



22nd Annual Capstone Conference



Friday – May 5, 2023

12:30pm-5:00pm

Via Zoom

University Honors Program

McNair Scholars Program

California State University, Stanislaus
One University Circle, Turlock CA 95382

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The following faculty taught in the Honors Program this year:

Hannah Abramson (English), Ralph Becker (Social Sciences), Ellen Bell (Anthropology), Juvenal Caporale (Ethnic Studies), Tom Carter (Computer Science), Dave Colnic (Political Science), Andrew Conteh (Political Science), Jim Cook (History), José Díaz-Garayúa (Geography & Environmental Resources), Kanwaljit Dulai (Biology), Katherine Filbert (Philosophy), Jeff Frost (Anthropology), Suditi Gupta (Psychology), Meggan Jordan (Sociology), Rene Mattos (English), Chris Nagel (Philosophy), Jamila Newton (Biology), Justin Pack (Philosophy), Kyra Pazan (Anthropology), Richard Randall (Political Science), Chad Redwing (Philosophy), Jennifer Ringberg (Anthropology), Kyle Stubbs (Comm. Studies), Elaina Tucker (Comm. Studies)

Seniors in the Honors Program are encouraged to tackle complex problems using methods and knowledge drawn from relevant disciplines. Honors Program faculty and research mentors offer critical feedback and guidance along the way. The main objective is for students to explore, gather and analyze information effectively, and to reflect on the implications of what they have discovered. Group discussions help to promote thoughtful questioning. The goal is to communicate knowledge, judgments, and original perspectives based on careful inquiry, exploration and analysis.

2023 Capstone Conference Schedule

Friday – May 5, 2023

12:45PM - 5:00PM

12:45PM Welcome & Opening Remarks

1:00-2:00PM Senior Research Presentations

15 Minute Break

2:15PM-3:00PM Senior Research Presentations

30 Minute Break

3:30-4:10PM Junior Research Presentations

10 Minute Break

4:20–4:55PM Junior Research Presentations

5:00PM Conference concludes

Senior Capstone Presentations

1:00 PM – 3:15 PM

Moderators: Dr. Nicole Cochran, Dr. Jamila Newton, Dr. Ellen Bell,

Timekeepers: Celina Bridges / Jennifer Frisk

Coordinator: Kirstin Halstead

*McNair Scholars are identified with an asterisk **

1:00-1:15 PM

Gillian Johnson (Biology & Chemistry): Cockroaches: Run of the Mill Pest or the World's Best Kept Secret

Faculty Mentor: Dr. Thao

1:15-1:30 PM

***Mauricio Corona** (Physics): Finding the Best Fit Models of Afterglows of Gamma Ray Bursts

Faculty Mentor: Dr. Brian Morsony

1:30-1:45 PM

Chantell Castillo (Psychology): Healthy Narcissism

Faculty Mentor: N/A

1:45-2:00 PM

Alainna Davis (Social Sciences): What Perpetuates the Relationship Between Eating Disorders and Social Media Usage

Faculty Mentor: Esteban Montenegro-Montenegro

2:00-2:15 PM

15 Minute Break

2:15-2:30 PM

***Bethany L. Saint-Smith** (Social Sciences): Representations of Skin Tone, Colorism, and Reimagining Marginality for Black Women

Faculty Mentor: Dr. Staci Gem Scheiwiller

2:30-2:45 PM

Adorina David (Political Science): The Effects of the Foster Care System

Faculty Mentor: Dr. Wellman

2:45-3:00 PM

***Ashley Borjon** (Sociology): The Social Phenomenon Surrounding Black Cosplay

Faculty Mentor: Dr. Meggan Jordan

3:00-3:30 PM

30 Minute Break

Junior Research Poster Session

3:30PM – 4:55PM

Moderators: Dr. Nicole Cochran, Dr. Jamila Newton, Dr. Ellen Bell,

Timekeepers: Celina Bridges / Jennifer Frisk

Coordinator: Kirstin Halstead

3:30-3:35 PM

Harman Kooner (Nursing): Assessing nurse-to-patient ratios and patient care

3:35-3:40 PM

Justin Torrison (Psychology): How sleep affects performance in athletes

3:40-3:45 PM

Emma Pohl (Psychology): Does the influence of perceived control show a positive correlation between college students' time management skills, health, and academic performance?

3:45-3:50 PM

Leslie Figueroa (Art): Art Therapy

Faculty Mentor: Prof. Suditi Gupta

3:50-3:55 PM

Aryanna A Jimenez (Psychology): Using art therapy for individuals in cancer treatment to counter psychological distress.

3:55-4:00 PM

Nathan Rohani (Ethnic Studies): Racial discrimination and mental health consequences

4:00-4:05 PM

Alexis Kaae (Pre-Nursing): Effects of social media on young adults mental health

Faculty Mentor: Prof. Suditi Gupta

4:05-4:10

Athena Taylor (Computer Science): The Effects of Screen Time on Adolescent Mental Health

4:10-4:20 PM

10 Minute Break

4:20-4:25 PM

Kylie Sackett (Psychology): Video Games Effect on Aggression

Faculty Mentor: Prof. Suditi Gupta

4:25-4:30 PM

Amaris Giselle Armendariz (Psychology): Seasonal Affective Disorder

Faculty Mentor: Prof. Suditi Gupta

4:30-4:35 PM

Jordan Louise Miller (Psychology): Early Childhood Education

4:35-4:40 PM

***Claudia Pérez-Suarez** (Sociology): College students from Immigrant Families

Faculty Mentor: Adam Fleenor

4:40-4:45 PM

Michael Hopkins (Political Science): Heller and McDonald's Affect on State Firearms Laws - A Qualitative Look

Faculty Mentor: Pam Van Zwaluwenburg

4:45-4:50 PM

Anam Khan (Political Science): The Arab Spring

4:50-4:55 PM

Kaitlin Rogers (History): The Daughters of the Confederacy

Faculty Mentor: Eric Nystrom

Abstracts of Senior Capstone Presentations

The Social Phenomenon Surrounding Black Cosplay

Ashley Borjon

This study aims to identify if there is racial battle fatigue associated with being a Black cosplayer that stems from negative experiences due to racial discrimination. Black cosplayers are experiencing backlash for their chosen characters (which are often fictional) not being Black. There is an underrepresentation of the Black community in all forms of media. This lack of representation does not allow many options for those that participate in the subculture of cosplay. As cosplay is a marginalized group within society, Black cosplayers are a marginalized group within a marginalized group. An online survey for those involved in cosplay and voluntary participant interviews have been analyzed along

with data collected from various social media platforms. All participants in this study are 18 years of age and older and are now or have previously been members of the cosplay community. Results of the online survey conducted show that many participants in cosplay have positive experiences associated with the subculture. This information was consistent in interviews although members of the Black and Female community have experienced more negative backlash from the community. People of color are experiencing higher negative responses as a result of participating in cosplay, supporting the thesis that cosplay is a reflection of systemic racism within society. While some Black cosplayers have noted that they believe they have the same experiences as their White counterparts, others note that members of the Black community have become accustomed to this type of behavior.

Finding the Best Fit Models of Afterglows of Gamma Ray Bursts

Mauricio Corona

Gamma Ray Bursts (GRBs) are one of the strongest and brightest explosions in the universe. They produce an afterglow after the explosion, and there are two types of GRBs: short GRBs, where the afterglow lasts a couple of seconds, and long GRBs, where they last up to a couple of months. We are focusing on the afterglow of GRB130603B. This was a complex, well-observed afterglow with detections in X-ray, optical, and radio, and evidence for a jet break. This was observed using the Swift satellite. We are going to use the fit from GW170817, a structured jet, and apply the same assumption to GRB130603B. The program is going to do Monte Carlo iterations with a data set from GRB130603B to find the best fit line settling on values for the best fit parameters. Our goal is to see if all short GRBs can be fit with same structured jet, or, if not, what range of jet shapes and energies may be needed.

The Effects of the Foster Care System

Adorina David

Foster care is a service almost every American is aware of, yet one of the least discussed topics in the media. There are several goals for this service: to protect and nurture children, meet the children's developmental needs, support the relationship and reunification between children and their families, and to help them build healthy, lasting relationships with those around them. Although this is the intention behind the service, and there are cases that have proven to be successful, the impact of the current system in the United States on children is not always ideal. This study aims to demonstrate the systemic consequences that foster children experience. It is then important to research unique factors that create differences between the children who are placed in the system and children who grow up in stable homes— meaning a safe home, having healthy relationships with family and friends, where they keep their possessions, and a home where they

positively interact with their school and community—to show to the public the necessary changes that must be implemented in order to make this institution a more equitable system. This study highlights these substantial differences through the lenses of factors including behavior, academics, and health.

What Perpetuates the Relationship Between Eating Disorders and Social Media Usage

Alainna Davis

The question of the impact of social media on its users has been widely debated in the field of psychology, with scholars such as Dr. Aparicio-Martinez and Dr. Ioannidis arguing that increased time on social media (SM) puts users at risk of developing an eating disorder. However, these perspectives have not adequately addressed the issue of which variables of SM perpetuate the relationship between eating disorders and SM usage. My paper addresses the issue of increased rates of eating disorders among college students with special attention to the role that SM usage plays. Specifically, I will be implementing the Eating Disorders Examination Questionnaire (EDEQ), Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ), Depression, Anxiety, and Stress Scale (DASS-21), Social Media Engagement Questionnaire (SMEQ), and the Inventory of Peer Influence on Eating Concern (IPIEC) to show that increased usage of social media, especially on picture-based applications, promotes a sense of unhappiness about one's appearance which puts them at risk of developing an eating disorder. I argue that increased SM usage puts college students at risk of developing an eating disorder. In conclusion, this project, by closely examining what promotes the risk of developing an eating disorder, sheds new light on the neglected issue of unregulated SM content.

Cockroaches: Run of the Mill Pest or the World's Best Kept Secret

Gillian Johnson

Antibiotics have been in use far before people even knew what bacteria was. We have been using them unknowingly, and with good intentions. Their use has grown exponentially after the discovery of what they could really do. Similarly, we have made great leaps and bounds with discovering more sources of these sacred panaceas. However, with that great discovery comes serious ramifications. The consequence, in this scenario, is that of antibiotic resistance (Chokshi, 2019). It has been found that American and German cockroach species have incredible antimicrobial properties held within their chitin. This study aims to see if that same property is held within Madagascar hissing cockroaches, despite their thinner chitin. It is assumed that, due to their thinner chitinous layer, there may not be as much antimicrobial activity; this study aims to answer whether or not that is true. This will be done in the lab through experiments similar to those done by Basseri and

her colleagues during their study of American and German cockroaches. If similar results are found, these results could be useful in the case that cockroaches are ever sourced as an antibiotic, since hissing cockroaches are cleaner and easier to keep in the lab. Either way, this study is an attempt to further the research in the area of antibiotics.

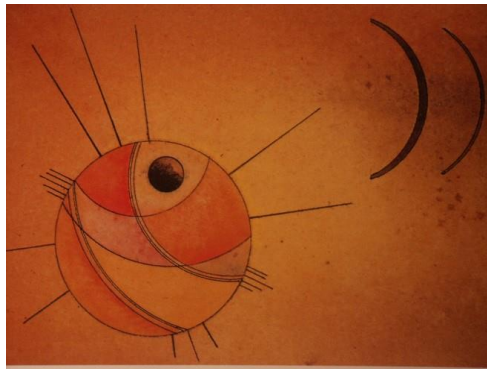
Representations of Skin Tone, Colorism, and Reimagining Marginality for Black Women

Bethany Saint-Smith

Engaging intersectional analysis of the issues of colorism shows how participant interviews among Black women in the university systems in this research are viewed, how they view themselves, and the expectations they are held to. Consequently, the United States perspective of worldview expectations and assimilative practices yield contrasting viewpoints and frame a social construct of colorism within Black communities. Suppose one reimagines the representations of Black women to be centered on their experiences and standards of self-reliance. In that case, we can see beyond a colorist caste system in various spaces where Black women belong—everywhere. In discussing experiences from Black women’s standpoints, we are reimagining ideologies that shift narratives of assimilation praxis. Much research examines the effects of colorism and how race and representation stem from colonial thinking. We can discuss how we respond to the worldview of marginality, an informed epistemic response to how we participate. Participants of this study, shaped from various backgrounds and environments, are all members of a university or college or have been in higher education, offering perspectives of their own and of other Black individuals. The social locations of Black women should not be dependent on the consequential marginality that oppression has placed them in. To consider a dynamic shift in centralizing the reimaginative process for Black marginality, we may construct a new theory for inclusion by representation

HONORS PROGRAM COMMUNITY STATEMENT

The Honors Program at CSU Stanislaus is a community of scholars bound together by vital principles of academic openness, integrity, and respect. Through focused study and practice involving exploration and discovery across a variety of disciplines, the Honors Program upholds these principles of scholarly engagement and provides students with the necessary foundations for further research and inquiry.



Our interdisciplinary curriculum is integral to this work and is intended to facilitate creative understanding of the irreducible complexities of contemporary life and knowledge. Personal and intellectual honesty and curiosity are essential to this process. So, too, is critical openness to difficult topics and respect for different perspectives, values and disciplines. The Honors Program aims to uphold these virtues in practice, in principle, and in community with one another.