

HUMBOLDT STATE UNIVERSITY

ideaFest

A SHOWCASE OF RESEARCH AND PROJECTS

University Library
Friday, May 3, 2019



Research Posters

Library 2nd and 3rd Floors ▪ 3:00 - 5:00pm ▪ Listed A-Z by Poster Title

Ten Plus Digital Media

Library 1st Floor, Room 120 ▪ 12:00-1:00 pm

HSU Sculpture Walk

All Floors ▪ Guided tours at 12:00 pm & 5:00 pm

Theatrical Performances

Library 1st Floor ▪ 2:00 pm

Dance Performances

Library 1st Floor ▪ 3:00 pm

Musical Performances

Library 1st floor, Lobby ▪ 2:00 pm

Celebration of First-Year Writing

Library 2nd Floor, Fishbowl

Virtual & Augmented Reality Station and 3D Showcase

Library 3rd Floor ▪ 2:00 pm

Photography Exhibit and Books

Feuerwerker Building Gallery, 854 9th Street, Arcata ▪ 2pm - 5pm

Research Presentations | Library 2nd & 3rd Floors

1. 3D Panorama of Lake Clark, Alaska

Aaron Taveras, Department of Geography, Faculty
College of Arts, Humanities & Social Sciences

This project describes the 3D cartographic methods used to design a panorama map of Lake Clark, Alaska.

2. A Comparison of Three Mobile Mapping 3-D Data Collection Techniques

David Gwenzi, Environmental Science & Management, Faculty
College of Natural Resources & Sciences

In this project, GSP 330 (Mobile Mapping) students evaluated 3 methods of collecting three dimensional (3D) data at Ma-le'l Dunes Park in Arcata, CA. Data was collected using 1) Autolevels, 2) Total Stations, and 3) Unmanned Aerial Vehicle (UAV). The XYZ data collected by the first two methods were converted to GIS data and then modeled into a Digital Elevation Model (DEM). Aerial images from the UAV were processed with Photoscan's Structure from Motion (SfM) algorithm to generate a point cloud and DEM. The point clouds from all methods were then processed into cut-fill rasters and Triangulated Irregular Networks (TINs) for visualization and comparison.

3. A Home Where the Buffalo Roam, Once Again

Emily Cole, Wildlife, Undergraduate Student
College of Natural Resources & Sciences

The North American Bison once ranged across the Great Plains, but during the era of market hunting, their numbers dropped drastically. These large herbivores are highly valued in the indigenous tribes from their native region. In an effort to restore these culturally significant herds, zoos across the nation have bred them to be reintroduced into their homeland.

4. A Little Piece of My Soul

Noemi Maldonado, Business Administration,
Undergraduate Student
College of Professional Studies

Poetry written about myself, my culture, oppression, heartbreak, and a fictional story about an immigrant woman.

5. A Mixed-Methods Pilot Evaluation of Humboldt County Mental Health's Dual Recovery Program Groups

Bryan Kraus, Social Work, Graduate Student
Nicole Calvino, Social Work, Graduate Student
Meghan Sheeran, Social Work, Graduate Student
College of Professional Studies

Our team partnered with Humboldt County's Dual Recovery Program to design/implement new methods for evaluating the degree to which their program supported clients in recovery from co-occurring mental health and substance use disorders. Our project took a holistic, whole person approach which took cultural, social, environmental, and medical factors into account when assessing client's process of recovery. In addition to quantitative data, we also gathered qualitative data by facilitating a focus-group discussion with DRP clients. The statistical analysis and qualitative themes that emerged were reported back to DRP clients and staff in series of meetings held at the county.

6. Advocacy Through Art

Kaitlyn Daggett, Environmental Studies, Undergraduate Student
College of Arts, Humanities & Social Sciences

In this service learning experience I worked along side the students at the Eel River Community School in Fortuna. Here, I led students in creating murals throughout their facility. When I began most had admitted to never having engaged in some sort of arts and crafts activity. I observed how impactful artistic expression is to the youth and helps aid in stages of development. Having an interdisciplinary education I was able to consider a variety of lenses that play into the importance of creative outlets in the youth. Knowing this, I focused my attention to point out that at risk youth do not receive these crucial opportunities and how that perpetuates inequality issues from a young age.

7. Amphibians and The Yurok Tribe's Wetland Restoration

Macy Dillenbeck, Wildlife, Undergraduate Student
College of Natural Resources & Sciences

My poster is about the Yurok tribe's wetland restorations with a focus on amphibian diversity with regard to the ongoing amphibian extinction.

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8. An Addiction to Capitalism: A Climate Story

Jake, Communication, Undergraduate Student

College of Arts, Humanities & Social Sciences

My research recognizes, evaluates, and dissects the intersections of Political Theory and Communication to offer a rhetorical criticism of mainstream environmentalism. Through a careful analysis of case studies, political processes, and interdisciplinary theory, I illustrate and criticize how environmentalism as a justice movement has been co-opted by capitalism through its commodification and farcical regulation. In these regards, I conclude by acknowledging and appreciating the discursive efforts of Armory Lovins, Hunter Lovins, Paul Hawken for their work in *Natural Capitalism*, as well as the political progress of Congresswoman Alexandria Ocasia-Cortez and her proposed Green New Deal.

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9. An Inside Look At Your Local Community School

Shane Pesis, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

This report summarizes the experience working with Humboldt County Office of Education at the Eureka Community School. The goal of this project is to enhance visibility of the education system at court schools and improve upon each individual's learning experience. This was accomplished through in-depth interviews with staff faculty at the Eureka Community School alongside 30+ volunteer hours as an aid in the classroom.

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10. Analysis of Protein Nanodisc Assembly Methods

William Castillo, Chemistry, Undergraduate Student

Madelyne Green, Chemistry, Undergraduate Student

College of Natural Resources & Sciences

Nanodiscs which are nanolipoprotein particles (NLPs) can be assembled in order to solubilize and study membrane proteins in a water soluble discoidal particle. Here, NLPs were assembled using two techniques: dialysis & biobead adsorption. These methods differ in the removal of a detergent called cholate. The Biobead method is much faster, but is relatively untested, whereas the dialysis method is in current use, but is fairly time consuming. By demonstrating the effectiveness of both techniques for nanodisc assembly, solubilization of membrane proteins can be optimized. This will ultimately be helpful in studying ASR, a retinal containing membrane protein for *Anabaena* (Now *Nostoc*) PCC 7120.

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11. Analyzing Landslide Susceptibility in Monterey County, California, Using MaxEnt

Robert Becker, Environmental Science & Management, Undergraduate Student

David Gwenzi, Environmental Science & Management, Faculty

College of Natural Resources & Sciences

Landslides are a destructive geological process that can destroy infrastructure, homes, and cause human fatalities. Over recent years there have been many damaging landslides along the California coast. Analyzing areas of high landslide risk potential can allow for preventative measures before the economic hardship of a massive repair or worst case scenario loss of life. This study aims to address the need of accurate predictive maps of landslide vulnerability in the Monterey County, CA. Weight of evidence based on prior landslides and selected triggering factors will be modeled within the MaxEnt software package to create landslide susceptibility maps.

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12. Angels Camp and The Rhetorical Power of Jumping Bullfrogs

Todd Loughran, English, Undergraduate Student

College of Arts, Humanities & Social Sciences

My hometown of Angels Camp is a bit bullfrog crazy because the town has various statues, paintings, and plaques of bullfrogs all over the town. There is even an annual fair where people from all over the world compete to see how far their bullfrog can jump. My project would explore the use of the bullfrog as an important rhetorical artifact in Angels Camp as the reason the town has prospered very well. This will be done by taking a look at the history between the town and the bullfrog from the creation of the town, approving the bullfrog as a rhetorical artifact in 1928, and its continuous success today.

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13. Application of the Predicted Repetitions-to-Failure Rating of Perceived Exertion Scale for the NFL 225-lb Bench Press Test

Anthony Ratto, Kinesiology, Graduate Student

College of Professional Studies

A rating of perceived exertion (RPE) scale is a numerical representation of an individual's perceptual response to training and is a viable method of measuring exertion during training (Borg 1982). Recently, versions of previously used RPE scales have been developed and are being used specifically for measuring repetitions-in-reserve (RIR), or repetitions-to-failure (RTF) in resistance exercise. The purpose of this study was to assess how accurately division II NCAA football players could predict repetitions-to-failure during the bench press exercise using an absolute load of 225-lbs by comparing predicted repetitions-to-failure (RTF) with actual repetitions-to-failure.

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14. Appropriate Technology in a University Setting: Table top game for change

Karina Coronado, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

Alternative Technology(AT) has the potential to empower communities in the U.S. to explore the possibility of non-capitalist means. This AT board game attempts to be inclusive of varied learning styles and academic disciplines, while providing a baseline understanding of the varied technologies located at CCAT. This encourages the campus understanding of CCAT, further extending the invitation of a interdisciplinary and multi-adaptable resource for the community. Exploring affinities between community leadership and AT's, reveals areas of overlap among the social and ethical approaches of these dynamics.

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15. Arcata, CA, Yoga Culture Ethnographic Analysis: Themes of Communalism and Individualism

Alicia Osmundson, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

A 16-week ethnographic study of Arcata Yoga Culture was performed in Fall of 2018. To present findings, the poster overviews of the application of one of numerous lens of analysis used in the final ethnography to examine research results. A dualist lens, contrasting the concepts of communalism and individualism was selected for its tangible interpretation of yoga culture specific to Arcata by looking at how people of the community interact and conceptualize yoga. This lens was used in the ethnography to provide a base for the application of additional lens that could potentially giving insight into the role and interpretation of yoga in the general West and its acculturation process.

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16. Art 100 Revamp!

Julie Alderson, Art, Faculty

Maya Strauss, Art, Undergraduate Student

Alexa Pante, Art, Undergraduate Student

Liz Gordon, Art, Undergraduate Student

College of Arts, Humanities & Social Sciences

Art 100 (Global Perspectives in Art) has been fully online for several years. For Spring 2019, Professor Julie Alderson converted the class to a blended format - retaining significant online components, but also introducing weekly face to face elements. In converting the class, she enlisted three advanced Art Education students - Liz Gordon, Alexa Pante and Maya Strauss, to freshen up the How To videos associated with the class. This presentation will present these videos which were designed to help students complete art projects for the course.

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17. Art is Culture, Culture is Medicine

Jibril Bob, Social Work, Graduate Student

Wendy Kerr, Social Work, Graduate Student

College of Professional Studies

The aim of this project was to address the lack of Indigenous representation in the Boys & Girls Club in Klamath, which operates on the Yurok Reservation. We were tasked by the Yurok Tribe and the Boys & Girls Club of the Redwoods to create a culturally appropriate mural.

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18. Barriers to LGBTQ+ Transition Age Youth in Humboldt County

Eugene Williams, Social Work, Graduate Student

College of Professional Studies

My community partner is the Humboldt County Transition Age Youth Collaboration (HCTAYC). The project is a preliminary research project that looks at the barriers in systems serving the LGBTQ+ transition age youth (16-26) population in Humboldt County. The outcomes from the research are the base for policy recommendations that will be used at HCTAYC. The results from the research done will address the specific question: "How are systems serving the LGBTQ+ transition age youth community in Humboldt County?"

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19. Benthic Microplastic Distribution in Humboldt Bay, Northern California: A Comparative Study of Surface Sediments Based on Proximity from the Shore

Carolyn Westrick, Oceanography, Undergraduate Student
Thomas Allie, Oceanography, Undergraduate Student
Alexandra Baker, Biology, Undergraduate Student
Annette J. Carlson, Oceanography, Undergraduate Student
Kyle R. Dahlman, Oceanography, Undergraduate Student
Jacob Evans, Oceanography, Undergraduate Student
Jack R. Hawley, Oceanography, Undergraduate Student
Karansingh M. Keislar, Oceanography, Undergraduate Student
Randall S. Keys, Oceanography, Undergraduate Student
Nathaniel V. Kristan, Oceanography, Undergraduate Student
Eric Lawrence, Oceanography, Undergraduate Student
Matthew T. Lopez, Oceanography, Undergraduate Student
Frey N. Mitchell, Oceanography, Undergraduate Student
Cory B. Monroy, Oceanography, Undergraduate Student
Erick Ortiz, Oceanography, Undergraduate Student
Katherine K. Panebianco, Oceanography, Undergraduate Student
Daniel Raemer, Oceanography, Undergraduate Student
Kezia F. Rasmussen, Oceanography, Undergraduate Student
Wendy Raymond, Oceanography, Undergraduate Student
Nicholas R. Schieferecke, Oceanography, Undergraduate Student
Jennifer J. Snyder, Oceanography, Undergraduate Student
Madeleine J. Tervet, Oceanography, Undergraduate Student
Christine J. Cass, Oceanography, Faculty
Daniel C. O'Shea, Oceanography, Faculty

College of Natural Resources & Sciences

This study focused on microplastic concentrations in and around Humboldt Bay, CA. Microplastics do not have a universal size class, but for the purpose of this study, microplastics were categorized as any plastic piece from 0.335 mm to 4.75 mm. Samples were taken on Humboldt State's research vessel Coral Sea, and by foot on land. Both water and sediment samples were collected and analyzed to find the amount of microplastic particles per mass sampled. Visual microscopy was utilized to create counts for each station.

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20. Beyond Surviving—Thriving: A Study of Resilience Protective Factors in Child Welfare Social Workers

Zachary Roberts, Social Work, Graduate Student
Dr. Marissa O'Neill, Social Work, Faculty

College of Professional Studies

The nature of the child welfare social work exposes workers to various forms of trauma impacting the sustainability of this workforce. The retention of social workers has a direct impact on the success or failure of families and children engaged with the child welfare system. Examining protective factors for these workers will increase information about where to focus agency and personal efforts. This is a quantitative study of resilience protective factors measuring resilience, personal meaning, quality of life and post

traumatic growth. Findings will help us explore ways to support this workforce and how these factors may impact child welfare worker's intention to continue in this field.

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21. Billing Medi-Cal for Indigenous Cultural Practices

Sitaram K. Sandin, Social Work, Graduate Student

College of Professional Studies

Two Feathers Native American Family Services is becoming a Medi-Cal provider through Humboldt County Mental Health. This will provide new revenue streams for their services but also requires navigating the Medi-Cal billing system. For my masters project, I helped research and compile best billing practices so Two Feathers can effectively bill for their many culturally-based interventions. My poster will highlight the important work Two Feathers is doing and will explain the importance of culturally-based interventions.

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22. Boobs and Beakers: Gender-Science Stereotypes Predict Implicit Attitudes Toward Women in Science

Hannah Ferguson, Psychology, Graduate Student
Benjamin P. Skillman, Psychology, Graduate Student
Danielle Siegel, Psychology, Graduate Student
Desiree Garcia, Psychology, Undergraduate Student
Kimberly Vazquez, Psychology, Undergraduate Student
Kierra Boykin, Psychology, Graduate Student
Christopher Aberson, Psychology, Faculty
James Peabody, Psychology, Undergraduate Student

College of Professional Studies

Women have always faced discrimination, but have made great strides, particularly in the workforce. Though more women are entering male dominated fields, these jobs are still seen as inherently male. Specifically, STEM fields have been slow to integrate women into its elite ranks. The field of sciences are traditionally male dominated and associated with masculinity. This is mostly attributable to sociocultural influences rather than biological differences or ability. Stronger implicit association of men with science promotes differences in academic and career outcomes. The current study aims to investigate gender differences in the masculine association with science.

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23. Botanical Sciences and Native Studies

Emily Bernardi, Botany, Undergraduate Student

College of Natural Resources & Sciences

I will be describing research done by the Native Medicinal Plant Research Program relating to ethnobotany. The research includes: their botany database, plants collected, Physalis research, osha, at risk plants, asclepius, and echinacea. The core values of this research are Conservation and sustainable harvest of medicinal plants, Respect for Indigenous knowledge of medicinal plants, and Education toward ecological responsibility,

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24. Boy Scouts and Native American Cultural Appropriation

Shane Jurak, Biochemistry, Undergraduate Student

College of Natural Resources & Sciences

I will be doing a poster that outlines the history of how boy scouts had appropriated Native American culture and the effect that that had on both tribes and the scouts that participated in events such as order of the arrow.

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25. Bringing the Buffalo Back

Nataly Sanchez, Zoology, Undergraduate Student

Kimberly Trinidad, Zoology, Undergraduate Student

College of Natural Resources & Sciences

Researching how Zoology and Native American Studies join together to find a way to protect rain forests.

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26. Broken Spirits Rising: Grief Support Group for those Who Have Experienced the Murder of a Loved One

Francine Schulman, Social Work, Graduate Student

College of Arts, Humanities & Social Sciences

I am interning at the District Attorney's Victim Witness program located in Eureka, California, as an advocate. There has been a long standing need for a grief support group for those who have lost a loved one to murder. As a mother of a murdered daughter I understand how important a grief support group becomes for this population. This unique need has become my community project focus and passion for those who've experienced complicated grief related to homicide. Broken Spirits Rising can offer people who are grieving a supportive environment in which to work through their grief when, for many of them there may be few places in their lives in which they can get this support and be themselves.

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27. Building Community Through The Sustainable Practitioners Directory

Elena Kennedy, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

Climate change, the most pressing issue of our contemporary world, will not be addressed without coming up with local solutions to this global problem. My project focuses on creating an avenue that would allow the campus community and the local community to work together to tackle local concerns. In tandem with HSU's sustainability office and Center for Community Based Learning we've been able to develop such a resource: The Sustainable Practitioners Directory. This directory will allow faculty to easily find community partners working to resolve critical economic, social and environmental challenges, and who are willing to bring their work to the classroom.

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28. Cahuilla Tribe and the Agua Caliente Case

Lita Sims, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

My paper will touch on the Coachella Valley Aquifer and the Cahuilla tribe, which is centered around the Agua Caliente case. Specifically focusing on how the Cahuilla tribe gaining rights over the groundwater, could change future cases on groundwater rights.

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29. Cannabis Cultivation: An Analysis of Humboldt County's Cultivation Regulation on Cannabis and the Affects on the Yurok Tribe

Julia Martinez, Botany, Undergraduate Student

College of Natural Resources & Sciences

This poster will show Humboldt County's regulation and cultivation of Cannabis species nearby the Yurok tribe's reservation boundary and Klamath River, and the effect it has on the Yurok tribe's water rights in relation to California's recent legalization of Cannabis.

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30. Changing Clothes: The Handmaid's Uniform as a Symbol of Protest

Heather Rumsey, English, Undergraduate Student

College of Arts, Humanities & Social Sciences

The bright red cloak and fearsome white bonnet featured in The Handmaid's Tale by Margaret Atwood has been internationally recognized as a symbol for protest. Bruce Miller's Hulu adaptation of the novel propelled this new wave of activism. I argue that the costume functions as a metonym, reacting to larger issues concerning women's rights. This study examines whether the uniform is a viable protest image or is it being co-opted to get people to buy into a certain social and political system?

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31. Cho' Skuy Soo Hey We Chem': Deconstructing Seeking Safety Training Manual for PTSD and Substance Use

Ruby Aguirre, Social Work, Graduate Student

College of Professional Studies

Cho' Skuy Soo Hey We Chem': Deconstructing Seeking Safety Training Manual for PTSD and Substance Use is a pilot curriculum being developed in collaboration with Yurok leaders, elders, professionals, and myself in constructing a culturally appropriate curriculum to address PTSD and Substance use for Yurok families navigating the child welfare system. Post-colonial theory informs my practice while working indigenous communities. Colonization has stripped Native American communities from their land, resources, identity, sovereignty, and children. Western models do not work for indigenous communities, thus offering culturally appropriate services is critical for the healing process.

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32. Climate Change and its Correlation to Klamath Salmon

Kenneth Xiong, Fisheries Biology, Undergraduate Student

Amber Henshaw, Wildlife, Undergraduate Student

College of Natural Resources & Sciences

In our presentation, we will be discussing how climate change is affecting the Salmon run in the Klamath River. We will be addressing the how warmer water temperatures can affect the Salmon population. Our purpose is to inform others that a change in water temperatures may affect oxygen levels in the watershed hence making it difficult for salmon to migrate and survive in the watershed. Overall this may affect their process of spawning.

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33. Clinical Peer Educators

Mira Friedman, Student Health & Wellbeing Services, Staff

Dr. Jessica VanArsdale, Student Health & Wellbeing Services, Staff

Other

College students are at high risk for sexually transmitted infections (STIs) and they are encouraged to get screened regularly. In the fall of 2017 we implemented a peer to peer model to provide reproductive health consultations. Evaluation of the program in 2017 showed it was effective and there was a high satisfaction rate among patients who participated in the program. In the fall of 2018 we had a new set of four peer health educators (PHEs) who were trained to provide asymptomatic STI screenings and birth control consults in clinic. The purpose of this study was to evaluate the demand, utilization, and cost of the program during Fall 2018 semester.

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34. Closing the Perinatal Residential Gap

Sophia Araneo, Social Work, Graduate Student

College of Arts, Humanities & Social Sciences

Humboldt County's Housing and Substance Use crises have intensified in recent years, leaving too few treatment and transitional living opportunities for families in recovery. This project seeks to document the urgency of the gap in services for Tribal and non-Tribal people, and streamline existing referral and resource channels under the new Drug Medi-Cal Organized Delivery System. Long term goals include a comprehensive continuum of integrated dual recovery support and safe housing for parents. Further inquiry and collaboration with county government, NCHIN, UIHS, Healthy Moms, and Yurok Family Wellness Court are recommended.

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35. College Students Acculturative Stress and Wellbeing: Examining School Connectedness as a Moderator

Juliana Taylor, Psychology, Undergraduate Student

Tsolak Kirakosyan, Psychology, Graduate Student

Bernardo Sosa-Rosales, Psychology, Undergraduate Student

Maria Iturbide, Psychology, Faculty

College of Professional Studies

Amongst adolescents, school connectedness has been found to predict positive student wellbeing (i.e., self esteem and depression). The present study plans to replicate these result with college students, whom experience daily stress. For some students this daily stress includes acculturative stress (i.e., psychological process of adapting to a dominant group that differs from one's heritage), which is negatively associated with wellbeing. We will examine how school connectedness buffers this association.

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36. Commander-in-Clown: An Analysis of Political Rhetoric in Relation to Saturday Night Live

Gary Dean Engle, English, Undergraduate Student

College of Arts, Humanities & Social Sciences

Saturday Night Live is a major cultural touchstone and a reactive satire which parodies the same politics it influences. Though whether this influence is descriptive or prescriptive remains to be seen. During the 2016 election, the show changed its portrayal of Donald Trump when Alec Baldwin took over the role. Trump was portrayed as ultimately stupid and unlikely to win. The show helped to normalize his campaign, repudiating Trump's mannerisms but not his policies. By lavishing so much faith on Clinton and treating Trump like a throwaway joke, Saturday Night Live may have inadvertently helped him win the election.

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37. Comparison Between Native Californian and Governmental Attitudes Toward Resource Management and Conservation

Caleb Sandoval, Wildlife, Undergraduate Student

College of Natural Resources & Sciences

Research on various land/ resource management and conservation techniques employed by Native communities in California; their foundations in Traditional Ecological Knowledge, influence on the natural history of Californian ecosystems/ habitats, and their relevance in today's California. Furthermore, the differences between Native community and State and Federal government attitudes toward land/ resource management and conservation will be explored, as well as the overlap/ cooperation between attitudes, especially in the case of the State of California and Native Californian communities.

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38. Concentrated Animal Feeding Operations (CAFOs) and their Consequential Effects on the Biotic Community

Elizabeth Russell, Environmental Studies, Undergraduate Student
College of Arts, Humanities & Social Sciences

Concentrated Animal Feeding Operations (CAFOs) are not only an environmental hazard, they are hazardous to the animals confined in them and neighboring communities. In this project, I researched the consequential effects of CAFOs on the entire biotic community. The main effects discussed include but are not limited to: waste concentration, water quality, air quality, and public health. The interdisciplinarity of the issue at hand is brought to light by analyzing these detrimental effects through an Environmental Justice and Ecofeminist lens. Proposed areas of further research and community inclusion/empowerment are provided upon conclusion.

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39. Conservation on Hunting

Alexander Arroyo, Wildlife Conservation & Management, Undergraduate Student

College of Natural Resources & Sciences

The goals of animal conservation and the goals of indigenous peoples wishing to hunt are not compatible in all cases. There has been a large amount of land being modified by modern civilization and it is increasing rapidly. There has been two pressing reasons for the preservation of undisturbed land, one is the preservation of indigenous homelands and the preservation of wildlife. Conservationists and indigenous peoples have been paying attention on certain wildlife and Indigenous homelands. Some of the data they do on hunting by indigenous people are, 1) the time period over which the information on hunting was collected ; and 2) the number of people consuming the game killed.

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40. Conspicuous Crisis Concerning Consumption of Calamitous Compounds

Briana M. Ramirez, Mathematics, Undergraduate Student
Austin Schenk, Mathematics, Undergraduate Student

College of Natural Resources & Sciences

After manipulating the data, our team presents our conclusions and strategies in an attempt to illuminate and combat the opioid crisis in the 5 states of question. We make policy recommendations for government officials regarding (1) the spread of the current opioid crisis in and between the five states, (2) the various characteristics of opioid incidents in all counties, and (3) the associated socio-economic factors that are present in counties that are in danger of being in an Opioid Crisis.

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41. Context-Specific Effects of Facial Dominance and Trustworthiness on Leadership Judgments

Hannah Ferguson, Psychology, Graduate Student
Maria Sepulveda, Psychology, Undergraduate Student
Amanda Hahn, Psychology, Faculty

College of Professional Studies

Social judgments of faces predict important social outcomes, including leadership decisions. Some studies have even linked these face preferences to actual election outcomes, within one second using just facial cues. Facial dominance and trustworthiness have context-specific effects on leadership decisions, with facial cues linked to dominance being preferred in hypothetical wartime scenarios and facial cues linked to trustworthiness being preferred in hypothetical peacetime scenarios. Here, we report a conceptual replication of Spisak et al. (2012), using only female faces that vary naturally in perceived trustworthiness and dominance.

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42. Controlled Fires

Owen James, Natural Resources, Undergraduate Student
Steve Navarrete, Natural Resources, Undergraduate Student

College of Natural Resources & Sciences

For our creative project we decided to create a poster explaining the relationships between controlled fires and forests. While participating in our Native American Studies class, we spoke briefly about how Native Americans used controlled fires to better the vegetation within their land. As biology (the study of life) and botany (the study of plants) majors, the idea of controlled fires helping forests become more suitable for the life surrounding it was an incredibly interesting topic for our research poster. Throughout our presentation we will be taking a closer look at how exactly controlled fires are able to help plants grow back stronger and healthier in the years after the fire.

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43. Creating Awareness About Traumatic Brain Injuries

Morgan Carley, Social Work, Graduate Student

College of Professional Studies

The focus of my project was to address the lack of knowledge pertaining to Traumatic Brain Injuries (TBI) and to let locals know. This included Bear River Rancheria, Eureka Police Department, Making Headway Center, and some other local locations. Pamphlets were dispersed with information regarding TBIs and were culturally appropriate for whichever population that they were dispersed to.

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44. Creating Methodology for Classroom Materials using Correlations between Childhood and Adulthood Literacy

Makayla Whitney, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Kindergarten reading habits are expected to persist into adulthood; however, for many adults in Washtenaw County this is not the case. This population will rise as half of their children will become illiterate themselves. Survey responses of 76 teachers regarding selection of reading materials based on grammar, syntax, and reading topics were collected in the fall of 2018. Teachers commonly selected pre-leveled reading materials regarding grammar with minor focus on topical matter. These materials did not correlate with topical-matter focused adult reading materials. This study suggests renovation of adult reading materials to help combat the ongoing cycle of illiteracy in Washtenaw County.

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45. Crisis Pregnancy Centers: Helpful or Harmful?

Geneva Baier, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Crisis Pregnancy Centers (CPC) are nonprofit organizations whose purpose is to provide free resources to pregnant women. Currently, there is much controversy over CPCs and their legitimacy as a nonprofit resource for women. To ascertain the prevailing perceptions of CPCs, a literature review was conducted. Materials were analyzed and synthesized to produce a comprehensive view of current feelings about CPCs. Trends reveal a negative characterization of CPCs as dishonest. Several articles call for new legislation that would either restrict or compel speech for CPCs. This study examines the conflict between reproductive rights and free speech laws and how it emerged.

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46. Cultivating Environmental Education Through School Gardens

Ana Puga, Environmental Studies, Undergraduate Student

Mary Brown, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

In a moment when there is a need to increase social knowledge and skills for addressing environmental issues, gardens are an important resource. Garden programs address multiple learning styles, help physical development and provide opportunities for interdisciplinary lessons for children. Within these programs, kids practice locomotor skills, patience, and responsibility. In this study, we looked at accessibility to gardens within elementary schools in Arcata & McKinleyville. In addition to observing accessibility, we looked at the limiting factors for schools that do not have access to gardens and see if there are correlations to social implications such as class and wealth.

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47. Culture Differences in Nonverbal Communication

Patrick Bischoff, Communication, Undergraduate Student

Saifullah Quadri, Psychology, Undergraduate Student

Nikki Xiong, Communication, Undergraduate Student

College of Arts, Humanities & Social Sciences

This poster illustrates nonverbal communication in different cultures through the examination of facial behaviors and emotional expression.

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48. Defending the Environment: From Grassroots to a Business

Joseph McDonald, Politics, Undergraduate Student

College of Arts, Humanities & Social Sciences

A common practice through the waves of environmental movements is for grassroots organizations to eventually form a non-profit that continues to support the environment. This was clearly observed at the Environmental Protection Information Center in Arcata, California. The study of this nonprofit and others like it have painted a clearer picture about how environmental nonprofits organize and mobilize. EPIC follows the patterns of other organizations, being a 45 year old environmental nonprofit, it has seen a lot of changes from its original grassroots mobilization. The focus is now on how to best fulfill its mission statement and maintain a complex membership based business.

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49. Deliberative Democracy for Climate Resilience: Can this Make a Difference?

Mustafa Khan, Political Science, Undergraduate Student

College of Arts, Humanities & Social Sciences

Considering how climate change is an ongoing issue, the basis of the project will explore the concept of deliberative democracy and it's potential effects on climate resilience. Deliberative democracy essentially focuses on how citizens engage with issues and the deliberation aspect of it can help make otherwise complicated political issues easier to comprehend. The research for this project will include a forum on this topic at HSU as well as an analysis of countries employing this strategy and its effectiveness.

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50. Delving into the Significance

Cataleena Tchieng, Wildlife, Undergraduate Student

Florencia Lopez, Anthropology, Undergraduate Student

College of Natural Resources & Sciences

Understanding the significance of basket weaving such as the materials that are used and the importance that it holds for indigenous communities.

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51. Design of a ChiA surface expression system for enhanced biofuel feedstocks.

Kristian Bowman, Biology, Undergraduate Student

College of Natural Resources & Sciences

The ChiA protein from *Serratia marcescens* is responsible for the hydrolysis of 1,4 glycosidic bonds in N-acetyl-glucosamine chains, that comprise chitin. Chitin, being the second most abundant polymer, has untouched potential as a source for biofuel feedstocks. Here we aim to enhance chitinase activity through displaying the ChiA on the surface layer proteins (S-layers) of *Caulobacter vibrioides*. The S-layer of *C. vibrioides* is a nanometer scale hexagonal 2-D crystalline lattice composed of a single protein, RsaA, and covers the entire surface of the organism. In this study, the chiA gene isolated from *S. marcescens* was designed and amplified for expression in the *C. vibrioides* S-layer.

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52. Developing Interdisciplinary Anti-Violence Pedagogy

Maxwell Schnurer, Communication, Faculty

Tessa Pitre, English, Faculty

Leslie Rossman, Communication, Faculty

Maral Attallah, CRGS, Faculty

Mary Sue Savage, CHECK IT, Staff

College of Arts, Humanities & Social Sciences

The Students for Violence Prevention first year experience program faculty cohort will present key strategies learned in developing interdisciplinary anti-violence pedagogy. The faculty will cover strategies for community building, how classroom work weaves with activist strategies, and tactics for supporting students in trauma.

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53. Development and Stable Integration of Tetracycline Inducible Tools for Genome Editing and Genome Regulation in Cultured Human Embryonic Kidney Cells

Miranda Rodriguez, Biology, Undergraduate Student

Amanda Pope, Undergraduate Student

College of Natural Resources & Sciences

At Humboldt State University we aim to create a robust CRISPR/Cas9 toolkit which enables one to overexpress, repress, inhibit transcription and perform double strand DNA cuts allowing one to undertake research on genes associated with cancer, autophagy and neurological diseases. These tools will enable future students, private sector, and academia to investigate a wide range of biological questions. Currently in the CRISPR/Cas9 system there are inherent problems ranging from indel mutations, poor gene locus targeting, low efficiency, and in vivo applications. We built upon the knowledge in Dr. Steele's lab and chose to perform Hi-Fi assembly to overcome technological limitations that lowered.

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54. Deviant Leaders: Examining the Effect of Group Consensus on Individuals' Attitudes Towards a Leader's Position

Molly Crane Conso, Psychology, Graduate Student

Jeffrey Beaulieu, Psychology, Graduate Student

Helena Littman, Psychology, Graduate Student

Charles Moore, Psychology, Undergraduate Student

Nayshia Streater, Psychology, Undergraduate Student

Bryan Sherburne, Graduate Student

College of Professional Studies

The current study investigates how high or low consensus around a leader who holds a deviant or normative position influences individual attitudes, all contingent on the perceived group's attitude towards said position. We hypothesized that exposure to a leader with a deviant position who was elected by a landslide (high consensus) vs. marginally (low consensus) will convert individual attitudes to align with the perceived group attitude, which is supportive of the deviant position.

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55. Digitizing the Lumberjack Newspaper at Humboldt State University

Garrett Purchio, Library, Faculty

Adam Mellott, English, Undergraduate Student

Danielle Kirkland-Shatraw, Geography, Undergraduate Student

Reanne Meighan, Environmental Studies, Undergraduate Student

Veronica Koomson-Maiden, Anthropology, Undergraduate Student

Library

The Lumberjack is the award-winning, student-run newspaper of Humboldt State University and has published continuously since 1929. In Spring 2019, the HSU Library hired students to digitize editions of the newspaper and make the papers available online. These students scanned microfilm reels, applied Optical Character Recognition (OCR) to the scans, and uploaded the papers to the Library's Digital Commons website. This project will provide greater access to the history of HSU to researchers across the globe, creating opportunities for new and exploratory research.

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56. Dissolved Trace Metal Depletion Anomalies and Hydrothermal Interaction in South Pacific Deep Water

Madeleine Tervet, Oceanography and Chemistry,
Undergraduate Student

College of Natural Resources & Sciences

The array of metals obtained from the GEOTRACES cruise in 2013 provides evidence for anomalous metal behavior. Trace metals in the ocean can act as indicators of hydrothermal vents, providing evidence for iron and magnesium sources to the ocean. However, anomalies of other dissolved trace metals (DTM) have been observed at theoretical hydrothermal vent sites, specifically depletions of cerium, lanthanum, nickel, and yttrium. Initially, these depletions were thought to be the result of redox reactions,

but this only partially explained the DTM deficiencies. Particulate scavenging through the formation of metal oxides from DTM is also a possible cause for anomalous depletion.

57. Distribution of Western Thatching Ant Mounds and Their Effects on Soil Conditions in a Coastal Dune Ecosystem

Adrien Bouissou, Biological Sciences, Undergraduate Student

Ian Cullimore, Biological Sciences, Undergraduate Student

College of Natural Resources & Sciences

Western thatching ant (*Formica obscuripes*) mounds are a conspicuous feature in the coastal beach pine forests of the local Lanphere and Ma-le'l Dunes. We explored the mounds' size and spatial distributions, and tested whether their mound-forming behaviors could impact soil nutrient conditions. In a 3-km segment, we found 346 mounds generally situated along the sand-forest interface. Furthermore, from soil samples of seven of the mounds, we found that the ants significantly concentrated the soils with nutrients necessary for plant growth. These findings suggest that the ants could have important implications for supporting plant populations in this nutrient-poor environment.

58. Does Women's Interpersonal Anxiety Track Changes in Steroid Hormone Levels?

Andrew Diaz, Psychology, Graduate Student

Lola Pesce, Psychology, Graduate Student

Lauren Larsen, Psychology, Graduate Student

Amanda Hahn, Psychology, Faculty

College of Professional Studies

Previous studies have suggested that women's interpersonal anxiety will track changes in progesterone during the menstrual cycle. There have been few direct tests of this hypothesis. The present study used a longitudinal design to investigate whether interpersonal anxiety tracked changes in steroid hormones during the menstrual cycle. Women reported greater interpersonal sensitivity and anxiety in the luteal phase of the menstrual cycle compared to the follicular phase. More recent work did not replicate this effect of cycle phase on anxiety. Given results for attachment anxiety and progesterone, we predicted that women would report greater anxious jealousy when progesterone was high.

59. Dog World Dog Memes

Ingrid Beha, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Memes, photographs or videos that are edited to be satirical and that makes fun of cultural ideologies, are passed rapidly through the internet and phone applications and can end up on hundreds of websites within hours. Methods employed included participant observation, literature review, and screenshot analysis from Facebook and Instagram. Patterns in the types of posts indicate that people of all ages actively seek out dog memes to reduce anxiety

and that dog memes are more popular when they are humanized. Dog memes are an artifact of our generation that transcends age groups and allows us to research meme culture that reflects a virtual population.

60. Dragon Ecology

Daisy Montalvo, Mathematics, Undergraduate Student

Ezra Moreno, Mathematics, Undergraduate Student

College of Natural Resources & Sciences

Research focus is the resources and abiotic requirements 3 dragons (from TV series Game of Thrones) need in order to survive different environments around the world.

61. Eat to Live: An Analysis on Human Adaptation to Our Own Actions

Tyani Ifemola Ortiz, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Food is a fundamental life struggle, and just like any other species, humans have developed ways to meet our nutritional needs. Using scholarly peer reviewed texts, I investigated if there was any change to our nutritional needs as we have genetically modified the corn plant. Trends in the data analyzed suggest that while the nutritional needs of humans hasn't changed, the amounts in which we consume certain foods has profound effects on the human body. In the case of corn, too much sugar, such as high fructose corn syrup gives us an stored energy with out any extra nutrients. If we then do not burn off this stored energy it will accumulate and cause health problems.

62. Ecocentrism vs. Individualism

Marcos Macias, Zoology, Undergraduate Student

College of Natural Resources & Sciences

Congress okays reducing sea lion populations to help out Chinook Salmon. Salmon are a cultural importance to Indigenous populations and play a key role in the ecosystems it lives in. The idea of killing a natural predator to save another that is used in many ways. The declining salmon populations are being affected by many different pressures and many others are being affected by it such as killer whales.

63. Effects of a Race Timer on the 3 Minute All Out Test for Critical Power

Paul Mandell, Kinesiology, Graduate Student

College of Professional Studies

The 3 Minute all-out Test (3MT) provides a lens with which to gain insight on an individual's performance capabilities by measuring both anaerobic capacity and maximal aerobic capacity in one short test. The 3MT measures maximal performance based on the assumption that the subject is giving the test maximal effort. However due to the design of the 3MT, test participants may not

be able to accurately gauge their perceived exertion, which could potentially affect performance outcomes during testing. The aim of this study is to examine the effects of introducing a race timer to the 3MT on performance outcomes in healthy active males, and also carries the potential to refine the 3MT.

64. Embodied Liberation: Somatic Tools for Metabolizing White Fragility

Shanti Belaustegui Pockell, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

This poster draws from various studies and writings to provide tools for white bodies to metabolize their false sense of fragility around race related topics. Conversations around dismantling white body supremacy are often limited to addressing racism in a purely rational, intellectual manner. But white body supremacy is anything but rational. The symptoms of living in a racialized society accumulate within the body, often leading to unmetabolized pain, fear and/or conflict. This gives way to trauma associated with white supremacy, which often perpetuates racism while degrading our bodies and inhibiting our collective liberation.

65. Ethnic Differences in Adverse Childhood Experiences and the Role of Childhood Socioeconomic Status

Kali C. Williams, Psychology, Graduate Student
Nena N. McGath, Psychology, Graduate Student
Irene Gonzalez-Herrera, Psychology, Graduate Student

College of Professional Studies

Adverse childhood experiences (ACEs; e.g., child maltreatment, domestic violence, and other household dysfunctions), have been linked to an increased risk of later social and behavioral problems. Cronholm et al. (2015) found that the prevalence of ACEs was higher in their ethnically and socioeconomically diverse sample, as compared to less diverse samples, suggesting that ACEs maybe more prevalent in marginalized populations. Bruner (2017) suggests poverty may play a role in the disproportionate experiencing of ACEs on people of color (PoC). The current study aims to examine links between ethnicity, childhood socioeconomic status, and ACEs in a sample of ethnically diverse (47% PoC) adults.

66. Ethnozoology in North America

Camryn Kenneally, Zoology, Undergraduate Student

College of Natural Resources & Sciences

Exploring what ethnozoology is and how various Native American tribes used traditional ecological knowledge and ethnozoology to learn about animals and apply that knowledge to their way of life. The project will also cover how ethnozoology can be applied to our research, treatment, and conservation of animals throughout the country today.

67. Evaluating Adaptive Governance and Social-Ecological Restoration of the Klamath Dams on the Klamath River

Charley Reed, Native American Studies, Undergraduate Student
College of Arts, Humanities & Social Sciences

This poster will examine the historical timeline of tribal water rights along the Klamath River, including the various relicensing agreements associated with the Klamath Dams. This poster will also focus on the window of opportunity that the relicensing of the hydroelectric dams by providing a framework to implement an adaptive governance approach by reconsidering socio-ecological values within the tribes along the Klamath River. This poster will also demonstrate the use of socio-spatial formations through indigenous led processes stemming from indigenous knowledge and traditional values.

68. Examining Litter Flammability from Eastern Hardwood Forests

Louise, Rangeland Resource Science, Undergraduate Student
Jeff Kane, Wildland Resources, Faculty

College of Natural Resources & Sciences

Fire exclusion has led to mesophication in many eastern hardwood forests, or dominance of fire-sensitive mesophytes. Subsequently this has led to a reduction in pyrophytic litter, reducing the effectiveness of prescribed burns in sustaining ecosystems that need regular fire. Eight species of deciduous trees were examined for their max flame height, leaf pile heights, burn time, smolder time, and residual burned matter. This study will support the classification of tested species as either mesophytes, characterized by low flammability litter, or pyrophytes, characterized by high flammability litter. Greater understanding of these traits will lead to improved ecosystem and fire management.

69. Examining Validity of the Multidimensional Acculturative Stress Inventory Adapted for Armenian Americans

Giselle Velasquez, Psychology, Undergraduate Student
Miami Liscano, Psychology, Undergraduate Student
Bernardo Sosa-Rosales, Psychology, Graduate Student
Tsolak Michael Kirakosyan, Psychology, Graduate Student
Dr. Maria I. Iturbide, Ph.D, Psychology, Faculty

College of Professional Studies

Acculturative stress is experienced when individuals go through the process of acculturation (i.e., reconciling two or more cultures). Previous research has used the Multidimensional Acculturative Stress Inventory (MASI) to assess this stress. However, the measure has only been used with a limited number of ethnic groups. The current study examines the factor structure of the MASI with a community sample of Armenian Americans.

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70. Exploratory Analyses of the Self and Group: Entitativity

Logan Ashworth, Psychology, Graduate Student

Josue Rodriguez, Psychology, Graduate Student

James Peabody, Psychology, Undergraduate Student

Amanda Tarin, Psychology, Undergraduate Student

Stephanie Byers, Psychology, Graduate Student

Bryan Sherburne, Psychology, Graduate Student

Amber Gaffney, Psychology, Faculty

College of Arts, Humanities & Social Sciences

We completed an exploratory secondary analysis examining 167 students' perceptions of their self/group's warmth, entitativity, and the extent to which they identify with their group. Results indicate that perceptions of self-warmth, group warmth, and entitativity each positively predict group identification. A mismatch of the group variables are indicative of a threatening ingroup (low group warmth and high entitativity). Findings suggest that positive views of the self can act as a protective function against a threatening ingroup and may be related to projecting positive images of the self onto the group.

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71. Fake Feminism - A Rhetorical Critique

Maya Habis, CRGS, Undergraduate Student

College of Arts, Humanities & Social Sciences

By utilizing a critical Feminist approach, I will illustrate how Visa's commercial series Money Is Changing, attempts to portray Visa as a Feminist company, but ironically reinforces the very same ideologies, stereotypes, and norms that ground gender inequality.

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72. Feeding the Machine: Effects of Propaganda During World War II

Dylan Wicker, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Propaganda has affected politics for centuries. This research identified underlying themes/differences between U.S. and Nazi propaganda from World War II. Methods included a literature review as well as collecting and analyzing propaganda from that time. A trend that emerged during research was that both forms of propaganda espoused the ideal of defeating an enemy that was a threat to national security. U.S. propaganda focused more on maximizing resources and instilling fear among its citizens, while Nazi propaganda rallied citizens to perform their "natural duty". This research brings to light key trends in the nature of propaganda and reflects how it influenced our modern culture.

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73. Finding Stable Isotope Signatures of Fauna of Northwest California: A Tool for Anthropological Investigations

Abbie Ceja, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Anthropologists use Stable isotope analyses to understand environments where past and present human cultures lived. This project starts a database of isotopic signatures for the region of Humboldt County, in northwestern California, as a baseline for further research. I prepared samples at HSU Archaeology and Biological Anthropology Research labs for Carbon (C) and Oxygen (O) stable isotopes using H₂O₂ Hydroxyapatite-Carbonate protocol. The samples will be sent to Stable Isotope Laboratory at the University of California, Santa Cruz and analyzed for $\delta^{13}\text{C}$ & $\delta^{18}\text{O}$. As database entries increase, evidence of stable isotopic signatures of specific areas in northwest California may be identified.

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74. From One Way to Our Ways: Instilling Indigenous Values in the Western Education System

Naomi Rose Doherty, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Data show that Indigenous students are underperforming academically in schools because Western based education is failing to adapt multicultural pedagogies into the curriculum. To explore this issue, I examined peer-reviewed literature and conducted interviews from local teachers and experts in the field of secondary education. Indigenous concepts of community based building exercises, oral and social communication, as well as storytelling challenged Western discipline based learning methods focused on isolated learning and individual success. Understanding why Western education is flawed gives insight to immediate and future goals of improving education as a multicultural based discipline.

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75. Graduates with Communication Skills Have What Employers Want and Need

Armeda C. Reitzel, Communication, Faculty

Celeste Buntin, Communication, Undergraduate Student

College of Arts, Humanities & Social Sciences

This presentation visually highlights the critical communication skills that employers are looking for in college graduates and describes how these skills may be demonstrated by students in the Communication 490 course taught by Dr. Reitzel. Two viewpoints are highlighted: the Communication student's perspective completing the Capstone Experience course activities and the Communication faculty member's perspective in terms of addressing and achieving the National Communication Association's Learning Outcomes in Communication.

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76. Havasupai Relation to Water: Indian Reserved Water Rights and Water Policy

Vicente Diaz, Native American Studies, Undergraduate Student
College of Arts, Humanities & Social Sciences

The average person's relationship with water has changed because of the effects of settler colonialism. Some Indigenous people in the Americas have maintained their cultural understanding of the environment. The Havasupai tribe (the people of the blue/green water) have a strong relationship to water that is based in language, culture, and stories. I will analyze the Havasupai relationship and claim to water in regard to Indian reserved water rights and water policy. This includes the Winters Doctrine, on-going mining litigation, and contemporary water policies like the Clean Water Act.

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77. Healthy Youth, Healthy Communities

Felicia J Stansbury, Social Work, Graduate Student
College of Professional Studies

Our goal is to demonstrate the importance of connection between the natural environment, community, individuals, and wellness. We are creating a curriculum to provide a non-traditional prevention/intervention program of outdoor, wilderness activities for youth in the Southern Humboldt region. It is important to note, Ecological Systems Theory is the foundational framework for this project. The ecosystemic perspective is a way of thinking and organizing knowledge that emphasizes the interrelatedness and interdependency between individuals and social systems (Waller 2001). The purpose of our work; promoting healthy activities for youth in order to foster a healthier community.

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78. Hell Bent on Consent

Al Newman, Psychology, Undergraduate Student
Heather Reynolds, Psychology, Undergraduate Student
Edith Gomez, Psychology, Undergraduate Student
Indiana Murillo, Psychology, Undergraduate Student
Cameron Carpenter, Psychology, Undergraduate Student
Akacia Marks, Psychology, Undergraduate Student
Benjamin Graham, Psychology, Faculty

College of Professional Studies

On college campuses, the topic of sexual consent has received much attention over the past 15 years. Consent is a multifaceted term, and can incorporate an internal state of willingness, an act of explicitly agreeing to something, and behavior that someone else interprets as consent (Muehlenhard et al., 2016). Despite the attention to sexual consent within higher education, it is unknown whether or not this trend is reflected in human sexuality textbooks. The current study involved a content analysis of how the construct of sexual consent is represented in five major human sexuality textbooks in terms of location, definition, scope, and context.

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79. Helping the Community Save Energy

Nancy Charco, Environmental Resources Engineering, Undergraduate Student
Aneika Perez, Environment & Community, Graduate Student
Anh Bui, Energy Technology & Policy, Graduate Student
College of Natural Resources & Sciences

Our project is focused on developing educational materials on energy efficiency targeted to renters and student residence hall occupants. We are developing a checklist of possible actions that will include building energy efficiency, appliances, transportation, and energy purchasing options that are available to typical renters, who do not have the ability to make major improvements to their home. The main outcome will be a set of appropriate outreach materials to help deliver these messages. We will develop draft materials, workshop these with current renters, and improve the messages based on their feedback. The goal is to empower renters to make positive clean energy choices.

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80. Hormonal Factors Impacting Women's Relationship Jealousy

Hannah Ferguson, Psychology, Graduate Student
Jennifer Masad, Psychology, Undergraduate Student
Steven Bowman, Psychology, Graduate Student
Danielle Siegel, Psychology, Graduate Student
Amanda Hahn, Psychology, Faculty

College of Professional Studies

Previous research has suggested that the use of hormonal contraception affects women's feelings of relationship jealousy. Combined oral contraceptive use, in partnered women, has been linked to an increase in reported feelings of relationship jealousy, especially among women using a high-estrogen dose pill formulation. While the pill is one of the most widely used forms of hormonal contraception, many health care professionals now encourage young women to use progesterone-only contraceptives. This study compares reported relationship jealousy in women using the pill and women using long lasting, progesterone-only contraceptives using Buunk's (1997) relationship jealousy scale.

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81. How Different Tribes Harvest Their Deer

Jedidiah Parker, Wildlife, Undergraduate Student
College of Natural Resources & Sciences

I will be providing information on how different tribes utilize parts of the deer and add insight on how it varies throughout area and season. I will include tribes from Wisconsin, California, and Oregon.

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82. How do I Look? Gender Conformity, Self-Critical Comments, and Friendship

Elliott Meyer, Psychology, Undergraduate Student

Sarai Escalante-Castro, Psychology, Graduate Student

Stephanie Souter, Psychology, Graduate Student

College of Professional Studies

This study will investigate the differences in how men and women respond to same-sex friends and acquaintances engaging in self-criticism of their physical appearance. Past studies have found that physical appearance and body image are more relevant to women than to men. We expect that due to the different friendship norms that men and women follow, women will be more likely to respond to self-critical comments from friends with flattering comments, while men will be more likely to respond with honest opinions even if those responses are negative. It is also expected that following these norms will result in more positive interactions between same sex peers and acquaintances.

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83. How Does the Klamath Dam Effect Salmonid Species and Surrounding Indigenous Tribes?

Charles Ricci, Fisheries Biology, Undergraduate Student

Nolan Santala, Fisheries Biology, Undergraduate Student

College of Natural Resources & Sciences

Since the removal of the Klamath dams is such a current topic in today's society, we thought that it would be a great topic to research. The Klamath dams have since been an eyesore and a serious problem for organisms in the Pacific Northwest. Salmonid species cannot make their runs, water temperature increases, and Nitrogen blooms can occur with dams in place. These physical barriers, the Klamath dams, are not only a problem concerning the health of the salmon and other organisms, but the Indigenous tribes who live on these Pacific Northwest rivers as well. Their culture and way of life has become disrupted due to the lack of available salmon.

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84. How Traditional Ecological Knowledge Informs Scientific Research

Lauren Palmer, Zoology, Undergraduate Student

Shea Daly, Wildlife, Undergraduate Student

College of Natural Resources & Sciences

Traditional ecological knowledge has great potential with regard to its ability to inform and direct scientific research. We will be exploring various aspects of traditional ecological knowledge for the purpose of pinpointing and observing important changes in -- and uses for -- native plant and animal species over time, in order to find areas that would benefit from greater scientific attention or conservation efforts.

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85. How Tribes Saved Bison from Extinction

Justin Howard, Zoology, Undergraduate Student

College of Natural Resources & Sciences

I'm going to be doing my research on how the Indigenous people are reintroducing bison back from the brink of extinction on the great plains. The tribes along the Great Plains have started several programs for the reintroduction of the bison along the Great Plains.

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86. Humboldt Energy Independence Fund: Heat Pumps as a Means to Transition Away from Natural Gas

Aneika Perez, Social Science- Environment & Community, Graduate Student

Melissa Savage, Environmental Resource Engineering, Undergraduate Student

Alex Eckert, Energy Technology and Policy, Graduate Student

Other

Humboldt State University current HVAC (Heating, Ventilation, and Air Conditioning) system relies on the use of natural gas boilers. This project proposes to switch HSU's current HVAC system to electric air source heat pumps. Unlike natural gas boilers, electric heat pumps do not burn fuel onsite to generate and move heat. Transitioning building heating systems from natural gas to electrically powered systems would reduce the GHG emissions for HSU. In the HSU Climate Action Plan, it was reported that natural gas usage contributed to at least 60% of HSU's 2014 carbon emissions.

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87. Humboldt Tenant Landlord Collaboration (HTLC)

Katelyn Harris, Social Work, Graduate Student

Sonya Woody, Social Work, Graduate Student

Ashley Bradshaw, Social Work, Graduate Student

College of Professional Studies

Humboldt Tenant Landlord Collaboration (HTLC) is an educational program designed to create positive working relationships between student tenants and landlord/property managers as a way to mitigate barriers to housing. In order to engage stakeholders in the development of the program, we held three town hall meetings where we facilitated conversations around housing issues in the area. The data that was collected during the town hall meetings is helping to inform the topics in the modules for the program. Our poster showcases our process, our outcomes, and the next steps for HTLC, which will be launched for tenants and landlords by Fall Semester 2019.

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88. Humboldt Unitarian Universalist Fellowship Impact on Community

Kyle Groben, Religious Studies, Undergraduate Student

Jordan Stevens, Religious Studies, Undergraduate Student

Lillyanne Price, Religious Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

The Humboldt Unitarian Universalist Fellowship in Bayside is an all inclusive religious organization with a focus on fostering healthy relationships between all beings and the world we live in. HUUF has multiple committees through which they address different aspects of intersectional issues. In this poster we will compile the three separate emphasises of our service learning experience through the HUUF which are: children's religious education, providing services to the homeless, and sharing the importance of native plants with the congregation. We will share what we learned from our experience, how that deepened our understanding of Religion in America, and how we served the community.

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89. I See Gay People: Gaydar Abilities in a Real-World Distribution

Benjamin Skillman, Psychology, Graduate Student

Amanda Hahn, Psychology, Faculty

Logan Ashworth, Psychology, Graduate Student

Lola Pesce, Psychology, Graduate Student

Andrew Diaz, Psychology, Graduate Student

Hannah Ferguson, Psychology, Graduate Student

College of Professional Studies

Previous research suggests that people can accurately identify a person's sexual orientation from facial cues alone. Many of these studies have relied on images collected from various online sources that may contain other contextual cues to sexual orientation. Additionally, heterosexual and homosexual individuals are typically presented using a 50/50 distribution, which does not accurately reflect the real-world distribution of faces we encounter. This study aims to investigate whether people are more accurate at identifying sexual orientation from facial cues when the distribution of images presented more accurately reflects the real world distribution of straight and gay faces.

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90. Identifying Bus Stop Locations: Isolating Flow from Entering Creeks and Parks

Christopher Lanz, Environmental Science & Management, Undergraduate Student

College of Natural Resources & Sciences

Municipal solid waste (MSW) aka. trash, is one of many stressors on global climate change. An estimated 19,832,501 metric tons generated within a year alone in California. Accumulation of trash can spread into creeks and parks. Trash flow can be mitigated through the use of waste and recycling receptacles. This study observes bus stops that are in proximity to selected creeks and parks based on 100, 200, and 300 meter zones of the Arcata Red and Gold Bus Routes. The Red Route buffer zones intersecting

greatly with nearby creeks and parks. Community members and stake holders can provide further input where receptacles are most beneficiary for local green-space and city planning cost.

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91. Identifying Resources to Strengthen Pathways to Higher Education for Native Foster Youth in Humboldt County

Liliana Gandarilla, Social Work, Graduate Student

Melody Soper, Social Work, Graduate Student

Alex Garcia, Social Work, Graduate Student

College of Professional Studies

This project partnered with the Indian Tribal and Educational Personnel Program (ITEPP) to gather qualitative data regarding the strengths and challenges in the existing resources and services offered to Native foster youth (NFY) in Humboldt County. The intended goals were to use Indigenous research methods to 1. Build connections between community agencies serving NFY in order to create a stronger network of support; 2. Strengthen support for NFY that can carry on throughout their collegiate experience and facilitate their eventual degree completion; 3. Provide a model of practice for other campuses seeking to strengthen resources and pathways to higher education success for NFY.

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92. Improving Postmortem Intervals through Protein Degradation Analysis

Stephany Salgado, Biochemistry, Undergraduate Student

Kim White, Chemistry, Faculty

Luisa Segovia, Biochemistry, Undergraduate Student

College of Natural Resources & Sciences

Analysis of protein degradation to assess postmortem intervals in a quantative approach.

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93. Improving The Fostering Of Power For Students With Multi-Dimensional Identities Through Analysis

Samantha Garcia, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

Making up around 33% of Humboldt State's demographics, Hispanic or Latino identifying students share a lack of representation for P.O.C in the community. The Latinx Center for Academic Excellence works to navigate pathways to success for students while at the same time respecting their cultural and historical trajectory. Through the center I have used the technique of surveying and analysis to help strengthen the fostering of power for students with multi-dimensional identities by identifying how the center can enhance their approach of building community, facilitating events, workshops, mentorship programs, and free services for students.

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94. Indigenous DNA: The Trauma Built Into It

Chaughnessy Szillat, Cellular and Molecular Biology,
Undergraduate Student

College of Natural Resources & Sciences

Purpose: To look at how trauma is passed down through Indigenous peoples' generations and cross examine how they really still dealing with problems from colonization.

Problem: Many indigenous people are experiencing the same oppression from settler colonialism. It is affecting the youth in their level of self esteem resulting in low grades or not making it to college.

Literature review: Native American DNA by Kim TallBear is a book about how Native American DNA hold generational trauma, how it got to be there and why it is still persisting today. Another source is Dr. Evan Adams' book "Indigenous people," issue of Visions, he talks about the ways of healing using resilience.

they have used their developed practices to contribute to medicine today. We will then discuss what natural resources these tribes utilized to create these medications and conditions they may treat.

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95. Indigenous Education Through Acts Of Art

Alisa Ibyadullin, Art, Undergraduate Student

College of Arts, Humanities & Social Sciences

This poster illustrates how the younger generations of Indigenous peoples can use art in order to educate and reach out to younger, unknowledgeable generations throughout the United States on the history of Native Americans culture.

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96. Indigenous Health and Wellness

Loowyza Colegrove, Biology, Undergraduate Student

College of Natural Resources & Sciences

Indigenous peoples have always had a balanced nutritional diet. In my poster, I want to dive into the connection between Diabetes and its connection to Indigenous people. Modern day foods are nothing comparable to the cultivated food and resources the indigenous people thrived on. I feel that because of this epidemic, Indigenous people are more susceptible to having diabetes through their bodies not recognizing "modern day food," as real food. Due to the high concentrations of sugar and fatty foods today, this has created a wave of health issues for Indigenous peoples. More simply, their bodies struggle to process the unnecessary garbage that we choose to put in our bodies daily.

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97. Indigenous Holistic Practices

Kamaya Killebrew, Biology, Undergraduate Student

Halijah Edison, Biology, Undergraduate Student

College of Natural Resources & Sciences

The goal of our research project is to inform our peers on the medicinal practices of tribes like the Cherokee, Creek, and Houma tribes used. We will provide some background information on these tribes and their regions they reside in. We will also discuss how

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98. Indigenous People and Tiger Conservation

Rainey Strippelhoff, Wildlife, Undergraduate Student

College of Natural Resources & Sciences

My poster will be an examination of current tiger conservation efforts and how indigenous people have contributed to the recent growth in tiger populations. Traditional beliefs surrounding tigers shape the perspectives of Indigenous tribes living alongside these powerful cats. Understanding the indigenous perspective of coexistence with tigers offers conservationists new insights for promoting tiger conservation elsewhere. The poster will outline where tigers fit into the attitudes and beliefs of indigenous people living alongside them, how it affects conservation efforts today, and why it is important.

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99. Indigenous People the First Biologists: use of TEK in Sustaining the Wilderness

Carlie Smith, General Biology, Undergraduate Student

College of Natural Resources & Sciences

A study on how using Traditional Ecological Knowledge can help sustain the wilderness and natural resources

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100. Indigenous Peoples and Uses of Plants in Spirituality and Healing

Max Schmidtbauer, Botany, Undergraduate Student

Sophia Kitts, Botany, Undergraduate Student

College of Natural Resources & Sciences

Sophia and I will be creating our poster based around the ideas of Traditional Ecological Knowledge, as well as Indigenous plant-based medicines. We will take a look into how Indigenous peoples use plants to enrich their lives, heal, and further states of spirit and consciousness. The focus of the poster will be around common Indigenous plant-based medicines, some psychedelic allies, and we will finish it out by discussing how the gathering of these materials bring Indigenous peoples closer to their land.

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101. INRSEP + Diversity in STEM

Lonyx Landry, INRSEP, Graduate Student

Dr. Nievita Bueno Watts, INRSEP, Staff

Amanda Staack, INRSEP, Staff

College of Natural Resources & Sciences

HSU's Indian Natural Resources, Science and Engineering Program (INRSEP) provides academic and research support services to historically underrepresented students in the Sciences, in order to

support their academic success and degree completion, as well as connect them with the resources and opportunities to meet their career and graduate school goals.

102. Integrating 3D Visualizations and Geographical Data for Mayan Archaeological Mapping and Research

Michael McDermott, Anthropology, Undergraduate Student

Jeremy McFarland, Anthropology, Undergraduate Student

Philip Pantages, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Archaeologists have used GIS to analyze spatial patterns of ancient cultures, but integrating accurate 3D models of cultural features with GIS data is a new endeavor. This project provides a medium for spatial analysis that conserves the context of cultural features across the landscape, by combining 3D renditions with topographical LiDAR and spatial data collected by the HSU-Belize Archaeology Project in northwestern Belize. Using a variety of software, the authors modeled the field data into an interactive GIS mapping environment that integrates the multiple data formats into a working tool, allowing for accurate analysis of archaeology data in 3D or 2D layouts.

103. Intersections of Gender, Access, and Confidence in Women's Leadership

Lauren Wardle, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

This poster reflects my experiences in leadership positions within HSU campus organizing, and how those experiences intersect with questions of gender, power, access, and confidence. Although we might hope that leadership is open to all folks, this isn't always true in the workplace. It was through my own journey of self-reflection, research and trial and error to foster my own confidence and leadership skills, that I found myself asking how gender and power reinsert themselves in such contexts. My poster provides ideas for how we can foster these skills for other women in similar and differing situations.

104. Investigating the Genetic Diversity of Immune Genes in Non-Native Populations of American Bullfrogs (*Lithobates catesbeianus*)

Luisa Segovia, Biological Sciences, Undergraduate Student

Karen Kiemnec-Tyburczy, Biological Sciences, Faculty

College of Natural Resources & Sciences

The American Bullfrog (*Lithobates catesbeianus*) is a highly invasive species that has successfully colonized different habitats around the world. Our project's objective is to isolate and characterize the genetic diversity of a rapidly evolving immune gene in an invasive bullfrog population in California's Sutter National Wildlife Refuge. The level of genetic variability in a population may help determine how resistant a population is pathogens and how persistent

an invasive population may be over time. We compared the genetic diversity within this population to that found in other frog populations, including both native and non-native populations.

105. Investigating the Timing of Seed Maturation Inside Conifer Cones

Madeleine Lopez, Biology, Undergraduate Student

College of Natural Resources & Sciences

Evidence of high density non-serotinous recruitment post-fire questions if seed dispersal from a live tree is solely responsible. Studies suggest that seed maturation occurs before the cone scales reflex, and it's possible that cone scales act as a protective barrier during fire, such that mature seeds are protected and remain germinable. If cone scales adequately protect seeds, then an aerial seed source post-fire is available for recruitment, relative to seed maturation and time of fire. This research aims to determine the timing of *Pinus contorta* ssp. *latifolia* seed maturation within a coniferous cone and its relationship to degree days.

106. Is 'Populism' or the 'Neoliberal Project' Challenging Liberal Democratic Norms & Institutions?

John Ferdon, Political Science & Philosophy, Undergraduate Student

College of Arts, Humanities & Social Sciences

Conventional wisdom in academia and media often paint recent challenges to liberal democratic norms and institutions as a result of "populism". In this lenses, the anti-pluralistic, and tribalistic tendencies of the demos, or people, of a political community challenge the 'liberal' element of liberal democracy. In this project I challenge this conventional wisdom, and argue that such an analysis does not take into account the causes of the what is referred to as 'populism'. To understand the causes, I argue that we must take a look at the cultural, political and economic changes that have been unfolding since the late seventies.

107. Islamophobia, Anti-Semitism, and Other Forms of Religious Prejudice in Humboldt County

Michael Howell, Religious Studies, Undergraduate Student

Vincent Biondo, Religious Studies, Faculty

College of Arts, Humanities & Social Sciences

In Fall, 2018, Religious Studies senior Michael Howell wrote a research paper for RS 332 Introduction to Islam on Islamophobia in Humboldt County. Professor Biondo encouraged Michael to expand the scope to examine religious prejudice more broadly. To help him interview twelve Jewish, Christian, and Muslim leaders in Humboldt County and to publish his findings, Michael was awarded an Undergraduate Research & Creative Activity Award from the College of Arts, Humanities, and Social Sciences. Does

Humboldt contain an ideology or worldview (such as libertarianism, secularism, spirituality, or naturalism) that prevents violence or promotes civic engagement?

108. It Gets Better: Policy Changes Predict Implicit Bias Against Homosexuality

Danielle Siegel, Psychology, Graduate Student

Ben Skillman, Psychology, Graduate Student

Hannah Ferguson, Psychology, Graduate Student

Desiree Garcia, Psychology, Undergraduate Student

College of Professional Studies

The purpose of this study was to examine the effect of policy changes on people's implicit biases about gay people. Participants completed an online IAT task that measures implicit favoritism for gay vs. straight people. A time series analysis indicates that the average monthly implicit favoritism score (for straight over gay people) decreased following the legalization of same-sex marriage in the United States. This suggests reduced favoritism for heterosexuals over gay and lesbian people, $b = -0.83$, $t(164) = -18.74$, $p < .001$. As predicted, people exhibited less implicit bias against homosexuality after the legalization of gay marriage.

109. Jefferson Community Center: Making Progress Where People Matter

Lauren Sanchez, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

Jefferson Community Center is a non-profit organization located in Eureka, CA. This project will focus on their dedication to food insecurity and how they teach their youth programs about sustainable food practices. It will also show other services such as their sustainable garden plots in which they grow their own food but also plant native plants for wildlife conservation. My poster will show the variety of services I've helped with during my time there.

110. Jefferson Community Center: Working Together for the Greater Eureka Community

Desteny Gutierrez, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

The Jefferson Community Center is dedicated to fostering a sense of working together by increasing recreational, educational and vocational opportunities to the needs of the community. The excitement builds as our community shows its commitment to a clean, safe neighborhood full of activities for all ages. This project will summarize my service learning at Jefferson, primarily working with the youth programs. I will describe a few other programs and services offered at Jefferson, supported by photos of events and activities. I will provide contact information and opportunities to get involved. Join us with your ideas, projects and energy!

111. Kaulana Na Wai Eha

Kawai Navares, Forestry, Undergraduate Student

College of Natural Resources & Sciences

In central Maui in the Wailuku district, a system of fresh water streams that sustained thriving Hawaiian communities since time immemorial is all dried up. Kaulana Na Wai Eha (the famous four great streams) is comprised of the Waihe'e river, Waiehu, Iao, and Waikapu streams. These waterways have been diverted since the beginning of the plantation era, to grow sugarcane. The sugarcane industry has now ceased but the water is still being diverted and sold to private corporations, continuously draining the streams leaving no water for the surrounding community. I will be talking about the legal battle between the Hawaiian Commercial & Sugar Co. v. Native Hawaiian Legal Corporation.

112. Keeping it Glassy: Skeletal Analysis of Ancient Mesoamerican Obsidian Weapons

Taylor Picard, Anthropology, Undergraduate Student

Jordyn Winters, Anthropology

Baylor Greene, Anthropology, Undergraduate Student

Philip Pantages, Anthropology, Undergraduate Student

Natalie Wells, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

The project examined the damage caused to skeletal remains by ancient Mesoamerican weapons, due to the lack of research into this topic. The project focused on macuahuitls, wooden clubs lined with obsidian blades, which were produced through a combination of ancient and modern techniques. These weapons were then tested on animal crania acquired from a local butcher. The preliminary results show that the weapons left similar patterns of damage to the skeletal remains while having unique characteristics reflective of the individual weapon. These results show potential for future research in the area that could be compiled into a database similar to those used today for modern forensic cases.

113. Klamath Dam Removal

Noah Jenkins, Fisheries, Undergraduate Student

Aidan Berlin, Fisheries, Undergraduate Student

College of Natural Resources & Sciences

Within our poster we will present the positives of the removal of the dams on the Klamath and the effects that it will have on the water ways in that area. While doing this we will also inform about the history and importance of rivers like the Klamath that are being dammed. We will also cover the socio economic effects of the dam removal on indigenous groups that have thrived on salmonid populations. Scientists have speculated that the presence of the dams is responsible for the decline of salmonid in northern rivers. In conclusion we will make a hypothesis based on other dam removals to see what effect it will have on the area.

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114. L.A. Sheriff's "Our Mission, Creed, and Core Values": a Subversive Standpoint"

Cristian Martinez, English, Undergrad student,

College of Arts, Humanities & Social Sciences

The Los Angeles Sheriff's Department has strategically created a message in hopes of persuading its population that they stand for justice. "Our Mission, Creed, and Core Values," may be considered an honorable message to its preferred audience. But from a subversive standpoint, the message is considered to target and criminalize marginalized citizens. This study will demonstrate how the hegemony uses militarized rhetoric to support their war on our communities. Ultimately, this research seeks to educate its audience about the ways in which messages, those similar to the LASD's, continue to instigate hostilities towards and among the marginalized population.

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115. Leaf Dispersal Trends Among Pyrophytic and Mesophytic Oak Tree Species

Matthew Pedrotti, Forestry & Wildland Resources,
Undergraduate Student

College of Natural Resources & Sciences

We hypothesize that leaves from pyrophytic species (highly flammable species with historically frequent fire regimes) will disperse farther than leaves from mesophytic species (less flammable species with lower frequency fire regimes). To test this, we examined the leaf fall velocity and dispersal distance of four mesophytic and four pyrophytic oaks species from California by dropping ten leaves of each species from five different heights in the absence of wind. Preliminary results indicated that mesophytes dispersed farther than pyrophytes, and mean leaf fall velocity was slower in pyrophytes. Mesophytes could have traveled farther due to having lower surface area-to-mass ratio.

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116. Leeroy Jenkins; Identity Formation, Investment, and Social Structure of a Guild in World of Warcraft

Rachael Heller, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

World of Warcraft, an online fantasy game, connects more than 10 million players worldwide in a multiplayer story-based adventure. Each player builds a character and plays through game content individually or in groups called guilds. Through participant observation over the course of a year, this study of one guild found: social/hierarchical bonds/structure are reinforced in all group activities; and the correlation between individual time investment in guild play/communication and group cohesion. This research contributes to existing scholarship on online sociality by providing insight into the role online gaming plays in connecting people across time and space in new forms of community.

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117. Mad River Fish Hatchery

Kyle A. Barney, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

One issue facing fisheries management is communicating with the public in an informative way. Filmography has shown to be an excellent medium for educating the public. A major driving force of education consist of documentaries, giving access of new information to the most amount of people. In collaboration with the Mad River Fish Hatchery I have created an educational documentary that assists in further educating the the local community and students that visit this site. This project will reinforce the necessity of the Fish Hatcheries educational purposes and further continue their mission in fish management practices.

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118. Makeup Design for Evil Dead the Musical by Amy Beltrán and Constance Hill

Amy Beltrán, Theatre Arts, Undergraduate Student

Constance Hill, Theatre Arts, Undergraduate Student

College of Arts, Humanities & Social Sciences

National Award Winning Makeup Design for Evil Dead: The Musical by Amy Beltrán and Constance Hill.

Due to the theatre department not having a makeup class dedicated to teaching FX makeup, we had to teach ourselves the entire process of face casting, creating latex prosthetics, and designing realistic gore makeup. Our creativity ranged from using fake nails to create teeth on zombies, to using chocolate syrup to make fake blood.

Our collaborative design won us the national award for excellence in Allied Arts at the Kennedy Center American College Theatre Festival back in February, 2019, as well as an internship with the Stage Craft Institute of Las Vegas over the summer.

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119. Making Connections Between Queer Students and Resources

Sebrinna Schmidt, Social Work, Graduate Student

College of Professional Studies

The Eric Rofes Multicultural Queer Resource Center (ERC) works hard every year to provide resources to the queer identified students on campus. This can be a difficult yet rewarding position to be in. The difficulty being, at times, queer students have other needs that go beyond what the ERC is able to assist with. This does not stop the ERC from trying to connect students with other resources both on and off campus. With their guidance a resource zine was created. Its intention is to bridge gaps and make connections from the students to the resources they may find useful.

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120. Mapping Our Way to Zero Waste

Liam Hazelton, Environmental Studies, Undergraduate Student
College of Arts, Humanities & Social Sciences

A Zero Waste perspective is supportive of reducing plastic consumption. Zero Waste Humboldt cooperated with six local governments and three schools with sponsorship from Coast Central Credit Union, Strong Foundation, and Mad River Rotary Club. They obtained a startup grant from the Footprint Foundation to implement the process of installing water bottle refilling stations to support the local communities and reduce the amount of single use plastic. They needed several maps in different mediums showing the locations where they have installed the water bottle refilling stations. I supported their efforts by making a web based map and a printed map for their public outreach.

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121. Marijuana Cultivation on the Yurok Reservation

Nicole Peters, Native American Studies, Undergraduate Student
College of Arts, Humanities & Social Sciences

This poster will look at the history of illegal cannabis cultivation within the Yurok Reservation boundaries. This poster will include the impacts to the tribal communities and their dependence on the water resources used in maintaining cannabis farming, the impact on natural and cultural resources and the current tribal stance on cannabis cultivation.

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122. Mask Design for Fantastic Mr. Fox by Constance Hill

Constance Hill, Theatre Arts, Undergraduate Student
College of Arts, Humanities & Social Sciences

My concept for the mask design is rooted in sustainability, using found materials to decorate the masks. The masks are made out of items that are found in nature - items that animals would use if they were able to make masks for themselves. Ranging from feathers, to redwood tree leaves and bark, to pine cones, and to dirt. Each material provides texture that is accurate and unique to that of the animal, or to the animal's personality.

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123. Mayan Ceramic Reconstruction

Forrest Estes, Anthropology, Undergraduate Student
College of Arts, Humanities & Social Sciences

This reconstruction project was essential in understanding the proper steps to put together ancient pottery. The methods used were based on the National Park Service use of acryloid B-72 for labeling, as well as the Xuenkal Archaeological Project, Yucatan's way of properly conserving, washing, and gluing of ceramic. The acryloid glue allows items' provenance to be written directly on the artifact without damage. The acryloid glue prevents the curling, flaking, and loss of numbers of the cellulose nitrate lacquers within

the ceramics unlike other glues. These methods have proven successful with the ink, not being absorbed by the ceramic causing damage and the glue proved longevity.

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124. Media Coverage of the Opioid Epidemic in Humboldt County

Freddy Brewster, Journalism & Mass Communications, Undergraduate Student

Amanda Schultz, Journalism & Mass Communications, Undergraduate Student

Tony Wallin, Journalism & Mass Communications, Undergraduate Student

Michael Weber, Journalism & Mass Communications, Undergraduate Student

Alejandro Zepeda, Journalism & Mass Communications, Undergraduate Student

Jessie Cretser-Hartenstein, Journalism & Mass Communications, Faculty

College of Arts, Humanities & Social Sciences

This study focuses on media coverage of the opioid epidemic. We analyzed local media coverage from 2013-2018 in the Times-Standard, North Coast Journal, and Lost Coast Outpost. The study is inspired by cultivation theory, which indicates that prolonged exposure to mediated messages influence how people perceive reality. Results indicate that the majority of articles containing the term "heroin," are focused on crime rather than a health, legislation, community engagement, or other key factors that could potentially affect the future outcome of this epidemic.

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125. Mindfulness in Higher Education: How the Brain Booth is Fostering Academic Excellence

Justina Madrigal, Library, Undergraduate Student

Amelia Towse, Library, Undergraduate Student

Library

The Brain Booth initiative is an innovative project promoting mindfulness and contemplative pedagogy as a means of introducing metacognition for academic success. The Brain Booth is an informal, experiential space to learn about the mind body connection, reduce stress, and optimize learning. It is open to all HSU students, staff, and faculty as well as community members. In the last academic year, 1,000+ students took a brain break in the Brain Booth, and the Brain Booth was embedded across the colleges' curricula in 5 departments and 8 courses.

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126. Motion Sickness: An Evolutionary Analysis

Justin Ordonez, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Motion sickness is a condition that has no apparent evolutionary advantage, yet it persists in many species. Research has revealed the mechanisms that cause motion sickness, but there is no consensus or agreement in the scientific literature regarding its

evolutionary origins. Some research suggests that motion sickness is an evolutionary byproduct of our biological response against neurotoxins. Others propose that it functions as some kind of defense mechanism against unfavorable motion and promotes visual-spatial stability. Exploring the evolutionary origins of motion sickness will provide a better understanding of how modern environments can cause physiological miscues.

127. Mountaintop Removal at Hobet Coal Mine from 1976-2010

Brian Murphy, Environmental Science & Management,
Undergraduate Student

College of Natural Resources & Sciences

The Hobet Coal Mine is located in West Virginia and was an active mining site for 41 years and was one of the largest surface coal mines in the United States. The impacts of this particular mine are especially pronounced because of the sheer scale of alteration to the landscape caused by mountaintop removal to retrieve the coal, and valley fill techniques to dispose of the mining debris. In order to reach the coal located in shallow seams below these Central Appalachian Mountain peaks, hundreds of vertical feet of earth were demolished. This mining has impacted nearly every aspect of the geography of the region, from the environment to the surrounding human communities.

128. My Protein Bars are Gendered

Rachael Thacker, Communication, Undergraduate Student

College of Arts, Humanities & Social Sciences

Did you know that most protein bars are gendered? DeFrancisco, V. L., & Palczewski, C. H. wrote that "communication creates gender, gender does not create communication," and this is especially evident when looking at the difference in protein bars. Protein bars like the Clif bar and Luna bar are socially constructed to appear feminine or masculine. This is done by playing to cultural feminine ideals, by the packaging of the product itself, and by the rhetoric associated with each product.

129. Mycoremediation and TEK Implemented into Ecological Restoration Practices

Maya Noble, Biological Sciences, Undergraduate Student

Casey Nichols, Biological Sciences, Undergraduate Student

College of Natural Resources & Sciences

Mycoremediation and traditional ecological knowledge or TEK implemented within Indigenous communities and blended with accepted ecological restoration methods in order to restore the health of damaged and contaminated ecosystems.

130. Nanoscale Modifications to the RsaA S-Layer Protein Enhance Lead Binding in *Caulobacter Vibriondes*

Kayla Templeton, Chemistry, Undergraduate Student

Dr. Jenny Cappuccio, Chemistry, Faculty

Azariah Coblentz, Chemistry

College of Natural Resources & Sciences

Heavy metal contamination of soils and waterways due to industrial processes continues to be a problem in the United States. Recent reports indicate that microbial surface layers (S-layers) can bind and sequester heavy metals, thereby removing them from the environment. Our approach is to enhance this process for lead bioremediation. Through this study, *C. vibriondes* strains were morphologically characterized through transmission and scanning electron microscopy, and recombinant surface layer export was genetically verified. Using a fluorescence-based assay, we show that our engineered strains were 10% more effective in bioremediating lead than the wildtype in nanomolar concentrations.

131. Narrative Mapping of Genocide: A Transformative Approach in Reader's Advisory

Amanda Alster, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Studies show that knowledge of atrocities in history such as the Holocaust is rapidly declining. Fewer people are searching these topics or reading related articles, and evidence shows there is a significant decline in the reading of literature altogether. To address these issues on a small scale, I created an interactive digital platform using geographic locations to share the various literary narratives of those who have experienced genocide first hand. I examined the impact of transformative approaches, such as GIS software, to provide a new method that actively engages and directs readers to books from a geographic perspective.

132. Native Alaskans and Wildlife Interactions and Issues

Barbara Larrondo-Soto, Native American Studies,

Undergraduate Student

College of Natural Resources & Sciences

This project encompasses the relationship and issues connected to Alaskan Natives and wildlife. Their relationship to the land and wildlife is deeply rooted in their history, and most Alaska natives practice traditional hunting and gathering practices. Native Alaskan interactions with the natural world is interwoven in the way in which they define subsistence, which is synonymous with culture, identity, and self-determination and involves conservation and perpetuation of natural resources. The US Federal and Alaska State government define subsistence differently and have passed Acts and policies that interfere with the Native's aboriginal hunting and fishing rights.

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133. Native American Storytelling

Olivia Kakacek, Zoology, Undergraduate Student
Bryan Foster, Zoology, Undergraduate Student
Abigail Wesendunk, Zoology, Undergraduate Student
College of Natural Resources & Sciences

We are focusing our topic on the role that animals have in Native American storytelling, and how these animal's behaviors in real life are reflected in the stories. Storytelling is a way of communication that Natives use to share knowledge between generations; often, these stories use animals as symbolism. Our group is composed of all zoology majors interested in studying animal behavior, and we will compare the personality traits and characteristics of these animals to their role played in these stories.

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134. NDCI Analysis and Change Detection for Coral Reef Habitats of Duncan Island In South Chinese Sea from 2016 to 2018

Christopher Lanz, Environmental Science & Management, Undergraduate Student
Buddhika Madurapperuma, Environmental Science & Management, Faculty
College of Natural Resources & Sciences

Mismanagement of coral reef habitats for construction has impacted on rapid destruction of most biodiverse coral reefs of South Chinese sea. This project examines how coral reef habitats changed in Duncan island of South Chinese sea using object based image analysis (OBIA) and coral index. We estimated the coral changes over time with different land-use classes. The unchanged coral acreage was 7.80 acres between 2016-2017, 1.21 acres between 2017-2018 and 8.22 acres between 2016-2018. The coefficient of agreement for the classification is ranged from 0.55 to 0.60. NDCI Analysis of coral regions surrounding Duncan island revealed vegetation change in coral health.

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135. Nifty Fifty Ain't So Thrifty- Privileges and Challenges of Locavore Diet in Arcata

Aidan Belleau, Environmental Studies, Undergraduate Student
College of Arts, Humanities & Social Sciences

A locavore diet aims to consume only foods that have been grown and produced typically within 100 miles of where you live (I chose to do 50 miles). Localism offers community-based solutions to global problems like fossil fuel dependency, carbon emissions, and single-use plastics while attempting to remove the individual from global markets, transnational free-trade agreements, and socio-economic exploitation of labor. This project reflects on the personal privileges and challenges with participating in a strict 50-mile diet in terms of economic viability, dietary habits, and accessibility to luxury ingredients (such as sugar, spices, and beer).

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136. Nonverbal and Stereotypical Representations of Disney Animation and Characters Throughout History

Ashlyn Mather, Child Development, Undergraduate Student
Kimberly Duarte-Bonilla, Child Development, Undergraduate Student
Sofia Tam, Child Development, Undergraduate Student
Zoe Zuroske, Child Development, Undergraduate Student
College of Professional Studies

The purpose of this study was to analyze and focus on gender roles, expectations, and ideologies portrayed in Disney animated feature films through the use of nonverbal communication. The researchers of this analysis observed three distinct Disney Films across history: Snow White and the Seven Dwarfs (1937), The Little Mermaid (1989), and Moana (2016) to draw similarities and differences between them. By 1) uncovering hegemonic principles and gender norms in Disney animation and 2) determining changes in stereotypical representations of Disney characters throughout history, the researchers sought to understand why gender roles and norms have primarily remained the same throughout history.

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137. Nonverbal Communication In Charlie Chaplin's Modern Times

Greg Childs, English, Undergraduate Student
Braeden Delome, Communication, Undergraduate Student
Jordan Hindo, Sociology, Undergraduate Student
College of Arts, Humanities & Social Sciences

This project is a analysis of the nonverbal communication in the film Modern Times. The analysis is based on theories from Comm 324 Nonverbal Communication and include the use of physical space, gestures and facial expressions to communicate meaning.

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138. Nonverbal Communication in Children's MMO Games

Mikhayla Freeman, Child Development, Undergraduate Student
Preslli Ponce, Sociology, Undergraduate Student
Robbie Ippolito, Communication, Undergraduate Student
College of Professional Studies

We looked at three free Massively Multiplayer Online video games (MMO) for children: Wizard 101, Wooworld, and ToonTown Rewritten. We focused on three nonverbal areas: character design, gestures, and emotional displays. While looking into each of these games, we compared these non verbals, their contexts, and their meaning.

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139. Novel Tests of Gravity Below Fifty Microns

Berlin Del Aguila, Physics & Astronomy, Undergraduate Student
College of Natural Resources & Sciences

Due to inconsistencies between General Relativity and the Standard Model, tests of gravity remain at the forefront of experimental physics. At HSU, undergraduates and faculty are designing an

experiment sensitive enough to detect gravitational interactions below the 50 micron scale. The experiment measures the twist of a torsion pendulum as an attractor mass is oscillated nearby in a parallel plate configuration, providing time varying gravitational torque on the pendulum. The size and distance dependence of the torque variation will provide a means to determine any deviation from current models of gravity on untested scales.

last active Iron mine in Michigan). While these mines have been great for the local economy, this has come at the cost of major environmental impacts.

140. Obscured Misogyny: A Feminist Rhetorical Critique of the Disney Princess

Francis Palmieri, English, Undergraduate Student

College of Arts, Humanities & Social Sciences

Disney Princess movies are beloved by many, and, on the surface of the most recent renditions of the trope, the lead female characters portray many pro-feminist messages. However, there is a discrepancy between the surface meanings and the implied meanings of the movies. Hidden beneath these pro-feminist surface meanings, the implied meanings present a vastly different message - one contrary to the beliefs of feminism. Through this discrepancy between the surface and implied meanings of Disney Princess movies, this poster aims to illustrate the anti-feminist rhetoric of Disney Princess movies.

141. Only Birds Can Start Wildfires

Nathan Chavez, Wildlife Conservation & Management, Undergraduate Student

Payton Wills, Wildlife Conservation & Management, Undergraduate Student

College of Natural Resources & Sciences

Our creative project is going to revolve around the ecological knowledge of the Chicken Hawk that is from Indigenous people of the Humboldt County area. We want to show the significance that Chicken Hawk has in their culture and how it correlates to scientific research that has been done and is being done on them today. We aim to show how ecological knowledge can be applied to current research and assist modern day scientists.

142. Open Pit Iron Mining on Michigan's Upper Peninsula

Brian Murphy, Environmental Science & Management, Undergraduate Student

College of Natural Resources & Sciences

Michigan's Upper Peninsula is an iron rich region in the Marquette Iron Range (aka Negaunee Iron Formation) that has been mined since the mid-1800's. By the 1950's most of the easily accessible high grade ore had been mined, forcing the mining companies to dig deeper for less valuable ore. The entire complex depicted in this map is commonly referred to as the National Mine, but it is broken up into two separate facilities: the Empire Mine to the east (which closed in 2016), and the Tilden Mine to the west (the

143. Osteoarthritis in Anglo-Saxon Groups

Tyler Robinson, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

There are many cases of osteoarthritis observed in western England skeletal remains from the 5th to 9th century. I investigated the potential connections and causes of the high rates of osteoarthritis within Anglo-Saxon remains as described in case studies. Current research indicates there is a link between occupation and osteoarthritis. These data shed light on how lifestyle affects overall health. These findings are valuable because they can be used to describe the connections between lifestyles and diseases through the remains of Anglo-Saxons through the observation of osteoarthritis within their remains.

144. Outdoorsy Instagram Culture and 19th Century Art: Imperialism in Our National Parks

Sofia DiGregorio, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

Curated Outdoorsy social media accounts rival 19th century idealized landscape paintings, allowing people to present themselves as adventurous and fulfilled by sharing beautiful photos from their travels. These visualized false landscapes present a new age of imperialist beliefs as themes of colonialism have continued to live on through generations in our culture. In western culture, landscape has often been seen as a commodity to be presented and reconstructed for our enjoyment throughout history. Although Instagram culture has contributed to many changes within our national parks, this "new" culture of objectifying and commodifying the landscape is really nothing new at all.

145. Painting the Medium: Digital Standardization of Archaeological Data

Adam Wall, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

The bulk of archaeological notes taken in the field are hand-written, with pencil-sketches maps and diagrams, varying widely in legibility, clarity, and completeness of information. While this last point cannot easily be fixed in post, the former two can be through the development of a comprehensive "style guide" and tutorial for the digitization of archaeological field notes—using the free design program "Inkscape". The guide is designed to be internally consistent and easily comprehensible, usable even by those with no experience with either the programs or raw data involved, guiding the user along the process of rendering previously inconsistent field data into a uniform visual style.

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146. Performance Profile For Tabata Intermittent Training on Treadmill

Nathan Tamayo, Kinesiology & Recreation Administration,
Graduate Student

Taylor Bloedon, Kinesiology & Recreation Administration, Faculty

Jill Pawlowski, Kinesiology & Recreation Administration, Faculty

Young Kwon, Kinesiology & Recreation Administration, Faculty

College of Professional Studies

This study investigated the effect of four supramaximal intensities (110%, 130%, 150%, and 170% of VO₂max) on number of Tabata bouts performed by recreationally trained men (mean age = 22.27 ± 1.74 years, height = 1.72 ± 0.07m, mass = 78.74 ± 15.77kg) were assigned the four intensities in a counterbalanced order. HR, stride frequency, and number of bouts were measured during each testing session. Given that ideal number of Tabata bouts is ~8, results suggested that intensities ranging between 130% and 150% were optimal. The number of bouts outside this range were found to be too high or too low what is deemed normal.

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147. Perpetuating a Stereotype: Minstrel-Shows in Antebellum America

Abigail Moreno, English, Undergraduate Student

College of Arts, Humanities & Social Sciences

In "The African-American Experience as portrayed by Minstrels" I examine how the African-American experience in Antebellum America was inaccurately portrayed by minstrel-performers; slaves were largely portrayed as happy field workers; lazy and good-for-nothing buffoons. The disparity between the entertainment art form and the reality of the black-slave offers a historical viewpoint of the American people of this era, their white nationalist values, as well as their prejudicial practices.

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148. Personal Healing and Restoration through Creative Expression

Juliana Artemov, Art, Undergraduate Student

College of Arts, Humanities & Social Sciences

I recently completed a midterm project in which I discovered the renowned photographer Kenro Izu. His unique use of negative space, meticulous and innovative coloring methods sparked a fire in my artistic soul. In October of last year, I lost my best friend and cousin. The gravity of grief is immeasurable and there is no right or wrong way to experience loss. Through artistic inspiration and the pursuit of expression, I have begun to create a space for healing in my life. I would like to have the opportunity to share the methods that I have used to construct peace in my life through my work.

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149. Picea Sitchensis Trees Have a High Capacity for Foliar Water Uptake

Emily Hoeft, Botany and Forestry, Undergraduate Student

College of Natural Resources & Sciences

Some plants absorb water through foliage as well as roots. This is an important water acquisition strategy for many plants in the redwood forest ecosystem during dry California summers when fog is often the only water input for months. The goal of our study was to determine if *Picea sitchensis* trees have the capacity for foliar water uptake, and if they do, how they compare to other species in redwood forests. We also wanted to learn if capacity for foliar uptake increases with height in tree crowns and how it changes under increasingly negative water potentials. Our findings have important implications for *P. sitchensis* water use, physiology, and growth potential.

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150. Pomo Water Rights in the Russian River Watershed

Daniel Holsapple, Native American Studies,
Undergraduate Student

College of Arts, Humanities & Social Sciences

This poster will illustrate the relationships between the Northern, Central, and Southern Pomo tribal communities and the Russian River watershed in the context of their forced relocation to reservations and rancherias over the course of the nineteenth century. It will illustrate the effects of settler incursion in terms of genocidal campaigns, enslavement, western agriculture, urban development, and recreational water use. Furthermore, it will explore the effects that both the loss and subsequent restoration of federal recognition had on Pomo rights to ground and surface water in the Russian River watershed.

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151. Post-Fire Seedling Recruitment by Burnt Trees at the 2017 Helena Fire

Buddhika Madurapperuma, Forestry & Wildland Resources &
Environmental Science & Management, Faculty

David Greene, Forestry & Wildland Resources, Faculty

College of Natural Resources & Sciences

A regeneration survey was conducted in Weaverville by the 2019 Forest Ecology class at the 2017 Helena Fire students looking at post-fire seedling recruitment. Forty five 10-meter radius plots were established. Within the plots, seedlings and fallen seed cones were counted. We assumed that the seeds were mature when this site burned (August 31) and that all seedlings came from burnt trees; i.e. the seeds within the cones survived the flames. Thus, we hypothesized there would be a positive relationship between seedling and seed cone density. The results showed a positive correlation ($R^2 = 0.82$) between seedlings and seed cones per plot, thus sustaining our hypothesis.

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152. Predicting Support for Atypical Leaders Under Conditions of Uncertainty

Dennis A. Estrada, Psychology, Graduate Student

Ben Skillman, Psychology, Graduate Student

Vilay Phimmasorn, Psychology, Undergraduate Student

Haley Carter, Psychology, Graduate Student

Al Newman, Psychology, Undergraduate Student

Jaz Mendez, Psychology, Undergraduate Student

Lily Syfers, Psychology

Amber M. Gaffney, Psychology, Faculty

David E. Rast III, Psychology

College of Professional Studies

People support leaders who embody the traits of their group (Hogg, 2001). However, previous research suggests that non-prototypical political leaders can also gain support when constituents are uncertain about their identity (Gaffney, Rast, Hogg, 2018; Rast, Gaffney, Hogg, & Crisp, 2011; Hogg, 2001). This can be problematic as identity uncertainty predicts support for autocratic leaders (Rast, Hogg, Giessner, 2013). Therefore, further understanding of the factors involved in support for leaders under conditions of uncertainty is important. The present study attempts to extend previous research by examining support for leaders under conditions of uncertainty.

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153. Preserving Humboldt's Native Biodiversity

Sarah Wall, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

My project focuses on invasive plant management in Humboldt County. I partnered with the California State Parks Environmental Services division to identify, combat, and manage some of the more aggressive plant species found in Patrick's Point State Park.

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154. Professional Networking Communications

Jose Juan Rodriguez Guiterrez, English, Undergraduate Student

College of Natural Resources & Sciences

I will be presenting a poster and an oral presentation on Professional Networking Communications (P.N.C). Being able to attain new opportunities through the art of communication is what P.N.C means to me. Not everyone is born with a golden spoon, so to get what you want, you might have to persuade, motivate, or enlighten someone. You can network with verbal communication, like speaking appropriately, and varying your tone of voice. However, physical communication is just as effective when networking; the way one dresses, behaves, and even stands. Professional networking communication is the skill of growing yourself and or career through person to person encounter.

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155. Pursuing Perfection: Social Media and the Ideal Self

Kaitlin Simpson, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Due to the rapid changes to social media studies, I conducted analyses of relevant literature to explore Instagram (IG) users' motivations and methods used project images of themselves to the world that are seen as "ideal". The existing literature suggests IG users' motivations for cultivating and maintaining online personas correlate with an overall trend of commodification of "self" and data show that IG users use the platform to manage relationships online and in "real life" (face to face). IG usage highlights changes in ourselves as a result of our choices involving self-identity online, and the ways in which maintaining an IG profile changes the way we perceive and engage with others.

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156. Quantification and Comparison of Microplastic Contents in Wild Mussels and Maricultured Oysters from Humboldt Bay, California using Enzymatic Digestion Methods

Daniel Raemer, Oceanography, Undergraduate Student

College of Natural Resources & Sciences

This research evaluates the microplastic (MP) contents of commercially maricultured Pacific oysters (*Crassostrea gigas*) and wild mussels (*Mytilus edulis*) from Humboldt Bay (HB), California. Bivalves were collected from each of three different locations in HB, and oysters were cultivated in HB. All bivalves were digested with proteolytic enzyme complexes, vacuum filtered, and MP's were quantified by microscopic examination. All samples contained MP's, and significantly different concentrations of MP particles were found between bivalves collected from different locations. Results also suggest that Corolase 8000 is a more efficient enzyme complex than Corolase 7089 for this purpose.

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157. Quantify Your Perception: A Portable (And Stylish) Method

M. Goh K. Butler, Chemistry and Psychology, Undergraduate Student

College of Natural Resources & Sciences

Have you ever wondered how much dopamine your brain releases when you hug your dog? Or how extensive your addiction to caffeine is? Recent advances in brain imaging have allowed us to begin answering such questions, and many more, without the need to insert probes into a person's head. The use of Electroencephalography (EEG) is one method of measuring brain activity, which is both high in temporal resolution (it's fast) and possibly the next big fashion trend. This project examines the efficacy of using EEG to measure regional neurotransmitter concentrations, brain-activity pathways, in addition to the feasibility of making such technology aesthetically attractive to wear.

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158. Regional Taphonomic Processes of the Humboldt County Area

Kelly Hughes, Anthropology, Undergraduate Student
Jordyn Winters, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

The Archaeology Research Laboratory (ARL) and Biological Anthropology Research Center (BARC) at Humboldt State University maintain a teaching collection of faunal skeletal materials. This project will add examples of known taphonomic markers relevant to the Humboldt County area to the faunal collection. Faunal elements were deposited in nine unique burial conditions incorporating local earth materials and native plants. Elements will be recovered and accessioned in December 2019. This study provided valuable experience for undergraduate student participants and will add unique reference material to the ARL/ BARC collection.

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159. Reintroducing Native American Culture Through Corn

Jazmin Sedano, Botany, Undergraduate Student
Nina Sahagun, Botany, Undergraduate Student

College of Natural Resources & Sciences

Corn has been a staple food crop for over 10,000 years, having been domesticated by aboriginal peoples in Oaxaca, Mexico. Being successfully responsive to different environmental pressures corn not only represents aboriginal survivance, it also stands as a major testimonial to their culture's magnitude. Iroquois white corn is an ancient variety that contains a myriad of nutritional benefits which could improve the overall health of indigenous people. In a community effort to revitalize Native American customs, Iroquois white corn has been reintroduced back into their daily endeavors. This effort represents a growing awareness to see past the Western portrayal of a culturally rich community.

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160. Reintroduction of California condor over Yurok Tribal Land.

Cesar Rocha, Wildlife, Undergraduate Student
Mason Park, Wildlife, Undergraduate Student

College of Natural Resources & Sciences

We will be talking about the reintroduction of California Condor in Northern California. Seeing how it can benefit the local Yurok tribe and ecosystem.

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161. Religious Freedom in Northern California: Fighting to Keep Sacred Lands Out of Government Hands

Jenifer Hailey, Native American Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

This Creative Project compiles the different avenues of research I have studied concerning cultural survival and activism in Northwest California. The sacred spaces in the High Country and

the communities that joined together to preserve Native Spirituality and sacred spaces. It also, highlights my work in Special Collections documenting the Lyng v NICPA's case archival materials for online public viewing.

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162. Reparations, Reconciliation and Restitution: An In-Depth Look at Local Native Politics on Indian Island

Joshua Overington, Native American Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

In a sociopolitical climate where hate is so clearly permeating through our country, it is important to recognize battles that have conquered evils of the past in the form of reparations. My research looks at the reconciliation process that has occurred on Indian Island and how the 1862 massacre contextualizes the events taking place today. Through a difficult history and unique form of restitution, Indian Island provides insight into current Native Politics unparalleled anywhere else in the United States.

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163. Replicating the Unreplicable: 3D Printing and its Impact on Artifact Ownership

Maeve M. Moriarty, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

I examined the emergence of 3D printing within museum contexts to better understand how it impacts artifact ownership. My review and critique of the literature related museums' usage of 3D printing technology showed that it is largely utilized as a tool for education as well as a method for preserving cultural materials. While educational benefits are central to 3D printing use, the replication of cultural materials promotes the concept of commercialization which may ultimately deemphasize ethical issues. Recognizing and acknowledging the gap in existing narratives will aid future endeavors and allow 3D printing to function as a relevant and respectful tool utilized by museums.

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164. Reserve, Symptoms, Sex and Outcome Following a Single Sports-Related Concussion

Summer Anne Thornfeldt, Psychology, Graduate Student

College of Professional Studies

The study addressed reserve and symptoms following a single sports-related concussion (SRC). Reserve is the biological/cognitive differences between individuals that protect against cognitive changes following a SRC. A SRC can lead to brain damage, and thus a loss of reserve. The ImPACT is a neurocognitive test taken before an athletic season and following a SRC, which was used as a proxy for reserve. Symptoms were explored using PCSS, a symptom checklist. It was found that those with low pre-SRC reserves had better outcomes than those with high pre-SRC reserves, and that females reported more symptoms than males. Reasons for these findings and suggestions for SRC management were explored.

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165. Resilience, Protective Factors and Sustainability in Child Welfare Workers

Jamie Curtis, Social Work, Graduate Student

College of Professional Studies

The preliminary findings of this research highlight the resiliency, retention, and protective factors of Title IV-E child welfare workers. This study aims to better understand the relationship between the effects of working in a field with high exposure to vicarious trauma, and a social worker's own personal resiliency and coping strategies. The implications of our research suggest several ways agencies and educators can increase the well-being and sustainability of social workers. Improving the well-being of child welfare workers can have a substantial impact on the experiences and outcomes of children and families in our communities.

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166. Restoration and Medicinal Plants: Ending the Negligence Towards Ethnobotany and TEK

Cami McQueen, Botany, Undergraduate Student

Victor Garcia Balderas, Botany, Undergraduate Student

College of Natural Resources & Sciences

Our project focuses on the importance of ethnobotany with an emphasis on restoration and medicinal plant properties. Ethnobotanical studies fixated on traditional ecological knowledge have long been disregarded by western science; however, this information is crucial for the restoration of the environment, advancement of medicines, and cultural revival of the Native people. Due to colonization and westernization, the continuation of knowledge throughout generations along with the vast ecosystems that once thrived has depleted. Conversely, through the expansion and shared education on plants and restoration processes long known by Natives, the gap between western science and TEK will degrade.

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167. Reusables for Waste Prevention

Rachel Medina, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

Seeking to address zero waste and upstream waste reduction by increasing awareness, and providing access to reusable cloth produce bags made from donated and upcycled materials. By volunteering time to handcraft bags and distribute them at farmer's market, engaging shoppers and vendors to collect and disseminate information regarding our relationship to waste. With the support of the North Coast Grower's Association, I hope to reach a better understanding of what we can do as a community to reduce our dependence on single use plastics.

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168. Rhetorical Genre Theory and Whiteness

Greg Childs, English, Undergraduate Student

College of Arts, Humanities & Social Sciences

Whiteness is the foundation on which academia is built. It shapes the institutions and methods of knowledge making that form what we call education. If we hope to make radical, meaningful change to our systems of learning and knowledge, a critical step will be decentering whiteness. This project uses the work of James Baldwin to conceptualize whiteness and examines rhetorical genre theory as an example of the ways academia's systems of knowledge making are based in the assumptions of whiteness.

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169. Sacramento Pike Minnow in the Eel River

Vincenzo Baroga, Fisheries, Undergraduate Student

Alexander Eaton, Fisheries, Undergraduate Student

College of Natural Resources & Sciences

In our presentation, we will be researching and presenting the historical, and current effects in the Eel River regarding the invasive Sacramento Pike Minnow. This fish was introduced into the Eel River watershed in 1962 and has been an issue for people who depend on the river for the past 45 years. The pike minnow is a species that eats juvenile salmonids (salmon, trout, steelhead). Salmonids are extremely important to the eco-system as well as the people who rely on it. The Wiyot people depend on healthy salmon runs each and every year as a source of food, and more importantly in today's day and age, a source of income.

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170. Save the Bison

Paige Lindner, Zoology, Undergraduate Student

Queen Juarez-Ward, Zoology & Botany, Undergraduate Student

College of Natural Resources & Sciences

For ideafest we plan to enlighten our fellow Humboldtians on how Native tribes are helping to save the bison from extinction. Bison have played a key role in Native culture especially in the great plains. Their bison are like our salmon. The Sioux and Assiniboine tribes of Fork pecks currently have the largest restoration herd, with up to 340 bison living and thriving on their lands. We major in zoology and we decided to focus in on this subject because it is a clear bridge on how Indigenous people make connections between animals and their culture. Thereby, a connection between NAS and Zoology is born and recognized :).

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171. Self-Harming Practices from the Perspective of Forensics: An Interdisciplinary Approach for Anthropologists

Manisha Davesar, Anthropology, Graduate Student

College of Arts, Humanities & Social Sciences

This paper explores the ways in which forensic anthropology can utilize other forensic disciplines (psychiatry and medicine) when analyzing remains for medico-legal purposes, specifically when

determining manner of death. Forensic anthropologists need not just extensive knowledge on the trauma's morphological differences, but also the reasons behind the actions that lead to suicide or homicide. Death prevalence, the physical differences between suicide and homicide, and the psychology of those actions is extensively looked at. The author finds that there are distinct patterns in the physical remains that can be corroborated with psychological evaluations and documented prior behavior.

172. Should Democracy be Constrained to Address Climate Change?

Jake Engel, Political Science, Undergraduate Student

College of Arts, Humanities & Social Sciences

My research analyzes the implications that climate change has for democracy. Recognizing that climate change presents unique challenges to our political system, I search for a healthy balance between democratic means and necessary, urgent ends. To do so, I compare the advantages and disadvantages of different forms of democracy, i.e., representative versus deliberative, ultimately concluding with the need for more research and collaboration.

173. Snake River Basin Adjudication

Elizabeth McClure, Native American Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

This poster will display the process and implications between the Nez Perce Tribe, state and federal government agencies in dealing with the settlement process of the Snake River Basin Adjudication (SRBA). The SRBA can serve as an opening to discussing the relationship between the Nez Perce with the state and federal governments, particularly the U.S. serving as a trustee for the tribe and is suppose to protect the Nez Perce tribal treaty-based fishing rights. We will discuss the basis for their claims is within the fact that in stream flow is necessary for the salmon survival. Based within the treaties with the U.S., the Nez Perce holds the exclusive right to fish within the streams.

174. Social Status and Gender: Burial Reflection in Viking Culture

Julia Sulzinger, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Burials excavated at the Birka, Sweden archaeological site, which was under Viking occupation from 750 to 950 CE, provides a cultural snapshot of gender and social status. Previous studies make inaccurate assumptions of gender based on types of tools found. In addition, there has been limited research linking osteological analyses with artifact analysis, which has also led to inaccurate assumptions regarding gender and social status. This work, which expanded and revised our understanding of gender expectations and social differences in Viking society from this time period, can be used to also further our knowledge of other societies.

175. Society's Way of Making Women Fade

Reagan Parker, English, Undergraduate Student

College of Arts, Humanities & Social Sciences

The Giving Tree is a children's story where a personified tree gives away pieces of herself to a boy whom she loves. She gives him her apples and branches as a means of further his prosperity, never taking into account her own happiness. In this project, I analyze it as a reflection of society's view of women's bodies. The tree in the story needs to be seen as their own character; she is a woman is a state of suffering and abuse.

176. Stayin' Alive! How Black Grama and Soil Stability Respond to Desert Stressors

Laura Sadorf, Biology, Undergraduate Student

College of Natural Resources & Sciences

Global climate models predict a more variable climate in the future through increased frequency of extreme wet and dry years. Since water is the most limiting resource in the Chihuahuan desert, investigating how semi-arid plants respond to precipitation extremes is pertinent to understanding how desert ecosystems will be altered in the future. To study these responses, I experimentally applied an extreme precipitation treatment to black grama, a dominant desert grass, during June and July 2018 in the Sevilleta National Wildlife Refuge before the monsoon season. This experiment supports black grama's ability to survive in the desert with few precipitation events due to its growth response.

177. Stop Damming Native Lands

Boston Jones, Criminology, Undergraduate Student

College of Arts, Humanities & Social Sciences

The effects on local Native Tribes from the construction of the Shasta Dam.

178. Stress and the Oral Microbiome

Jane Kuszmaul, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

The microbiome is many single celled organisms, which play an essential role in protecting the body against pathogens. Studies show that stress decreases microbial diversity, and thus negatively impact the body's immune defenses. This study explored relationships between stress, cortisol levels, and the oral microbiome. Daily questionnaires and biweekly salivary tests assessed stress levels and microbial diversity. Data collection was conducted the first and second week of December 2018. Stress plays a significant role in the experience of college students. Understanding how stress impacts what microbes are in the mouth could lead to the development of better stress management strategies.

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179. Structural Determination of the Olfactory Epithelium in Terrestrial Adult Rough-Skinned Newts (*Taricha granulosa*)

Amber Van Hecke, Biological Sciences, Undergraduate Student
College of Natural Resources & Sciences

Taricha granulosa (rough-skinned newt) uses olfaction for feeding, migration, and mate choice. In this study, we are examining the olfactory epithelium with scanning and transmission electron microscopy to determine whether variation in cellular morphology exists amongst seasonally terrestrial adults and aquatic larvae.

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180. Student Satisfaction with Technology

Cassady McLaughlin, Psychology, Graduate Student
Michael Wilson, Mathematics, Undergraduate Student
David Marshall, Computer Science, Faculty
College of Professional Studies

The purpose of this research is to assess HSU students' satisfaction with the various services provided by the Information Technology Services department. The services that are being assessed are computers labs, on-campus printing, technology in the classroom, on-campus wi-fi, myHumboldt, HSU Gmail accounts, Google Drive, Google Calendar, Canvas, ITS Support, online classroom scheduling (via 25live), and the virtual labs (vlab.humboldt.edu). After completion of the survey, we hope to use the data to implement changes within the department in order to increase student satisfaction with the services mentioned above.

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181. Supporting Social Workers: A Manual Promoting Sustainability & Wellness in Social Work

Katelyn Bawcom, Social Work, Graduate Student
Sarah Smith, Social Work, Graduate Student
Taylor Prilliman, Social Work, Graduate Student
College of Professional Studies

The community project will consist of a manual that addresses the wellness and sustainability of social workers. Our community partner is Liora Levenbach and the finished project will be applicable to all social workers and supervisors, regardless of placement or role in the community. We are looking at how to decrease burnout and improve retention rates of social workers. We would like to take a strengths based approach by researching the effects of resiliency on social workers and their organizations.

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182. Surface Ocean Distribution of Trace Metals in the California Current System During a Year of Anomalously Low Upwelling

Robert B. Freiburger, Chemistry and Oceanography, Undergraduate Student
Dr. Claire Till, Chemistry, Faculty
College of Natural Resources & Sciences

Upwelling in the California Current System (CCS) brings nutrient rich water to the continental shelf. Included with these nutrients are some trace metals. Trace iron (Fe) has been shown to be a control on primary productivity in the CCS. 2014 marked a year of low upwelling along the CA coast. This anomaly provides an opportunity to assess annual variability in processes affecting micronutrient distributions here. In 2014, the IRNBRU research cruise measured surface macronutrient and trace metal distributions in the CCS. Their results show lower nutrient concentrations than found in previous studies, and suggest an unusual uptake ratio of macronutrients by microorganisms in the area.

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183. Taphonomic Bone Shrinkage: A Study on the Effects of Wet and Dry Climates on Postmortem Bone Shrinkage

Ryan Martis, Anthropology, Undergraduate Student
Robert Lovato, Anthropology, Undergraduate Student
Nelsie Ramirez, Anthropology, Undergraduate Student
Thomas Mathews, Anthropology, Undergraduate Student
College of Arts, Humanities & Social Sciences

In forensics, stature estimation is a key component of the assessment of skeletal remains. Estimating stature involves extrapolation from the length of long bones. Previous research has indicated environment can result in postmortem shrinkage of bone, and therefore affect stature estimates. This research project examines the extent of bone shrinkage that occurs when bones are exposed to the elements, dried out in a fume hood and submerged underwater. Measurements of bone length were taken at regular intervals. Preliminary analysis indicates a relationship between precipitation and postmortem shrinkage. This study has the potential to aid in assessing the accuracy of stature calculations.

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184. Tattoos as Rhetoric

Helen M. Berry, English, Undergraduate Student
College of Arts, Humanities & Social Sciences

American tattoos are no longer considered counter-culture. Dominant ideologies that once reserved tattoos for bikers, criminals, and sailors now consider tattoos as highly popularized and commonplace. This prospectus will not look at the history of tattooing so much as it will explore the acts of getting, maintaining, and displaying tattoos as rhetoric. I explore the relationship between modern body art and rhetoric and argue that tattoos are persuasive and contextually meaningful. Tattoos function as a personal narrative and a social artifact fixed in time.

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185. Ten Tribes Partnership and the Colorado River Basin

Zachary McClellan, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

My project will discuss the role and influence the Ten tribes Partnership plays in the Colorado River Basin's water management and policy and how it affects the communities of its member tribes as well as their surrounding non-native communities.

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186. The All-American Boy: Ted Bundy as an Example of White Privilege and Toxic Masculinity

Grace McKendry, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Ted Bundy is one of the United States' most infamous serial killers. He has been described as being charismatic and intelligent, despite the fact that he murdered dozens of women in the 1970s. Ted Bundy's motivation for killing, and reactions to him, may reveal some potentially problematic aspects about what mainstream society in the United States values. A trend that made itself apparent was the idea of Ted Bundy being a charming and intelligent person being a myth created by Bundy himself. This myth was made popular by other writers and journalists over the last 30 years.

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187. The Anti-Violence and Comics Project

Henry Solares, Anthropology, Graduate Student

Alison Pitts, Art, Undergraduate Student

College of Arts, Humanities & Social Sciences

The project presents a strategy to address the question of how to best support marginalized survivors. Through translating academic and practical knowledge into a visual resource, "(in)difference to survivors". It brings marginalized voices up front without putting them at risk. It is the ultimate hope that the project influences policy makers, Title IX professionals, applied anthropologists, and survivor support organizations. This is a project by and for survivors of sexualized violence.

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188. The Biocultural Trauma Feedback Loop

Michelle Irvine, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Trauma is repeated throughout a victim's life, but the biological mechanisms of its recurrence (revictimization), even though understood biologically, are not accepted or discussed in all disciplines. To understand these issues, I conducted a synthesis of existing scientific research on revictimization. Sociological research revealed that initial trauma and revictimization are in a positive feedback loop, with incidences of one increasing the other. In biology, however, this loop has been acknowledged but has not

been integrated into these disciplines. Recognizing the existence of this biological feedback loop has the potential to mitigate the damage of past, present, and future trauma.

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189. The Choctaw Tribe and the Nanih Waiya

Marlie Brine, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

The land feature known as the Nanih Waiya mound is central to the religious beliefs and cultural identity of the Choctaw Tribe of Native Americans. The function and creation of this mound differs depending upon the perspective of the Choctaw Tribal divisions, but it is mostly classified as a human-made earthwork that dates back to the Middle Woodland period (c. 0-300 CE) with naturally occurring features. Choctaw tribal members were separated from their original land and the Nanih Waiya after European contact and forced evacuations which began with the Indian Removal Act of 1830. The mound is present in most Choctaw origin stories and is a source of identity and community for the Tribe.

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190. The Counter-Narratives of British and American High Schools Within Television

Salina Jimenez, English, Undergraduate Student

College of Arts, Humanities & Social Sciences

This ongoing research project investigates the counter-narrative of high schools within American and British culture within films and tv shows. 90210 and many other American shows depict high school as "the greatest time of your life" while Skins, a British-based series, shows that high school is just something that you want to get out of. Sex Education, which is the main focus, combines the two cultures to combat the negative connotation of the stereotypical British high school. I also explore how as technology improves, rhetoric changes its form (television) to fit with what society needs to get their message across a large audience.

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191. The Effect of Interval Intensity on Time To Exhaustion During High Intensity Interval Training (HIIT) Running in Recreational Male Runners

Andrew Hahn, Kinesiology & Recreation Administration, Graduate Student

College of Professional Studies

High Intensity Interval Training (HIIT) has become popular in recent years, but a lack of guidelines for interval intensities and margins compromise exercise prescription. The purpose of this study was to investigate the effects of 3 HIIT sessions and 1 continuous running session of the same average intensity (80% VO₂max) on total Run Time to Exhaustion (TE). Ten adult male recreational runners (Age=22.9 -4 2.5 yr, Height=1.72 -4 0.1m, Body Mass=74.1 -4 7.4 kg) completed running sessions, with HIIT trials featuring 2

minute bouts and a 1:1 ratio of work to active recovery. A repeated measures ANOVA revealed mean TE differed significantly between conditions ($F(3, 27) = 23.4071, p < 0.05$).

192. The Effects of C-Tactile Afferent Stimulation on Orgasm

Yacoub Innabi, Psychology, Graduate Student

College of Arts, Humanities & Social Sciences

This study aims to test the possible effects of naturally-released oxytocin on aspects of the male orgasm. In two trials, the participants utilize an FDA-approved clinical vibration device to induce orgasm in the absence of any audiovisual stimuli. During one of these trials, the participant is brushed on the forearm to release endogenous oxytocin (via C-tactile afferent activation), at the other they are tapped on the hand with the end of the brush to act as a placebo. Given the role of oxytocin in hedonic (pleasure) responses, it is predicted that oxytocin will significantly increase subjective orgasm intensity and ejaculate volume and decrease ejaculation latency.

193. The Effects of Climate Change on Native American Communities

David Hovda, Wildlife, Undergraduate Student

College of Natural Resources & Sciences

Currently climate change is altering landscapes all over the globe and Native American communities are at the forefront of this ongoing battle. Tribes near low-lying coastal areas are most at risk when talking about climate change and the I've chosen to focus on three tribes in Alaska, two tribes in Florida in the Everglades and four tribes in the bayous of Louisiana. In this poster I'll be talking about how climate change will not only affect the tribes' abilities to continue their subsistence lifestyle and culture but also their ability to collect traditional food sources and maintain their water rights held by the *Winters v. United States* court case.

194. The Effects of Phonetic Convergence and Auditory Imagery on Reading

Josue Rodriguez, Psychology, Graduate Student

Kauyumari Sanchez, Psychology, Faculty

College of Professional Studies

This study aimed to address whether phonetic convergence (i.e., speech imitation) and auditory imagery with respect to reading (i.e., hearing the voice of a text's author) are fundamentally governed by the same process—episodic encoding (c.f., Goldinger, 1998). This would provide an explanation for why we shift the way we speak when reading text written by a familiar author. The results of this study suggest that these two phenomena may actually be governed by differing processes. However, further research is needed to provide support for a more definitive conclusion.

195. The Effects of Tribal Water Rights on Forestry Practices

Colleen Sloan, Forestry, Undergraduate Student

College of Natural Resources & Sciences

The United States, on behalf of numerous Native American tribes, brought action against the State of Washington, alleging that the State violated the fishing clause of the Stevens Treaties by building and maintaining barrier culverts that prevented salmon movement along rivers. This poster will show the effect of the 'right to fish' on tribal water rights and the lasting effects of these factors on forestry practices, especially road building.

196. The Gap Between Indigenous People and the Access to Proper Health Care

Leslie Ortega, Biology, Undergraduate Student

College of Natural Resources & Sciences

By presenting the issue of the lack of access Indigenous people have with health care, which is ultimately none, will enlighten individuals of the pressing issue of increasing mortality rates and implement change within the government.

197. The Gift of Kings: Reciprocity Between Worlds

Kelly Hughes, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

I investigated the role of reciprocity in sacrificial rites of Iron Age Ireland through literature review of three well-documented bog bodies: Clonycavan Man, Gallagh Man, and Oldcroghan Man. I hypothesized that the elite status of these men made them valuable as sacrificial offerings. Literature indicates their high status as well as the ritual nature of their deaths and deposition. Sacrificial ritual establishes reciprocity between mortals and the divine. Reciprocity is a universal social phenomenon which creates a network of mutual obligation. The people of Iron Age Ireland used high-value offerings in sacrificial ritual as a means of obtaining high-value returns from their deities.

198. The Impacts of the Boldt Decision

Skarlet Morales, Fisheries Biology, Undergraduate Student

College of Natural Resources & Sciences

In 1974, Federal District George Boldt granted a 50/50 share of salmon and steelhead fisheries for tribes and commercial fishermen, as well as co-manager statues over their natural recourses. My poster is going to cover the regulations this decision established for both local fisheries and surrounding waters of the Puget Sound.

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199. The Indian Health Service and the Sterilization of Native American Women

Emily Suarez, Biology, Undergraduate Student
Yazmin Chamu, Biology, Undergraduate Student

College of Natural Resources & Sciences

In the 1960s, the Indian Health Service (IHS) introduced and provided Native American women different methods of birth control. The US government agency personnel, including the IHS, targeted Native Americans due to their high birth rate. As opposed to popular belief, native women were often subsidized and used as test subjects with the goal of population control under the American Department of Health, Education, and Welfare (HEW.) This led to an abundance of native women becoming sterilized by their physician without their consent.

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200. The Indigenous Effort to Protect Eagles

Lilli LeVan, Wildlife, Undergraduate Student
Mary Lehman, Wildlife, Undergraduate Student

College of Natural Resources & Sciences

Native Tribes have been and continue to be an instrumental part in the protection of eagles throughout the United States. Due to their work with the U.S. Fish and Wildlife Service and researchers, they have made substantial progress in furthering their conservation areas and techniques to protect the different species of eagles from extinction. These initiatives are depicted by the Eagle Summits that have been held, as well as eagle rehabilitation areas created on tribal land. Through my research, I will be educating attendees on the work of the tribes to conserve eagle populations and rehabilitate injured eagles while continuing their cultural traditions within the Midwest.

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201. The Indigenous Influence on Komodo Dragon Research and Conservation

Cesar Aguilar, Wildlife Conservation Biology,
Undergraduate Student

College of Natural Resources & Sciences

I will be exploring the history and involvement of indigenous people from the islands of Indonesia focusing on the conservation and research of Komodo Dragons. My poster will go into depth of the history and culture that surrounds the giant reptiles of the islands, focusing on the traditional ecological knowledge and the impacts it has had and how it is changing still to this day.

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202. The Involuntary Sterilization of Native American Women

Liliana Cortes, Biology, Undergraduate Student
Haiyan Libaire, Biology, Undergraduate Student

College of Natural Resources & Sciences

Between the 1960s and 1970s, Native American women were involuntarily sterilized when they went to the Indian Health Services (IHS). Many would go in for one procedure and end up being sterilized and made believe that it was reversible.

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203. The Irishman and His Whiskey

Kathryn Tirrell, English, Undergraduate Student

College of Arts, Humanities & Social Sciences

The artifact of alcoholic beverages contains a profoundly vast array of facets to articulate. This paper aims to make the critical interventions necessary to realize the manifestations of alcohol use and its interpretations, in terms of identity, occur because of historic contexts embedded in our culture. By examining the symbolism and stereotypes of the Irish immigrant in America, the identity struggles and ideologies surrounding alcohol can be understood through the rhetoric of social groups.

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204. The Jefferson Community Center Fight Against Food Insecurity in Humboldt County

Brooke Kalarney, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

Communities in poverty often lack access to fresh fruits and vegetables. Resources such as community gardens and health education have the ability to inspire and transform the lives of those involved. The Jefferson Community Center provide these resources to the public, bringing back environmental sustainability and justice. The lack of food security in the community shows the need of community building and access to fresh produce. My poster reflects my experiences at the Jefferson Community Center and how they are contributing to the public in important and positive ways.

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205. The Lyre: An Ancient Symbol of Power?

Daniel Nugent, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Music is a phenomenon that transcends cultural boundaries and primordial origins. At the Anglo-Saxon archaeological site of Sutton Hoo, a seventh century lyre was unearthed in a lavish royal burial. Utilizing literature analysis and experimental archaeology to recreate a seventh century lyre, this study explored the relationship between social stratification and art, implementing a cultural materialist theoretical framework. Research indicates the labor required to create a lyre would limit the market to wealthy individuals. This work serves to expand the understanding of hierarchical institutions in ancient England and how social stratification affected access to art.

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206. The March of Our Mothers

Claire Walton, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

It is ironic that scientific depictions of our hominin ancestors often overlook female representation, despite reproductive success being a major cornerstone of evolutionary theory. The story of evolution is instead told from male-centered, eurocentric perspectives, as in Rudolph Zallinger's March of Progress (1965). My research employs a feminist critique on such popular models of human evolution in the form of an illustrated depiction of female hominid ancestors based on data from paleontological records and literature review. This research creates a balanced view of our evolutionary history, and encourages appropriate dialogue towards better understanding the evolution of humanity.

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207. The Marching Lumberjacks

Veronica Perez, Library Special Collections,
Undergraduate Student

Library

Have you ever thought where local World Famous Marching Lumberjacks originated from? I mean where exactly did all that silliness come from? Over 50 (+1) years ago the band was able to become the most loquacious, vehement, and fatuous student lead scatter band known to mankind, and you're still probably thinking "why am I reading this?" Well, because you want to know about one of the oldest student run organizations on campus because it is still successful today. How has the world's most whimsical and nonsensical band been able to exist for this long? Well the roots of the band, which has been documented very well, created the foundations of a band embedded in HSU school spirit and community.

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208. The Misrepresentation of Inclusivity

Laura Garcia, Social Work, Undergraduate Student

College of Professional Studies

Humboldt State University's students, faculty and staff aspire to be an inclusive and liberal school. However, this is not necessarily the reality that students, particularly students of color, have experienced attending school and living in this area. This study utilizes general inductive analysis that focuses on: How is diversity being represented in Humboldt County as reflected in local news sources and their comments sections? According to the data, there are certain aspects of the system that we can change to provide more support when students experience racialized violence. This project seeks to make recommendations for change in the public dialogue on diversity issues.

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209. The Nonverbal Communication of a Serial Killer

Chelsey Wojcik, Psychology, Undergraduate Student

Shaun Aksionczyk, Psychology, Undergraduate Student

Jeremy Sami, Undergraduate Student

College of Professional Studies

This project will focus on the nonverbal communication patterns of psychopathic offenders or serial killers. We will be researching this topic both through the use of peer-reviewed studies and articles as well as making our own observations and taking notes on video interviews of multiple serial killers and comparing to the current literature.

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210. The Northcoast Environmental Center

Reanne Lopez, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

The Northcoast Environmental Center is one of the oldest non-profit organizations in Northern California that has been protecting and conserving marine ecosystems since 1971. As a special project intern, this project focuses on the contributions of the Northcoast Environmental Center and how their volunteer events and ideas towards removing plastic waste have impacted beaches worldwide. The Coastal Cleanup Day was first established in 1979 through the Beach Beautification project, which is now practiced internationally every year.

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211. The Quapaw Tribe and Tar Creek Superfund site

Jami (Danielle) Henry, Environmental Studies,
Undergraduate Student

College of Arts, Humanities & Social Sciences

The Quapaw tribe has been detrimentally impacted by the Tar Creek mines. These mines have now turned into a Superfund site. However, the issues surrounding near by water source contamination is still negatively impacting this tribe specifically in regards to health and food sovereignty.

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212. The Reintroduction of Condors Through the Tribes of Indigenous People

Jeremy Dodds, Wildlife, Undergraduate Student

Hector, Wildlife, Undergraduate Student

College of Natural Resources & Sciences

It is about the reintroduction of the condors in California in the areas of North America

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213. The Relationship Between Indigenous Peoples and Animals

Cosette Yoder, Zoology, Undergraduate Student
College of Natural Resources & Sciences

In many Indigenous cultures animals are imbued with great spiritual significance. Their understanding of the natural world seems to be much more sophisticated and comprehensive than many people view it to be. This project will go over the interconnected relationship between animals and humans displaying the spiritual connection or view that the environment is one whole entity, not a separate entity. This interconnectedness is equivalent to the idea of caring for and respecting the natural world and one's surrounding environment. While many cultures are quite diverse, animals seem to frequently appear in creation stories, legends, ceremonies, and art.

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214. The Relationship Between Native People and the Lamprey

Benjamin Fujita, Fisheries, Undergraduate Student
Kaitlyn Zedeker, Wildlife, Undergraduate Student
College of Natural Resources & Sciences

In our poster, we want to discuss the importance that the lamprey has to Native Americans, and how they are/were an essential source of sustenance for these people. In addition, we would like to talk about how the populations of lamprey have changed over time, and the reasons for these changes. We believe that the lamprey is a species that often gets a bad reputation, when in reality they are an extremely important species that does not get enough attention.

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215. The Relationship Between Personality Characteristics and Creativity on Judgments of Facial Attractiveness

Zhelin Wu, Psychology, Graduate Student
College of Arts, Humanities & Social Sciences

People may or may not realize that when they meet a physically attractive person, they are more likely to evaluate him or her as a smart and positive person compared to a less attractive person in the absence of other features besides physical attractiveness. This attractive halo effect has influenced multiple areas that include the job market, dating, and academic success. However, it is possible for other factors, such as one's creativity and personality to affect one's judged attractiveness level. The purpose of this study is to investigate the impact of facial attractiveness, creativity, and warm-cold personality characteristics when judging female attractiveness.

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216. The Relationship Between T.E.K and Botany

Raul Barajas-Ramirez, Botany, Undergraduate Student
Harrison Kummer, Botany, Undergraduate Student
College of Natural Resources & Sciences

For our Idea Fest Idea we are planning on using native T.E.K within the field of Botany in terms of medicinal uses, identification and importance of plants the ecosystem in relation to native burnings. To better improve and drive the field of Botany. We will be focusing the the different types of T.E.K within the tribes surrounding Humboldt County and seeing how we can incorporate it with general Botany and Ethnobotany practices such as surveying and identifying plants based on medicinal and overall characteristics of native plants around Humboldt County. For this project we plan on obtaining our research through the library and hopefully the native tribes around Humboldt County.

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217. The Relationship of the Hualapai Tribe Water Rights Settlement Act of 2017 and the Quantification of Colorado River Rights for the Hualapai Tribe in Northern Arizona

Andie White, Environmental Policy and Management, Undergraduate Student
College of Natural Resources & Sciences

This poster will show the relationship of the S. 1770, the Hualapai Tribe Water Rights Settlement Act of 2017 and the quantification of Colorado River rights for the Hualapai Tribe in Northern Arizona. The decision made by this settlement could set a precedent for how much water belongs to current and future tribes residing along the Colorado River.

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218. The Reversing of Roe: A Dialogue at Humboldt State University

Sessi Fletcher, Political Science, Undergraduate Student
College of Arts, Humanities & Social Sciences

The 2018 documentary Reversing Roe illustrated the heartfelt and often intense debate of abortion care in the U.S. today, highlighting the history of the 1973 Supreme Court case Roe v. Wade, the contemporary forces opposed to such legislation, and the individuals dedicated to defending reproductive freedom. This past April, HSU students from across disciplines held a public screening of this documentary and opened a dialogue for the community to tackle the issues at hand: why are the rights of Roe v. Wade still important today, how could overturning such legislation endanger the health of Americans across the country, and what is the role of the Humboldt County community going forward?

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219. The Rhetoric of Immigration

Jake Engel, Communication, Undergraduate Student
Rachael Thacker, Communication, Undergraduate Student
Max Antezana, Communication, Undergraduate Student
Nick Umana, Communication, Undergraduate Student

College of Arts, Humanities & Social Sciences

Immigration is one of the most controversial topics in the U.S. As such, this VoiceThread will focus on the rhetoric of immigration in American culture. To do so, we compare multiple dimensions of this rhetoric from the scholarly perspective of our intercultural communication course. Specifically, we incorporate intercultural communication scholarship as a vantage point off which to compare the framing of immigration in news coverage with the framing of immigration in popular culture. We conclude by emphasizing the power of rhetoric to shape public opinion.

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220. The Road So Far: How Carry On Wayward Son Forged a Bond Between a Story's Creators and Their Audience

Julia Sisk, English, Undergraduate Student

College of Arts, Humanities & Social Sciences

Over the past 14 years, the classic rock song Carry On Wayward Son by Kansas has been adopted by the television show Supernatural as its unofficial anthem. The song bridges the gap between story and audience, inviting viewers to participate rather than simply observe. My research will examine how this song serves the purpose of identity formation within the creator-audience relationship. The song helps to construct cultural identity, inspires creativity, and works as a persuasive element that affects not only the audience, but also the production crew of Supernatural.

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221. The Role of Encoding Specificity in Incidental Learning: Implications for Explicit and Implicit False Memories

Cassady McLaughlin, Psychology, Graduate Student
Kauyumari Sanchez, Psychology, Faculty
Aaron Foster, Psychology, Undergraduate Student
James Peabody, Psychology, Undergraduate Student

College of Professional Studies

This project investigated false memories via spreading activation and the influence of encoding specificity on explicit and implicit memory tests in incidental learning situations. An interaction for memory condition and font color was found; the implicit condition had more false memories for when in the incongruent font color condition, and the explicit condition had more false memories when in the congruent font color condition. Regarding memory accuracy, both the implicit and explicit conditions had more accurate memories when in the congruent font color condition. Overall, the explicit condition had more false memories and more accurate memories than the implicit condition.

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222. The Role of Polyhedral Dice

Laura Thompson, English, Undergraduate Student
College of Arts, Humanities & Social Sciences

Intuitive to use, polyhedral dice hold meaning in the nerd and geek communities as a storytelling tool for tabletop games. Dice are rolled to advance a game's plot by limiting the action of a scene and opening options for the story to move forward. The artifact is a product, and its image is used to advertise to the nerd and geek communities. Further research would explore polyhedral dice in relation to history, psychology, and marketing.

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223. The Role of the Accounting Profession in Advancing Corporate Social Reporting Practices

Amanda Eribez, Business, Graduate Student
Hyeun Kyoung Song, Business, Graduate Student

College of Professional Studies

Given the significant increase in the production of corporate social responsibility and sustainability reports within the private sector, the demand for quality information has become paramount for stakeholders. As quality assurance professionals, the accounting profession serves in the unique position to become stewards and standard-setters in the deployment of such data. This research explores the contribution academic accounting, within the research realm, can make towards addressing perfecting reporting practices within the sustainability field.

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224. The Role of Traditional Ecological Knowledge in Wildlife Management & Conservation

Eli Otto Cutting, Wildlife, Undergraduate Student
College of Natural Resources & Sciences

My Ideafest poster will be looking at ways in which traditional ecological knowledge (TEK) can be used to help with wildlife management and conservation efforts. Traditional ecological knowledge can be used to get information on wildlife populations and habitats where proper scientific data is lacking, either from the past or due to being in a remote area. I will also be exploring potential problems from using traditional ecological knowledge and explaining how it is best used when paired with scientifically sound data.

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225. The Surface Distribution of Trace Metals Along a Pacific Meridional Transect: GEOTRACES GP-15 Research Cruise

Cristina Tusei, Chemistry, Undergraduate Student

Jacob Begorre, Chemistry, Undergraduate Student

Robert B. Freiburger, Chemistry & Oceanography,
Undergraduate Student

Dr. Claire Till, Chemistry, Faculty

College of Natural Resources & Sciences

Many trace metals are delivered to the ocean in the form of wind-blown sediments and by riverine input, some of which are essential micronutrients. Iron has been found to play a significant role in limiting biological productivity in many regions of the ocean such as in the California Current System. Investigating this distribution of trace metals provides insight into processes affecting surface ocean waters. In Fall 2018, the GEOTRACES GP-15 cruise traveled from Alaska to Tahiti along the 152°W meridian, a region yet to be well characterized for trace metals. Our group is interested in the distribution of scandium in surface waters as a proxy for understanding processes affecting iron.

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226. The Tohono O'odham Nation Reservation and the Border Wall in the Context of Tribal Water Rights

Kassandra Lamphere, Environmental Studies,
Undergraduate Student

College of Arts, Humanities & Social Sciences

When the United States acquired the 29,670-square-mile region of present-day southern Arizona and southwestern New Mexico through the Gadsden Purchase of 1854, the Tohono O'odham nation was cut in half. Now, they reside on either side of the U.S.-Mexico border in Arizona and Sonora. The border wall has forever altered their way of life, and new proposals for the wall are putting their relationship with local waterways in danger as well. This poster will be examining the history between the Tohono O'odham tribe and the border wall, specifically in the context of the Federal Indian Water Rights, and what construction of the wall would mean for the tribe in the long term.

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227. The True Roots of Chocolate: A Study of Cacao

Arii Geampa, Botany, Undergraduate Student

College of Natural Resources & Sciences

When we eat food, we don't tend to think about its agricultural history and origins. An effective way to learn this history is by looking to the original Indigenous peoples' relationships with this food. This is a look at a plant/food we heavily value in the present day: chocolate, otherwise known as cacao. Though we presently have it all around the world in a variety of methods of consumption, this poster will help inform the ways in which cacao was used by Indigenous peoples of North and South America. Studying the

past uses of this plant in compared to current uses will provide a thought-provoking learning experience that allows us to reassess our own present uses of cacao.

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228. The Use of Traditional Ecological Knowledge in Yellowstone Park

Shea Alexander, Zoology, Undergraduate Student

Julian Duran, Zoology, Undergraduate Student

College of Natural Resources & Sciences

Throughout history, indigenous tribes have used traditional ecological knowledge, TEK, to utilize natural resources while simultaneously tending to the environment. In our presentation, we will examine how incorporating these ideas of TEK will be a positive addition to the ecosystem and aid in conservation. We will focus specifically on the reintroduction of wolves into Yellowstone Park and explain how this is an example of TEK. By adding a predator to the ecosystem, they will benefit it by keeping prey populations under control to restore the natural balance of the land

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229. The Vote Was...Strike! Humboldt State University Anti-war Activism During The Vietnam War

Amanda Alster, Anthropology, Undergraduate Student

Library

Humboldt State University Library houses a collection of posters and documents preserving anti-war ephemera and primary sources from the HSU Strike for Peace protest, which took place May 11-15, 1970. This student-organized protest was one of the largest demonstration in Humboldt County's history to date; it drew support from almost 3,000 students, faculty, and Humboldt community members. The protest stemmed from President Richard Nixon's support of expanding the war into Cambodia, after he had promised the general public to begin the withdrawal of troops from Vietnam.

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230. The Yurok Tribe and The California Condor

Nicholas Isola, Wildlife, Graduate Student

Remy McCuistion, Wildlife, Undergraduate Student

College of Natural Resources & Sciences

We will be presenting the connection between the California Condor and the Yurok tribe. Focusing on the reintroduction of the California Condor into Northern California and Humboldt County. We will be presenting information on the history of the California Condor and the problems it has faced in the past.

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231. Threat Appraisals: Mediator of Acculturative Stress and Wellbeing Among Armenian Americans

Hayley Roberts, Psychology, Undergraduate Student
Shaun Aksionczyk, Psychology, Undergraduate Student
Tsolak M. Kirakosyan, Psychology, Graduate Student
Maria I. Iturbide, Psychology, Faculty

College of Professional Studies

Acculturative stress is the stress experienced by individuals when they are in the process of reconciling two or more cultures (i.e., their heritage culture and a new culture). Research suggests that stress is linked to individuals' wellbeing. Moreover, wellbeing linked to acculturative stress may be explained by threat appraisal (i.e., how individuals perceive stress - as anxiety-provoking and unmanageable). The current study examines threat appraisal as a mediator of the relationship between acculturative stress and wellbeing amongst a community sample of Armenian Americans.

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232. Timber Harvesting Effects On The Environment and Wildlife

Eddie Sanchez, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

This GIS research project provides info how clear-cut logging effects humans relationship to the forest and is threatening the Humboldt Marten. The Humboldt Marten, *Martes caurina humboldtensis*, is historically found exclusively in Humboldt County and is currently registered as a "species of concern" or "threatened species" in the State of California and does not have an official "endangered species" status. As unsustainable timber harvesting continues, the Marten species faces threats to their home range and the impacts of logging include environmental, economic, and social aspects. This project is in support of the Environmental Protection Information Center (EPIC) located in Arcata, Ca.

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233. To the Victor Go the Soils: An Analysis of a Historic Preservation Project in Arcata, CA.

Curtis Rogers, Anthropology, Undergraduate Student
Joe Tregle, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

The objective of this historic preservation project is to evaluate the historical significance of an Arcata landmark, the Nixon House, constructed on Wiyot land, to determine its eligibility for inclusion in the National Register of Historic Places. We analyzed literary and primary source documents, consulted with the homeowners and local historic preservation organizations, and Tribal Historic Preservation Offices. The property is significant under National Register Criteria A & C. Our analysis of this process highlights colonial hegemony in our society by basing the house's historical value on its association with a period of genocide.

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234. Towards a Critical Game Based Pedagogy

Justin Egan, English, Graduate Student

College of Arts, Humanities & Social Sciences

This presentation represents the culminating thesis project, titled Towards a Critical Game Based Pedagogy in Composition in the Applied English Grad Program. My research outlines the key figures and discourses of game-based learning and gamification. In response, I presents a theoretical framework for its application in a composition course. My argument holds that a game based pedagogy bears potential for introducing critical, social justice literacies alongside composition and writing literacy. Literacy, being at the center of this framework, is supported by what I call Pillars: Identity, Social Learning, and Multimodality.

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235. Traditional Ecological Knowledge and Application to the Klamath River

Rachel Mack, Zoology, Undergraduate Student
Chris Vignery, Zoology, Undergraduate Student

College of Natural Resources & Sciences

The application of TEK to the Klamath River and the Yurok tribe. How to intertwine the scientific methods with the original knowledge of the native people. Mainly focusing on how pacific lamprey and salmon are effected and ways to apply the old and new techniques to help the current populations recover and grow, such as better ways to monitor and take care of the river and what live in the river ecosystem.

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236. Training and Continuing Education Manual for In Home Supportive Services

Lauren Pollock, Social Work, Graduate Student

College of Professional Studies

This project is the creation of a training and continuing education manual for In Home Supportive Services, social workers. Gaps and barriers in training will be assessed through a survey to current staff. Results will be analyzed and considered in the development of new training materials. A variety of learning methods, as well as information on working with culturally diverse populations will be considered in the creation of the manual. The intended purpose of this project is to create equitable services to the clients, as well as providing extra education and resources to reduce burnout and turnover of staff.

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237. Transmission Electron Micrographs of Human Embryonic Kidney Cells Post Drug Treatment

Christine Kupelian, Biology, Undergraduate Student
Haley Nisson, Biology, Undergraduate Student

College of Natural Resources & Sciences

Applying data collected during lab in BIOL 410, we treated human embryonic kidney (HEK) cells to trigger the autophagy pathway. After treating the cells in standard growth conditions and nutrient deprived conditions, we used transmission electron microscopy to visualize these cells in hopes of imaging the formation of autophagosomes.

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238. Twitch: Social Currency

Allison Iafrate, English, Undergraduate Student
College of Arts, Humanities & Social Sciences

Twitch.tv is an online streaming platform where gamers can record their game-play and commentary in a live setting, while interacting with their viewers. Streaming has the potential to create an intimate setting where people who enjoy videogames can come together to share their interests. How much of that social interaction, though, is directly linked to users spending their money? This ongoing research project investigates the ways in which Twitch uses the appeal of social rewards (such as friendship, happiness, and community bonding) to promote the spending of economic capital.

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239. Types of Censorship in Early Modern England

Korinza Shlanta, English, Undergraduate Student
College of Arts, Humanities & Social Sciences

A research project that aimed to identify the materials, methods, subjects, and people who affected censorship in the early modern period. Censorship is often thought to be a conspiratorial act by those who are in power and control the dominant discourses, so how did censorship happen and how did people manage to circumvent intensely regulated printing and selling processes? The printing of materials was almost solely restricted to the city of London and only a handful of people had the money and privilege to own and operate the equipment; this project explores the circumstances that gave rise to a strict printing culture and censorship practices in a country that had a low literacy rate.

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240. Unlearning to Use the N Word

Mireille Roman, English, Undergraduate Student
College of Arts, Humanities & Social Sciences

I will analyze the way people in marginalized communities, specifically those who do not identify as Black, internalize the "N" word through the lyrics of music in hip hop. Although those in similar systems of oppression relate to the word's connotation, it does not entitle anyone who does not identify as Black to use the "N" word. Through ethnomusicology paired with metalinguistics, I conclude that hip hop should diversify the industry with artists from

different social positions to represent other minorities, leaving room for marginalized groups to create artifacts that directly represent their day-to-day experiences in this oppressive society without having to use the "N" word.

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241. Uses of Traditional Ecological Knowledge

Benjamin Lee Hanlin, Zoology, Undergraduate Student
College of Natural Resources & Sciences

The poster will be about how Native American studies go hand in hand with the field of Zoology and natural resources and management as well as wildlife and game management. It will delve into the benefits of applying Traditional Ecological Knowledge to conservation-related issues as well as some of the social and economic issues that we are facing. In particular, This poster will address some of the issues regarding the environment today and how TEK can help to both resolves and benefit from the initial problems. In addition to the management benefits that Traditional Ecological Knowledge offers, I want to include how TEK can help bridge the gap between different communities.

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242. Using Characterization of Androgen-Dependent and Androgen-Independent Prostate Cancer Metabolic Differences to Help Illustrate our Changing Marine Ecosystems

Marina Storey, Marine Biology, Undergraduate Student
College of Natural Resources & Sciences

Over the past summer, I worked as an intern at UCSF where I grew cell lines of PC3s (androgen independent) and LnCaps (androgen dependent) prostate cancer and performed biochemical assays to see the metabolic change from an androgen dependent to androgen independent cell. Theoretically you could use imaging such as hyper-polarized C13 imaging (a type of nuclear imaging) to see when the metabolic change happens instead of taking a biopsy which is very invasive to patients. By using the skills I learned and cellular metabolic change I hope to be able to apply this to my major by conducting further research on metabolic changes in marine organisms to help illustrate our changing ecosystems.

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243. Using Ecological Niche Models to Predict the Distribution of Plant Species Through the Use of Python Programming

Jason Heutmaker, Environmental Science & Management, Graduate Student
Buddhika Madurapperuma, Environmental Science & Management, Faculty

College of Natural Resources & Sciences

Understanding the potential locations of where plant species will thrive is a fundamental necessity for resource managers who are concerned with controlling invasive species as well as promoting endangered ones. This study examines the credibility and usage

of predicting ecological niche models developed through a Python program which uses in-situ data for counties within California (primarily climatic, elevation, and slope data). We tested its validity to predict the distribution of invasive species of plants by using an easily identifiable species known as *Cortaderia selloana* (Pampas Grass) with initial findings indicating an extremely high degree of success (well over 90% overlap).

244. Varying Botanical Perspectives from Indigenous Groups

Dalia Martinez Cardenas, Biological Sciences, Undergraduate Student

College of Natural Resources & Sciences

Taking the names and meanings behind the certain plants that Indigenous groups gave and comparing them to what scientists have used them for, as well as what properties they possess. Looking at the name Indigenous peoples have given to the plants explains to others what they can do.

245. Vegetation detection change with NDVI and NBR Analysis of the Thomas Fire Using Landsat 8 Imagery

Christopher Lanz, Environmental Science & Management, Undergraduate Student

College of Natural Resources & Sciences

The Thomas Fire drew immediate attention from all across California on December 4, 2017, during a time of year with higher levels of precipitation. Roughly 281,000 acres of land was engulfed by the extent of the wildfire outbreak where typically the native chaparral are known to thrive despite chaparral scrubland have typically evolved to remain fire tolerant. This study was able to determine a variety in vegetation change, further tests involving supervised classification and collection of field data (ground truthing) would provide more information giving way to further suggestions as to what indicators contributed the most to California's worst wild fire outbreak.

246. Water Conservation's Affect on Tribal Water Rights

Abril Avalos-Morales, Psychology, Undergraduate Student

College of Professional Studies

This poster will focus on what the effects of the water conservation efforts of San Diego County have on the Kumeyaay peoples' Tribal Water Rights.

247. Waves of Friends at the Dunes

Stefan Robles, Environmental Studies, Undergraduate Student
Courtney Greene, Environmental Studies, Undergraduate Student
College of Arts, Humanities & Social Sciences

Friends of The Dunes is an organization that is heavily involved with building community through various educational and stewardship programs. Our project revolved around outdoor public outreach and child education. Local schools have the opportunity to learn about biodiversity and conservation of coastal ecology.

248. What They Aren't Saying: Nonverbal Behaviors and Stereotypes

Rachael Thacker, Communication, Undergraduate Student
Celeste Buntin, Communication, Undergraduate Student
Ariana Tlaseca, Communication, Undergraduate Student
College of Arts, Humanities & Social Sciences

Our group is exploring the link between vocalics and nonverbal communication by examining four different popular television characters and analyzing their individual character nonverbals. We selected popular characters and examined their vocalics (pitch, speech rate, etc) and nonverbals (gestures) in relation to audience and character perception. The characters selected are Ron from Parks and Rec, Jack from Will and Grace, Captain Holt from Brooklyn Nine Nine, and Sheldon from The Big Bang Theory. Often nonverbal behaviors, specifically speech illustrators, are used to accompany the characters respective idiosyncrasies in an amusing or humorous way that we examine in our project.

249. Why It's the Thought That Counts: A Rhetorical Study of Greeting Cards

Asha Galindo, English, Undergraduate Student
College of Arts, Humanities & Social Sciences

Is it true that It's the thought that counts? When we give and receive greeting cards in a variety of situations, we are not only documenting our thoughts towards a person or event but also enacting an internalized sense of human connection and care. This project explores the exigence for greeting cards, especially the pushback against digital versions of cards as impersonal and not as meaningful as handwritten notes, as well as, the different ways that greeting cards embody thoughts and intentions.

250. Why What Happens in Vegas Stays in Vegas

Janna Trowbridge, English, Undergraduate Student
College of Arts, Humanities & Social Sciences

What Happens in Vegas Stays in Vegas is much more than a catchy saying. An economic tool, this slogan has shaped the city. Through the use of billboards, casinos and shows Vegas offers anything one could need to fulfill their wildest fantasies. Drugs, sex and entertain

are readily available. Vegas is much more than a destination it is a state of mind, one that is often detrimental. Exploiting the worst of human desire, Vegas earns the name Sin City.

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254. You're Just Supposed to Explore This House: Queer Hypermedia Heuristics in Theory and Practice

Cat Boers, English, Graduate Student

College of Arts, Humanities & Social Sciences

In this project, I examine three queer textual structures used in hypermedia/video games: open worlds, high levels of object interactivity, and a first-person perspective with an absent player-character identity. I argue that these textual structures provide a means to analyze how readers develop queer "literacies" as well as how readers make sense of and actively construct a sense of their own identity within digital texts.

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255. Youth Outdoor Resilience-Building Experiences Pilot: Planning, Implementation and Program Evaluation with Big Lagoon School

Molly Hilgenberg, Social Work, Graduate Student

College of Professional Studies

During the academic year 2018-2019, Big Lagoon School was awarded a grant from the Alexander T. Salvos & Timothy A. Salvos Fund for Youth of Humboldt Area Foundation, which provided the opportunity to formalize the Outdoor Resilience-Building Experiences pilot program, an intervention for creatively addressing the need for more behavioral and social-emotional supports with youth in rural schools. This was an IRB-approved study measuring student resilience outcomes with self-regulation skills, mindfulness, and empowering access to the county's natural surroundings for participants grades 4-7. Findings will help the program test effectiveness and sustainability.

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251. Wildlife Management and Native American Life

Logan Charles, Wildlife Management, Undergraduate Student

College of Natural Resources & Sciences

On my poster I would like to Show the intersection of the study of Native American peoples and the idea of wildlife management and resource conservation.

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252. Wolves and Native Americans

Sarah Yatsko, Wildlife Biology, Undergraduate Student

College of Natural Resources & Sciences

My research will be about wolves and their relationship with Native Americans. Lots of Native American tribes that lived in the Great Plains admired wolves because they taught the Native Americans how to hunt. These include Cheyenne, Lakota, Blackfoot, Assiniboine, Arikara, Arapaho, Osage, Shoshone, and Pawnee. It will also be about what the wolf was regarded as in terms of spiritual ties with the Native Americans and wolves.

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253. Worldviews and Ideologies of Humboldt County

Michael Howell, Religious Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

Mapping the worldviews and ideologies of Humboldt County

Ten Plus Digital Media

Library 1st Floor (Room 120) ▪ 12:00–1:00 pm

This is a video showcase by students in ITS Media Production called “Ten Plus.” Ten Plus means that more than one in ten students on the HSU campus has a disability and requires some form of accommodation. These videos aim to build awareness as to what is currently being done and what steps we need to take in order to create accessibility on this campus through the use of Universal Design, accessible documents and more. It includes interviews by faculty, students and staff who are familiar with these issues and work with them every day. This project is funded through the GI 2025. Its purpose is to “remove obstacles and support innovation to increase student success in graduating on time!

HSU Sculpture Walk

All Floors ▪ Guided tours at 12:00 pm & 5:00 pm

The sculpture walk will take you on a journey through the Library, as pieces are displayed in different locations appropriate for each piece. Once again, you will find that there is an abundance of high quality art created on this campus. This is part of the annual HSU Sculpture Walk, presented by the Associated Student Sculptors, which is an event designed to showcase the wide variety of artwork produced by the HSU Sculptor program and usually occurs April to May of every year, closing with commencement. Guided tours are at 12:00 pm and 5:00 pm. Coordinated by Sondra Schwetman, HSU Sculpture Lab. Tours groups meet in the Library Lobby (1st Floor).

Theatrical Performances

Library 1st Floor ▪ 2:00 pm

Theatre Majors and Minors performing scenes and monologues from their Irene Ryan Nominations, displaying work from the Design, Technology & Management Exposition, and performing one of our two invited scenes from the Kennedy Center American College Theatre Festival held in Eugene, Oregon.

Design/Tech Displays

Amy Beltran and Constance Hill for Makeup Design for “Evil Dead the Musical”

Constance Hill for Makeup Design for “The Fantastic Mr. Fox”

Jordan Goad for Scenic Painting for “Hayfever”

Irene Ryan Acting Scenes

Kiara Hudlin and Isaiah Alexander

William English III and Amy Beltran

Victor Parra and Amy Beltran

Zackary Tucker and Micah Sheff

Maude Jaeb and Shawn Wagner

Madison Glee and Andrea Carillo

Musical Soloists

Kiara Hudlin

William English III

Gwynnevere Cristobel

Invited Scene

“Boisterous Bitties” with Maude Jaeb, Andrea Carillo, and Taiquira Williams

Dance Performances

Library 1st Floor ▪ 3:00 pm

Excerpts from the recent “ Surrenderings” HSU Dance Program spring concert. Six dances will range in styles from contemporary to tap to hip hop. Thematic content will range from cultural identity, human relationships and merging of our diverse American cultures.

Musical Performances

Library 1st floor (Lobby) ▪ 2:00 pm

The music department will showcase HSU students as soloists, composers, and performers in chamber ensembles.

Faschingsschwank aus Wien

I. Allegro

Robert Schumann

(1810-1856)

Yanting Yu, piano

Sonata

I. With vigor

Paul Creston

(1906-1985)

Jesse Garate, alto saxophone

John Chernoff, piano

The Maids of Castlebar-The Ashplant-The Farewell to Erin

Traditional Fiddle Tunes

Evan Morden, violin

Folia Variations, Op. 45

Mauro Giuliani

(1781-1829)

Nicholas De Anda, guitar

Sonata in B-flat Major, K. 333

I. Allegro

Wolfgang Amadeus Mozart

(1756-1791)

Xiaowen Xu, piano

Sonata for Flute and Piano

I. Allegro Malinconico

Francis Poulenc

(1899-1963)

Emani Manning, flute

John Chernoff, piano

Rondo in C Major, Op. 51, No. 1

Ludwig van Beethoven

(1770-1827)

Hannah Shapiro, piano

SyrinxClaude

Debussy

(1962-1918)

Ahtziri Ramirez Quintana, flute

Suite No. 1 in G Major, BWV 1007

III. Courante

Johann Sebastian Bach

(1685-1750)

Dillon Solliday, cello

Inventions (2018), Op. 259

III. with energy

VII. Tango

VIII. Coda (quickly)

Michael Kibbe

(b. 1945)

Ryan Blake, trumpet

Collin Kirkwood, trumpet

Concerto in D Major, K. 218

II. Adagio

Wolfgang Amadeus Mozart

(1756-1791)

Thomas Starkey-Owens, violin

John Chernoff, piano

Mazurka in C Major, Op. 67, No. 3

Frederic Chopin

(1810-1849)

Prelude

Sergei Prokofiev

(1891-1953)

Owen Reiss, piano

Elephant Dance

Jeffrey Ruiz

(b. 1991)

Matt Wardynski, clarinet

The Whistler

George Hamilton Green

(b. 1893)

Jovial Jasper

Blake Meisinger, marimba

Concerto in C Minor
I. Allegro molto ma maestoso

Michael Hall, viola
John Chernoff, piano

Johann Christoph Bach
(1735-1782)

The Offering

Michael Burritt
(b.1962)

Fantasia in A minor

Grave
Vivace
Adagio
Allegro

Ryan Franzen, marimba

Georg Phillip Telemann
(1681-1767)

Stubernick

Richard Rios, soprano saxophone

Mark Ford
(b. 1958)

Concerto in F Major, RV 538
Largo

Makani Bright, marimba
Blake Meisinger, marimba
Isaac Saltoon, marimba

Antonio Vivaldi
(1678-1741)

Ghost Garden

Emily Morse, cello
Trish, Kiy, cello

Adam Hopper
(b. 1985)

Animal Ditties (1978)

I. The Turtle
II. The Python
III. Hyena
IV. Hog

Travis Strong, marimba

Anthony Plog
(b. 1947)
Poetry by Ogden Nash
(1902-1971)

Romantica

Andrew Henderson, trumpet and flugelhorn
Dominique Hausler, narrator
John Chernoff, piano

Emmanuel Séjourné
(b. 1961)

"Porgi amor" from Le Nozze di Figaro

Richard Rios, marimba

Wolfgang Amadeus Mozart
(1756-1791)

Homo Balcanicus

Countess: Helen Kimber
John Chernoff, piano

Nebojša Jovan Živkovi
(b. 1962)

"Madamina, il catalogo è questa" from Don Giovanni

Makani Bright, marimba

Wolfgang Amadeus Mozart
(1756-1791)

Rhythm Song

Leporello: Dylan Kinser
John Chernoff, piano

Paul Smadbeck
(b. 1955)

Makani Bright, marimba
Richard Rios, marimba

Musical Performances *continued*

"Crudel, perch fin'ora" from Le Nozze di Figaro

Wolfgang Amadeus Mozart
(1756-1791)

Count: Brandon Barbosa
Susanna: Haley Rhouault
John Chernoff, piano

Cry Me a River

Arthur Hamilton
(b. c. 1926)

Unchain My Heart

Arr. Kirby Shaw
Bobby Sharp and Teddy Powell
(1924-2013) and (1905-1933)
Arr. Kirby Shaw

Mad River Transit Singers

Caitlin Pyle, soprano I
Haley Rhouault, soprano I
Paige Hernandez, soprano II
Helen Kimber, soprano II
Quinn Pendergast, soprano II
Diamond James, alto I
Amber Rausch, alto I
Olvia Horton, alto II
Tina Okoye, alto II
Liz Whittemore, alto II
John Chernoff, piano
Loren Acoasta, bass
Eric Tolfa, drumset

Celebration of First-Year Writing

Library 2nd Floor Fishbowl ▪ 2:00-5:00 pm

The HSU Composition and Rhetoric Program highlights textual, visual, and digital projects created by our students in first-year composition. Students will present videos, podcasts, posters, brochures, and other texts in a variety of genres and mediums.

Virtual & Augmented Reality Station and 3D Showcase

Library 3rd Floor ▪ 2:00 pm

The Virtual & Augmented Reality Station showcases projects related to virtual reality (VR), augmented reality (AR), and 3D modeling and animations. The Library's Oculus Go, Lenovo Mirage Solo, and Oculus Rift headsets are available to view these projects and more.

Virtual Exercise Physiology Lab

Lukas Coppen, M.S. Kinesiology

Dr. Young Sub Kwon, Human Performance Lab Director, Kinesiology

Beginning in summer, 2018, Dr. Kwon and the Human Performance Lab created a virtual reality lab using 360-degree video. The virtual lab allows viewers to experience what it is like to be in the Human Performance Lab to conduct wingate tests and more. Stop by the VR Station to experience the lab for yourself!

The Scope of Special Collections: An Augmented Reality Tour

Alyssa Johnson and Katelyn Brady

The HSU Special Collections is incorporating AR into the space to help provide access to a few areas of focus (indigenous history, logging industry, wildlife conservation, etc.). Several AR projects make up an interactive display, including images, 3D models and information on Humboldt County history.

HSU Gaming Club Introduces a Flight Simulator to Campus

Sarah Kanga Livingstone, President of the PC Gaming Club, Wildlife Management and Conservation, Undergraduate

David Marshal, Club Adviser

The PC Gaming club started this project in Fall 2018, fundraising and obtaining donations from community members. In Spring 2019 the Airplane Flight Simulator became a reality and is open to all students and community members in the HSU Library. Library guests can practice and learn the basics of flying an airplane. Please let us show you how to start the engine, set the flaps and take flight.

In a Bread Basket: a VR video experience

Ronald Homer, Graphic Design, Undergraduate

Technical and creative experience through VR created by a student. Experience on being a part of a bread making assembly line!

Go Train Go: An Augmented Reality Technical Experience

Ronald Homer, Graphic Design, Undergraduate

Go Train Go is a creative and technical visual experience through AR. A train traveling in a circle while being attacked by zombies from the outside. The Train will be firing on the zombies as they attempt to approach, the zombies will evaporate.

Photography Exhibit and Books

Feuerwerker Building Gallery, 854 9th Street, Arcata ▪ 2:00 pm - 5:00 pm

The World "The way we saw it"

These books and exhibition showcase the inspiring and creative work of the Languages students at Humboldt State University (HSU) and Arcata High School (AHS), captured through the instructionally related activities program The World "The way we saw it" in the 2018-2019 academic year. Their photographs from around the globe and their writings in different languages have committed precious moments to memory. This is our world! This is the way we saw it!

Showcasing Brain Booth Activities (libguides.humboldt.edu/brainbooth) ▪ Live Music by HSU and AHS performers and bands.

For Additional Information: Katia G. Karadjova (HSU), katia@humboldt.edu

The Fantastic Mr. Fox ~ Children's Show

Based on the book by Roald Dahl. Dramatized by David Wood

May 3, 4, 10, 11, 2019 @ 7:00 p.m. ▪ Gist Theatre

May 4, 5, 11, 2019 ~ Matinee @ 2:00 p.m. ▪ Gist Theatre

"Boggis and Bunce and Bean/One fat, one short, one lean/These horrible crooks/So different in looks/Were nonetheless equally mean." And so begins another enchanting Roald Dahl tale concerning the extraordinary adventures of three nasty farmers, two curious creatures, a family of foxes, and our hero—a most fantastic fellow! Your audience will be fascinated as they watch Boggis, the (enormously fat!) chicken farmer; Bunce, the (pot-bellied dwarf) duck-and-geese farmer; and Bean the (thin) turkey-and-apple farmer, attempt to foil the efforts of Mr. Fox and his friends—the Badgers, the Moles, the Rabbits and the Weasels. And then, of course, they'll be held in suspense as the animals unwittingly trap themselves in Bean's Secret Cider Cellar—much to the displeasure of Rat (a rude creature) and all appear doomed. In the end, they'll cheer as Mr. Fox provides a glorious feast for each and every one—and gives rise to Mrs. Fox's proclamation that "My husband is one fantastic fox!" Certainly this show is lively and suspenseful and we're sure you will also find it a whole lot of fun!

This event is sponsored by the Office of Research & Sponsored Programs, Marketing & Communications, and the HSU Library, in collaboration with the Colleges. A special thanks to Theatre, Dance, Music, Creative Writing, ITS Media Production, and the Sculpture Lab for their contributions to the programming this year!

HUMBOLDT STATE UNIVERSITY & ARCATA HIGH SCHOOL



2019 **The World "The way we saw it"** **HSU & AHS Photography Exhibit**

Feuerwerker Building Gallery
854 9th St, Arcata

ideaFest (satellite location): May 3rd, 2pm - 5pm
Arts Arcata!: May 10th, 6pm-9pm

Book Signing by HSU and AHS Authors,
Showcasing Brain Booth Activities (libguides.humboldt.edu/brainbooth),
Live Music by HSU and AHS performers and bands,
Food provided by the AHS Language Honor Clubs