17th Annual Student Research Day

California State University, Dominguez Hills

February 16-17, 2022
Greetings from President Parham

Welcome to the 17th Annual Student Research Day at California State University, Dominguez Hills. Discovery, innovation, creativity, and analysis are words that come to mind as I think about students’ exposure to new realms of information and data. Student Research Day is a hallmark of the university’s commitment to student learning and success, showcasing research by undergraduate and graduate students from across the university and from all walks of life. It’s an amazing opportunity for our entire campus community to come together and celebrate the achievements of our students in a wide array of disciplines.

Student Research Day represents the culmination of months, semesters, and years of hard work and is a shining example of student success at our university. From initial inquiries, through hypothesis testing, data gathering and analysis, to the findings presented this week, students who take advantage of research opportunities learn valuable lessons about the investigative process and what it means to be a Toro scholar. The research process requires planning, diligence, patience, and determination—all values exemplified by our student participants. Presenting their own firsthand research to peers, professors, family, and friends at Student Research Day is an unforgettable experience and one that will serve as a valuable stepping stone on their chosen career path.

Over the past two years, our Toro community has persisted through a series of challenges unlike any previously faced by our university. I want to thank all our faculty mentors and staff who went above and beyond during this time of challenge and provided support to our students in pursuit of their educational goals. I also want to thank our students who have demonstrated their resilience, again and again, overcoming a seemingly endless series of obstacles. The presentations this week are a testament to your perseverance and dedication to your studies, research, and future.

I welcome all to join in the celebration of our impressive, multi-talented, creative student researchers, and encourage our Toro community to support student research by attending or viewing as many presentations as possible.

Thomas A. Parham, Ph.D.
President
Welcome

On behalf of California State University, Dominguez Hills and the Student Research Day Committee, we welcome all to the 17th annual Student Research Day (SRD). We are excited for students and faculty mentors who have been preparing for this event over the last year. SRD brings together students, faculty, staff, alumni, and industry sponsors through a unique campus event to share leading-edge research conducted by CSU Dominguez Hills students.

This year, Student Research Day will consist of a keynote address by Dr. Debra Emmons, oral presentations and poster sessions in both in-person and virtual formats, and two roundtable sessions in which students will share their research and accomplishments. Not only does SRD provide a platform for current student researchers to showcase their projects, but it exposes future student researchers to the wide range of research opportunities occurring at CSUDH. We hope that students, staff, and faculty from across campus will take advantage of this opportunity to attend presentations both within and outside their respective fields of study.

We want to thank all those participating, from students sharing their research to faculty and staff serving as volunteer judges. Finally, we wish all a positive and triumphant celebration of these outstanding student achievements.

The 2022 Student Research Day is made possible through the generous sponsorship of Gilead Sciences and Shell, hours of preparation by staff, and the support of more than 100 faculty in research and judging. We want to thank all the students, faculty, and staff volunteers who helped make this event possible. Special thanks go to the support of President Thomas Parham, Provost Michael Spagna, Vice-Provost Ken O’Donnell, Dean Sheree Schrager, the Department of Graduate Studies and Research, University Ceremonies and Events, Loker Student Union, and the members of the Student Research Day Planning Committee.

If you have any questions, comments, or feedback, we encourage you to contact the committee by reaching out to Ken Seligson (k seligson@csudh.edu) or Cheyenne Cummings (ccummings@csudh.edu).

Sincerely,

Ken Seligson, PhD
Professor of Anthropology
Student Research Day Co-Chair

Cheyenne Cummings, MS, MA
Lecturer & Instructional Assistant
Student Research Day Co-Chair
Keynote Speaker

Dr. Debra L. Emmons
Chief Technology Officer, The Aerospace Corporation

Dr. Debra L. Emmons currently serves as vice president and chief technology officer at The Aerospace Corporation. In this role, Emmons is responsible for providing leadership for determining and executing the company’s technology strategy and investments. Emmons leads four offices that are responsible for assessing promising new technologies, developing investment strategies in innovative technologies and advanced concepts (“iLab”), building and operating prototypes (“xLab”), and driving the harnessing of commercial solutions for government missions to advance U.S. space (Commercial Space Futures office). She also manages the company’s internal research and development program and the Aerospace Technical Fellows program, with the company’s top 30 engineers and scientists. Emmons joined The Aerospace Corporation in 2003 as a project engineer and has held positions of increasing responsibility from technical project execution to business development.

An experienced aerospace leader with technical, management, and industry experience in the acquisition and development of advanced technology space systems, Emmons has more than 20 years of experience in systems engineering, technical and risk analysis, program management, and communications systems. Emmons was a principal contributor on several key high-level studies and assessments that have informed strategic decision-making within the government.

Emmons earned bachelor’s and master’s degrees in electrical engineering from Cornell University. She was awarded an MBA from Imperial College Management School, London, UK, and a PhD in systems engineering from The George Washington University. Emmons was awarded two Aerospace President’s Awards and named Aerospace Woman of the Year (2007). In 2006, she was honored for her contributions to the NASA Hubble Space Telescope Analysis of Alternatives. In 2010, she was honored for providing technical studies critical to the Augustine Commission’s recommendations for future U.S. human spaceflight.
Conference Schedule

Wednesday – February 16, 2022

Loker Student Union

4:00 – 5:30 p.m. Registration
5:30 – 8:15 p.m. Evening Sessions

Thursday – February 17, 2022

Loker Student Union

8:30 – 9:00 a.m. Registration
9:00 – 9:10 a.m. Welcome
Dr. Sheree M. Schrager
Dean, Graduate Studies and Research
Cheyenne Cummings
Co-Chair, Student Research Day Planning Committee
9:10 – 9:30 a.m. President
Dr. Thomas A. Parham
President
9:30 – 10:00 a.m. Keynote Speaker
Dr. Debra L. Emmons
Chief Technology Officer, The Aerospace Corporation
10:15 – 11:30 a.m. Morning Sessions
11:30 a.m. – 12:30 p.m. Lunch – Ballroom C
12:30 – 2:30 p.m. Afternoon Sessions
4:00 – 5:30 p.m. Reception and Award Ceremony – Ballroom C
Announcing First and Second Place Session Winners
# Faculty Mentors

<table>
<thead>
<tr>
<th>Field</th>
<th>Mentors</th>
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</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>Sarah Lacy, Lawrence Ramirez, Ken Seligson</td>
</tr>
<tr>
<td>Art and Design</td>
<td>Kirstin L. Ellsworth</td>
</tr>
<tr>
<td>Biology</td>
<td>Karin Kram-Glassman, Teklegiorgis Ghebremariam (UCLA), Samantha Leigh,</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Erin McCauley, Kari Pederson, Sen Wang</td>
</tr>
<tr>
<td>Chicana and Chicano Studies</td>
<td>Alfredo Gonzalez</td>
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<tr>
<td>Communications</td>
<td>Nancy Cheever</td>
</tr>
<tr>
<td>Computer Science</td>
<td>Mohsen Beheshti, Sanaz Rahimi Moosavi, Bin Tang</td>
</tr>
<tr>
<td>Earth Science and Geography</td>
<td>Parveen Chhetri, Lori Keller, Tianjun Lu</td>
</tr>
<tr>
<td>English</td>
<td>Kimberly Huth, Iara Mantenuto</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>Jennifer Lučarević, Payman Nasr, Enrique Ortega</td>
</tr>
<tr>
<td>History</td>
<td>Kate Fawver, Andrea Johnson, Christopher Monty, Doris Namala, Kerry Shannon</td>
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<tr>
<td>Interdisciplinary Studies</td>
<td>Jenney Hall</td>
</tr>
<tr>
<td>Liberal Studies</td>
<td>Jen Stacy</td>
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<tr>
<td>Marketing</td>
<td>Bing Xu</td>
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<tr>
<td>Marital and Family Therapy</td>
<td>Monique Willis</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Wai Yan Pong, Carolyn Yarnall</td>
</tr>
<tr>
<td>Nursing</td>
<td>Sally Mahmoud, Samira Moughrabi</td>
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<tr>
<td>Occupational Therapy</td>
<td>Sheryl Ryan, Julie Werner</td>
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<tr>
<td>Physics</td>
<td>Kristoff Paulson (Harvard University &amp; Smithsonian)</td>
</tr>
<tr>
<td>Psychology</td>
<td>Erin Barrett, Giacomo Bono, Kaylie Carbine, Steven Frieze, Maria Hurtado-Ortiz Ashley Membere, Kevin Montes, Monique Turner, Silvia Santos, Carl Sneed, Philip Vieira</td>
</tr>
<tr>
<td>Public Administration</td>
<td>Hugo Asencio, Rui Sun</td>
</tr>
<tr>
<td>Sociology</td>
<td>Kelin Li, Corina Diaz (Compton College) Joanna Perez, Katy Pinto</td>
</tr>
<tr>
<td>Women’s Studies</td>
<td>Tahereh Aghdasifar</td>
</tr>
</tbody>
</table>
Judges

Judy Aguirre
Iris A’Hirataro
Amy Michele Allen
Erin Barrett
Tracy Becerra-Culqui
Leeanne Bergeron
Kaitlyn Breiner
Sarah Britto
Kisha Calbert
Karla Castillo
Vanessa Cervantes
Alexander Chen
Jenny Chiappe
Arleen Chikami
Emily Colville
Cheyenne Cummings
Kelley Dawdy
Steven Frieze
Nestor Garza Puentes
Gabriela Gonzalez-Martinez
Harneet Grewal
Christopher Hallenbrook
Kathleen Janert
Joshua Jeffers
Michelle Kang
Wafa Khasawneh
Kara Kogachi
Karin Kram-Glassman
Sarah Lacy
Sharon Lanaghan
Juan Leon

Hui Li
Angelica Lopez-Fraire
Tianjun Lu
Michelle Martinez
Ashley Membere
Stephen McFarland
Matthew Mutchler
Payman Nasr
Thomas Philo
Nop Ratanasiripong
Kresimir Reil
Doris Ressl Acosta
Sheryl Ryan
Cynthia Sanchez Tapia
Fernando Severino
Tayyeb Shabbir
David Smith
Jennifer Stacy
Valencia Teems
Elwin Tilson
Sarah Turkel
Monique Turner
Sarah Underwood
Annalyn Valdez-Dadia
Justin Valliere
Marisela Velazquez
Philip Vieira
Melissa Williams
Tessa Withorn
## Organizing Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheyenne Cummings, Co-chair</td>
<td>Diane Dizon</td>
</tr>
<tr>
<td>Ken Seligson, Co-chair</td>
<td>Gillian Fischer</td>
</tr>
<tr>
<td>Sheree Schrager, Dean</td>
<td>Imelda Hammes</td>
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<tr>
<td>Denise Aguiluz</td>
<td>Dakota Hughes</td>
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<tr>
<td>Judy Aguirre</td>
<td>Michelle Martinez</td>
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<tr>
<td>Bacilisa Baltazar</td>
<td>Gabriela Montes</td>
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<tr>
<td>Amy Bentley-Smith</td>
<td>Kevin Narvaez</td>
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<tr>
<td>Tigress Briggs-Wroten</td>
<td>Chi Nguyen</td>
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<tr>
<td>Brigette Brown</td>
<td>Jazlyn Sanchez</td>
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<tr>
<td>Kimberly Campos</td>
<td>David Smith</td>
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<tr>
<td>Ashley Carter</td>
<td>Rachel Murillo Tafolla</td>
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<td>Vanessa Cervantes</td>
<td>Valencia Teems</td>
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<tr>
<td>Arleen Chikami</td>
<td>Valerie Whittington</td>
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</tbody>
</table>
## Wednesday Presentation Schedule

### February 16, 2022

<table>
<thead>
<tr>
<th>Session</th>
<th>Discipline</th>
<th>Location</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td># 1</td>
<td>Behavioral and Social Sciences Graduate Oral I</td>
<td>Ballroom C</td>
<td>5:30 – 6:45 p.m.</td>
</tr>
<tr>
<td># 2</td>
<td>Natural Sciences Graduate Oral</td>
<td>LSU 324</td>
<td>5:30 – 6:45 p.m.</td>
</tr>
<tr>
<td># 3</td>
<td>Health, Nutrition, and Clinical Sciences Graduate Oral I</td>
<td>LSU 326</td>
<td>5:30 – 6:45 p.m.</td>
</tr>
<tr>
<td># 4</td>
<td>Natural Sciences Undergraduate Poster I</td>
<td>LSU Ballroom A &amp; B</td>
<td>5:30 – 6:45 p.m.</td>
</tr>
<tr>
<td># 5</td>
<td>Health, Nutrition, and Clinical Sciences Graduate Oral II</td>
<td>LSU 326</td>
<td>7:00 – 8:15 p.m.</td>
</tr>
<tr>
<td># 6</td>
<td>Natural Sciences Graduate Oral</td>
<td>Virtual</td>
<td>7:00 – 8:15 p.m.</td>
</tr>
<tr>
<td># 7</td>
<td>Behavioral and Social Sciences Graduate Poster</td>
<td>LSU Ballroom A &amp; B</td>
<td>7:00 – 8:15 p.m.</td>
</tr>
</tbody>
</table>

We have made every effort to make the information in this program accurate and to include all participants. If we have made an error, or if we have inadvertently excluded you, please let us know at srday@csudh.edu, and we will make corrections and provide you with an updated program.
### Thursday Presentation Schedule

#### February 17, 2022

<table>
<thead>
<tr>
<th>Session</th>
<th>Discipline</th>
<th>Location</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>#8</td>
<td>Behavioral and Social Sciences</td>
<td>LSU 326</td>
<td>10:15 – 11:30 a.m.</td>
</tr>
<tr>
<td></td>
<td>Graduate Oral II</td>
<td></td>
<td></td>
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<tr>
<td>#9</td>
<td>Natural Sciences</td>
<td>Virtual</td>
<td>10:15 – 11:30 a.m.</td>
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<tr>
<td></td>
<td>Undergraduate Oral</td>
<td></td>
<td></td>
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<tr>
<td>#10</td>
<td>Behavioral and Social Sciences</td>
<td>LSU Ballroom A &amp; B</td>
<td>10:15 – 11:30 a.m.</td>
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<tr>
<td></td>
<td>Undergraduate Poster</td>
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<td></td>
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<tr>
<td>#11</td>
<td>Health, Nutrition, and Clinical Sciences</td>
<td>Virtual</td>
<td>10:15 – 11:30 a.m.</td>
</tr>
<tr>
<td></td>
<td>Graduate Oral</td>
<td></td>
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<tr>
<td>#12</td>
<td>Natural Sciences</td>
<td>LSU 325</td>
<td>10:15 – 11:30 a.m.</td>
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<tr>
<td></td>
<td>Undergraduate Oral</td>
<td></td>
<td></td>
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<tr>
<td>#13</td>
<td>Behavioral and Social Sciences</td>
<td>Virtual</td>
<td>12:30 – 1:30 p.m.</td>
</tr>
<tr>
<td></td>
<td>Undergraduate Oral</td>
<td></td>
<td></td>
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<tr>
<td>#14</td>
<td>Arts and Humanities</td>
<td>LSU 325</td>
<td>12:30 – 1:30 p.m.</td>
</tr>
<tr>
<td></td>
<td>Undergraduate Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#15</td>
<td>Health, Nutrition, and Clinical Sciences</td>
<td>LSU Ballroom A &amp; B</td>
<td>12:30 – 1:30 p.m.</td>
</tr>
<tr>
<td></td>
<td>Graduate Poster</td>
<td></td>
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<tr>
<td>#16</td>
<td>Natural Sciences</td>
<td>LSU Ballroom A &amp; B</td>
<td>12:30 – 1:30 p.m.</td>
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<tr>
<td></td>
<td>Graduate Poster</td>
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<tr>
<td>#17</td>
<td>Graduate Roundtable</td>
<td>LSU 320</td>
<td>12:30 – 1:30 p.m.</td>
</tr>
<tr>
<td>#18</td>
<td>Education and Social Sciences</td>
<td>Virtual</td>
<td>12:30 – 1:30 p.m.</td>
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<tr>
<td></td>
<td>Graduate Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#19</td>
<td>Natural Sciences</td>
<td>LSU Ballroom A &amp; B</td>
<td>12:30 – 1:30 p.m.</td>
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<tr>
<td></td>
<td>Undergraduate Poster II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#20</td>
<td>Behavioral and Social Sciences</td>
<td>LSU 326</td>
<td>12:30 – 1:30 p.m.</td>
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<tr>
<td></td>
<td>Undergraduate Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#21</td>
<td>Undergraduate Roundtable</td>
<td>LSU 320</td>
<td>12:30 – 1:30 p.m.</td>
</tr>
</tbody>
</table>

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Behavioral and Social Sciences Grad Oral
I February 16 — LSU Ballroom C

Evening Session: 5:30 – 6:45 p.m.

5:30 – 5:40 p.m.  Bianca Hunter
Reducing Homelessness in Los Angeles County: Policy Strategies for Housing First
Faculty Mentors: Rui Sun and Hugo Asencio, Public Administration

5:40 – 5:50 p.m.  Edward Cruz
Social Mobility and Income Inequalities: Work Opportunities, Working Conditions, and Fair Wages
Faculty Mentor: Rui Sun, Public Administration

5:50 – 6:00 p.m.  Lamiya Hoque
Public School Leadership During a Pandemic
Faculty Mentor: Rui Sun, Public Administration

6:00 – 6:10 p.m.  Nate Hertweck
Tragicomedy of Errors: Colonial Oppression, Conversion, and Martyrdom in The Island Princess and Beyond
Faculty Mentor: Kimberly Huth, English

6:10 – 6:20 p.m.  Jasmine Hannani, Jessica Chan, Rachel Garcia, Kayla English
The Lived Experiences of Neurotypical Individuals with Autistic Siblings: Occupational Participation and Balance
Faculty Mentor: Sheryl Ryan, Occupational Therapy

6:20 – 6:30 p.m.  Stephen Wong, Mallory Sheldon, John Stokes, Sarah Taylor
Understanding Social Participation Among the Previously Incarcerated Population: A Narrative Study
Faculty Mentor: Sheryl Ryan, Occupational Therapy
Natural Sciences Grad Oral
February 16 — LSU 324
Evening Session: 5:30 – 6:45 p.m.

5:30 – 5:40 p.m.  Gabriel Angulo
Using Maxent Species Distribution Modeling to Project Suitable Habitat of Ponderosa Pine in Arizona
Faculty Mentor: Parveen Chhetri, Earth Science

5:40 – 5:50 p.m.  David Saldana
Dendrochronological Investigations of Pinus jeffreyi in San Jacinto Mountain
Faculty Mentor: Parveen Chhetri, Earth Science

5:50 – 6:00 p.m.  Kimberly Campos
Identifying Disparities in Air Pollution Exposure and Transit Access in the South Los Angeles Region
Faculty Mentor: Tianjun Lu, Earth Science

6:00 – 6:10 p.m.  Angelo De Guzman
Wildland-Urban Interface Controls Vegetation Recovery after Fire – A Case Study from the Station Fire
Faculty Mentor: Parveen Chhetri, Earth Science

6:10 – 6:20 p.m.  Richard Quiloan
Using Generative Machine Learning Models to Protect Patient Privacy
Faculty Mentor: Sanaz Rahimi Moosavi, Computer Science
Health, Nutrition, and Clinical Sciences Grad Oral
I February 16 — LSU 326

Evening Session: 5:30 – 6:45 p.m.

5:30 – 5:40 p.m.  Danielle Clay
Non-Pharmacologic Interventions to Prevent or Reduce the Incidence of Chemotherapy-Induced Peripheral Neuropathy: An Integrative Review
Faculty Mentor: Samira Moughrabi, Nursing

5:40 – 5:50 p.m.  Noelle Wada, Salma Sudarmadji, Mayán Rodriguez
The Lived Experiences of Internationally Adopted Children
Faculty Mentor: Sheryl Ryan, Occupational therapy

5:50 – 6:00 p.m.  Mina Kim, Roy Jeon, Lydia Lee, Mohammad Maabreh
Perceptions of Male Occupational Therapists on Delivering Hands-on Care to Pediatric Female Clients
Faculty Mentor: Sheryl Ryan, Occupational Therapy

6:00 – 6:10 p.m.  Ria Glassman, Nina Hoang, Kristina Ballard, Caitlin Terry
“My Therapist Is the Trees”: A Phenomenological Study of Experiences of Spirituality in Nature
Faculty Mentor: Sheryl Ryan, Occupational Therapy

6:10 – 6:20 p.m.  Lisette Martine Torres, Jenna Meyers, Sarah Milbrodt, Serena Ortiz
The Influence of Traumatic Brain Injury on the Friendship Roles of Survivors
Faculty Mentor: Sheryl Ryan, Occupational Therapy
Kevin Quezada Alvarez  
*Analysis of the Importance of ycfM, hofM, and iraD for Escherichia coli’s Survival in Long Term Stationary Phase*  
Faculty Mentor: Karin Kram, Biology

Susana Lopez-Ignacio  
*Rare Species in Encelia*  
Faculty Mentor: Sonal Singhal, Biology

Kevin Mosqueda, Kelsie Kaufman, Raven Nolasco  
*Pervasiveness of Microplastics in the Southern California Bight*  
Faculty Mentor: Samantha Leigh, Biology

Joie Luna  
*Urban Coyote Project at CSUDH: Using urban Ecological Research to Guide Wildlife Management*  
Faculty Mentor: Justin Valliere, Biology

Jocelyne Mena  
*Identifying if ycfJ, yqgB, malZ and tfaS Play A Role in Long-Term Stationary Phase in Escherichia coli*  
Faculty Mentor: Karin Kram, Biology

Mikaela Gil  
*Playing with Fire: Potential Benefits and Risks of Prescribed Burning for Grassland Management in California*  
Faculty Mentor: Justin Valliere, Biology

Marialuisa Flores-Jacobo  
*Invasive Plant Species Exhibit Population-level Differences in Phenotypic Plasticity in Response to Nitrogen Availability*  
Faculty Mentor: Justin Valliere, Biology

Isabel Parada  
*Oenothera pallida ssp. pallida are an Important Species for Testing Genetic Diversity and Breeding Systems.*  
Faculty Mentor: Kathryn Theiss, Biology

Mayra Hernandez  
*Exploring the Impacts of Multiple Anthropogenic Stressors on California’s Coastal Sage Scrub*  
Faculty Mentor: Justin Valliere, Biology

Gavin Acosta  
*A Survey of Constructed and Simulated Molecular Knots*  
Faculty Mentor: Carolyn Yarnall, Mathematics

Ruben Lopez  
*The importance of the genes bdm, phoP, and sdhE in Long-Term Stationary Phase in Escherichia coli*  
Faculty Mentor: Karin Kram, Biology
Health, Nutrition, and Clinical Sciences Grad Oral II
February 16 — LSU 326

Evening Session: 7:00 – 8:15 p.m.

7:00 – 7:10 p.m.  Claire Stacey, Lauren V. Sabihon, Cassandra R. Sigua, Araceli Villarreal  
*The Career Development Process of Occupational Therapy Practitioners Utilizing Animal Assisted Therapy*  
Faculty Mentor: Sheryl Ryan, Occupational Therapy

7:10 – 7:20 p.m.  Emily Acker, Hannah Chang, Annabelle Clegg, Megan Gibson  
*Exploring the Mothering Occupations of Women with Physical Disabilities*  
Faculty Mentor: Sheryl Ryan, Occupational Therapy

7:20 – 7:30 p.m.  Suzette Chavez, Hannah Mi Chang, Jessica German  
*Community-based Practice for Underserved Stroke Survivors: A Case Study*  
Faculty Mentor: Sheryl Ryan, Occupational Therapy

7:30 – 7:40 p.m.  Morgan Kumlin, Shekinah Laylo, Sonia Monreal-Alvarez, Minji Kim  
*The Lived Experiences of First-Generation Immigrants in Los Angeles Navigating the Healthcare System*  
Faculty Mentor: Sheryl Ryan, Occupational Therapy

7:40 – 7:50 p.m.  Adriana Del Barco  
*Cervical Cancer Screening in Patients on the Female to Male Transgender Spectrum*  
Faculty Mentor: Payman Nasr, Health Science
Natural Sciences Grad Oral
February 16 — Virtual
Evening Session: 7:00 – 8:15 p.m.

7:00 – 7:10 p.m.  Michelle Mohr
Tree-Ring Growth Response of Pinus ponderosa (PIPO) to Climatic Variability in Prescott National Forest, Arizona
Faculty Mentor: Parveen Chhetri, Earth Science

7:10 – 7:20 p.m.  Stacy Zamora
Neurobiological Correlates of Substance Use Disorder: Disrupted ΔFosB Protein Expression in the PFC and NAc of Ethanol and Cocaine-Exposed Male and Female Rats
Faculty Mentor: Philip Vieira, Psychology

7:20 – 7:30 p.m.  Shinaola Agbede
Efficient Greedy Algorithm for Virtual Network Function Placement
Faculty Mentor: Bin Tang, Computer Science

7:30 – 7:40 p.m.  Sterling Abrahams
SAM: Maximizing Service Function Chain Availability in Cloud Data Centers
Faculty Mentor: Bin Tang, Computer Science
Behavioral and Social Sciences Grad Poster
February 16 — LSU Ballroom A & B
Evening Session: 7:00 – 8:15 p.m.

Denise Aguiluz, Antonio Romero, Taylor Duff, Daniel Correa
Type 2 Diabetes Threat Appraisal & Exercise-Self-Efficacy as Predictors of Vigorous Exercise among At-Risk Latinx Students.
Faculty Mentor: Silvia Santos, Psychology

Marissa Wenzell
Grit, Academic Function, Academic Harm, Resilience, and SES During the COVID-19 Pandemic
Faculty Mentor: Giacomo Bono, Psychology

Madison Reyna
Retrospective Self-Reports of Parental Monitoring
Faculty Mentor: Carl Sneed, Psychology

Jennifer Marie Correa, Nasim Karimi
Christian Riley, Julissa Magana
The Impact of COVID-19 On CSUDH Students
Faculty Mentor: Steven Frieze, Psychology

Belen Guillen, Tristan Ayoubi, Dominique Hall, Antoya Graham
The Trajectory of Research of COVID-19's Effect on Working Populations
Faculty Mentor: Ashley Membere, Psychology

Lindsey Washington
Educator Burnout in Underserved Communities: Examination of Family and Workplace Social Support
Faculty Mentor: Monique Willis, Marital and Family Therapy

Miguel Palacios
Differences in Social Support and Mental Health Among Urban College Students
Faculty Mentor: Giacomo Bono, Psychology
Behavioral and Social Sciences Grad Oral
II February 17 — LSU 326

Morning Session: 10:15 – 11:30 a.m.

10:15 – 10:25 a.m.  Angelica Nino, Myrick Nguyen, Jenna Leland, Leticia Ortiz
*Lived Experiences of Post-Graduates with a Family History of Mood Disorder: Examining Lifestyle Choices and Occupational Engagement*
Faculty Mentor: Sheryl Ryan, Occupational Therapy

10:25 – 10:35 a.m.  Therese Rafaela Rios, Patricia Tom, Elisa Yao, Jann Ramirez
*Inclusion Among Ethnically Diverse Families Within an EI Pediatric Clinic*
Faculty Mentor: Sheryl Ryan, Occupational Therapy

10:35 – 10:45 a.m.  Kasey Reeve, Jenny Phung, Bobby Woodcock
*Investigating the Formation and Maintenance of Friendships in Autistic Adolescents: A Qualitative Study Using Narrative with Photo-Elicitation*
Faculty Mentor: Sheryl Ryan, Occupational Therapy

10:45 – 10:55 a.m.  Ji Won Ahn, Larissa Arakaki, Jennifer Eo
*Neonatal Intensive Care Unit (NICU) Experiences with Compassion Fatigue and Its Effect on Occupations*
Faculty Mentor: Sheryl Ryan, Occupational Therapy

10:55 – 11:05 a.m.  Ramon Ronquillo, Celine Rezvani, Chris Simmons, Khanh Phan
*Tattoos and Six-inch Heels: A Visual Exploration of the Meaning of Clothing for Adults with Mobility Disabilities*
Faculty Mentor: Sheryl Ryan, Occupational Therapy

11:05 – 11:15 a.m.  Brandon Lawton, John Lorenzo, Sandra Ngo, Faith Ignacio
*Experiences of Occupational Therapists Working with Unhoused Populations*
Faculty Mentor: Sheryl Ryan, Occupational Therapy
Natural Sciences Undergrad Oral
February 17 — Virtual

Morning Session: 10:15 – 11:30 a.m.

10:15 – 10:25 a.m.  Kirsten Clerre Rafanan
   *The Particle Size and Shape of Hydroxyapatite in the Presence of Fish Antifreeze Protein and Chondroitin Sulfate*
   Faculty Mentor: Sen Wang, Chemistry and Biochemistry

10:25 – 10:35 a.m.  Alexis Widmann, Chandra Jones
   *Corona Coloration of Encelia Farinosa*
   Faculty Mentor: Sonal Singhal, Biology

10:35 – 10:45 a.m.  Carlos Zuniga
   *Examining Genetic Signatures Fast and Slow Growing Tumors in African American Triple-Negative Breast Cancer*
   Faculty Mentor: Shehla Pervin, Biology

10:45 – 10:55 a.m.  Arman Izadifar
   *Digital Forensics*
   Faculty Mentor: Mohsen Beheshti, Computer Science
# Behavioral and Social Sciences Undergrad Poster

**February 17 — LSU Ballroom A & B**

**Morning Session: 10:15 – 11:30 a.m.**

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<td>Does Alcohol Recovery Identity Predict Alcohol Consequences: An Examination of Heavy Drinkers</td>
<td>Arrianna Lister, Anita Kapila-Ramirez, Nicole C. Figueroa-Sierra, Juana Hernandez Jaime</td>
<td>Kevin Montes, Psychology</td>
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<td>Recognizing Our Power: Experiences of Latinx Immigrant Predominantly Spanish-Speaking Parents During COVID-19</td>
<td>Arhelia Figueroa</td>
<td>Joanna Perez, Sociology</td>
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<td>Lukas Daniels</td>
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<td>Are You the Culprit?: How Workplace Incivility Impacts Black LGBTQ Members</td>
<td>Aliza Potter</td>
<td>Ashley Membere, Psychology</td>
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<td>Primate Influence on the Evolution of the Human Language</td>
<td>Alicia Melich</td>
<td>Sarah Lacy and Lawrence Ramirez, Anthropology</td>
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<td>Gender Differences in College Students’ Coping Strategies and Mental Health Outcomes During the COVID-19 Pandemic</td>
<td>Margarita Alvarez, Jennifer Hernandez</td>
<td>Giacomo Bono, Psychology</td>
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<td>Desde Tenochtitlan a los Altiplanos: The Nahua and their Sixteenth-Century Conquest Mission in Guatemala</td>
<td>Cesar Ovando</td>
<td>Ken Seligson, Anthropology, and Doris Namala, History</td>
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<td>Supporting First-Year Student Success through a Combination of High-Impact Educational Practices</td>
<td>Jennifer Hernandez, Margarita Alvarez</td>
<td>Philip A. Vieira, Psychology</td>
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<td>Academic Function, Grit, and COVID-19</td>
<td>Alexander Camarillo</td>
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Health and Clinical Sciences Grad Oral

February 17 — Virtual

Morning Session: 10:15 – 11:30 a.m.

10:15 – 10:25 a.m. Carlos Mora
Empowerment or Endangerment? An Examination of Social Media Use in Healthcare Organizations
Faculty Mentor: Rui Sun, Public Administration, and Bing Xu, Marketing

10:25 – 10:35 a.m. Christine Feld, Nicholas Fernando
Exploring Culture Misconception and Fear of Retribution as Barriers to Reporting Elder Abuse Among Undergraduate and Graduate Nursing Students
Faculty Mentor: Sally Mahmoud, Nursing

10:35 – 10:45 a.m. Jennifer Robbins, Andie Cano, Monica Craft, Catherine Cummings
Occupational Justice for Women Survivors of Intimate Partner Violence
Faculty Mentor: Sheryl Ryan, Occupational Therapy

10:45 – 10:55 a.m. Rebecca Moore, Yevgeny Medalle, Rachel Lee
Exploring Occupational Participation in LGBTQIA+ Individuals Following the Coming Out Process: A Narrative Study
Faculty Mentor: Sheryl Ryan, Occupational Therapy
Natural Sciences Undergrad Oral
February 17 — LSU 325
Morning Session: 10:15 – 11:30 a.m.

10:15 – 10:25 a.m.  George Contreras, Itzel Ixta
Genetic & Geographical Evidence for New Species of Notoscincus
Faculty Mentor: Sonal Singhal, Biology

10:25 – 10:35 a.m.  Benjamin Garcia Morales
Density of Length Spectra of Natural Numbers
Faculty Mentor: Wai Yan Pong, Mathematics

10:35 – 10:45 a.m.  Jeisson Pulido
Magnetic Flux Rope Reconstruction in the Heliospheric Current Sheet using Parker Solar
Probe Data
Faculty Mentor: Kristoff Paulson (Harvard), Physics

10:45 – 10:55 a.m.  Joshua Quiran
Affinity Purification of Antibodies (2G8) from Endotoxins
Mentor: Teklegiorgis Ghebremariam (UCLA), Biology
Behavioral and Social Sciences Undergrad Oral

February 17 — Virtual

Afternoon Session: 12:30 – 1:30 p.m.

12:30 – 12:40 p.m.  Jennyfer Ibarra
Southern California ESL High School Teachers: Examining Curriculum Placement and Implicit Bias with Latinx ESL Students
Faculty Mentor: Alfredo Gonzalez, Chicana and Chicano Studies

12:40 – 12:50 p.m.  Maria De La Torre
E-cigarette Reduces Apoptosis in Prolonged Latent Breast Tumors
Faculty Mentor: Shehla Pervin, Biology

12:50 – 1:00 p.m.  Yesenia Gonzalez
Impacts of Racism and Discrimination on Mental Health
Faculty Mentor: Giacomo Bono, Psychology

1:00 – 1:10 p.m.  Claudia Blandino
First-Year Pandemic: Virtual Learning Experiences In the K-12 System
Faculty Mentor: Corina Diaz (Compton College), Sociology

1:10 – 1:20 p.m.  Lauren Casillas
A New Wave of Linguistics
Faculty Mentor: Iara Mantenuto, English
Arts and Humanities Undergrad Oral
February 17 — LSU 325
Afternoon Session: 12:30 – 1:30 p.m.

12:30 – 12:40 p.m.  Caitlin McClister
American Duplicity: How the FDR Administration and American Red Cross Voluntary Aid Bypassed Millions of Jewish Refugees during World War II
Faculty Mentor: Andrea Johnson and Christopher Monty, History

12:40 – 12:50 p.m.  Daniella J. Enriquez
The Making of Prohibition: How Immigrants Became the Reason Prohibition was Enacted into a Law
Faculty Mentor: Kate Fawver and Andrea Johnson, History

12:50 – 1:00 p.m.  Michelle Avila
Depictions of Fat Women Through the Gazes of Female and Male Artists During the Baroque Period
Faculty Mentor: Kirstin L. Ellsworth, Art and Design, and Andrea Johnson, History
Health, Nutrition, and Clinical Sciences Grad Poster
February 17 — LSU Ballroom A & B
Afternoon Session: 12:30 – 1:30 p.m.

Kelly Cox-Gonzalez, Cale Foreman, Adam Watson
The Uncanny Valley Phenomenon in Relation to Upper Extremity Prosthetics as Viewed by Amputee & Non-Amputee Populations
Faculty Mentor: Jennifer Lučarević, Orthotics and Prosthetics

Paul Mindemann, Mario Jimenez, Nick Mastrandrea, Jacob Schulman
The Relationship Between Residual Limb Length and Gait Kinematics in People with Unilateral Transradial Amputation
Faculty Mentor: Julie Werner, Occupational Therapy

Jose Garcia, Taylor Warren, Rachel Kroener, Martha Bretado
Illinois Agility Test Scores for Wheelchair Basketball
Faculty Mentor: Jennifer Lučarević, Orthotics and Prosthetics

Michael Wood, Kimberly Campos, Cindy Munoz Hussam Alghamdi
Air Pollution Distribution Among Vulnerable Populations in the South Los Angeles Region
Faculty Mentor: Parveen Chhetri, Earth Science

Amani Weekes-Daniel, Nicole Halfman, Quinn Mehigan
Athletic Foot Posture and Performance in Men’s Varsity and Junior Varsity Lacrosse
Faculty Mentor: Jennifer Lučarević, Orthotics and Prosthetics

Natalie Wong, Kimberly Iniguez, William Harris
Comparison of Functional Performance of People with Transfemoral Amputation Using a Microprocessor Knee Versus Mechanical Knee
Faculty Mentor: Jennifer Lučarević, Orthotics and Prosthetics
Natural Sciences Grad Poster
February 17 — LSU Ballroom A & B
Afternoon Session: 12:30 – 1:30 p.m.

Alicia Salmeron  
*The Effects Native Plants and Fertilizers have on Nutrient Levels and Soil Infiltration Rates within two Different Sites on the CSUDH Campus*
Faculty Mentor: Charlene McCord, Earth Science

Paul Dinh  
*Accelerating Coral Growth Rates*
Faculty Mentor: Charlene McCord, Biology

Armando Garcia, Harmony Gregorio  
*Spatial Analysis of the Waste Management Program at CSUDH*
Faculty Mentor: Parveen Chhetri, Earth Science

Jessica Ledesma, Dulce Andrea Garcia  
*Using GIS to Assess Vegetation Structure, Composition, and Recovery in the Angeles National Forest*
Faculty Mentor: Parveen Chhetri, Earth Science

Elizabeth Hernandez, Angelo De Guzman  
*Maria Joyas, Astrid Molina*

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Elizabeth Hernandez, Angelo De Guzman  
*Maria Joyas, Astrid Molina*
Graduate Roundtable
February 17 — LSU 320
Afternoon Session: 12:30 – 1:30 p.m.

12:30 – 12:40 p.m.  Eli Sarceno

*Ethnographic Roundtable Discussion*
Faculty Mentor: Katy M. Pinto, Sociology

12:40 – 12:50 p.m.  Tanya Jimenez

*Homelessness Among People Incarcerated as Youth*
Faculty Mentors: Rui Sun and Hugo Asencio, Public Administration
Education and Social Sciences Grad Oral
February 17 — Virtual
Afternoon Session: 1:30 – 2:30 p.m.

1:30 – 1:40 p.m. Maria Torres
Waiting for Education Desegregation? How to Drop Out Factories Produce Juveniles into Prison
Faculty Mentor: Jen Stacy, Sociology

1:40 – 1:50 p.m. Casey Caprioglio
The Mental Health of Medical Interns during the COVID-19 Pandemic: A Mixed Methods Analysis of Gender and Institutional Failures
Faculty Mentor: Kelin Li, Sociology

1:50 – 2:00 p.m. Norah Alnassar
An Investigation of Saudi English Second Language Students’ Acquisition Prepositions
Faculty Mentor: Iara Mantenuto, English

2:00 – 2:10 p.m. Kelsie Traylor
CRT and the Fight for K-12 Education
Faculty Mentor: Katy Pinto, Sociology
Natural Sciences Undergrad Poster II
February 17 — LSU Ballroom A & B
Afternoon Session: 1:30 – 2:30 p.m.

Cindy Munoz
High- and Low-Level Exposure to Particle Pollution in Unrepresented Cities
Faculty Mentor: Tianjun Lu, Earth Science

Cindy Munoz
Air Quality Monitoring in Low-Income Communities
Faculty Mentor: Tianjun Lu, Earth Science

Jorge Hernandez Garcia
Identification of Putatively Novel Natural Products from a Marine Derived Geotrichum silvicola Fungal Strain
Faculty Mentor: Erin McCauley, Chemistry and Biochemistry

Edwin Chavez Santana, Jorge Hernandez Garcia, Jeffrey Ocampo, Sabrina Barata
Identifying Novel Chemical Scaffolds from Marine Derived Fungi using Mass Spectrometry-based Molecular Networking
Faculty Mentor: Erin McCauley, Chemistry and Biochemistry

Nathan Williams, Amber Alvarado, Arianna Lister
Characterization of HIV-1 P17 Interaction with Heparan Sulfate
Faculty Mentor: Kari Pederson, Chemistry and Biochemistry

Jessica Ledesma, David Saldana, Andrea Garcia, Raju Bista
Tree-ring Growth Pattern Along the Elevation Gradient in San Jacinto Mountain, CA
Faculty Mentor: Parveen Chhetri, Earth Science
Behavioral and Social Sciences Undergrad
Oral February 17 — LSU 326

Afternoon Session: 1:30 – 2:30 p.m.

1:30 – 1:40 p.m.  Tracy Bertka, Anita Kapila-Ramirez  
Morning versus Evening Exercise—What’s Better for Your Diet? Evidence From an Event-Related Potential (ERP) Study  
Faculty Mentor: Kaylie Carbine, Psychology

1:40 – 1:50 p.m.  Nicole Figueroa-Sierra  
Phone Notifications Study  
Faculty Mentor: Nancy Cheever, Communications

1:50 – 2:00 p.m.  Alex (Adriana) Perez  
Adoption of Distributed Energy Resources in Disadvantaged Communities and Climate Change related Challenges  
Faculty Mentor: Parveen Chhetri, Earth Science
Undergraduate Roundtable
February 17 — LSU 320
Afternoon Session: 1:30 – 2:30 p.m.

1:30 – 1:40 p.m.  Brianna Marquez
Composting Comparative Analysis
Faculty Mentor: Jenney Hall, Interdisciplinary Studies

1:40 – 1:50 p.m.  Aysa Collins
Understanding the Experience of Black Women During Prenatal Care in Underrepresented Communities
Faculty Mentor: Enrique Ortega, Health Science

1:50 – 2:00 p.m.  India Sanders
COVID-19 and Mental Health
Faculty Mentor: Ashley Membere, Psychology

2:00 – 2:10 p.m.  Jasmine Abang
Perception Is Everything: Deconstructing Perceptions Around Mexican-American Immigrant Women
Faculty Mentors: Tahereh Aghdasifar, Women’s Studies, and Kerry Shannon, History

2:10 – 2:20 p.m.  Aliza Potter, Diana Aguirre, Ronald Jackson, Dwasha, Ezequiel Minero, Alexa Vasquez, Karl Lopez, Diana Robinson, Theres, Anahi Gomez
Making the Invisible Visible; Resilience through Awareness of Microaggressions on CSUDH Students
Faculty Mentors: Monique Turner, Steven Frieze, and Erin Barrett, Psychology
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