

University Library • Friday, April 21, 2017



Research Posters

Library 2nd and 3rd Floors • 3:00 – 5:00 pm Listed A-Z by Poster Title • Pages 1-53

Welcome

HSU President Lisa Rossbacher, Ph.D. and Provost Alexander Enyedi, Ph.D. Library 2nd Floor • 3:30 pm

Musical Performances

Library 1st Floor (Lobby) • 3:00 - 4:15 pm • Pages 54-55

Film Screenings

Library 1st Floor (Room 120) • 4:15 - 5:00 pm • Pages 56-57

Dance Performances

Library 2nd Floor • 3:00 pm • Page 58

Sculpture Walk

Library 1st Floor (Lobby) • Starting at 3:00 pm • Page 58

Theatrical Performances

Library 2nd Floor • 4:00 pm • Page 58

Research Presentations

Library 2nd Floor

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1. 501(c)(3) Development for Local Equine Assisted Growth and Learning (EAGL) Organization

Nicole Winters, Social Work, Graduate Student

College of Professional Studies

This project involved work with Flying Changes, a local EAGL (or horse therapy) organization. EAGL is an experiential therapy shown to be a powerful modality in treating all sorts of trauma and emotional issues, especially with those who do not benefit from, or are resistant to, traditional talk therapy. I worked to develop grant application and fundraising strategies, build lasting relationships with collaborating partners and inform the organization on existing research and education opportunities. I hope to have assisted in receiving sustainable funding, and in building a sustainable organization, providing EAGL to populations in Humboldt County who could benefit from its power.

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2. A Feminist Interpretation Of Women's Work With Koloa In The Tongan Community

Meleana Akolo, Anthropology, Graduate Student

College of Arts, Humanities & Social Sciences

This research involves studying the Tongan culture in the San Francisco Bay Area with a feminist perspective focused on Tongan women and Tongan cultural materials known as koloa. Koloa is a major component of keeping with Tongan traditions and customs. Koloa is used for all cultural, religious, and social events. Those with proprietary entitlement are women. Women create, collect, and sell koloa. Studying women and their dominant role as cultural providers will shed light on their valuable assets and talents within the community. The Tonga Islands are located in the deep South Pacific. The study was conducted from interviews with the women, observations, and a focus group.

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3. A Multi-Cultural Approach to Lesson Study

Yesenia Torres, Mathematics, Undergraduate Student **Mario Sanchez,** Physics, Undergraduate Student **AnaCena Zander,** Biology, Undergraduate Student

College of Natural Resources & Sciences

Through the collaboration between Humboldt State and the university HEP in Switzerland, we developed lesson study practices for English Language Learners at L'Élysée, a Swiss high school. Specifically, our main areas of interest involved assessing student engagement and learning. Our lesson was taught four times, and after each lesson, it was adapted to better match the needs of our students.

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4. A New Look at Factors Influencing Iron Limitation of Phytoplankton along the California Coastline

Jessica Solomon, Oceanography, Undergraduate Student **Claire Till,** Chemistry, Faculty

College of Natural Resources & Sciences

While the ocean's upwelling regions bring nitrogen-rich water to the surface, evidence shows that the micronutrient, iron, can be limiting. In areas of low iron, the biological utilization of nitrogen is inhibited, preventing phytoplankton from fulfilling their productivity potential. It is thought that iron concentration of coastally upwelled water is tied to the coast 's geology, but there are more factors involved. To investigate this, we analyzed samples of California 's upwelling coast from published data that were deemed iron replete or limited. By studying the location's sea surface temperature and altimetry, plumes of water were proven an additional factor that influences iron.

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5. A Search for Triggered Star Formation in the Compact Group of Galaxies NGC 5851, NGC 5852 and CGCG 077-007

Charlotte Olsen, Physics & Astronomy, Undergraduate Student

College of Natural Resources & Sciences

Galaxy interactions provide ideal conditions for triggering star formation, and impact galaxy evolution and the structure of the universe. I present analysis of one compact group of interacting galaxies. Areas of increased star formation are classified by the identification of the most UV bright regions within the galaxies. In order to gain deeper insight into how mergers drive galaxy evolution, star formation histories are determined by fitting ultraviolet to mid-infrared photometry to Spectral Energy Distribution (SED) models.

6. Advocacy for the Holistic Development of the Gut Microbiota in Young Children

Roxann McArthur, Child Development, Undergraduate Student

College of Professional Studies

As a plethora of continuing research emerges from projects such as The Human Microbiome Project (NIH, 2008), there is more evidence than ever before on how the health of our "forgotten organ", known as the Gut Microbiota (GM), is linked to our lifelong holistic health. Between birth and 3 years of age, our GM will develop between 40-60% of the 100 trillion microbes that will coexist in balance with our bodies as adults; That is over three times the number of human calls in our bodies. That makes this short window critical to the physiological and mental health of our children. Spreading education while also providing resources for families is the primary goal of this collection of research.

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7. Alcohol and Drug Resource List

Jeremy Muhleck, Social Work, Graduate Student

College of Professional Studies

Social Workers commonly share that there is a lack of resources related to alcohol and drug treatment programs to refer clients to. Based on a review of alcohol and drug services available in the Northern CA region, I created a resource list on how to refer clients to a variety of alcohol and drug services including substance testing, assessment, and treatment in the region for Child Welfare Services. This resource list was developed to improve service delivery, identify services in the region, and to assist social workers in referring people who have court mandated alcohol and drug service requirements.

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8. Analysis of Trace Metals in Seawater using Pre-Concentration Techniques and Flame Atomic Absorption Spectroscopy

Jeremiah Hays, Chemistry, Undergraduate Student **Kezia Rasmussen,** Oceanography, Undergraduate Student **Claire Till,** Chemistry, Faculty

College of Natural Resources & Sciences

Many trace metals are essential micronutrients for phytoplankton, and despite their low concentrations in seawater, trace metals can have large impacts on biological processes. Also due to their low concentrations, the measurement of trace metal concentrations requires precise analytical techniques. One common method utilizes expensive instrumentation that we do not have at HSU. In this research project, we adapted published methods to use the Flame Atomic Absorption Spectrometer, an instrument in the HSU Chemistry Department. Results show successful adaptation of the method for zinc and manganese. Current work streamlines the method to allow for 8-fold faster sample preparation.

9. Arcata Elementary After School Program

Madison Lopez, Child Development, Undergraduate Student
Chase Redding, Child Development, Undergraduate Student
Francisca Sanchez, Child Development, Undergraduate Student

College of Professional Studies

All together we volunteered over 60 hours at Arcata Elementary After School Program where we had to chance to interact with the staff and students. During this experience we were able to work one on one with some children as well as work/play with larger groups during "clubs". Being able to give our time to these children and focus on them for the few hours we were there was a very rewarding experience that we would like to share.

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10. Area 1 Agency on Aging Volunteer Driver Program Annual Client Survey

Alma T. Barba, Social Work, Graduate Student

College of Arts, Humanities & Social Sciences

In 2012, Humboldt County was the home of just over 25,000 people over the age of 60. By 2050 Humboldt County will be the home of nearly 60,247, more than double documented in 2012. These statistics are alarming and should get the attention of all local (State & National) sectors working with the aging population on track to establish and sustain community resources necessary to allow the elderly to age safely, comfortable, respectfully, and with dignity in their homes and communities. In the efforts of enhancing local social services for seniors, I worked alongside Area 1 Agency on Aging on a client-centered survey geared to enhance local senior programming.

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11. Assessing BDNF Levels over 45 days via Capillary blood

Sally Hang, Psychology, Graduate Student

College of Professional Studies

Brain health, and the benefits of exercise, have been linked to a biological signaling molecule called brain-derived neurotrophic factor (BDNF). Results have been inconsistent especially in human studies, which may be attributed to incomplete information about normal variation in BDNF levels over time. This study aims to assess BDNF measurements (3 x a week) from human participants under normal life conditions over a span of up to 45 days, a longer span than has been reported in any other study to our knowledge. We will also collect their exercise activity during the study to see if there is a correlation.

12. Best Practices in Adolecent Alcohol and Other Drug Interventions

Dylan McClure, Social Work, Graduate Student

College of Professional Studies

This project explored alcohol and other drug interventions that could be successfully implemented in our rural community, while also focusing on the special needs of foster and homeless youth. My goal was to focus on interventions for youth that are actively using alcohol and drugs, and to pay particular attention to interventions that focused on rural and indigenous youth. Interventions were screened using 6 key criteria. A total of 17 interventions met criteria to be included. Effective interventions were found to be school-based, peer-driven, built community within the school, and focused on developing positive coping skills among youth who participated

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13. Bicycling for Exercise Helps Maintain a Youthful Metabolic Cost of Walking in Older Adults

Daniel Hugo Aslan, Kinesiology, Graduate Student

College of Professional Studies

Healthy older adults have been shown to have a 15-20% greater metabolic cost of walking compared to young adults. However, a recent study suggests that older adults who routinely run for exercise have a lower metabolic cost of walking compared to older adults who walk for exercise. It remains unclear if bicycling elicits similar improvements among older adults. PURPOSE: To determine if regular bicycling exercise affects metabolic cost of walking in older adults. RESULTS: Across the range of walking speeds, older bicyclists had a 9-17% lower metabolic cost of walking compared to older walkers. CONCLUSION: Bicycling exercise mitigates the age-related deterioration of walking metabolic cost.

14. Bio-Renewable Hydrogel Polymers from Modified Chitosan: Progress Towards Three Dimensional Cell Growth Scaffolds

Tara Alizadeh, Chemistry, Undergraduate Student **Diana Sehawneh,** Chemistry, Undergraduate Student **Jordan Jacobs,** Chemistry, Undergraduate Student **Mitchell Ward,** Chemistry, Undergraduate Student **Frank Cappuccio,** Chemistry, Faculty

College of Natural Resources & Sciences

The current research focuses on producing hydrogels from chitosan, a bio-renewable bio-compatible and bio-degradable polymer. Hydrogels are used as contact lenses, drug delivery systems, and biomedical applications such as tissue engineering. Chitosan is the deacetylated form of chitin, an abundant biopolymer found in the exoskeletons of crustaceans and insects. Amino acid coupling, using 1-Ethyl-3-(3- dimethylaminopropyl) carbodiimide (EDC), is employed to covalently attach trans-cinnamic acid to the free amine of chitosan. Modified chitosan is then cross-linked under UV irradiation to produce hydrogels. The swelling capacity and sterilizability are currently under investigation.

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15. Boiling Down: An Introduction to the Eureka Iron Works Collection at The Humboldt Room

Katie Buesch, Anthropology, Undergraduate Student **Olivia Gambino,** Anthropology, Undergraduate Student **Eleanor Collins,** Anthropology, Undergraduate Student **Mikaela Lee,** Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

This project investigates the Eureka Boiler Works Collection housed at Humboldt State University's Humboldt Room by presenting the collection within a historical context, including how it arrived at the Humboldt Room. The social and economic context of the Humboldt Boiler Works will be addressed as well as the company's impact on Humboldt County and the surrounding Pacific Northwest. The collection includes documents ranging from the late 1800s to the 1940s, incorporating employee records, product designs, correspondence and general company records. The project provides an overview of the contents of the collection.

16. Bridging the Gap: Environmentalism & the Military

Samantha Weeks, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

The United States military has a long and well documented history of environmental degradation, contamination, and environmental injustice. Today, the U.S. military has taken steps to attempt control, regulation, and conservation in a growing environmental sector. Current relations between environmentalists and military personnel are still plagued with contention. This has created a stigma on bases about environmentalists and their contributions to military base lives. By reconciling my knowledge of the military and the environment with the tools of an environmental studies major I hope to show ways in which we can improve the relationship with the military and environment.

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17. California State University System FY 2011-15 Financial Condition & Capacity Assessment

Vanesa Carillo-Salas, MBA Graduate Student Thomas Souza, MBA Graduate Student

College of Professional Studies

The CSU system is the largest public university system within the US. Purpose of this study is to assess the financial condition and viability of the system, as well as individual campuses. We examined four years of independently audited financials presented in a standardized format. Using financial ratios we identify trends, establish benchmarks, and highlight areas of concern. In our analysis, we attempt to identify causal determinants of stronger financial performance, including controllable activities and non-controllable. This study seeks to understand the role management structure and related controls play in the long-term financial condition and solvency of public institution.

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18. Campus Readiness Assessment: Tobacco and Smoke-Free Policy at Humboldt State Unviersity

Corina Martinez, Masters of Social Work, Graduate Student

College of Professional Studies

In 2016, Governor Jerry Brown received a bill (AB 1594) authored by assembly member McCarthy requesting the prohibition of smoke & tobacco use on all Calfornia college and university campuses. However, Gov. Brown vetoed the bill and stated that the governing boards of public colleges and universities have the authority to revise their own smoke & tobacco policies as needed. Therefore, an online survey was developed to assess the community's readiness to adopt a 100% smoke & tobacco-free policy. The goal of this project is to provide the Humboldt State University governing board with a glimpse of public opinion regarding the possible implementation of a smoke and tobacco-free policy.

19. Cannabis Use and Mood on Creativity

Caitlin Clark, Psychology, Graduate Student

College of Professional Studies

This study examines the relationship between cannabis use (infrequent, moderate, and heavy use) and one 's mood (neutral, positive, and negative) on the Alternative Use Task (AUT). Although both mood and cannabis may influence creativity independently, not much is known about their interactive effects. Creativity was measured by the number of alternative uses for common objects produced by the participants. The AUT was followed by a survey that included cannabis use frequency and the Creative Achievement Questionnaire, which has been shown to represent an individual 's creative ability across multiple mediums.

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20. CCAT: Conjoining Social and Natural Systems

Kelsey Summers, Environmental Studies Undergraduate Student

College of Arts, Humanities & Social Sciences

As a senior in Environmental Studies I have chosen to complete my service learning capstone project at the Campus Center for Appropriate Technology (CCAT) since I am one of the co-directors managing the non-profit organization. CCAT is a student run sustainable living demonstration site that utilizes appropriate technology. While at CCAT I have analyzed and critiqued how social systems and natural systems overlay one another creating a sustainable relationship. Living lighter and in tune with the local environment is not only doable but rewarding and beneficial. My service learning project has helped to fill part of the gap between where I am now and where I aim to be professionally.

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21. Collections Room Project using Past Perfect 5.0

Samantha Murphy, Anthropology, Undergraduate Student **Cori Brennan,** Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

The Collections Room Project is dedicated to digitizing and organizing the information for the various artifact collections housed in BSS 139. The parameters include using the Past Perfect 5.0 software in order to catalog the data for each individual artifact and create a database in which all the information can be housed and viewed. The final product will include information such as measurements, potential use, and physical characteristics for each artifact; attributes which may be searched, using the query field. The primary use for the compiled database is to allow for a convenient search of artifacts within the collection in order to aid in student and faculty research and study.

22. Colorectal Cancer Disparities and Physical Activity Distribution Among Hispanics and Non-Hispanic Whites in New Mexico

Nathaniel McGuigan, University of New Mexico-Epidemiology and Biostatistics Department, Undergraduate Student

College of Natural Resources & Sciences

"We studied changes in physical activity among Hispanic and Non-Hispanic Whites (NHW) to examine the difference in colorectal cancer (CRC) related risk factors between these 2 groups across time. The UNM ColorectalDisease Prevention Study (M. Gonzales PI) surveyed the intensity of work and leisure physical activity at age 18, 30, 50 and/or year before diagnosis among 176 Hispanic and NHW CRC patients including additional risk factors which are known to differ between Hispanics and NHWs in New Mexico (Gonzales 2012). Due to racial ethnic differences in CRC related risk factors, the need to raise awareness about CRC prevention is essential for the Hispanic communities in New Mexico.

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23. Comparing Male and Female Domestic Violence Offender Responses Regarding Experiences Related To Intimate Partner Violence

Elizabeth Arcamone, Social Work, Graduate Student

College of Professional Studies

Historically, male violence has been viewed as a way to maintain power and control over a female partner within an intimate relationship while female violence has been viewed as a response to a male intimate partner's attacks (Dobash & Dobash, 1979; Walker, 1989). This community research project examines differences in attitudes and experiences related to violence among male and female domestic violence offenders. Individual interviews (N=13) were conducted to gain qualitative data specific to this topic. Participants included 5 men and 8 women enrolled in a 52-week batterer 's intervention program. The project findings will help guide a better understanding of family violence.

24. Compiling Archived Spectral Data of Exoplanetary Systems to Search for Trends in the Atmospheric Composition of Hot Jupiters

Troy Maloney, Physics, Undergraduate Student

College of Natural Resources & Sciences

The study of exoplanets has produced large amounts of data since the first exoplanet was discovered over two decades ago. Much of these data are archival and available online to be reused to search for new results. More specifically, spectral data that has been taken from planet-star systems to detect planets by the radial velocity (RV) method can be reused to perform transit spectroscopy if the RV curves include spectra taken at the primary and secondary eclipses and the observations have sufficient signal-to-noise ratio. Our goal is to prepare a compilation of current results on the atmospheric composition of hot Jupiter type planets and extend it by reusing archival data.

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25. Conversations Matter: Mediation Theory, Practice, and Social Change

Maricela Wexler, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

I am participating in a service learning project through the Environmental Studies' Spring 2017 Senior Capstone. My emphasis in community organizing has established my curiosity and passion for conflict resolution communication. Conflict is a part of life. How this inevitability takes form and is approached varies and has social ramifications. Working with Humboldt Mediation Services has informed me about the social impacts mediation theory and practice impart and has revealed the need for and power of alternative dispute resolution in personal, social, environmental, and political arenas. This project highlights my involvement with and vision for mediation theory and practice.

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26. Conversations on Transportation- Exploring Transportation Concerns for HSU OLLI Members

Sara Simon, Recreation Administration, Undergraduate Student

College of Professional Studies

HSU OLLI holds classes all over Humboldt County. With a member population of people aged 50 and better, the accessibility issues and transportation problems getting to all the class sites is a huge concern for the program. This study looks into what exactly are the barriers for members and what transportation options are available in Humboldt County for this population.

27. Co-Occurring Curriculum in the Criminal Justice System

Kevin McGeoch, Social Work, Graduate Student

College of Arts, Humanities & Social Sciences

The curriculum will be developed for current inmates at the local county jail experiencing co-occurring disorders. Culminating healthier approaches to communication and stress management as well as developing systems of support in regards to personal relationships may provide foundations for increasing overall functioning and wellbeing. The curriculum will be guided by the empowerment process, based on an individual 's right to self-determination; valuing personal perspective, acknowledging difficulties and encouraging self-regulated personal growth. The project will attempt to address current problematic and maladaptive thinking and behavior for current inmates with co-occurring disorders.

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28. County Wide Assessment of Syringe Exchange Programs

Rachel Waldman, Department of Social Work, Graduate Student

College of Professional Studies

Intravenous drug usage can lead to multiple detrimental health related risks including the transmission of Human Immunodeficiency Virus and Hepatitis C, abscesses and infections, and drug related overdose. One of the most crucial interventions proven to reduce rates of these health risks among injection drug users is the syringe exchange program. This project examines the active syringe exchange programs in Humboldt County in order to explore the various practices, policies, and services offered by each. The ultimate goal for this project is to strengthen agency relationships, promote sharing of information and best practices, and maximize our ability to reach people in need.

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29. CR Resource Center and Food Pantry

Jenny Quigley, Social Work, Graduate Student

College of Professional Studies

The CR Resource Center (CRRC) seeks to decrease stigma and barriers and empower students to achieve academic success through increasing access to services and resources in a caring community. The Resource Center provides application assistance and information on CalFresh benefits and Medi-Cal, access to the Food Pantry, referrals to on and off campus programs in a safe and welcoming community space. Collaborations with the Klamath-Trinity campus and other community agencies are an essential part of the development of the CRRC. The CRRC opened its doors on 11/16 and will continue as an added resource on the CR campus.

30. Creativity and Mood in Cannabis Using College Students

Caitlin Clark, Psychology, Graduate Student

Joseph Camarena, Psychology, Undergraduate Student

Mari Sanchez, Psychology, Staff

College of Professional Studies

This study examines the relationship between cannabis use (infrequent, moderate, and heavy use) and one 's mood (neutral, positive, and negative) on creativity, which is scored by the Alternative Use Task (AUT) and the Creative Achievement Questionnaire (CAQ).

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31. Critical Service Learning and Social Change

Jeff Ensworth, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

The major problems we face today are socially constructed and institutionally perpetuated. With the right approach Service Learning can play a critical role in affecting social change. Critical Service Learning informed by the Environmental Humanities offers a dynamic and interdisciplinary model for problem solving, and an effective mode of intervention. These ideas are explored using my Service Learning placement at Northcoast Environmental Center and my experience with the Humboldt State Environmental Studies curriculum.

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32. Cultural Awareness and Education for Military and Veteran Population

Nancy U Kelly, Social Work, Graduate Student

College of Professional Studies

Current literature indicates the number of Veterans entering higher education is rapidly growing due to the reduction of military size and the availability of financial support through the Post-9/11 GI bill (Lang, et al., 2013; McBain, et al., 2012). Research shows the challenges student Veterans face can be reduced significantly when colleges incorporate support programs specific to student Veterans and provide training about military culture to faculty and staff (Bosari, et al, 2017; Osborne, 2014). The intention of this project was to increase awareness to the presence of military culture on the HSU campus through a training presentation.

33. Decolonizing Mentorship Programs

River Smith-Sayer, Social work, Graduate Student

College of Professional Studies

In the past, efforts to create mentorship programs have been unsuccessful due to the tendency to place the needs of mentors before individuals who are being mentored. The purpose of this project was to lessen the paternalism in mentorship programs by providing space to discuss objectives and barriers for students who may then participate as mentees. Six open ended questions were designed in an effort to include student 's ideas on how to engage with student partners and provide a safe learning environment. Following the focus group, the information will be analyzed and delivered to mentors in the form of a powerpoint. This analysis will also be available to students for review and critique.

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34. Define American

Kaitlyn Boyes, Sociology, Undergraduate Student Celia Haro, Sociology, Graduate Student Nur Seirafi, Sociology, Undergraduate Student Martha Olin, Sociology, Undergraduate Student

College of Arts, Humanities & Social Sciences

The purpose of this research is to gain a deeper understanding of the self-perceived identities of immigrant and first-generation community members in Humboldt County, particularly related to feelings of inclusion and exclusion. The research will help to identify the resources that are available and important to immigrant and first-generation members, to identify areas in which resources are lacking, and to provide an intimate understanding of their experiences related to their identities in this community. Through surveys and interviews we hope to bridge public discourse between the American identity and the immigrant and first-generation identity.

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35. Designing a Radiant Heating System that Recovers Waste Heat from Shower Wastewater

Tanya Garcia, Environmental Resources Engineering, Undergraduate Student **Alyssa Virgil,** Environmental Resources Engineering, Undergraduate Student **Zachary Ramsey,** Environmental Resources Engineering, Undergraduate Student

College of Natural Resources & Sciences

To design a hydronic floor heating system that maximizes the amount of heat transfer from the shower wastewater to the bathroom floor.

36. Does Lexicality or Phonemic Predictability Affect Cross-Modal Identification of Monosyllabic Items?

Kauyumari Sanchez, Psychology, Faculty **Joseph Camarena,** Psychology, Undergraduate Student

College of Professional Studies

Speech is both auditory and visual. Both modalities can carry the same underlying (articulatory) information. This relationship serves cross-modal matching abilities in a variety of conditions, but to what extent is cross-modal matching ability mediated by abstract, cognitive processes, representations, and linguistic experience (e.g. lexicality or phonemic predictability)?

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EcoNews

Claire Roth, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

The presentation of my research will document the process by which EcoNews, the bimonthly environmental publication produced by the Northcoast Environmental Center in Arcata, California, comes to fruition. I have gained experience in this topic through my internship with the Northcoast Environmental Center, where I help to produce EcoNews. Additionally, I will present on the history behind EcoNews, as it has been in operation since 1971 and is one of the longest-running bioregional publications in the nation.

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38. Effects of Active Versus Passive Recovery on Blood Lactate and Performance in Repeated Wingate Tests

Madison Kirkpatrick, Kinesiology, Graduate Student

College of Professional Studies

The Wingate anaerobic test is one of the most widely used fitness tests that requires the participants to exert maximum effort. There is a lack of research on the effect of a longer duration active recovery protocol on blood lactate levels and performance in repeated Wingate tests as compared to passive recovery, and a lack of research on those components in females. The purpose of the study is to investigate the effect of active versus passive recovery on performance and blood lactate levels during two 30-second Wingate tests in healthy, college-aged females to further understand how different recovery types can affect performance and recovery. Hypothesis: An active recovery will allow for

39. Effects of Rest Interval Duration on the Volume Completed During a High-Intensity Bench Press Exercise

Dennis J. Hernandez, Kinesiology, Graduate Student Boram Lim, Kinesiology, Graduate Student Dr. Sean Healy, Kinesiology, Faculty Dr. Mona Hass, Biological Science, Faculty Dr. Young Sub Kwon, Kinesiology, Faculty

College of Professional Studies

Between set rest intervals (RI) are one of the most important variables in resistance training; however, no known research has investigated the effects of RIs greater than 5-min during strength training. The purpose of this research was to examine the effects of three different RIs on training volume (TV) completed during a high-intensity bench press exercise. 15 resistance trained males completed 3 experimental sessions, during which 4 sets of the bench press were performed. Resistance trained males, with the goal of greater volume during strength training, would benefit from longer RIs. Specifically, using an 8-min RI between 4 consecutive sets of a bench press allows for a greater TV.

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40. Effects of Uncertainty and Rhetoric on Democrats' Views of Abortion

Benny Chu, Psychology, Undergraduate Student Tsolak Kirakosyan, Psychology, Graduate Student Isaac Huicochea, Psychology, Undergraduate Student Alexandra Cruz, Psychology, Undergraduate Student Bryan Sherburne, Psychology, Undergraduate Student Amber Gaffney, Psychology, Faculty

College of Professional Studies

This study highlights the interaction between uncertainty and rhetoric on the support for policies such as abortion. Clinton's affirming rhetoric created higher support for abortion because highly uncertain individuals define the self by expressing polarized group-based attitudes (Gaffney et al., 2014). Political leaders may be able to gain support for causes that are salient to their party identity by utilizing affirming rhetoric rather than negating rhetoric.

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41. End of Life, A Talking Circle

Denise George, Social Work, Graduate Student

College of Professional Studies

Grief support groups are offered to the bereaved, after the death of a loved one, yet are rarely made available to those who have been given a terminal diagnosis. This vulnerable and under-serve population may greatly benefit from having an outlet for complex new emotions, the experience of connectedness, understanding and support from others who are facing their own mortality. The purpose of this project is to develop a pilot support group model serving individuals facing end of life to assess the demand for and value of such an intervention. Research on promising practices with support groups for terminally-ill patients was combined with a community-

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42. Environmental Education through Community Support

Kevin Fulgencio, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

Friends of the Dunes is a non-profit organization in Manila, California that has various educational programs available for the community to educate younger children about the natural diversity of our beautiful area. As a part of my Service Learning Project, I felt that it was important to show younger generations the value and importance of coastal ecological restoration and the fun that can be had in the process. By showing children the importance and connection we have with the life around us, I believe they will have a better understanding of critically thinking and assessing about how to address environmental problems in the future.

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43. Environmental Education through STEAM

Angelica Muñoz, Environmental Studies, Undergraduate Student **Jenna Batchelder,** Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

STEM (Science Technology Engineering Mathematics) programs for children is a well known concept to encourage more students to pursue education and careers in such fields, but what is missing from this? Art! The Arcata Afterschool Program in Humboldt County has taken the initiative to implement STEAM activities into their program to show that art and creative forms of expression is just as important of a field as STEM. As a part of our Service Learning project, we felt that environmental education with art was something we wanted to gain more experience with and decided to create our own lesson plans to develop our skills and teach a new kind of pedagogy to children in our community.

44. Environmental Justice & Public Health: Bilingualism in Community Outreach Efforts

Noemi Pacheco-Ramirez, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

As a bilingual Environmental Studies student, I am committed to applying my education to address environmental issues and advance environmental justice in Spanish speaking communities. Through my service learning position with the local non-profit, Redwood Community Action Agency, I will utilize my Spanish speaking ability to the RCAA's community outreach efforts aimed at the Latino/a community of Humboldt County.

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45. Environmental Management of Marine Wildlife in Humboldt Bay

Andrew Jacobson, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

The scope of this research was aimed toward extracting the most possible information about Longfin Smelt, Sculpin, and Blue Herring out on Humboldt Bay. The primary research was geared toward finding out the distribution limits, abundance, habitat, and spawning limits for the three mentioned species. Work was done directly with the California Department of Fish and Wildlife, in which tributaries leading into Humboldt Bay of Salmon Creek, Wood Creek, Freshwater, and others were the leading areas of research. Through laboratory work and field work conducted by boat and by foot, important knowledge of Smelt, Sculpin, and Herring was gained drastically the last three months.

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46. Epiphyte Diversity in Sitka Spruce Crowns

Millen McCord, Biological Sciences, Undergraduate Student **Lucy Kerhoulas,** Forestry & Wildland Resources, Faculty

College of Natural Resources & Sciences

We inventoried the epiphyte community in one 87 m tall Sitka spruce (Picea sitchensis) tree in the Redwood Experimental Forest north of Klamath, CA. For our inventory, we sampled approximately 5% of trunk, segment, branch, and branchlet area and found over 50 species of epiphytes. Functional groups of these epiphytes include microlichens, macrolichens, leafy liverworts, mosses, and ferns. For all epiphyte samples we estimated percent cover for spatial analyses of within-crown epiphyte distribution relative to crown height and distance from the bole. In this project we showcase some of the impressive biological diversity and introduce viewers to a variety of lesser-known botanical species.

47. Eureka Consumer Price Index (CPI)

Richard Borrego, Economics, Undergraduate Student **Daniel Moreno,** Economics, Undergraduate Student **Jordan Morgan,** Economics, Undergraduate Student

College of Professional Studies

We will be presenting the Eureka CPI. A CPI (consumer price index) is a statistical overview of price fluctuation over the years caused by inflation and deflation in the economy. We track the economy on nine different sectors in Eureka CA by collecting data, analyzing the results, and presenting a model gauging those fluctuations in the county and how it compares to previous years. The sectors range from consumer products to occupational wages and everything in between.

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48. Eureka High School's Advance Via Individual Determination Program.

Stephanie Yang, Social Work, Graduate Student

College of Professional Studies

I am working to create a survey to evaluate Eureka High School's Advance Via Individual Determination (AVID) program. AVID is a global nonprofit organization dedicated to closing the achievement gap by preparing underachieving and disadvantage students for college. In 2009, Eureka High School implemented AVID into their school curriculum to better prepare students for college.

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49. Experiential Education: Exploring More Effective Ways to Address Social and Environmental Justice with Children and Young Adults

Amara E. Hans, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

Experiential education incorporates approaches such as service learning, place-based education, and student-centered learning into traditional and nontraditional education settings. Based on my research paper on experiential education's role in addressing climate change and justice ("Experiential Education: Preparing Our Climate Change Combaters of The Future"), I am also using my experience with service learning at SCRAP Humboldt to further explore how these forms of education can effectively teach social and environmental justice. These approaches provide children and young adults with better toolkits for becoming future leaders and active citizens in our rapidly changing world.

50. Factors Influencing Longevity and Wellbeing for CalSWEC Title IV-E Stipend Recipients Working in County Child Welfare Agencies in California

Erica A. Ashby, Social Work, Graduate Student

College of Professional Studies

Social workers employed in county child welfare agencies experience large and complex caseloads, high rates of burnout and consistently high rates of turnover. The California Social Work Education Center (CalSWEC) Title IV-E Child Welfare Training Project provides BSW and MSW students with additional training in child welfare and a stipend of \$18,500 per year in exchange for a year's work in a county or state child welfare or Tribal agency upon graduation. Data was collected through an electronic survey, completed by county and state child welfare social workers who had participated in the Title IV-E program in order to assess their wellbeing, preparedness and longevity in the position.

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51. Financial Capacity of Local Nonprofits

Jason Jones, MBA, Graduate Student Chase Cook, MBA, Graduate Student Seth Friel, MBA, Graduate Student

College of Professional Studies

There are currently a variety of nonprofit organizations operating in and serving the needs of Humboldt County. The purpose of this project is to assess the financial needs of these organizations and develop a report to help them expand their capacity. We conducted an extensive literature review of best financial practices at nonprofit organizations, reviewed three years of IRS 990 forms for local nonprofits, and analyzed survey results from a previous local study. Using the best practices we identified during our literature review and the data from our two analyses we developed an action plan for local nonprofit organizations.

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52. Food at School

Elizabeth Phillips, Communication Studies, Undergraduate Student **Michael S. Bruner,** Communication Studies, Faculty

College of Arts, Humanities & Social Sciences

This chapter explores the intersection of food and place in one of the most important places in the lives of children and youth -- school. The critical rhetorical analysis examines school menus, but makes it clear that food at school involves more than school lunches. Food at school has included breakfast, lunch, and dinner, as well as vending machines and campus gardens (Duram & Klein, 2015). In the broader society, food at school is at the center of public argumentation about agriculture, citizenship, economics, government, health, power & empowerment, religion, sustainability, and values.

53. Food Justice Through Decolonization

Hannah Zivolich, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

Food Justice offers a reactionary approach to empower a person and communities' rights to fresh and healthy affordable food. The Potawot Community Garden not only embraces this approach, but goes further through decolonial practices. In addition, the process of growing an cultivating one's own food is shown to help heal certain varieties of trauma. Potawot offers its community a unique opportunity by providing fresh, local, and organic produce to local tribes in the greater Humboldt area. Furthermore, Potawot displays a primary example of promoting food justice by promoting justice for indigenous and native peoples by providing access to education and growing one's own food.

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54. Foundation and Development of Satellite Case Manager Position at Transitional Residential Treatment Facilities

Dustin Haywood, Social Work, Graduate Student

College of Arts, Humanities & Social Sciences

A foundation was needed for the Satellite Case Manager position at Transitional Residential Treatment Facilities. To address the issue, an employee guidebook was created to define the position and act as a training tool for new employees. Institutional knowledge, experience, and current literature guided the development of a Satellite Case Manager handbook that acts as a foundation for the position. An executive summary was also completed recommending next steps to increase collaboration with stakeholders, clearly define roles of Satellite Case Manager, and to expand the scope of the Satellite Case Manager to better meet the needs of clients and other stakeholders.

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55. Garden Collaborative: Addressing Food Insecurity

Sam Wicks, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

My service learning project addresses the issue of food insecurity in Arcata. Through the benefits of community gardens, greater socio-economic development can be achieved. At Open Door Health and Wellness Garden, I am maintaining and managing the beds in the garden for spring harvest, for the people of Arcata, so they can have easier access to organically grown healthier foods. I am interested in support networks of community gardeners as resources to sustain locally grown organic food and the health benefits that community gardens offer.

56. Gardening for Change

Ciera Townsley-McCormick, Environmental Studies, Undergraduate Student **Madi Whaley,** Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

In Spring Semester 2017, we dove into a service learning project with Pacific Union School. We are contributing to the garden coordinator's vision for an interdisciplinary, garden-based learning program that incorporates aspects of social and environmental justice. We have worked to create a reciprocal learning environment, such as described by authors in the Environmental Studies curriculum. We believe this is one step toward addressing the inequalities, environmental degradation, and corruption inherent in the global industrial food system. These injustices span issues such as race, class, gender, health, and the environment, which we have been exposed to throughout our journey at HSU.

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57. Getting Fit with Athletes

Daniel Cox, Child Development, Undergraduate Student **Danielle Pfeifer,** Child Development, Undergraduate Student **Elizabeth Taylor,** Child Development, Undergraduate Student **Rochelle Craig,** Child Development, Undergraduate Student

College of Professional Studies

The four of us volunteered for the HSUfit program. In this program we meet every Friday for three hours and try to work and be with the kids any way we can. We run adapted physical education activities with children with special needs. At the end of the day we record the progress the child made that week towards their goals. Through this project we essentially are describing what we do, why it's important, and how it's impacting these kids.

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58. Greenway Partners: A Residency for HSU Graduates in Downtown Eureka

Rebecca Ron, Environmental Studies, Undergraduate Student **James Bradas,** Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

In growing need to accommodate graduate students' housing issues from Humboldt State University as well as the need for urban revitalization projects in Old Town Eureka, ENST seniors James Bradas and Rebecca Ron partnered with Greenway Partners: an Arcata-based engineering design, consultancy, and facilitation firm to continue with the lead on this project. Through research within the Old Town quarter of Eureka, research in city, county, and state municipal code, and using the lived experiences of the Humboldt State domestic experience with the current housing market, a conceptual framework grew from a critical understanding about the community, place, and placement of prospective housing.

59. Harm Reduction Training for Residential Facilities

Wendy Bojorquez, Social Work (MSW), Graduate Student

College of Professional Studies

This project aims to educate staff and participants in residential facilities about the practices of harm reduction through open dialogue. The essence of having this discussion is to highlight the ways in which these programs already implement these practices and can further develop harm reduction methods to best support their population. The topics are framed around the concepts of self awareness, safety (physical & emotional) concerns, best practices, and lasty defining harm reduction as whole through team building activities. By collectively choosing a harm reduction philosophy we can begin to address the risks and work together in developing safer and healthier ways to minimize harm.

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60. Health Attitude Change Associated with Health Education Among College Students

Irene Gonzalez-Herrera, Psychology, Graduate Student Carrie J. Aigner Ph.D., Psychology, Faculty Vladimir Leontyev, Psychology, Undergraduate Student Heather Kilgore, Psychology, Graduate Student Owen Gardner, Psychology, Undergraduate Student

College of Professional Studies

Drawing from stages of behavioral change framework, the goal of this research study is to examine changes in importance and confidence ratings for health behavior change associated with the course 'Health Psychology.' We hypothesize that self-efficacy for behavioral change will be associated with greater importance ratings. We further hypothesize that ratings of importance and confidence for diet and exercise change will increase from the beginning to end of the semester. A survey was administered to 227, Undergraduate Students in Health Psychology during the first and last two weeks of class. Results suggest that health curriculum may be associated with health behavior attitude change.

61. Histories of Chinese Communities in Humboldt County: A Source Collection

Meghan Ueland, History, Undergraduate Student

College of Arts, Humanities & Social Sciences

This research project examines the historical experience of Chinese communities living in Humboldt County in the late-nineteenth and early-twentieth centuries, with particular focus on the 1885 Chinese expulsion from Eureka. Offering a broad survey of primary sources, the project delves into personal letters, court cases, retrospective reports, newspaper articles, maps, and photographs to piece together a multi-faceted picture of the Chinese experience in the region. Newspapers from the time also shed light on the expulsion of the majority of the Chinese population from Eureka on 8 February 1885, a tumultuous event that dramatically transformed the culture and history of the county.

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62. Housing Displacement & HSU Former Foster Youth: A Policy Brief

Kristina Bollmann, Social Work, Graduate Student

College of Professional Studies

In addition to many other barriers to degree completion, former foster youth may also have fewer financial resources to cover the high cost of attending college because they may not have as much family support as students who have not been in the foster care system. This presentation summarizes the work from my MSW community project and aims to describe how former foster youth attending Humboldt State University (HSU) may be experiencing housing displacement. Transitional Housing Placement Plus (THP-Plus) and Transitional Housing Placement Plus Foster Care (THP+FC) are supportive living environments for collegeaged youth who were in foster care or probation.

63. HSU River Otter Citizen Science Project

Chelsea Stewart-Fusek, Wildlife, Undergraduate Student Elizabeth Meisman, Wildlife Sheri Hart, Wildlife, Undergraduate Student Jeff Black, Wildlife, Faculty

College of Natural Resources & Sciences

We are interested in describing the distribution and demography of otters on the coasts, wetlands, and watersheds in Humboldt, Del Norte, and surrounding counties. The river otter (Lontra canadensis) is a key bio-indicator of the health of our environment as they sit at the top of this water-based food chain. Unlike most otter habitats around the world, it is thought that the Pacific north coast still supports a thriving otter population. The initial goals of the study are to: establish a network of otter observers; assess spatial and temporal variation in otter distribution; conduct observational studies on otter foraging; assess diet, home range, and site faithfulness.

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64. HSU SkillShops: Campus Collaborations that Motivate Student Learning

Tim Miller, Humboldt State University Library, Faculty **Sarah Fay Philips,** Humboldt State University Library, Faculty **Victoria Bruner,** Business Administration, Graduate Student

Library

Our poster discusses SkillShop development from Fall 2013 - Fall 2016 and our focus on student learning and motivation. We have adapted John Keller's ARCS (Attention, Relevance, Confidence, Satisfaction) Model of Motivation Theory for designing SkillShops workshops. Learn about the lesson planning questions that SkillShop facilitators use to design lesson plans for 50-minute drop-in workshops, to ensure that workshop content connects the learner to their coursework, personal and professional growth, and supports independent learning. This poster will share the data on SkillShop themes and attendance compared to campus data and the partnerships that have expanded HSU SkillShops.

65. HSU VETS Outdoor Program

Keith Tanenbaum, Social Work, Graduate Student

College of Professional Studies

HSU VETS Outdoor program is a recreational based program designed to assist student veterans in their transition for military to civilian/student life. Recreation has long been shown to provide therapeutic benefits to those who engage in it. The HSU VETS Outdoor program is no exception and increases the overall wellbeing of veterans on campus by creating support networks and reestablishing bonds familiar to those who have served in the military furthermore assisting the veterans ability to be a successful student. The HSU VETS Outdoor Program runs year around and participates in a variety of recreational outings from skiing/snowboarding in the winter to rafting in the summer.

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66. Humboldt Journal of Social Relations Issue 39 Diversity and Social Justice in Higher Education

Josh Smith, Sociology, Staff Heather Clark, Sociology, Graduate Student Jennifer Miles, Sociology, Graduate Student

College of Arts, Humanities & Social Sciences

This special issue of the Humboldt Journal of Social Relations (HJSR) captures work and experiences in higher education as they relate to changes and challenges around diversifying U.S. college campuses. Race, class, gender, sexuality, able-bodiedness, and citizenship shape contemporary conversations about campus climate, curricular content, organizational structures, decision making and the disparate impacts of related policy changes or stagnation. These conversations shape the everyday experiences of faculty and staff, and ultimately are linked to student success.

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67. Humboldt's Homeless

Erica Lovell, Political Science, Undergraduate Student

College of Arts, Humanities & Social Sciences

Understanding how limited funding for public health services impacts the homeless population of Humboldt County, California. This includes the demographic of the homeless population, the types of local public health services, and the current and future problems of the homeless in regards to access to public health services. Finally, considers local and national policy options to address the issue.

68. Implementing the Sources of Strength program with Indigenous Youth on the Hoopa Valley Indian Reservation.

Sue-I-Chet Colegrove, Social Work, Graduate Student **Erica Ashby,** Social Work, Graduate Student

College of Arts, Humanities & Social Sciences

My project will directly serve the American Indian population located on the Hoopa Valley Indian Reservation. The Hoopa community suffers from numerous traumatic issues. I am fortunate to not only to be aware of the issues, but I am dedicated to create positive opportunities for the Hoopa community. My project will be creating a strong group of positive role models to help implement the Sources of Strength program with the Indigenous Youth of the Hoopa Valley Indian Reservation. Implementation of this program will decrease suicide rates and idealizations.

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69. In the Face of Drought: Do Fuel Reduction Treatments Promote Drought Resistance at Whiskeytown National Recreation Area?

Michael Vernon, Natural Resources, Graduate Student
Tracy Gatumu, Environmental Studies, Undergraduate Student
Courtney Brown, Environmental Resources and Engineering, Undergraduate Student

College of Natural Resources & Sciences

In this study, we investigated the influence of thinning and prescribed fire on tree growth responses to multi-year drought conditions in the dry forests of Whiskeytown National Recreation Area in northern California. Specific questions include: 1) Do fuel reduction treatments influence forest resistance to drought stress? 2) What individual tree-level and site-level factors (i.e. size, crown height, competition, pre-disturbance tree growth) influence tree growth responses? 3) Do tree growth responses change over years of successive drought stress?

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70. Indian Child Welfare Act Training

Allison Eldridge, Social Work, Graduate Student

College of Professional Studies

Training curriculum and presentation on the Indian Child Welfare Act.

71. Integration and Supports for MSW Advance Standing Students

Sara Dianish, Social Work, Graduate Student

College of Professional Studies

The HSU Social Work Department is interested in better integrating the AS students into the existing two-year MSW program by considering instructor knowledge and awareness of the introduction of AS students, the importance and development of interpersonal relationships between the two cohorts, how AS students adjust to graduate-level work and how prepared AS students are for graduate-level work. The purpose of this project was to evaluate what changes have been made since the initial report by Assistant Professor César Abarca, MSW, Ph.D. conducted in 2014 and what recommendations could be made from the experience of the 2016-2017 on-campus advanced year cohort and existing instructors.

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72. "Keep on Truckin': The Social Life of a Log Trailer in Eureka, CA between 1880-1940"

Benjamin Maceda, Anthropology, Undergraduate Student **Kelda Brtitton,** Anthropology, Undergraduate Student **Maci Bell,** Anthropology, Undergraduate Student **Eva Hogue,** Undergraduate Student

College of Arts, Humanities & Social Sciences

Eureka Ironworks, located in Old Town Eureka, was an iron manufacturing and fabrication company that was in business from the late 1800s through the 1940s. This project investigates the local economy and manufacturing process in the late 1800s through early 1900s, by focusing on the fabrication of log trailers. Through archival research in the Eureka Ironworks Historical Collection and Humboldt Room, this project aims to examine the social life of a log trailer in order to understand how this product fit into the Humboldt County economy. This research traces the log trailer from schematic, through fabrication, to its use in the local lumber industry.

73. Kriging Interpolation of Understory Light for Prediction Modeling of Stump Sprout Growth in Mixed Multiaged Stands in California

Kurt A. Schneider, Forestry and Wildland Resources, Graduate Student **John-Pascal Berrill,** Forestry and Wildland Resources, Faculty **Christa M. Dagley,** Forestry and Wildland Resources, Faculty **Lynn A. Webb,** CAL FIRE Jackson Demonstration State Forest

College of Natural Resources & Sciences

We studied conifer and hardwood regeneration response to experimental harvest treatments conducted ~100 years after the first harvest (clearcut). We examined relationships between understory light, varying overstory tree retention, and growth of coast redwood and tanoak stump sprouts arising after complete and partial harvest. First, we quantified understory light throughout this 30 ha experiment comparing four different retention treatments repeated at four sites. Then we related understory light to post-treatment stand density, treatment type, and regeneration. Redwood sprouts outperformed tanoak by different margins, and grew most rapidly in high light.

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74. Levee Stories Unearthed

Kathleen C. Bromley, Applied Anthropology, Graduate Student

College of Arts, Humanities & Social Sciences

Field and mixed methods in support for an expedited reconnaissance study

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75. Leveestories.XYZ for an Expedited Reconnaissance Study

Kathleen C Bromley, Applied Anthropology, Graduate Student

College of Arts, Humanities & Social Sciences

Within the design and construction of the Redwood Creek Flood Control Project in Humboldt County, a mistake was made. The project, a substandard system of earthen levees, extended too far into the creek's estuary. Poorly negotiated allowances of the levied wound left by the Corps into the transition zone caused the circulation of this vital water vein to be compromised in providing proper supportive nourishment to regional health ecology and economic components. Why hasn't the miscalculated scar been corrected? Participant observation and historical archaeology helped to first understand the biological and cultural aspects involved.

76. Leveraging Applied Problems to Enhance the Undergraduate STEM Experience

Kamila Larripa, Mathematics, Faculty **Borbala Mazzag,** Mathematics, Faculty

College of Natural Resources & Sciences

Strong analytical skills and the ability to develop and analyze mathematical models are highly sought-after skills, especially when they are paired with the auxiliary skill set of strong scientific writing, the ability to collaborate across disciplines and effective visualizations of quantitative information. We focus on the development of these auxiliary skills by (1) offering training to teams who participate in COMAP'S Mathematical Contest in Modeling (MCM) and (2) through the PIC Math course, a problem-solving course in which students work on problems provided by an industry client.

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77. LGBTQ Risk & Protective Factors for Offending Over the Queer Life Course

Meredith Conover-Williams, Sociology, Faculty
Joice Chang, Politics, Faculty
Liza Olmedo, Sociology, Graduate Student
Lindsay Mixer, Sociology, Graduate Student
Grecia Alfaro, Sociology, Undergraduate Student
Logan Cheney, Sociology, Undergraduate Student
Taylor Richardson, Sociology, Undergraduate Student
Sarah Fasi, Sociology, Undergraduate Student
Hannah Lemly, Sociology
Cesar Ramirez, Sociology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Prior research finds lesbian, gay, bisexual (LGB) individuals offending more than their heterosexual peers, due to differential experiences in social institutions like school and family. There are no qualitative studies of queer pathways into or away from crime, or research on the offending of transgender and gender non-conforming individuals. We seek to fill this gap by analyzing life trajectories of LGBTQIA individuals with qualitative interviews. We explore pushes/pulls into/away from criminal behavior and respondents' relationships with social institutions--including chosen families and political participation--to illuminate sites of intervention in the queer life course.

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78. Making America Great Again: American Identity Uncertainty and White-American Bias

Natasha La Vogue, Psychology, Undergraduate Student Stephanie Byers, Psychology, Undergraduate Student Berkeley Kijsriopas, Psychology, Graduate Student Bryan Sherburne, Psychology, Undergraduate Student Alexandria Jaurique, Psychology, Graduate Student Amber M. Gaffney, Psychology, Faculty

College of Professional Studies

Research collected from attendees of the RNC shows that White Americans who feel uncertain about their American identity and possess a bias toward viewing their country as "White" might be particularly likely to turn to a candidate who uses rhetoric which excludes ethnic minorities as a means of reducing their identity uncertainty. This work examines the moderating role of American identity uncertainty on the relationship between implicit bias and American identification. These results are important because they display the relationship between American identification and the extent of Americans' implicit biases as moderated by the extent of their identity uncertainty.

79. Mapping the Sierra Nevada

Mary Beth Cunha, Geography, Faculty

Tyler Young, Geography, Undergraduate Student

Patrick Wood, Geography, Undergraduate Student

Henry Whipps, Geography, Undergraduate Student

Whitney Newcomb, ENVS, Undergraduate Student

Monica Moreno-Espinoza, Geography, Undergraduate Student

Solveig Mitchell, Geography, Undergraduate Student

Isabella Knori, Geography, Undergraduate Student

Brady Goodwin, ENVS, Undergraduate Student

Kim Deniz, ENVS, Undergraduate Student

Nathaniel Douglass, Geography, Undergraduate Student

John Dellysse, ENVS, Undergraduate Student

Kelly Bessem, Geography, Undergraduate Student

Selene Castillo, Wildlife, Undergraduate Student

Jacob Howard, Geography, Undergraduate Student

Michael McDermott, Geography, Undergraduate Student

Mariah Lomeli, Geography, Undergraduate Student

Sara Phipps, Forestry, Undergraduate Student

Kassandra Rodriguez, Geography, Undergraduate Student

Ryan Salas, Forestry, Undergraduate Student

Cristina Bauss, Geography, Undergraduate Student

Harrison Brooks, Geography, Undergraduate Student

Daniel Cooper, Geography, Undergraduate Student

Joben Penuliar, Geography, Undergraduate Student

Aleck Tan, Anthropology, Undergraduate Student

Aaron Taveras, Environment and Natural Resources, Graduate Student

College of Arts, Humanities & Social Sciences

Mapping the Sierra Nevada. HSU advanced geospatial students map a variety of topics to accompany text in a forthcoming book about Environmental Issues in the Sierra Nevada.

80. Mapping Tibet

Patrick Wood, Geography, Undergraduate Student
Nathaniel Douglass, Geography, Undergraduate Student

College of Arts, Humanities & Social Sciences

This project aims to show two different styles of Cartography to represent the same geographic area, Tibet. The first map is paper map, a mapping project of Tibet and of Tibetan toponyms. The paper map focuses on the region rather than the geopolitics of the region and displays toponyms that reflect Tibetan culture. The second map uses a web based interactive platform to display the various routes that HSU students have taken between 2000 and 2014, while conducting research in Tibet. The web map hopes to consolidate the previous field studies conducted, into an interactive database for future research to reference.

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81. Mazes and Memory: Does Lifestyle Affect Spatial Memory and Ability?

Josue Rodriguez, Psychology, Undergraduate Student

College of Professional Studies

This study aims to address whether differences in spatial ability and memory will be found among those who have active lifestyles, inactive lifestyles, and those who play video games. Spatial ability was examined by having participants become familiarized and then tested on a 3-D computerized maze. Participants were tested on memory and spatial components when asked to recollect the spatial layout of the computerized map.

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82. Mental Health Stigma and Help Seeking Among College Students

Benjamin Skillman, Psychology, Undergraduate Student

College of Professional Studies

The purpose of this study is to examine the relationship between mental health stigma and help-seeking intentions and behaviors at a rural university and explore differences in patterns of help seeking by race/ethnicity. We hypothesize higher levels of mental health stigma will be related to lower levels of help-seeking. Multiple regression will be used to examine predictors of mental health help-seeking. We found that higher levels of stigma lead to a lower likelihood to seek help.

83. MICP Bio-cementation for Uniform Improvement of Heterogenous Sands

Chelsea Obeidy, Environmental Science: Ecological Restoration, Undergraduate Student

College of Natural Resources & Sciences

Microbially Induced Calcite Precipitation (MICP) is an environmentally-conscious biocementation ground improvement technology. In the process, microorganisms containing active urease enzymes are utilized to induce the precipitation of calcite on soil particle surfaces and contacts. MICP can be utilized for; strengthening soils to support structures, mitigation of earthquake-induced liquefaction, prevention of soil erosion, improvement of slope stability, and immobilization of divalent cation contaminants.

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84. My Service Learning Experience with CalTrout

Connor Stewart, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

My service learning project consisted of working with Mary Burke, Project Manager at CalTrout Arcata. Together we planned/coordinated special events for this year's Humboldt Steelhead Days celebration which included fun/educational activities, workshops, conferences, and engaging art experiences. We worked together with several local residents and organizations who all helped put these events together for a common goal of getting involved with the local community and helping educate them about CalTrout and other's work in watershed and salmon habitat restoration.

85. Nanodiscs Stabilize Anabaena Sensory Rhodopsin Trimers for Regulatory Binding Studies

Alexis D. Aguiar, Chemistry, Undergraduate Student Joshua M. Massey, Chemistry, Undergraduate Student Jessica K. Andersen, Chemistry, Undergraduate Student Edward Sandoval, Chemistry, Undergraduate Student Madelyne H. Green, Chemistry, Undergraduate Student Jenny A. Cappuccio, Chemistry, Faculty

College of Natural Resources & Sciences

Anabaena Sensory Rhodopsin (ASR), a photoactive membrane protein, undergoes light induced conformational change associated with release of a transducer protein, ASRT. This complex is proposed to control transcription. However, DNA binding to ASR has not been demonstrated. We prepared ASR in soluble nanodiscs. Our data show ASR nanodiscs had a retinal absorbance shift (\approx 548 - 537 nm). DLS of ASR nanodiscs, separated by SEC, displayed two populations (21.9 \pm 6.3 and 31.1 \pm 12.5 nm). These populations may represent varying oligomeric states. Preliminary data from crosslinking studies suggest ASR exist in a trimeric state. We conclude ASR is stabilized in the nanodiscs, enabling studies of ASR.

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86. Nanoscale Modifications to the RsaA S-Layer Protein Enhance Lead Binding in Whole Cells

Azariah Coblentz, Chemistry, Undergraduate Student **Kayla Templeton,** Chemistry, Undergraduate Student **Joana Villanueva,** Chemistry, Undergraduate Student **Lisi Johnson,** Chemistry, Undergraduate Student

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) are able to bind and sequester heavy metals, thereby removing them from the environment. Our approach is to enhance this process for heavy metal bioremediation. Using a highly sensitive fluorescent dye, lead remediation was measured in the nanomolar range. Results show that upon exposure to 39.0 nM Pb solution engineered C. vibrioides strains Hcm 027,028, remediated the solution to, 9.6 \pm 0.3 nM, 9.0 \pm 0.2 nM respectively and 13.3 \pm 0.1 nM for the wild type.

87. NCAA DoD Grand Alliance: Concussion Assessment, Research and Education (CARE) Consortium - Longitudinal Clinical Study Core

Erica McMullen, Kinesiology and Recreation Administration, Undergraduate Student Dr. Justus Ortega, Kinesiology and Recreation Administration, Faculty Aaron Sinnott, Kinesiology and Recreation Administration, Faculty Lisa Martinez, Kinesiology and Recreation Administration, Graduate Student Katlynn Mannatt, Kinesiology and Recreation Administration, Faculty Elizabeth Larson, Kinesiology and Recreation Administration, Faculty

College of Professional Studies

Humboldt State University received a two-year grant from the NCAA and the U.S. Department of Defense to expand upon the existing study that investigates concussive and repetitive head impacts in NCAA student-athletes. This collaboration is to further understand the neurobiopsychosocial nature of concussive injury and recovery to enhance the safety and health of our collegiate student-athletes, service members, youth sports participants and the broader public. At Humboldt State, researchers have conducted baseline and post injury monitoring of neurocognitive, motor control, and behavioral data in 638 athletes from all sports. The poster will have current results from the CARE consortium.

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88. Needs Assessment for Resource Compilation for Persons Experiencing Homelessness While Caring for a Companion Animal

Sophia Gang-Halvorson, Social Work, Graduate Student

College of Professional Studies

Individuals facing poverty and homelessness can be denied housing when care-taking for a companion animal. Sometimes a refusal of housing is caused by rules which prohibit companion animals in housing, so the preference is to remain homeless. My project provides a compilation of local, free, and low cost resources to help provide for the companion animal's care. A needs assessment with persons facing long-term homelessness informed the list. The compilation will allow a person facing poverty to make informed choices among resources in the community that would facilitate a healthy human-companion animal relationship regardless of status of homelessness.

89. North Coast AIDS Project Needs Assessment

Kristen Palmero, Social Work, Graduate Student

College of Professional Studies

I developed a needs assessment for DHHS, North Coast AIDS Project. This was used to evaluate the needs of our clients and evaluate the program services that we provide. This assessment also helps to acquire any future funding for these services offered to Humboldt County residents living with HIV/AIDS.

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90. Novel Tests of Gravity Below Fifty Microns

Ian Guerrero, Physics and Astronomy, Undergraduate Student
Jeremy Johnson, Physics and Astronomy, Undergraduate Student
Gabriela Martinez, Physics and Astronomy, Undergraduate Student
Noah Dunkley, Physics and Astronomy, Undergraduate Student
Hilde Isachsen, Physics and Astronomy, Undergraduate Student
Duncan Shaw, Physics and Astronomy, Undergraduate Student
Dr. C.D. Hoyle, Physics and Astronomy, Faculty

College of Natural Resources & Sciences

Inconsistencies between Quantum Mechanics and General relativity have motivated many new theories which unify these two very successful models of physics. Many of these theories predict changes to the behavior of gravity at the sub 50 micron distance scale, specifically deviations from the newtonian Inverse Square Law (ISL) and Weak Equivelance Principle (WEP). We measure the twist of the torsion pendulum as an attractor mass is oscillated nearby in a parallel-plate configuration, providing a time varying torque on the pendulum. The size and distance dependence of the torque variation provides a means to determine any deviation from the WEP or ISL at untested scales.

91. "O'er the Land of the Free and the Home of the Brave!" The Power of Our Official and Unofficial National Anthems"

Armeda "Doc" Reitzel, Communication, Faculty **Kyra Vollger,** Communication, Undergraduate Student **Tania Mejia,** Communication, Undergraduate Student"

College of Arts, Humanities & Social Sciences

This study explores the historical origins and contemporary views of "The Star Spangled Banner" as the national anthem and three "unofficial anthems" in the United States. We define music as rhetoric and describe its role in promoting patriotism and fashioning identities. We conduct a rhetorical analysis of "The Star Spangled Banner" and discuss how it has become a rallying point - figuratively and literally - for first amendment rights by examining the wide array of actions and reactions to it. We describe the backstories of three unofficial national anthems and analyze how they have been transformed and appropriated by different groups and movements in the United States.

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92. OG ~ Organic Guru ~ Humboldt Homegrown Handmade and Fair Trade ~ Sustainable Village Project

Barbara Nearing, CCAT, Graduate Student

Organic Guru is an organic food company and sustainable village. The food company replaces Sysco, and US Foods as a restaurant and small market supply, supplying Humboldt's restaurants, schools and general population with organic food. The profits in turn support a sustainable/ecovillage which provide quality sustainable housing such as tee pee's, yurts, for either permeant or transitional housing. allowing for a large segment of the population to have food shelter clothing and income. We also have planned to create a product line of food to sell at the retail stores, and restaurants, such as kombucha, teas, superfood cookies, pasta sauces. Like Newmans own

93. Outgroup Influence

Olivia Kuljian, Psychology, Undergraduate Student Lily Syfers, Psychology, Undergraduate Student Dennis Estrada, Psychology, Undergraduate Student Dr. Amber Gaffney, Psychology, Faculty

College of Professional Studies

The research reveals the complex dynamics of intergroup context, particularly with the presence of extreme outgroups in comparison to moderate outgroups. Results supported the hypothesis that the presence of an extreme outgroup might pull perceivers' perceptions more negative, possibly because it reminds them of the intergroup comparison process. In addition, results supported the hypothesis of lower perceptions of warmth than competence for relevant outgroups. The work has implications for many social and political situations where individuals may change their opinions of groups in a similar manner based on the presence of extreme outgroups in comparison to relevant and moderate outgroups.

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94. Paleo Facial Reconstruction

Joanne Gallagher, Anthropology, Undergraduate Student Sheena Glasgow, Anthoropology, Undergraduate Student Cathlyn Garibay, Anthopology, Undergraduate Student Lucy Her, Anthopology, Undergraduate Student Garrett Goodnight, Anthropology, Undergraduate Student Alexander Guerin, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

Facial reconstruction is a method whereby the likeness of a person is reconstructed from the cranial skeleton. This projects involved researching facial reconstruction techniques and applying them to casts of hominin fossil skulls in the anthropology teaching collection. Species/specimens chosen to reconstruct include: (1) a juvenile Australopithecus africanus (the "Taung Child"), a 2.5 million-year-old hominin from South Africa; (2) an adult Paranthropus boisei skull; (3) also an adult Homo neanderthalensis found at the La Chapelle Aux-Saint, in France. To complete the reconstructions, we used a combination of tissue depth markers for humans and chimpanzees.

95. Police Body Cameras

De'Shaun Patacsil, Political Science, Undergraduate Student

College of Arts, Humanities & Social Sciences

This project is one I have been working on with my internship at the Humboldt Center for Constitutional Rights. The emphasis is on police body cameras and the protocols or standard practices that are required. I have looked into several police departments (including some of our own in Humboldt County) to see what procedures, if any, are taken when recording before and afterwards. The purpose of my research is to educate/inform all on the footage that is captured in public and what is normally done.

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96. Prison Ecology Project

Tony Silvaggio, Sociology, Faculty **Brant Hartsell,** Sociology, Undergraduate Student **Stian Roussell,** Sociology, Undergraduate Student

College of Arts, Humanities & Social Sciences

The prison ecology project (PEP) maps the intersection of mass incarceration and environmental degradation by investigating the environmental impacts and human health problems created by the prison industrial complex. It is the first to study the myriad of environmental issues associated with prisons such as: water pollution from prison sewage and industrial waste; threats to listed species through the construction of prisons in remote, environmentally-sensitive rural areas; and, environmental justice concerns regarding prisoners, staff and surrounding communities concerning clean drinking water, exposure to coal ash dust and toxic waste.

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97. Project Rebound

Chey King, CRGS, Undergraduate Student

College of Professional Studies

Project Rebound is a resource we are working to implement on HSU's campus for students who have been/are currently incarcerated. We have been networking with other campuses and organizations to create this center. Included will be research conducted about students re-entering to society and education. This will hopefully officially begin next semester, but we want to spread awareness of our program and connect with others who may be interested.

98. Recommendations of Evidence-Based Curriculum for Incarcerated Youth Mental Health Treatment Program

Zack Chernin, Social Work, Graduate Student

College of Professional Studies

This project incorporates peer-reviewed research and academic literature in developing a report of evidence-based curriculum for appropriate use in mental health treatment for incarcerated youth.

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99. Reconceptualizing Waste in Humboldt County

Ryan Cantor, Environmental Studies, Undergraduate Student **Emily Michaels,** Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

Did you know our solid waste doesn't reside with us here in Humboldt County? We didn't either. In fact, it's actually trucked, container by container, about 280 miles south to a landfill in Solano County. Through our service-learning partnership with Zero Waste Humboldt, and collaboration with Humboldt Waste Management Authority and Recology, we are producing public service announcements and other media messages to communicate inclusive and effective solutions by cultivating a community of stakeholders in our shared environment. We intend to provoke community members, businesses, and organizations of Humboldt County to reexamine the responsibilities that come with the waste we produce.

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100. Reduction of Secondary Trauma Among Mental Health Interpreters

Ericka Balderas, Social Work, Graduate Student

College of Professional Studies

Humboldt County currently has an interpretation program to assist clients with Limited English Proficiency needs who seek local mental health services. This working alliance of the mental health provider, the mental health interpreter, and the client currently has no systematic support for mental health interpreters to reduce and cope with secondary trauma. The purpose of this project is to provide a resource guide on best clinical practices regarding this working alliance, the implementation of an Interpreter Coordinator for the county, and systemic structural recommendations in order to reduce secondary trauma among mental health interpreters.

101. ResolutionCare Kitchen: Program Development

Laura Gardner, Social Work, Graduate Student

College of Professional Studies

"For my master's project, I laid the foundation for a kitchen program that will provide an organic, nutrient-rich meal to ResolutionCare patients once a week. The ResolutionCare Kitchen will be dependent upon grants, donations of resources, and volunteer effort. With my research and the support of the local community, staff at ResolutionCare can move forward with developing a pilot for the program in the summer of 2017.

Activities of my project included:

- exploring potential partners
- · researching food permit laws
- researching ethical and nutritional considerations of the palliative care patient"

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102. Rethinking Community in Westside Eureka: The Jefferson Project

Sarah Cooper, Environmental Studies, Undergraduate Student **Jack Davis,** Environmental Studies, Undergraduate Student **Rebecca Reyes,** Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

From our time at the Jefferson Center we have been exposed to a new form of community. The Jefferson Project located on the Westside of Eureka is an inclusive space that allows for numerous activities, workshops, events, after school child care, and volunteering. This location has transformed from an abandoned elementary school to a "clean, safe neighborhood dedicated to combatting urban blight" and revitalizing the local environment by fostering a sense community. Our experience at the center has allowed us to expand our academic lenses to applicable social justice scenarios.

103. Rise of the Machines: The Effects of Autonomous Cars on Highway Efficiency

Catherine Ledesma, Physics and Astronomy/Math, Undergraduate Student **Katie Fasbender**, Physics and Astronomy, Undergraduate Student

College of Natural Resources & Sciences

We looked at a possible macroscopic model, the LWR model, but ultimately turned to a microscopic model, the IDM. Here, autonomous vehicles were incorporated, and a Matlab simulation was run. Simulation results along with existing research was analyzed, and differing traffic densities, lane changing, and heterogeneous traffic were then taken into account which resulted in an analysis of the MOBIL model. Finally, using traffic networking schemes, and analysis of available data, a unique model was proposed, with talk of expected results and implementation on the greater Seattle Area. Existing data suggests that these added vehicles will ease traffic congestion and increase road capacity.

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104. Road to the Registry

Blanca Drapeau, History, Undergraduate Student

College of Arts, Humanities & Social Sciences

My project describes the work put into nominating the Arcata Plaza to the National Register of Historic Places. This is a research based project which highlights the cultural importance of Plaza as it has hosted many large events over the course of its history.

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105. Screening for Regulators of Quiescence in Drosophila Testis Stem Cell Niche

Linh Pham, Biology, Undergraduate Student

College of Natural Resources & Sciences

Interactions between stem cells and their microenvironment, or niche, are not thoroughly understood. The Drosophila testis stem cell niche provides a simple model to observe nichestem cell interactions. This niche contains non-dividing hub cells that signal to adjacent germline stem cells and somatic cyst stem cells (CySCs). If the testis is damaged (specifically, if CySCs are eliminated) hub cells sense their absence and respond by dividing and changing their identity (or transdifferentiating), becoming replacement CySCs. Because transdifferentiation occur in many niches and can promote tumor formation, we are using Drosophila testes niche as a model to gain more insights on this process.

106. Search for Possible Trends Between Quasar Outflows and Radio Properties

Sean Haas, Physics, Undergraduate Student

College of Natural Resources & Sciences

Quasars are supermassive black holes that, through accretion, emit large amounts of radiation and eject large amounts of matter. Spectral emissions from quasars have proven to be highly variable, that is, quasar spectra change dramatically over time. The physical mechanism behind this variability in the accretion disk is not yet completely understood. High velocity outflows of matter have been observed in many quasars and could serve as a mechanism for changing the radiating matter in the accretion disk around the black hole, thus changing the quasar's spectra. Our team has analyzed quasar spectra to search for possible trends between radio properties and outflows.

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107. Self-Uncertainty and Systematic Processing of Self-Relevant Information: Understanding Uncertainty Reduction

Alexandria Jaurique, Psychology, Graduate Student Jack Allen, Psychology, Graduate Student Benjamin Skillman, Psychology, Undergraduate Student Clara Allen, Psychology, Graduate Student Amber M. Gaffney, Psychology, Faculty

College of Professional Studies

We found that not only did participants experiencing high self-uncertainty make fewer overall errors, but more interestingly, they demonstrated greater accuracy for self-relevant word-pairings than those low in uncertainty. This in turn affected reaction times pairing self-relevant vs. self-irrelevant words. This implies that uncertainty might not lead to cognitive load or distracted and heuristic processing. Instead, we suggest that uncertainty can create a motivated process with respect to self-relevant information, leading to more accurate judgments about the self, perhaps in an attempt to reduce uncertainty.

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108. Service Learning at Arcata Preschool

Maggie Figueroa, Child Development, Undergraduate Student

College of Professional Studies

This poster presents the experience of working at a local preschool in the area. I have gained a lot of knowledge on what it is like to be in a preschool classroom setting. Before starting my service learning, I did not know what to expect, but now I can say that this experience has allowed me to direct myself to a future career that might be gratifying. I got to experience hands experience working with children for a couple of hours each day and see how the teachers interacted with children. I learn about some of the practices that are being used to meet the unique needs of each child. This experience has helped me improve my communication skills and confidence, explore future careers.

109. Service Learning at Humboldt State University Y.E.S. House

Miranda lacopetti, Child Development, Undergraduate Student Maggie Lally, Child Development, Undergraduate Student Jasmine Phillips, Child Development, Undergraduate Student

College of Professional Studies

The Y.E.S. House is a student run club that has multiple groups, which provide services and activities to youth and elderly alike. From tutoring to playing musical instruments, the Y.E.S. House does tremendous things for the community in Humboldt County. Two of us are at JHRP and one of us in L.E.A.P. The JHRP program works with youth, who are incarcerated. During their recreation time, we engage them in playing games and sports or talking. L.E.A.P. is a program that works with youth to build self-esteem, leadership, and teamwork skills. We propose to present a poster that consists of these two groups: JHRP and L.E.A.P. and their in depth working.

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110. Service Learning at Little Learners

Megan Butler, Child Development, Undergraduate Student Elisabeth Nirschl, Child Development, Undergraduate Student Paige Nickols, Child Development, Undergraduate Student Delaney Dietz, Child Development, Undergraduate Student Adrianna Gonzales, Child Development, Undergraduate Student

College of Professional Studies

The focus of this presentation is on the positive effects that service learning has on our Child Development experience at Humboldt State University. We start by explaining the environment that our service learning took place in and the core beliefs of the center. Next we will discuss the reasons why we chose to participate in service learning and what challenges we encountered. We also explain the strengths and knowledge that we have gained while participating in service learning. Finally, we discuss how service learning enhances the child development experience. We experienced many connections between theory and practice in the short time that we participated in service learning.

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111. Service Learning at Ridgewood Elementary School

Brittany Ann Miller, Child Development, Undergraduate Student

College of Arts, Humanities & Social Sciences

This presentation provides a look into the service learning experience at Ridgewood Elementary School. This poster will discuss the responsibilities of the service learning volunteer, the experiences gained and the learning that took place. Additionally, this poster discusses the systems perspective that is used to work with students in the school.

112. Service Learning at Sunny Brae Middle School Afterschool Program

Xochitl Rodriguez, Undergraduate Student **Gabriella Salvato,** Child Development, Undergraduate Student **Ashlyn Mather,** Child Development, Undergraduate Student

We would like to discuss the benefits of service learning with adolescent children. We will discuss various aspects of working with middle school children. We will cover the after school program's purpose and their goals. Following we will mention our experiences and challenges that we encountered. Lastly we will end with a question to all HSU students, why one should consider service learning and what benefits do they see in the opportunities.

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113. Service Learning at the Boys and Girls Club

Ashley Clawson, Child Development, Undergraduate Student

College of Professional Studies

This presentation includes the learning experiences and exploration during this service learning opportunity at the Boys and Girls Club. I also connect the theoretical constructs that I learn in Child Development classes and the practical experience that I have gained during this service learning opportunity.

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114. Service Learning at Yurok Tribe Head Start

Chelsea Reed, Liberal Studies, Child Development, Undergraduate Student"

College of Professional Studies

This presentation emphasizes the importance of incorporating Yurok language and culture in early childhood development. I also include the learning experiences and exploration during this service learning opportunity at the Yurok Tribe Head Start program. I also connect the theoretical constructs that I learn in Child Development classes and the practical experience that I have gained during this service learning opportunity.

115. Sinking Microfibers on the New England Continental Shelf Break

Jennie Warmack, Oceanography, Undergraduate Student

College of Natural Resources & Sciences

In June 2016, the water column abundance and vertical flux profile of microfibers was examined using Niskin bottle collection and a vertical array of surface-tethered sediment traps at the continental shelf break south of Rhode Island. Fibers were extracted and analyzed on a Fourier transform infrared spectrometer to determine the type of materials present. Sinking rates of the fibers were estimated through three independent approaches: theoretical, field-based, and lab-based. In general, the field-based approach indicated roughly 8x slower sinking speeds than those observed in the lab or predicted by theory.

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116. Slow Violence at the Salton Sea

Drew Andrew, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

California's largest inland body of water, the Salton Sea, is suffering from decreasing water levels. Water transfers in Southern California are responsible for the current status of the Salton Sea. Addressing the responsibility of the State of California in restoration of the Salton Sea, inaction at the state level continues to perpetuate the slow violence of health issues in Imperial Valley. Analyzing the framing of the ecological devastation of the borderlands of Southern California, mainstream white environmentalism continue's to pervade the agenda to restore a shrinking sea.

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117. Stable Isotope Mapping of Humboldt County's Ecological Landscape

Shannon Bresnahan, Anthropology, Undergraduate Student **Andres Alcocer,** Anthropology, Undergraduate Student **Walter Tovar Saldana,** Anthropology

College of Arts, Humanities & Social Sciences

We gathered biological materials from animals around Humboldt County and used their stable oxygen and carbon isotopic signatures to create an isotope map of the Humboldt area. Samples of bone, teeth and shell were collected in various areas of this county. Samples were processed at the HSU Biological Anthropology Research Center (BARC) and then sent to a stable isotope facility to be analyzed. This information will be distributed in a Geographic Information System (GIS) map. This project is part of an ongoing project at BARC that aims to create a map to help identify the region of origin of animal and human remains, and address ecological questions.

118. Stand up for Mother Earth: Music and Art as a Means for Resilience

Carlrey Arroyo Delcastillo, Environemental Studies, Undergraduate Student **Jesus Rodriguez,** Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

Seventh Generation Fund for Indigenous peoples has been a successful 501(3)(c) organization for the past forty years. In the past years they have organized Mother Earth Day events, in order to raise the unity and interconnectedness of human lives with our planet earth. This years organized Mother Earth Day celebration will be a call to action through music to 'wake up' and 'warrior through' self-awareness and self-empowerment. The headliner to this event is Nataanii Means along with other indigenous hip hop artists that focus their lyrical art on self determination, resilience, indigenous rights, water, and liberation from systems of oppression.

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119. Stand up for Mother Earth: Music and Art as a Means of Resilience

Jesus Rodriguez, Psychology/Environmental Studies, Undergraduate Student **Carlrey Delcastillo,** Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

nth Generation Fund for Indigenous peoples has been a successful 501(3)(c) organization for the past forty years. In the past years they have organized Mother Earth Day events, in order to raise the unity and interconnectedness of human lives with our planet earth. This years Mother Earth Day celebration will be a call to action through music to 'wake up' and 'warrior up' through self-awareness and self-empowerment. The headliner to this event is Nataanii Means along with other indigenous hip hop artists that focus their lyrical art on self determination, resilience, indigenous rights, water, and liberation from systems of oppression.

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120. STEAM Education and Environmental Studies: Embracing Diverse Imaginaries

Tara Tompkins, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

My service learning experience explores the role of diverse imaginaries in education. At the Arcata After School Program I am exploring educational imaginaries by engaging students of diverse age groups and backgrounds in integrated learning opportunities. In a system where 'objectivity' is largely valued over unique subjectivities, I am interested in deconstructing the value of 'objective' education and creating a space for subjective learning experiences.

121. Stress, Anxiety, Social Support and Hopelessness in Latino and White College Students

Irene Gonzalez-Herrera, Psychology, Graduate Student William M. Reynolds Ph. D, Psychology, Faculty Lily Syfers, Psychology, Graduate Student Ivette Lopez, Psychology, Undergraduate Student Gabriela Leon, Psychology, Undergraduate Student

College of Professional Studies

The current study examined the association of stress, anxiety, hopelessness and social support in undergraduate Latino and White students. The sample included 250 Latino (women = 76%) and 296 White (women = 66%) participants, with more women in the Latino group (chi2 = 5.74, p < .05). For the total sample, a hierarchical linear regression with stress as the dependent variable, age and sex entered in block one and anxiety, social support, and hopelessness in block two, resulted in an R = .772 with block two variables accounting for 57% of the variance. Separate regression analyses for Latino and White students produced similar results, R = .75 and R = .80, respectively.

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122. Survey and Map English Ivy Distribution at the Patrick's Point State Park, California

John Cortenbach, Department of Environmental Science & Management, Undergraduate Student

Buddhika Madurapperuma, Department of Forestry & Wildland Resources and Department of Environmental Science & Management, Faculty

College of Natural Resources & Sciences

Patrick's Point State Park has experienced a tremendous growth of English Ivy that has causing a damage to park resources. The goal of this study was to accurately map English Ivy habitats, estimate coverage, and survey English Ivy colonization effects on tree trunks. The results showed that the English Ivy growth has decreased from 8.0 acres to 6.5 acres between 2015 and 2016 respectively due to park restoration activity supported by volunteer organizations. The English Ivy growth on tree trunks was significant for Western Hemlock and Sitka Spruce. With this project the park will be able to locate the most English Ivy spots that require attention, and monitor their growth rate.

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123. Textbook Production

Kelley Ellion, English, Undergraduate Student **Bri Lucero,** English, Undergraduate Student

College of Arts, Humanities & Social Sciences

Kelley and Bri are helping professor Janelle Asdit with her textbook: "Critical Creative Writing: An Anthology of Craft-Criticism" published by Bloomsbury publications. They are in charge of writing chapter summaries.

124. The "Lester Leaps In" Music Listening Project

Tito L Ross, Social Work, Graduate Student

College of Professional Studies

My research project is the implementation of a music listening library at the Humboldt Senior Resource Center for participants of the Alzheimer's Day Program. I will be providing the Center with 4 Ipods with playlists accompanied by 4 picture album books highlighting the musicians in the playlists.

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125. The Bigfoot Fraternity

Michael Barnes, Communication, Undergraduate Student

College of Arts, Humanities & Social Sciences

The United States Census estimates that 20.9% surveyed in Humboldt qualify as impoverished. Poverty is experienced in a multitude of severity-homeless individuals often bare the greatest physical and psychological burdens. In a 2016 preliminary study, Jennifer Maguire of HSU found that over 15% of student participants experienced housing insecurity. The Bigfoot Fraternity is a research project I've developed in order to alleviate some of the hardships homeless students experience and alter perceptions of homelessness through participation, action and reflection. TBF criticizes dependency on socioeconomic norms and highlights the benefits of an "alternative housing movement" in Humboldt Co.

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126. The Geographic Movement of Goods Related to the Iron Industry in Humboldt County During the Early 20th Century

Sarah Mangham, Anthropology, Undergraduate Student Marisa Bazaldua, Anthropology, Undergraduate Student Taylor Picard, Anthropology
Cory Platt, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

This project examines the geographic movement of materials and products related to the ironworks industry in Eureka, CA during the early 20th century. Archival research was undertaken in the Eureka Ironwork's Collection and Humboldt Room at Humboldt State University. Data was analyzed using GIS in order to understand the geographic scope of business transactions.

127. The Impact of the Potawat Community Garden

Samantha Stephens, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

A look into how the Potawot Community Garden, an offshoot of United Indian Health Services, aids in the fight for decolonization and health independence for local tribes.

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128. The Jefferson Project

Melissa Duarte, Child Development, Undergraduate Student Michelle Fierro, Child Development, Undergraduate Student Piper Frank, Child Development, Undergraduate Student Ashlee Greshman, Child Development, Undergraduate Student Selena Ponce, Child Development, Undergraduate Student

College of Arts, Humanities & Social Sciences

Volunteers with Eureka's Westside Community Improvement Association transformed what was once Jefferson Elementary school, into the now Jefferson Community Center. The building itself is used as a place to hold meetings and recreational activities. Moreover, the center is dedicated to helping youth in the community by providing a safe, reliable place to learn and explore. Two projects that we have been volunteering for as Child Development students are the SEEDs project, and the Imagination playground. These projects provide the children with access to: homework help, a community garden, cooking classes, nutritious meals, educational exploration, and lots of FUN!

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129. The Northwestern California Genocide Project

Kerri J. Malloy, Native American Studies, Faculty **Bryce Baga,** Native American Studies, Undergraduate Student **Michael Ruff,** Zoology, Undergraduate Student

College of Arts, Humanities & Social Sciences

The Northwestern California Genocide Project is a Digital Archive put together and presented by Humboldt State University students. This project is the first digital source to present to the public and future scholars a collection of items on genocidal atrocities and mass extermination events committed against Northwestern California native peoples perpetrated by white pioneers and settlers around the mid and late 19th century.

130. The Wubba Lubba Dub Dub Fandom: An Ethnography on the Expressiveness of the Rick and Morty Fandom

Garrett Goodnight, Anthropology, Undergraduate Student

College of Arts, Humanities & Social Sciences

The animated hit series; Rick and Morty had an enormous impact within its first 3 years. There are currently two seasons available with a third on its way in 2017. This cartoon featured on Adult Swim, follows a scientific genius Grandfather and his grandson, as they travel through the universe. In the short amount of time that this show has been around, it has spawned a very loyal and dedicated fan base with an increasingly active community. A portion of this fan base is structured as an online community, which uses various platforms to communicate and express their devotion to the show. These platforms include forum sites such as Reddit, Instagram, Facebook, and the fandom run Wlkia page.

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131. Tribal Foster Care Research

Natalie, Social Work, Graduate Student

College of Arts, Humanities & Social Sciences

The lack of tribally specific foster homes in Humboldt County is representative of the statistic that Indian children are three times likely to be placed in foster care, ninety percent of these placements are within non-native homes (CA Dept. of Social Services, 2002). This literature review will discuss the importance of having tribally specific foster homes, review tribal foster care recruitment strategies, and successful foster placement models for Native youth in agreement with ICWA objectives.

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132. Tsunami Effects and Mitigation Results for South-east Regions in Sri Lanka

John Dellysse, Department of Environmental Science & Management & Forestry & Wildland Resources, Undergraduate Student

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

College of Natural Resources & Sciences

This study examines the land-use changes along the south-east coast of Sri Lanka before and after the 2004 Tsunami to spot vulnerable areas for future monitoring efforts. A time-series vegetation change: (i) immediately after Tsunami between 2004-2005, (ii) pre-Tsunami & long-term between 2004-2016 and (iii) post-Tsunami & long-term between 2005-2016 were mapped using Landsat TM images. The resulting series of multiple change detection models became a series of maps displaying a considerable disturbance of vegetation patterns and agricultural activity at the coastal and inland areas.

133. Understanding the Importance of Frameworks Through Art

Sylvia Bellhouse, Environmental Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

Throughout the Spring 2017 semester, I conducted my service learning at the Sunny Brae Middle School afterschool program. Using my experience from the Environmental Studies program, I led an environmental art class where students learned the importance of frameworks by looking giving a critical look at photographers work and also putting what they learned to practice by taking photos of their own. I hope that knowing how frameworks operate will allow the students to be critical about the produced world around them.

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134. Using Art and Mindfulness as Coping Mechanisms for Teens with Depression: A Guidebook

Eve S. Freedman, Social Work, Graduate Student

College of Professional Studies

According to the National Institute of Mental Health (NIMH), as much as 10 to 15 percent of American teenagers experience symptoms of depression at any one given time (2014). Research has shown that mindfulness methods and art therapy methods have both proven themselves useful in treating this disease, but there is little research that has delved into the possible benefits of combining these two methodologies. This project combines these two forms of coping skills into one curriculum for use in school or therapeutic settings aimed at helping adolescents find outlets for dealing with their depression. That's the goal of this project: the creation of a mindfulness and art therapy guidebook.

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135. Wailaki Directional Terms

Jocelyn Edmondson, Native American Studies, Undergraduate Student

College of Arts, Humanities & Social Sciences

Wailaki is an indigenous Northern California language within the Dene (Athabaskan) language family historically spoken in the Eel River basin. The language is categorized as a 'sleeping' language as there are no longer living first language speakers; however, there are second language learners today. This project examines translations in texts for words used in the Wailaki directional system and determines if this system is closer to river-based systems common to Northwestern California, or cardinal direction-based systems. In addition, this research discusses the extent to which geospatial references may have been preferred to relative frames of reference involving the body (left, right).

136. Wailaki Postpositions

Emily Ellis, Native American Studies, Undergraduate Student **Kayla Begay,** Native American Studies, Faculty

College of Arts, Humanities & Social Sciences

Wailaki is an indigenous language within the Dene (Athabaskan) language family, historically spoken within the Eel River Basin. This project examines postpositions found in Wailaki texts. Unlike English which has a system of prepositions, Wailaki has a system of postpositional suffixes that indicate an object's position in space relative to another. Words in English such as at, in, during, outside, next to, etc. modify a noun to indicate position, whereas in Wailaki this is accomplished with a suffix. Some are incorporated into verbs, as well as temporal expressions. This goal of this research was to compile a list for future language study, and use by second language learners.

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137. What We Think, We Are

Olivia Neu, Communication, Undergraduate Student

College of Arts, Humanities & Social Sciences

Self-talk is the inner dialogue we use to talk to ourselves. My research project addresses the significance that self-talk has on you both mentally and physically. I emphasize that we should be mindful of how we talk to ourselves because we are always doing it. I also explain the importance of positive self-talk and how to do it. My goal is that this research project motivates individuals to use self-talk in ways that let them live happier and more positive lives.

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138. Yurok Social Services Internship Manual

Dianna Heimstadt, Social Work, Graduate Student

College of Arts, Humanities & Social Sciences

"I've partnered with the Yurok Social Services (YSS) department to develop the Yurok Social Services Internship Manual. As the largest federally recognized tribe in California with over 6000 enrolled members, interns placed within YSS have an opportunity to learn from and be exposed to a diverse community with varied Indigenous, Yurok worldview(s). The Yurok Tribe continues to suffer from the historical and ongoing impacts of colonialism, and as Indigenous peoples, they have also continued to thrive. The intent of this manual is to better orient and train incoming interns as to their roles and responsibilities as well as to provide an introduction to a Yurok worldview.

Musical Performances

Library 1st Floor (Lobby) • 3:00-4:15 pm

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Concerto in Do

Antonio Vivaldi (1678-1741)

Hawk Silverdragon, guitar Michael Hall, violin Greta Goshorn, viola Garrick Woods, cello Greg Granoff, harpsichord

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Étude tableaux, Op. 39, No. 3

Sergei Rachmaninoff (1873-1943)

Ryan McGaughey, piano

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Partita No. 6

I. Toccata

Johann Sebastian Bach (1685-1750)

Chuang Li, piano

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Sonata in B minor, Hob. XVI:32

Joseph Haydn (1732-1809)

Max Marlowe, piano

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Sonatina in G major

Antonín Dvořák (1841-1904)

Michael Hall, violin John Chernoff, piano

Sicilienne, Op. 78

Prelude

Gabriel Fauré (1845-1924)

Thomas Starkey-Owens, violin **John Chernoff**, piano

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String Quartet in F major

II. Assez vif, très rythmé

Maurice Ravel (1875-1937)

Thomas Starkey-Owens, violin
Spencer Snow, violin
Hannah Rolf, viola
Kira Weiss, cello

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London Trio No.1

Allegro moderato

Joseph Haydn (1732-1809)

Keann Kline, flute Alyssa Ortega, flute Luke Smetana, bassoon

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Andante et Scherzetto

Pierre Lantier (1910-1998)

Richard Rios, soprano saxophone Marisa Finlayson, alto saxophone Ryan Walker, tenor saxophone Jesse Garate, baritone saxophone

Film Screenings

Library 1st Floor (Room 120) • 4:15-5:00 pm

4:15 Filmmaking 1—Beginning 16mm Film

Kevin's Big Break (2:00)

Directed by: Roak Ely II

Camera Operations: Matthew Nicholson, Ian McIntire

Camera Utility: Livon Gorgees

Lighting: Marvin Cardenas, Johnathan Munguia

Casting Assistance: Jess Gravelle

Cast: Cameron Rodriguez, Lucero Castorena, Declan Cowan, Daniel Erb, Ian McIntire

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Sueños De Sangre (1:43)

Directed and Scored by: Marvin Cardenas **Camera Log, Light Design:** Matthew Nicholson

Cinematographer: Jonathan Munguia
Lighting Assistant, Camera Log: Roak Ely
Cinematographer/Light Meter: Livon Gorgees
Costume Design/SFX: Marvin Cardenas
Cast: Matthew Nicholson, Miles Rich, Roak Ely

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Found In Dreams (2:00)

Directed and Writing by: Cain J. Towers **Cinematography and Lights:** Cain J. Towers

Camera Operator: Brian Madranos

Production Assistants: Joanna Galicha, Christopher Brady **Cast:** Sean Hass, Juan Bellmontes, Christopher Brady

4:30 Filmmaking II - Intermediate Film (Digital and 16mm)

Just the Right Keys (3:54)

Directed by: Ana Preciado

Director of Photography & Editor: Andrew Weisz

Audio: Gail Camenzind

Lights & 2nd Editor: Sarah Keiser-Arent

Composers: Aidan Sanborn-Petterson & Ryan McGaughey

Cast: Gino Latner, Rilo DeAnn, Ken Newman

4:40 Filmmaking III—Advanced Film (Digital)

Medicine Water (6:00)

CSU Media Arts Festival Second Place Documentary Award 2016

Featuring Jim Tobin

Directed by: James Simmons **Cinematography:** Anibal Polanco

Lighting/2nd Unit Camera: Jarrett Seiler, James Simmons

Audio Recordist: Nicholas Handcock

4:45 Filmmaking IV—Advanced Film (Digital)

Murder on Pine Hill (13:08)

Directed by: Anibal Polanco & Nairobys Apolito

Assistant Director: Ray Cisek **Cinematography:** Nick Kraus

Producers: Anibal Polanco & Ray Cisek
Editors: Hernan Oviedo & Anibal Polanco
Sound: Nicholas Handcock & Hernan Oviedo

Lighting: Nairobys Apolito

Costumes: Brynn Allen & Nairobys Apolito **Art Department:** Brynn Allen & Jarrett Seiler

Hair: Brynn Allen

Storyboarding: Alex Orozco Colorist: Anibal Polanco Sound Design: Anibal Polanco

Production Assistants: Jake Glasser, Marcos Villarreal, Kevin Perea **Cast:** William English, Justine Bivans, Erin Henry, Elio Robles, Carolina Rios,

Dance Performances

Library 2nd Floor • 3:00 pm

The Dance Program at Humboldt State University presents selected works from *Luminescence*, an original dance concert created by students and faculty. This production promises an exciting variety in styles and themes of dance. Performances coordinated by Choreographer Austin Silavong, Cellular-Molecular Biology major with minors in Child Development and Dance, under the direction of Sharon Butcher, Associate Professor of Dance.

HSU Sculpture Walk

Sculptures: All Floors • 3:00-5:00 pm

Guided Walk: Library 1st Floor (Lobby) • 3:00 pm

Be sure to catch the annual HSU Sculpture Walk, presented by the Associated Student Sculptors! This event is 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. 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.

Theatrical Performances

Library 2nd Floor • 4:00 pm

Majors and minors will be showcasing recent work including scenes from HSU's productions of *Julius Caesar* and the upcoming production of *Real Women Have Curves*, as well as scenes, monologues, and songs from competitions hosted by the Kennedy Center American College Theatre Festival held in Denver, Colorado.

Student presenters include: Ayanna Wilson, Fiva Pulu, Amy Beltran, Marissa Sanchez, Irma Gill, Camille Borrowdale, Izzy Ceja, Ambar Cuevas, William English III, Elio Robles, Madison Burgett-Feagin, and Heather Karns.





humboldt.edu/ideafest

This event is sponsored by the Office of Research, Economic and Community Development, University Advancement, and the HSU Library, in collaboration with the Colleges.

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A special thanks to Theatre, Film, Dance, Music and the Sculpture Lab for their contributions to the programming this year!

HUMBOLDT STATE UNIVERSITY