

Presenter List, sorted by last name

Poster # Presenter name

B-20 Abdolmanafi, Sheila (Irvine Valley)
B-12 Acevedo Piña, Janet Monserrat (Orange Coast)
A-12 Agarie, Alyssa (Irvine Valley)
A-8 Alvarez, David (Citrus)
B-13 Alvarez, Sam (Orange Coast)
A-2 Angulo, Saray (Cypress)
B-16 Becerra, Susana (Santiago Canyon)
B-24 Castaneda, Eduardo
B-22 Chan, Megan
B-22 Couyoumjian, Claire
B-24 Cusimano, Anthony
A-6 Estrada, Eric (Golden West)
B-7 Foroutan, Pantea (Orange Coast)
B-23 Franza, Deborah
B-3 Ghatas, Avrena (Golden West)
B-4 Gomez, Andrew (Orange Coast)
B-22 Gonzalez, Alondra
B-24 Gonzalez, Analiese
A-9 Guyer, Jenna (Cypress)
B-1 Guzman, Cesar (Santiago Canyon)
B-2 Hernandez Lopez, Luis Eduardo
A-18 Hernandez, Jackie (Fullerton)
B-18 Ho, Hung Anh (Santa Ana)
A-13 Hsu, Ann (Cypress)
A-17 Hury, Eric (Citrus)
A-4 Islam, Areeba (Irvine Valley)
A-22 Kernal, Sarah
B-23 Krager, Aubree
B-22 Lai, Devin
A-23 Lang, Gary

Poster # Presenter name

B-17 Leyva, Arai (Citrus)
B-14 Lira, Anthony (Cypress)
A-7 Macias, Jesus (Cypress)
A-1 Mauga, Elijah (Fullerton)
A-20 McNicol, Amber (Saddleback)
B-19 Medina, Sussana (Citrus)
A-14 Melendez, Bryan (Santiago Canyon)
B-9 Nguyen, Liam (Santa Ana)
A-3 Paul, Riti (Santiago Canyon)
B-24 Peng, Melissa
A-15 Perez, Jacob (Fullerton)
A-10 Pham, Maia (Orange Coast)
B-10 Ramirez, Gael (Santa Ana)
B-11 Ramos, Angelica (Fullerton)
A-22 Rehome, Samantha
B-15 Ruiz, Dylan (Fullerton)
B-6 Samari, Tanya
A-23 Sampson, Nkosi K
A-21 Scanlon, Riley (Santiago Canyon)
B-21 Serna, Derek (Golden West)
A-22 Sprengel, Scott
A-19 Ta, Ngoc Hong Nhi (Santa Ana)
A-22 Tamizifar, Ahoora
A-5 Tran, Ngoc
A-11 Van, Tien (Golden West)
B-8 Vien, Man (Santa Ana)
A-16 Villegas, Aidan (Irvine Valley)
B-5 Vo, Uy
B-22 Vu, Sean

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Project RAISE Peer Advisors and Student Assistants

Undergraduate Research Experience Student Research Mentors

Undergraduate Research Experience Faculty Mentors

Session A | 1:50-2:20

Poster	Title	Presenter(s), Author(s), *Faculty	Faculty Mentor
A-01	Study of oxygen transport membranes in $\text{La}_x\text{Ca}_{1-x}\text{FeO}_3$ and $\text{La}_x\text{Ba}_{1-x}\text{FeO}_3$	Elijah Mauga ¹	Dr. Allyson M. Fry-Petit
A-02	Discovering the relationship between excited state anti-aromaticity and photobasicity	Saray Angulo ¹	Dr. Andrew Petit
A-03	Synthesis of lithium copper pyrophosphate as a potential cool pigment	Riti Paul ¹	Dr. Joya Cooley
A-04	<i>In silico</i> & <i>in vitro</i> development of DNA based aptamer for small molecules	Areeba Islam ¹	Dr. Stevan Pecic
A-05	Comparing accuracy level of different machine learning models	Ngoc Tran ³	Dr. Doina Bein
A-06	Predicting vehicle acceleration using supervised machine learning models	Eric Estrada ¹	Dr. Doina Bein
A-07	Using pair trading analysis to examine the impact of COVID-19 on the stock market	Jesus Macias ¹	Dr. Doina Bein
A-08	A comprehensive surveillance system for tracking disease outbreaks: A case study of Lassa Fever	David Alvarez ¹	Dr. Sampson Akwafuo
A-09	Assessing potential changes in salt dome cap rock calcite carbon sources with depth, Boling Dome TX	Jenna Guyer ¹	Dr. Sean Loyd
A-10	An investigation of unfamiliar gas presence and focused laser incidence angle on thermocavitation bubble behavior	Maia Pham ¹	Dr. Darren Banks
A-11	Improving fuel efficiency in semi trucks	Tien Van ¹	Dr. Salvador Mayoral
A-12	Study of filaments of the nematode <i>T. aceti</i>	Alyssa Agarie ¹	Dr. Anton Peshkov
A-13	Investigation of the quasi-universal relation with equation of state	Ann Hsu ^{1,2} , Jocelyn Read [*] , Lami Suleiman	Dr. Jocelyn Read
A-14	Flame indication and remote electronics (F.I.R.E.): LoRa radio communication system	Bryan Melendez ¹	Dr. Ankita Mohapatra
A-15	Leveraging supervised learning for detection of malicious hardware designs	Jacob Perez ¹	Dr. Jaya Dofe
A-16	Adapting Raspberry Pi for excavator remote control	Aidan Villegas ¹	Dr. Rakesh Mahto
A-17	Training and evaluating machine learning transformer models to perform various mathematical tasks	Eric Hury ¹	Dr. Yu Bai
A-18	Effect of host microbiota on <i>Drosophila melanogaster</i> development time	Jackie Hernandez ¹	Dr. Parvin Shahrestani
A-19	<i>Drosophila melanogaster</i> longevity evolves in response to selection	Ngoc Hong Nhi Ta ¹	Dr. Parvin Shahrestani
A-20	<i>Acinetobacter baumannii</i> response at the transcriptomic level when exposed to <i>Lactocaseibacillus rhamnosus</i> CRL2244	Amber McNicol ¹ , Maria Soledad Ramirez [*]	Dr. Maria Soledad Ramirez
A-21	Optimization of a nuclear export assay for RNA binding protein PTBP	Riley Scanlon ¹	Dr. Alison Miyamoto
A-22	Predicting energy consumption in California	Logan Clark , Sarah Kernal ⁴ , Samantha Rehome ⁴ , Scott Sprengel ⁴ , Ahoora Tamizifar ⁴	Dr. Jessica Jaynes
A-23	Hippocampal ensembles represent sequential relationships among an extended sequence of nonspatial events	Gary Lang ⁴ , Jayden Tani , Luke Makishima , Nkosi K Sampson ⁴ , Sandra Nguyen	Dr. Jessica Jaynes

Session B | 2:25-2:55

Poster	Title	Presenter(s), Author(s), *Faculty	Faculty Mentor
B-01	Determining useful characteristics of oxygen transport membranes through $\text{La}_{y-1}\text{Sr}_y\text{FeO}_3$ and $\text{La}_{y-1}\text{Ba}_y\text{FeO}_3$	<u>Cesar Guzman</u> ¹	Dr. Allyson M. Fry-Petit
B-02	Exploration into alternative synthetic methods for solids state chemistry: Intercalation of photobases in 2D inorganic materials & microwave synthesis for Ba_3MoO_6 as NCOT	<u>Luis Hernandez Lopez</u> , <u>Perla Lea</u> , <u>George Bodossian</u> , <u>Allyson M. Fry-Petit</u> *	Dr. Allyson M. Fry-Petit
B-03	Structure-function relationships involving anti-aromaticity and photobasicity for quinolines	<u>Avrena Ghata</u> ¹	Dr. Andrew Petit
B-04	Determining the role of acetylation in RNA binding protein function	<u>Andrew Gomez</u> ¹ , <u>Niroshika Keppetipola</u> *, <u>Chris Nuñez</u>	Dr. Niroshika Keppetipola
B-05	Bankruptcy prediction tool	<u>Uy Vo</u> ³	Dr. Doina Bein
B-06	Wildfires in California: Machine learning with random forest classification	<u>Tanya Samari</u> ³	Dr. Doina Bein
B-07	Building a logistic regression model for loan default risk assessment	<u>Pantea Foroutan</u> ¹	Dr. Doina Bein
B-08	Immersive virtual reality: Analyzing the impact of user characteristics	<u>Man Vien</u> ¹	Dr. Doina Bein
B-09	Development of a GIS-enabled hybrid dashboard and app for Mpx outbreak surveillance system	<u>Liam Nguyen</u> ¹	Dr. Sampson Akwafuo
B-10	Mineral phases content and comparison with calcite carbon sources of salt dome cap rock from Boling Dome TX	<u>Gael Ramirez</u> ¹	Dr. Sean Loyd
B-11	Advancing mobility: Innovative lower limb prosthetic design	<u>Angelica Ramos</u> ¹	Dr. Yong Seok Park
B-12	Exploring Industry 4.0 through PLC smart factory integration	<u>Janet Monserrat Acevedo Piña</u> ¹	Dr. Sagil James
B-13	Modeling black holes using numerical relativity	<u>Samuel Alvarez</u> ^{1,2}	Dr. Geoffrey Lovelace
B-14	Measuring scattered light from the reflectance standard material Spectralon	<u>Anthony Lira</u> ^{1,2}	Dr. Joshua Smith
B-15	Flame indication and remote electronics (F.I.R.E.): LoRa radio communication system	<u>Dylan Ruiz</u> ¹	Dr. Ankita Mohapatra
B-16	Machine learning-based hardware Trojan detection in FPGAs	<u>Susana Becerra</u> ¹	Dr. Jaya Dofe
B-17	Incorporating AI in construction to automate excavator operations	<u>Arai Leyva</u> ¹	Dr. Rakesh Mahto
B-18	Fracture detection for artificial intelligence	<u>Hung Anh Ho</u> ¹	Dr. Yu Bai
B-19	The microbial development of <i>Drosophila melanogaster</i> and its effects towards generational evolution	<u>Sussana Medina</u> ¹	Dr. Parvin Shahrestani
B-20	Novel compounds that reduce HEK293 cell proliferation mediate their effect through the beta-catenin signal transduction pathway	<u>Sheila Abdolmanafi</u> ¹	Dr. Nilay Patel
B-21	Bactericidal activity of extracellular products' of <i>Lactocaseibacillus rhamnosus</i> CRL2244 against <i>Acinetobacter baumannii</i>	<u>Derek Serna</u> ¹ , <u>Maria Soledad Ramirez</u> *	Dr. Maria Soledad Ramirez
B-22	Investigating the unique contribution of distal upper extremity motor deficits to stroke impairment and functional outcomes	<u>Claire Couyoumjian</u> ⁴ , <u>Alondra Gonzalez</u> ⁴ , <u>Devin Lai</u> ⁴ , <u>Sean Vu</u> ⁴ , <u>Megan Chan</u> ⁴	Dr. Jessica Jaynes
B-23	An exploration of infant smartphone usage amongst low-income stressed parents	<u>Aubree Krager</u> , <u>Deborah Franza</u>	Dr. Jessica Jaynes
B-24	Impact of Mediterranean-DASH diets on MPN patient symptoms	<u>Eduardo Castaneda</u> ⁴ , <u>Anthony Cusimano</u> ⁴ , <u>Melissa Peng</u> ⁴ , <u>Milka Perez</u> , <u>Analiene Gonzalez</u> ⁴	Dr. Jessica Jaynes