

English

Title: Internet Memes and Online Culture: A Rhetorical Criticism of Tweet and Meme from Donald J. Trump

Presenter: Andrew Dimmick

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Co-author(s): Dr. Joshua Swift, Wilson Trusty

Mentor: Dr. Joshua Swift

Psychology

Title: Clients’ Preferences for Incorporating Religiosity and Spirituality in Psychotherapy
Presenter: Elizabeth Breuker  
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Co-author(s): N/A

Mentor: Dr. Kellee J. Kirkpatrick

Outdoor Education

Title: Nature’s Medicine: An Examination of the Use of Outdoor Recreation Spaces by the LGBTQ+ Community
Presenter: Sydney Knight

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Author: Dr. Cynthia Blanton
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Nutrition and Dietetics
Title: Assessing Herb and Spice Intake

Presenter: Skyler Smith

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Co-author(s): Dr. Lorenzo Vega Montoto, Dr. Dayna Daubaras, Dr. Caryn Evilia
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Spanish for Health Professions
Title: Finding DNA’s Metal Binding Properties using SELEX and Halophile DNA
Science and Engineering

Presenter: Jacob Diehl
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Co-author(s): Chris Brininger, Dr. Caryn Evilia
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Biochemistry
Title: FRET Analysis of an Engineered Halophilic Peptide

Presenter: Kayd Meldrum
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Co-author(s): Shu-En Li, Dr. Caryn Evilia
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Biochemistry
Title: Surveying the Salt-Stabilized Structure of Halobacterium Salinarum Cysteinyl- tRNA Synthetase by ANS Fluorescence

Presenter: Peter A. Eckert
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Co-author(s): Ehren Molar, Stephanie Zorio, Dr. Ken Aho
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Biochemistry
Title: Indications of Transgenerational Phenotypic Plasticity for Morphological Traits in Bromus tectorum Under a Two-Generation Reciprocal Drought Experiment

Presenter: Reagan Badger
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Co-author(s): Dr. Kinta Serve, Dr. Ken Aho, Jake Shields
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Biology
Title: Assessing the Effects of a Synthetic Flaxseed Lignan on the Gut Microbiome
Presenter: Brooks Myers
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Co-author(s): Dr. Barbara Frank
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Biology
Title: Phytofiltration of Arsenic by a native Idaho bryophyte (Brachythecium rivulare)

Presenter: Camdon Kay
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Co-author(s): Rachel Brinkley, Dr. Bruce Finney
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Biology
Title: Effects of Upstream Lakes on Downstream Nutrient and Biofilm Composition in the Upper Salmon River Watershed, Central Idaho

Presenter: Adriene Pavek
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Co-author(s): Farjana Afrin, Trevor Meldrum, Srinath Pashikanti, Dr. Jared Barrott
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Biology
Title: Sphingomyelin Synthase Inhibition in Sarcomas Results in Ceramide Accumulation and Apoptosis

Presenter: Alameda LaRoy-Colgrove
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Co-author(s): Tanner Hill
Mentor: Dr. Jack Shurley
Biomedical Science
Title: Detection of Blastomyces Dermatitidis in canine Serum Samples from the Northern and Southern United States using ELISA Testing
Science and Engineering

Presenter: Kathryn S. Malloy
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Mentor: Dr. Joshua J. Pak
Chemistry
Title: Preparation of Novel Sulfur-Containing Ligands for Permanently Porous Materials

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Co-author(s): Katelynn L. Miller, Ardice Fogelsong, Kathryn S. Malloy, Dr. Joshua J. Pak
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Chemistry
Title: Preparation and Study of Novel Porous Materials

Presenter: Callan Norby
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Chemistry and Biochemistry
Title: Fusion of Similarity Measures as an Indicator of Spectral Uniqueness (ISU) to Characterize Differences in Sample Matrix Effects

Presenter: Leah Renner
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Chemistry
Title: Single-Source vs. Multi-Source Approaches to Chalcopyrite Nanomaterials
Presenter: Hunter Harris
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Co-author(s): Makayla Thompson, Dr. Isaac Griffith, Dr. Paul Bodily
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Computer Science
Title: HeyLo: Visualizing User Interests from Twitter Using Emoji in Mixed Reality

Presenter: Austin Young
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Ecology and Conservation Biology
Title: Digital Imaging of Amphibian and Reptile Specimens at the Idaho Museum of Natural History

Presenter: Miranda Kuns
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Ecology and Conservation Biology
Title: Motivations and Attitudes towards Biology Learning in a General Biology Lab

Presenter: Katherine Englund
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Co-author(s): Dr. Charles R. Peterson, Patrick Glitz
Mentor: Dr. Charles Peterson
Ecology and Conservation Biology
Title: Using Community Science to Document Biodiversity at Edson Fichter Nature Area in Pocatello, Idaho
Presenter: Brandon Starks  
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Electrical Engineering  
Title: Solution to Long Distance Communication Systems Disruption due to Atmospheric Intolerance of EM Signals

Presenter: Kenneth Long  
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Integrative Organismal Biology  
Title: Developing a Plan to Study the Effects of River Restoration on the Amphibians and Reptiles of the Blackfoot River Wildlife Management Area

Presenter: Gabrielle Jablonski  
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Co-author(s): Dr. Bruce Finney, John Field, Steve Litvin  
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Integrative Organismal Biology  
Title: Changes in Rockfish Food Webs in the California Current Ecosystem during the ENSO Cycle as Revealed by Stable Isotope Analysis

Presenter: Garrett Blake Stouffer  
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Mentor: Dr. Yunrong Zhu  
Mathematics  
Title: Numerical Model of Gliomas Diffusion
Presenter: Jacob Tolman
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Mathematics
Title: An Application of the Finite Element Method to the Eastern Snake Plain Aquifer Model

Presenter: Benjamin Whipple
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Author: Caleb Monoran
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Mentor: Dr. Xaoxia "Jessica" Xie
Mathematics and Economics
Title: Henry's Fork Rainbow Trout Recruitment Model

Presenter: Zakarie Macpherson
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Mentor: Dr. Marco Schoen
Mechanical Engineering
Title: Analysis of Antiquated Systems Using Modern Technology: Exploration of a Jet Turbine

Presenter: Talia Cahoon
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Microbiology
Title: To Live in a World of Metals: Robust Microbial Communities of the Great Salt Lake
Presenter: Abby Prow  
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Mentor: Dr. Nicki Aubuchon-Endsley

Microbiology

Title: Maternal and Infant Psychosocial Predictors of Perceptions of Infant Sensory Processing from 6 to 18 Months

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Presenter: Robert Spiers  
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Physics

Title: Development of Unsupervised Transfer Learning Techniques for Multivariate Calibration in Near-IR Datasets