



CALIFORNIA STATE UNIVERSITY
LONG BEACH

College of Natural Sciences & Mathematics

▲ **2023 COMMENCEMENT CEREMONY**



Photo above: Carlson Bloc Bell Tower. In 1965, the International Sculpture Symposium contributed nine monumental pieces and designs to CSULB. These works received credits in 21 national and international publications, and, in 1972, additional community funds in the form of a trust provided for the completion of the Carlson Memorial Tower, designed by French sculptor Andre Bloc.

Welcome to

CALIFORNIA STATE UNIVERSITY LONG BEACH

SEVENTY-FOURTH ANNUAL COMMENCEMENT CEREMONIES

California State University, Long Beach is a member of the 23-campus California State University (CSU) system. The initial college, known then as Los Angeles-Orange County State College, was established on January 29, 1949, and has since grown to become one of the state's largest universities.

The first classes in 1949 were held in a converted apartment building on Anaheim Street and the cost to enroll was just \$12.50. The 169 transfer students selected for the 25 courses offered in Teacher Education, Business Education, and Liberal Arts were taught by 13 faculty members.

Enrollment increased in 1953 when freshman and sophomore students were admitted.

Expansion, in acreage, degrees, courses and enrollment continued in the 1960s, when the educational mission was modified to provide instruction for undergraduate and graduate students through the addition of master's degrees.

In 1972, the California Legislature changed the name to California State University, Long Beach. Today, more than 37,000 students are enrolled at Cal State Long Beach, and the campus annually receives high rankings in several national surveys.

What students find when they come here is an academic excellence achieved through a distinguished faculty, hard-working staff and an effective and visionary administration. The faculty's primary responsibility is to create, through effective teaching, research and creative activities, a learning environment where students grow and develop to their fullest potential.

Today you are attending one of seven Commencement Ceremonies, taking place over three days, to celebrate the accomplishments of the more than 11,000 graduates and candidates. They are earning doctoral, master's and bachelor's degrees as well as credentials and certificates. We are proud of our graduating students, who now go forward to serve society.

Welcome to our 74th annual Commencement Ceremonies.

A Message from the President...

Dear Graduate,



As you move your cap's tassel from right to left, remember that this moment marks the end of one journey and the beginning of another. It is now your responsibility to take the knowledge and experiences gained during your time at The Beach and use them to make a positive impact in your communities. Remember: your education continues throughout your life – stay curious, passionate, and committed to your goals. And, most importantly, work to make this world a better place.

I want to thank the many faculty, staff, alumni, families, and friends who helped make this day possible for our graduates. On behalf of our graduates, I thank you for your time, love, and encouragement. Class of '23, today we honor your incredible achievements, but we also look ahead to your future as Beach Alumni for life!

Go Beach!

Sincerely,

A handwritten signature in black ink that reads "Jane Close Conoley". The signature is fluid and cursive, with the first name "Jane" being the most prominent.

Jane Close Conoley, Ph.D.
President

A Message from the Interim Chancellor...

Dear Class of 2023,



I offer you my most enthusiastic and heartfelt congratulations on achieving this consequential milestone on the journey of a lifetime.

Today, we celebrate you – and all the hard work, perseverance and scholarship that brought you here. You will undoubtedly look back on this occasion for many years to come, filled with a well-earned sense of pride in your accomplishments – and maybe even a sense of relief for attaining a goal that, at times, might have felt more than a little daunting.

As numerous forces upended our world, you held firmly onto your dreams and persisted in your studies through challenges none of us could have foreseen or imagined. You have by necessity developed and demonstrated skills – far beyond your academic work – that will ensure your continued success: resilience, flexibility, resourcefulness, patience and tenacity. Your resolve shines brightly as a symbol of hope and optimism. It is admirable. And it is inspiring.

Of course, you did not make this journey alone. We also recognize the faculty who deepened your knowledge and enabled you to see the world from new perspectives. We acknowledge the counselors, tutors, advisors, librarians, coaches and support staff who championed you at every turn. And we appreciate the family, friends and loved ones who encouraged you, uplifted you and supported you along the way. Please remember to thank these important people and let them know how much their support means.

This celebration marks a new beginning for you – a time to commence a new life, filled with opportunities and prospects made possible by your degree from the California State University.

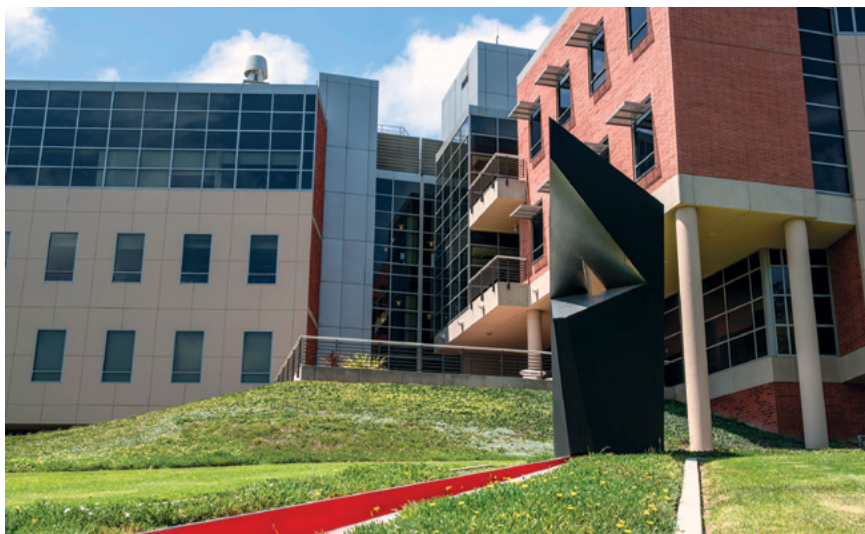
With this rite of passage we call “commencement,” you will join a dynamic, global network of more than 4 million CSU alumni. They are a remarkable force for good, and I am certain your addition to their ranks will multiply their contributions to our communities, to our state and to the world. I ask that – in the Cal State spirit – you use the knowledge, skills and personal qualities you have developed to work for justice, seek opportunities to foster equity and always uplift and empower others. Stay connected to your campus and look for ways to give back. And whenever possible, support future generations who aspire to follow in your footsteps.

On behalf of the entire California State University, again, congratulations.

Sincerely,

A handwritten signature in black ink that reads "Jolene Koester". The signature is fluid and cursive.

Jolene Koester
Interim Chancellor



COLLEGE OF NATURAL SCIENCE & MATHEMATICS

The College of Natural Sciences and Mathematics is a center of scientific learning in Long Beach offering excellent educational opportunities. The College's vision is to educate the next generation of scientists and mathematicians, as well as a science-literate citizenry, through instructional programs that serve the diverse community of Long Beach and beyond. Our student-centered instructional and research environment fosters equity, diversity, and access. We mentor students for lifelong success by elevating character and supporting skill set development and growth mindset. Students gain scientific knowledge through research and also become advocates for applying science and mathematics in our community. Outstanding teaching and research programs are integrated within the departments of Biological Sciences, Chemistry and Biochemistry, Geological Sciences, Mathematics and Statistics, Physics and Astronomy, Science Education, and the program of Environmental Science and Policy.

College faculty conduct research projects that offer opportunities for our students, both graduate and undergraduate, to solve problems and be involved in cutting-edge research addressing the important issues of today in a wide variety of subjects including heart and neurological diseases, astrophysics, mathematical modeling, improving science teaching, machine learning/data science, designing and understanding new materials, cancer drug delivery methods, earthquakes, and environmental issues such as overfishing, pollution, and invasive species. Faculty mentored research encourages students to develop critical and analytical thinking in the classroom, the research lab, and the field setting. Graduates are prepared to fill critical roles in industry and they also form a substantial pipeline of K-12 science and math teachers for California.

Committed to creating an equitable and inclusive environment for our students, staff, and faculty, the College ranks among the top master's-granting universities in the nation for producing graduates who go on to earn doctoral degrees in science and math research fields. The faculty, staff, and administrators of the College are proud of their graduates and wish them success and satisfaction in their careers.

College of Natural Sciences & Mathematics

RICHARD D. GREEN DEAN

Curtis Bennett

DEPARTMENT CHAIRS AND PROGRAM DIRECTORS

BIOLOGICAL SCIENCES

Jesse Dillon, Ph.D.

University of Oregon, Eugene, Oregon

CHEMISTRY AND BIOCHEMISTRY

Lijuan Li, Ph.D.

McMaster University, Hamilton, Ontario, Canada

ENVIRONMENTAL SCIENCE AND POLICY

Christine Whitcraft, Ph.D.

Scripps Institution of Oceanography, University of California San Diego

GEOLOGICAL SCIENCES

Lora Stevens, Ph.D.

University of Minnesota, Minneapolis, Minnesota

MATHEMATICS AND STATISTICS

Will Murray, Ph.D.

University of California, Berkeley

PHYSICS AND ASTRONOMY

Prashanth Jaikumar, Ph.D.

State University of New York At Stony Brook, New York

SCIENCE EDUCATION

James Kisiel, Ph.D.

University of Southern California, Los Angeles

▲ HONORS AND AWARDS

GRADUATE DEAN'S LIST OF UNIVERSITY SCHOLARS AND ARTISTS

Vinh Tran, M.S. Physics

Miguel Steiner Palma, M.S. Biochemistry

Emma Siegfried, M.S. Biology

Trang Tri Thu Tran, M.S. Geology

OUTSTANDING COLLEGE MASTERS GRADUATES

RICHARD D. GREEN DEAN'S GRADUATE SCHOLAR AWARD

Wilson Hsu, M.S. Mathematics

Heather Anne Calabrese, M.S. Science Education - Informal Science Education

OUTSTANDING THESIS AWARDS

Patrick Thomas Rex, *M.S. Biology*

Ricky Rodriguez, *M.S. Chemistry*

Matthew Thomas Schweiger, *M.S. Geology*

Jeffrey Bear Thompson, *M.S. Applied Statistics*

Maya H. Martinez, *M.S. Physics*

Laura Vanessa Crespo, *M.S. Science Education - Elementary and Middle School Science Education*

GRADUATING PHI BETA KAPPA NOMINEES FROM MEMBERS IN CLASS 2022-2023

Richelle Shu Chow, *Biological Sciences*

Alexxandra Hurtado, *Biological Sciences*

Amia Rosaleina Weiss, *Biological Sciences*

Ethan Huang, *Mathematics and Statistics*

Alejandro Smit, *Physics and Astronomy*

PHI BETA KAPPA NOMINEES FROM MEMBERS IN CLASS 2021-2022

Aimee Tran, *Environmental Science and Policy*

DEPARTMENTAL HONORS

BIOLOGICAL SCIENCES

Donita Jasmine Calayag Calma, *B.S. Biology - Education*

Sarah Michelle Durcan, *B.S. Biology*

Ciana Elizabeth Suffel, *B.S. Biology*

Elizabeth Cora Moses, *B.S. Biology*

Haylee Michelle Kramar, *B.S. Marine Biology*

Taylor Marjorie Earle, *B.S. Marine Biology*

Thien Nhan Tran, *B.S. Biology - Molecular Cell Biology and Physiology*

He Jiang, *B.S. Biology - Molecular Cell Biology and Physiology*

Giovannie Georgio Mitri, *B.S. Biology - Molecular Cell Biology and Physiology*

Howard Ed Terrence, *B.S. Microbiology*

Allison Linskey, *B.S. Biology - Zoology, Botany, and Ecology*

Annalise Iman Money, *B.S. Biology - Zoology, Botany, and Ecology*

Matt Acosta, *M.S. Microbiology*

Patrick Rex, *M.S. Biology*

Jordan Rodriguez, *M.S. Biology*

CHEMISTRY AND BIOCHEMISTRY

Jacqueline Chen, *B.S. Chemistry*

Jackson Dinh, *B.S. Biochemistry*

Nolan Johnson, *B.S. Biochemistry*

Susan Nguyen, *B.S. Chemistry*

Phuong My Nguyen, *B.S. Biochemistry*

Anh Dang, *M.S. Chemistry*

Kareem Asham, *M.S. Chemistry*

Jocelyn Dominguez, *M.S. Chemistry*

GEOLOGICAL SCIENCES

Alexa Cruz, *B.S. Geology*

Roxy Schulman, *B.S. Geology*

Hannah Elthea Fitzpatrick, *B.S. Geology*

MATHEMATICS AND STATISTICS

Luis Jovel, *B.S. Mathematics - Applied Mathematics*

Vy Nguyen, *B.S. Mathematics - Mathematics Education*

Gregory Lent, *B.S. Applied Statistics*

Alonzo Hinojosa, *B.S. Mathematics - Mathematics Education*

Seth Malonson, *B.S. Mathematics - Applied Mathematics*

Ally Pine, *B.S. Mathematics*

Thao Thao Nguyen, *B.S. Mathematics*

Daniel Lam, *M.S. Mathematics - Applied Mathematics*

Erick Hageo Castillo, *M.S. Applied Statistics*

Safwat Rahman, *M.S. Mathematics - Applied Mathematics*

PHYSICS AND ASTRONOMY

Epifanio Garcia, *B.S. Physics*

Michelle Annette McKenzie, *B.S. Physics*

Kenta Kodama, *B.S. Physics*

Angelique Noel Brulc, *M.S. Physics - Applied Physics*

Laura Tandy, *M.S. Physics - Computational Physics*

Ryan Tetsuo Mikzukami, *M.S. Physics - Applied Physics*

SCIENCE EDUCATION

Maira Rodriguez, *M.S. Science Education - Elementary and Middle School Science Education*

Rick O'Connor, *M.S. Science Education - Informal Science Education*

OUTSTANDING COLLEGE BACCALAUREATE GRADUATES

RICHARD D. GREEN DEAN'S AWARD

Adrian Lopez-Lopez, *B.S. Biology - Molecular Cell Biology and Physiology*

Matthew G. Plazola, *B.S. Biochemistry*

Michael Daniel Butler, *B.S. Environmental Science and Policy*

Aaron C. Martin, *B.S. Geology*

Carlos Rodriguez, *B.S. Mathematics - Mathematics Education*

Caleb Anderson, *B.S. Physics - Materials Science*

RICHARD D. GREEN DEAN'S OUTSTANDING STUDENT TEACHER IN SCIENCE

Dream Le, *Single Subject Credential - Biological Sciences*
B.S. Biology, CSULB



College of Natural Sciences & Mathematics

Candidates for the Master's Degree

▲ BIOLOGICAL SCIENCES

Master of Science - Biology

Alejandra Aguilar

Thesis: *Comparing the amount of myoglobin found in the medial gastrocnemius in mice with genetically inherited behavior for increased activity vs. wheel access.*

Advised by: Dr. Bryan Rourke

Delaney Anderson

Thesis: *Genetic Analysis of Two Potential Leaf Senescence Regulators Predicted by a Gene Regulatory Network in Arabidopsis Thaliana*

Advised by: Dr. Judy Brusslan

Anita Arenas

Thesis: *Effects of Iris pseudacorus on Invertebrate Communities in a Southern California Estuary*

Advised by: Dr. Christine Whitcraft

Alex Bartolo

Thesis: *A Test of the Species Sorting Hypothesis in Avian Communities Along Three Latitudinal Gradients in North America*

Advised by: Dr. Ari Martinez

Anna Behrend

Thesis: *Sex Differences in Apoptosis in the Developing Mouse Hippocampus and Cerebral Cortex*

Advised by: Dr. Hsiung-Wei Tsai

Alexis Amparo Diaz

Thesis: *Modeling Socially Driven Health Inequalities in a Nonhuman Primate Population*

Advised by: Dr. Raisa Hernandez Pacheco

Daniel P. Donovan

Thesis: *Vascular Flora of Ladd Canyon, Santa Ana Mountains, California*

Advised by: Dr. Amanda Fisher

Benjamin Ewing

Thesis: *Changes in Avian Mobbing Responses Along an Urban-Rural Gradient in Southern California*

Advised by: Dr. Ari Martinez

Derek Anthony Fuller

Thesis: *Investigating the Congruence of Protein Domain Evolution Within Multidomain GH5s*

Advised by: Dr. Renaud Berlemont

Sebastian De Jesus Garcia

Thesis: *Fish community structure relative to fishing pressure and protection status in southern California estuarine.*

Advised by: Dr. Christine Whitcraft

Stephanie Joanne Gonzalez

Thesis: *Early-Life Adversity Effects on the Lifespan of a Non-Human Primate*

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Advised by: Dr. Raisa Hernandez Pacheco

Kelly Jane Hood

Thesis: *Bobcat (Lynx rufus) occurrence and feline co-occurrence: Abundance, competition, and trends in coat pattern variation*

Advised by: Dr. Ted Stankowich

Alvin Vu Huynh

Thesis: *Determining Turnover Rates of Proteins That Perform Different Functions During the Parasite Lytic Cycle in Toxoplasma Gondii*

Advised by: Dr. Douglas Pace

Wenda Ly

Thesis: *Morphological plasticity in Pacific sand dollar larvae, Dendraster excentricus: physiological consequences of arm length variation*

Advised by: Dr. Douglas Pace

Amanda Transito Martinez

Thesis: *Prey Availability at a Variety of California Least Tern (Sterna Antillarum Browni) Colonies*

Advised by: Dr. Christine Whitcraft

Harrison James McGowan

Thesis: *A Flora of the Chiquito Springs Basin in the Santa Ana Mountains, Orange and Riverside Counties, California*

Advised by: Dr. Amanda Fisher

Peter Ryan Nilsson

Thesis: *Effects of culture density and large inedible particles on the development of the feeding larvae of echinoids*

Advised by: Dr. Bruno Pernet

Christina Pantoja

Thesis: *Determining the Role of Long Non-Coding RNAs (lncRNAs) in HIV-1 Latency Reversal*

Advised by: Dr. Peter Ramirez

Patrick Thomas Rex

Thesis: *Patterns of Overlapping Habitat Use of Juvenile White Shark and Human Recreational Water Users Along the Southern California Coast*

Advised by: Dr. Chris Lowe

Jordan Rodriguez

Thesis: *Urbanization Effects on Community-Level Landscape Use and Interactions Across Taxa in Southern California*

Advised by: Dr. Ted Stankowich

Yamilla N. Samara Chacon

Thesis: *Intraspecific Dietary Differences of Juvenile White Sharks (Carcharodon carcharias) in Southern California*

Advised by: Dr. Chris Lowe

Master of Science - Biology, continued...

Emma Jewell Siegfried

Thesis: *The Effects of Ocean Acidification and Food Limitation on the Respiration, Growth, and Survival of Larval California Grunion (Leuresthes tenuis)*
Advised by: Dr. Darren Johnson

Taylor Smith

Thesis: *Oxygen Consumption Rate and Metabolic Enzyme Activity of the Pacific Sleeper Shark (Somniosus pacificus)*
Advised by: Dr. Chris Lowe

Emily Spurgeon

Thesis: *The Role of Temperature in the Movement and Nursery Aggregation Site Fidelity of the Juvenile White Shark (Carcharodon carcharias)*
Advised by: Dr. Chris Lowe

Will Sweet

Thesis: *Evolutionary Patterns of Ant-Following Behavior in Neotropical Birds*
Advised by: Dr. Ari Martinez

Shannon Tarby

Thesis: *Assessing the effects of weathered microplastics and sorbate on larval zebrafish (Danio rerio)*
Advised by: Dr. Erika Holland

Alyssa Taylor

Thesis: *Impacts of Paired Olympia Oyster (Ostrea lurida) and Eelgrass (Zostera marina) Restoration on Fish Movement and Habitat Utilization*
Advised by: Dr. Christine Whitcraft

Juliana Vitagliano

Thesis: *Determining the Relationship Between Timing and Presence of Algae Cells, Protein Metabolism, and the Induction of Physiological Plasticity in the Pacific Sand Dollar, Dendraster*
Advised by: Dr. Douglas Pace

Yuting Wang

Thesis: *Evolution of Corolla and Pollen Forms in the Justicia 'sessile-Axillary Inflorescence' Clade*
Advised by: Dr. Amanda Fisher

Master of Science - Microbiology

Matt Acosta

Thesis: *Characterizing the Proviral Role of HIV-1 Nef*
Advised by: Dr. Peter Ramirez

Natalie Cokel

Thesis: *Metagenomic Investigations of Gut Organ Bacterial Communities of the Heart Urchin *Brisaster townsendi**
Advised by: Dr. Jesse Dillon

Angus Fuori

Thesis: *Elucidating the role of the host proteins Moesin and CD4 in HIV-1 and SARS-CoV-2 infection*
Advised by: Dr. Peter Ramirez

Leticia M. Galvez-Alva

Thesis: *The Co-Occurrence of Antibiotic Resistance Genes in Bacteria from Various Environments*
Advised by: Dr. Renaud Berlemont

Jennifer Garcia

Thesis: *The Distribution of Antibiotic Resistance Genes in Bacterial Communities Reflects the Environment*
Advised by: Dr. Renaud Berlemont

Kathryn Elise Morales

Thesis: *CIq modulation of lipid metabolism during macrophage foam cell formation*
Advised by: Dr. Deborah Fraser

Amogh Sudarshan

Thesis: *Investigating the Disparate Distribution of Multi-Domain Glycoside Hydrolases Across Environments*
Advised by: Dr. Renaud Berlemont

▲ CHEMISTRY & BIOCHEMISTRY

Master of Science - Biochemistry

Andrew Buckley

Thesis: *Evaluating Triisopropylsilyl for the Protection of Fluorophenols: A Model for the Protection of Fluorotyrosines During Solid Phase Peptide Synthesis*
Advised by: Dr. Jason Schwans

Noemi M. Castro

Thesis: *Effect of Roscovitine, a Selective Inhibitor of Cyclin-dependent Kinases, on the Unfolded Protein Response and Insulin Signaling*
Advised by: Dr. Deepali Bhandari

Cristina R. Flores

Thesis: *Merit Based Selection of Permanganate Ion for Antibiotic Inactivation in Wastewaters*
Advised by: Dr. Stephen Mezyk

Aida Husain

Thesis: *Mechanism Underlying Integrated Stress Response Induced by Small Molecule SC66*
Advised by: Dr. Deepali Bhandari

Juliette Jauregui

Thesis: *Insight into ApoA-I Self-Association Using Pyrene Fluorescence*
 Advised by: Dr. Paul Weers

Daanish Kulkarni

Thesis: *Targeting Metastatic Breast Cancer Cells with Chimeric ApoA1-AF7p Nanoparticles*
 Advised by: Dr. Vasanthi Narayanaswami

Iris Marquez

Thesis: *Purification and Activity Analysis of Recombinant CDK5-p25 Complex Harboring Mutations on a Potential Autophosphorylation Site*
 Advised by: Dr. Deepali Bhandari

Joshua Mercado

Thesis: *Thermodynamic Stability of Loop 6 Motion in Human Triosephosphate Isomerase Variants*
 Advised by: Dr. Jason Schwans

Kyle Albert Meyer

Thesis: *Fluorescence Spectroscopic Analysis of Apolipoprotein AI during HDL Particle Modulation*
 Advised by: Dr. Vasanthi Narayanaswami

Miguel Steiner Palma

Thesis: *Identification of the Protein Kinase B Isoform Involved in Regulation of the Unfolded Protein Response*
 Advised by: Dr. Deepali Bhandari

Judy Rodriguez

Thesis: *Removal of His6-tag from Apolipoprotein A-I N-terminal Chimeras by TEV Protease*
 Advised by: Dr. Paul Weers

Sako Srapyan

Thesis: *Mapping Molecular Interaction Interface Between Diaphanous Formin-2 and Neuron-Specific Drebrin*
 Advised by: Dr. Elena Grintsevich

Master of Science - Chemistry
Kareem Asham

Thesis: *Electrochemical Activation and Reduction of CO₂ by Benzoquinone and Pyridine in Ionic Liquids-Aqueous Solutions*
 Advised by: Dr. Hadi Tavassol

Cecilia Cisneros

Thesis: *Time-Resolved Study of Cyclooctadiene*
 Advised by: Dr. Enrico Tapavicza

Saba Labib Dalaub

Thesis: *Effects of Surface Ligand Density and Lipid Encapsulation on the Catalytic Activity of Hydrophobic Pd Nanoparticles*
 Advised by: Dr. Young-Seok Shon

Jocelyn Dominguez

Thesis: *Synthesis and Characterization of Hybrid Collagen Peptide Conjugates for the Delivery of Plasmid DNA via Non-Covalent, Non-Electrostatic Interactions*
 Advised by: Dr. Kasha Slowinska

Brandy Escobar

Thesis: *Synthesis and Characterization of Metal Organic Framework Materials*
 Advised by: Dr. Xianhui Bu

Jan Wafiea Farag

Thesis: *Water-Soluble Palladium Nanoparticles with Different Capping Ligands and Carbon Quantum Dot Cocatalysts for Green Catalysis*
 Advised by: Dr. Young-Seok Shon

Erik Dennis Galicia

Thesis: *Dinitrosyl iron complexes containing pyrazole ligands: Synthesis, X-ray crystal structures, spectroscopies, and electrochemical studies*
 Advised by: Dr. Lijuan Li

Faraz Hussain

Thesis: *In-Situ Hydrogenation of Aldol Condensation Products Using Ligand-Capped Pd Nanoparticles for Biomass Upgrading*
 Advised by: Dr. Young-Seok Shon

Hilda V. Posada Pacheco

Thesis: *Solvent effects in photohydroacylation*
 Advised by: Dr. Paul Buonora

Ricky Rodriguez

Thesis: *ZIF-8 coated stainless steel meshes with colloiddally capped silver nanoparticles (CC Ag NPs) for removal of organic dyes and bacterial species*
 Advised by: Dr. Fangyuan Tian

Shinta Tanamas

Thesis: *Synthesis, Structure, and Magnetic Properties of Novel Lithium Nickel Ruthenates*
 Advised by: Shahab Derakhshan

Raymond Yu

Thesis: *Encapsulation of fluorescein within zeolitic imidazolate framework: Solid-state fluorescence and analytical applications*
 Advised by: Dr. Fangyuan Tian

▲ GEOLOGICAL SCIENCES

Master of Science - Geology

Justin M. Arakaki

Thesis: *Formational-scale differences in styles of deformation and implications for petroleum migration and the structural evolution of the Pismo Basin*
Co-Advised by: Dr. Richard Behl and Dr. Nate Onderdonk

Francine M. Cason

Thesis: *Mapping fresh water flow confined below a fringing reef, Mo'orea French Polynesia*
Advised by: Dr. Matt Becker

Bedig Charkhutan

Thesis: *Lithostratigraphy, sedimentology and petrography of the siliceous lithofacies in the upper Modelo turbidite system, Eastern Ventura Basin, Southern Lake Piru, California*
Advised by: Dr. Richard Behl

Kenton Crabtree

Thesis: *Investigation of in-situ temperature and processes of diagenetic transition from opal-A to opal-CT and their physical/chemical controls in the subsurface San Joaquin Basin, California*
Advised by: Dr. Richard Behl

Carl Steven Jung

Thesis: *New insights into the chronology and geomorphology of the Musician Seamount Province, Pacific Plate*
Advised by: Dr. Andrea Balbas

Ellen B. Justis

Caroline Korterud

Patrick Morley Miller

Thesis: *Measuring uplift of the San Rafael Mountains of Central California using fluvial terraces along the Sisquoc River*
Advised by: Dr. Nate Onderdonk

Matthew Schweiger

Thesis: *Dissolved Inorganic Carbon Chemistry Dynamics of a Coral Reef Responding to Submarine Groundwater Discharge*
Advised by: Dr. K. Ben Hagedorn

Amanda Renee Seckington

Thesis: *Organic carbon accumulation, distribution, and geochemical significance in the Miocene Monterey Formation of the San Joaquin Basin, California*
Advised by: Dr. Richard Behl

Trang Thi Thu Tran

Thesis: *Integrating plant wax isotopes and terrestrial biomarkers for reconstructing precipitation and temperature variability in Vietnam during marine isotope stage 3*
Advised by: Dr. Lora Stevens

Megan Kaily Ward-Baranyay

Thesis: *Parametric modeling to design periodic hydraulic tests at the Frontier Observatory For Research In Geothermal Energy, Milford, Utah*
Advised by: Dr. Matt Becker

▲ MATHEMATICS & STATISTICS

Master of Science - Applied Statistics

Simeon Babatunde Adeyemo

Thesis: *Models for Transmission and Geospatial Distribution of Mycobacterium*
Advised by: Dr. Olga Korosteleva

Xena M. Adono

Indo Badial

Erick Hageo Castillo

Eric Chou

Nathaniel Lucas

Thesis: *Rare Events With High Risks: Extreme Value Theory with Applications in R*
Advised by: Dr. Olga Korosteleva

Kent Dinh

Erika Aline Garfias

Oscar Abundio Herrera

Christian Ibarra

Thesis: *Matching by the Propensity Score Methodology With Applications in R*
Advised by: Dr. Olga Korosteleva

Jose Iraheta

Thesis: *Predictive modeling of medical record retrieval*
Advised by: Xiyue Liao

Doyeon Kong

William Lam

Mario Alberto Leon

Jonathan Simon Leung

Rene Lupercio

Abigeal Ogunwuyi

Felix Padilla

Thesis: *Bootstrapping Method: Statistical Inference and Applications in R*
Advised by: Dr. Olga Korosteleva

Edgar R. Ramirez

Thesis: *Statistical Process Control in Aerospace Manufacturing Industry*
Advised by: Dr. Olga Korosteleva

Dean Reeves

Kristina D. Rosales

Linda Casandra Serafin

Dokyoung Shin

Jeffrey Bear Thompson

Thesis: *Approximating Infinity: An Investigation of the $n=30$ Rule of Thumb*
Advised by: Dr. Kagba Suaray

Derrick Liu Tien

Thesis: *Statistical Inference of Item Response Theory With Applications in R*
Advised by: Dr. Olga Korosteleva

Lauren M. Tran

Thesis: *Personalized Treatment Recommender Clinical Decision Support System using Deep Learning for Survival Analysis*
Advised by: Dr. Hojin Moon

Huy Truong

Thesis: *Predicting Aircraft Availability: A Machine Learning Approach*
Advised by: Dr. Xiyue Liao

Dana Villegas

Vivian Vu
Grant Williams
Vivien Wu
Rene Zamudio
Yushan Zhao

Thesis Title: *Statistical Methodologies in Family Studies and Developmental Psychology*
Advised by: Olga Korosteleva

Master of Science - Mathematics

Alex D'agostino
Minh Dinh Ho

Wilson Hsu
Windy Li

Master of Science - Applied Mathematics

Cindy Anaria Acuna
Rami Allaf
Aaron Amor Barel
Simon Arthur Bar-On
Clarisse Nicole Bonnard
Loc Phuoc Dam
Emily Day
Omnya Lyla Elhag
Sydney Gentile

Mustapha Hammoude
Gen Lian Hartnett
Mirian Juan Estrella
Megan Kem
Daniel Lam
Mikaela Meitz
Rodrigo Mendez
Eddie Rivera
Osvaldo Salazar

Master of Science - Mathematics - Mathematics Education for Secondary School Teachers

Nancy May Smith

Thesis: *Rhetoric About Disparities in Mathematics Education: A Thematic Analysis of Position Statements of K-12 Mathematics Education Organizations*
Advised by: Dr. Jeffrey Pair

Hilda Ulloa



▲ PHYSICS & ASTRONOMY

Master of Science - Physics

Patrick Barfield

Thesis: *Study of the electronic transport mechanisms in the Kitaev material α -RuCl₃ probed through guarded high impedance measurements*
Advised by: Dr. Claudia Ojeda-Aristizabal

Derek Bergner

Thesis: *The electronic band structure of layered ferromagnetic materials probed through angle resolved photoemission spectroscopy*
Advised by: Dr. Claudia Ojeda-Aristizabal

Dion M. Blackshire

Thesis: *Geometric Dependence on Thermodynamic Limit Extrapolations of Energies in the Fractional Quantum Hall Effect*
Advised by: Dr. Michael Peterson

Angelique Noel Brulc

Thesis: *Seeking Social Presence in a Virtual Science Camp: A Guide for Informal Science Education*
Advised by: Dr. James Kiesel

Nicholas Cassar

Thesis: *Mean Field Interactions in the Hadron Resonance Gas*
Advised by: Dr. Thomas Klaehn

T Gonzalez Baldizon

Thesis: *Machine Learning Applications in Biological Polymer Topology*
Advised by: Dr. Alex Klotz

Nathan Howald

Thesis: *Genomic Mapping of DNA through a Nanopore using Single Strand Binding Proteins*
Advised by: Dr. Alex Klotz

Lydia Juliana Juan

Thesis: *Toward the construction of realistic approximate parent Hamiltonians for chiral spin liquids*
Advised by: Dr. Michael Peterson

Fanuel Isai Mendez

Thesis: *Determining the effect of applying an electromagnetic field to diffusive superconducting-magnetic proximity systems*
Advised by: Dr. Andreas Bill

Maya H. Martinez

Thesis: *Atomic force microscopy characterization and electronic transport measurements of Van der Waals and molecular magnets*
Advised by: Dr. Claudia Ojeda-Aristizabal

Kam Modjtahedzadeh

Thesis: *Topics in Computational Polymer Physics*
Advised by: Dr. Alex Klotz

Amir Omidwar

Thesis: *Exact Diagonalization Studies of the Fractional Quantum Hall Effect at Filling Factor $5/2$ in the Tao-Thouless Limit*
Advised by: Dr. Michael Peterson

Luke Park

Thesis: *Regularization Scheme Dependence of Gap Equations for Dense Matter*
Advised by: Dr. Thomas Klaehn

Josh Ragotskie

Thesis: *Destructive Testing of Kinetoplast DNA Networks*
Advised by: Dr. Alex Klotz

Henry Scott Sundland

Thesis: *Mechanical Properties of Digested Kinetoplast DNA*
Advised by: Dr. Alex Klotz

Laura Tandy

Thesis: *Clean Superconducting-Magnetic Proximity Systems in the Presence of an Applied Electromagnetic Field*
Advised by: Dr. Andreas Bill

Vinh Tran

Thesis: *g -mode Oscillations in Neutron Stars with Hyperons*
Advised by: Dr. Prashanth Jaikumar

Master of Science - Physics – Applied

Dave Arnold Holling

Thesis: *Measuring the Flory Exponent of Double Sized Kinetoplasts and Observing the 2D Version of a Coil-Globule Transition*
Advised by: Dr. Alex Klotz

Ryan Tetsuo Mizukami

Thesis: *Morphology Evolution and Crystal Alignment of Thermally Annealed Copper Phthalocyanine Thin Films*
Advised by: Dr. Thomas Gredig

Aytana Sanchez

Thesis: *Pin Hole Analysis in Iron Phthalocyanine Thin Films using High-Resolution Atomic Force Microscopy*
Advised by: Dr. Thomas Gredig

Alejandro Zafra

Thesis: *Characterization of Permalloy nanocap and antidot thin films fabricated using modified microsphere templates*
Advised by: Dr. Jiyeong Gu

Master of Science - Physics - Professional Physics

Javier Estrada Olmos

▲ SCIENCE EDUCATION

Master of Science - Science Education - Elementary and Middle School Science Education

Laura Vanessa Crespo

Thesis: *How Parents of Color Connect Culture with Science Education*

Advised by: *Dr. Amy Ricketts*

Maira Rodriguez

Thesis: *Students' Misconceptions About Scientists*

Advised by: *Dr. Lisa Martin*

Katharine A. Muniz

Thesis: *Elementary Teachers' Perceptions of Student Sensemaking During a Virtual Field Trip*

Co-Advised by: *Dr. Laura Henriques and Dr. Amy Ricketts*

Master of Science - Science Education - Informal Science Education

Heather Anne Calabrese

Thesis: *Seeking Social Presence in a Virtual Science Camp: A Guide for Informal Science Education*

Advised by: *Dr. James Kiesel*

Rick O'Connor

Thesis: *Front-End Evaluation of the Workshop at the Downey City Library*

Advised by: *Dr. James Kiesel*

Master of Science - Science Education - Secondary Science Education

Jerren Smith

Thesis: *Students' Perspectives on Participating in a Science Learning Community*

Advised by: *Dr. Amy Ricketts*



College of Natural Sciences & Mathematics

Candidates for the Bachelor's Degree

▲ BIOLOGICAL SCIENCES

Bachelor of Science - Biology

Shima Abbasi
Azraa Adamjee
Rebecca Ann Aguilar
Jocelyn Grisel Aguilar
Tuleen Al Harastani
Anthony Christopher Alberto
Syed Jawad Ali
Jose Fabian Alvarez
Valerie Marijane Alvarez
Elda T. Amanuel
Jordan Nicole Andelin
Alexander Andrade
Madeleine Ruth Andre
Viviana Maria Araiza
Narmeen Ayoubi
Andrew Bailey
Erin Louise Bath
Michael Anthony Becerra
Aleksandra Brajanovska
Nicki Bright
Allison Christine Broderick
Brianna Hope Broderick
Juliana Bussey
Drake Caballero
Gianni Calienta
Samantha Camacho
Christian Alexander Caro
Arianna Krissa Castillo
Kryztal Alise Centeno
Andy Chan
Jessica Chavez
Irwin Kane Cheung
Yerlin E. Chevez
Jesselyn Gem Chhu
Richelle Shu Chow
Dylan James Christensen
Steven Oswaldo Chumbiray Ascate
Bobby John Compani
Julian Antonio Coriano
Valeria Citlali Corral
Joshua Costello
Sarah Christine Creviston
Daniel Esteban Cruz

Kristina Marie Curbelo
Katelyn Dang-Lien
Hadeel Khaled Darkhalil
Rafael Pineda de Jesus
Aileen Crystal De La Cruz
Andres Ramiro De La Herran
Jeremy David Dean
Ashley Del Cid
Jeanine Amber Detorio
Deandra Millo Diamsay
Hiralben Rameshchandra Diwan
Jonathan Dodd
Maritza Dominguez
Long Van Duong
Sarah Michelle Durcan
Nile Durrani
Italia Dutton
Jacob Ecija
Eliza Marie Edejer
Angela Belle Enriquez
Marifrey Escobar
Majd Eskandar
Elena Rose Esparza
Abel Espindola
Alondra Espinoza
Shapi Etemadi
Jane Ifeoma Ezeani
Eileen Faury
Jesenia Fernandez
Jennifer Fou
Amaris Frontela
Kendra Michele Gallagher
Jasmine Gallardo
Susana Garcia
Alice Garcia
Roy Garcia
Danika Nicole Gaslan
Trinity Anne Galang Gillette
Youstina Girgis
Jessie Rocio Gonzales
Steve Gonzalez
Marisela Gonzalez
Christian A. Gonzalez

Daniel Esteban Gonzalez Garcia
 Sara Maria Gonzalez Jarava
 Brianne Gragg
 Kristen Rene Graham
 Myriam Grande
 Ashanea LaMya Green-Compton
 Isabela Grott
 Carmelito Guan
 Luis Angel Gutierrez
 Jazmin Abigail Guzman
 Hannah Rene Hanlon
 John Emad Hanna
 Laura Dawn Hardin
 Tshue Lawrence Her
 Anabelle Faith Hernandez
 Alexis Alexandra Hernandez
 Jacqueline Yesenia Herrera
 Amanda Ho
 Brian Dai Hoang
 Nathy Nhu Hoang
 Liana M. Homsí
 Linda Y. Hung
 Joann Huynh
 Michelle Huynh
 Emily Victoria Jauregui
 Sarah Elizabeth Jimenez
 Salma N. Jimenez
 Tyler Johnson
 Kayla Brooke Jones
 Janette Elizabeth Juarez Reyes
 Cassandra Jung
 Edward Khoo
 Lauren Elizabeth Khoo
 Kerinna Lynne Kirk
 Madison L. Kobzeff
 Jacob Dean Korgan
 Laura Dawn Kurtz
 Cindy Ngoc Le
 Jane Lee
 Peter Kiwon Lee-Choi
 Jhan Pierre Leon
 Maria Guadalupe Leyva
 Mariana Leyva
 Melody Lin
 Anjan Lingampally
 Vanessa Lopez
 Jonathan Joe Lopez
 Bayron Adrian Lopez Mendoza
 Alejandra Lopez Hernandez
 William Thien Luong
 Ivy Luong
 Alina Ly
 Nickolas Nathan Mabini

Cesar Jimenez Martin
 Diana Martinez
 Ryan Kenneth Marx
 Deneise Medina
 Cristian Mendoza
 Mariela Esmeralda Michel
 Marlin M. Mikhael
 Michael Brett Mildner
 Matthew Scott Mildner
 Daniel Mizin
 Jovanna Molina
 Natalia Morales
 Yasmeen Morales
 Tiffany Amber Morales
 Elizabeth Cora Moses
 Blanca Aurora Munoz
 Ryan Patrick Nagle
 Lian Pich Nguon
 Brookeshields Nguyen
 Lilian Noel Nguyen
 Anthony Thanh Nguyen
 Huy Nguyen
 Sandra Thi Nguyen
 Jenny Luong Doan Nguyen
 Kevin Hoang Nguyen
 Michelle Loan Nguyen
 Michelle Nguyen
 Michelle Nguyen
 Ellen T. Nguyen
 Casey N. Nguyen
 Stephanie Han Nguyen
 Hung H. Nguyen
 Cong Nguyen
 Ronjodh Singh Nijjar
 Keomonyroth Nuon
 Nanthanann Nuon
 Stephanie Omagari
 Alexis Osatohanwmen Omoregie
 Brianna Marie Oropeza
 Andrea Orozco
 Brenda Natali Ortiz
 Enidh Veronica Padron
 Sally Padilla
 Aabha Panta
 Sarah Parrott
 Mahek Patel
 Karina Perez
 Nathaly Perez
 Karen Sarahi Perez Fernandez
 Michelle Jessie Pham
 Duy Khanh Pham
 Phillip Quoc Pham
 Nhung Pham

Bachelor of Science - Biology, continued...

| | |
|-------------------------------|-----------------------------------|
| Amy Tran Phan | Kyla Tang |
| Danny Phan | Sarah Lynn Tang |
| Victor Hieu Phan | Stephanie Gabriela Tepaz |
| Elvis Pineda | Ghenet B. Tesfa |
| Lauren Priest | Diana Laura Torres |
| Mateo Elias Quezada | Matteo Torres |
| Leslie Ramirez | Roberto Aurturo Torres |
| Lorena Ramirez | Kathryn Tran |
| Cheyenne Nicole Renfro | Dragos Troana |
| Christian Rivera | Cece Tuvshintsengel |
| Rosa Bianca Rodarte | Julissa Valderrama |
| Anthony Jesus Rosales | Victoria Olivia Valencia |
| Steven Alexis Rosales Hurtado | Emily Taylor Vandercook |
| Azadeh Rostami | Isabel Vasquez |
| Joshua Hunter Rouimi | Chloe Vent |
| Melanie Ruiz | Ciana Kalina Verenini |
| Adam Douglas Russell | Jacqueline Paige Verga |
| Mattias Conlon Saati | Isabel Villafuerte |
| Charnay Salone | David O. Villagomez |
| Michelle Sanchez | Cecilia Villaseñor |
| Anmoljot Kaur Sandhu | Kira Vorres |
| Marissa Maurine Serrano | Benjamin Nguyen Vu |
| Natalia Shcherbakova | Amy Ngoc Anh Vu |
| Katherine Julissa Silvestre | Alan Vu |
| Davis Kyutae Sim | Nikki Vu |
| Jesse Abraham Solis | Amia Rosaleina Weiss |
| Madison Dawn Spadaro | Serena Marie Williams |
| Bentley Su | Maigan Lee Ann Wong |
| Triana Raquel Subias | Erin Nicole Wright |
| Ciana Elizabeth Suffel | Maelice Eugenie Yamdjieu Tchamdeu |
| Vincent James Sullivan | Melissa Z. Yee |
| Shannon Sweeney | Lynette Botum Yem |
| Marc Wagih Tadros | Elizabeth Mary Zaarour |
| Natsumi Takanashi | Sondos M. Zein |

Bachelor of Science - Biology - Biology Education

| | |
|-------------------|--------------------------|
| Thaddeus J. Blase | Alejandra Najera-Coronel |
| Donita Calma | Kate Lynn Nguyen |
| Rita Greenspon | Jean Carlo Rivera |
| Karen Hernandez | Sarah Stevenson |
| Jessica Kuang | Joselyn Teresa Waites |
| Brandon Luong | Joey Wedmore |
| Jacob Mcdonald | Ani Zohrabyan |

Bachelor of Science - Biology - Molecular Cell Biology and Physiology

| | |
|------------------|-------------------------|
| Laura Abonce | Jamie Nichole Albertson |
| Yara Al Hinn | Brandon Rogelio Alvarez |
| Jocelyn M. Alban | Stephanie Alvarez |

Vet Kha An
 Elaine Jennifer Andrade
 Emily Elyse Aniya
 Vanessa Avila Rios
 Ehriele Lagman Barrett
 Taya Michelle Brown-Del Biaggio
 Ellie Butner
 Louie L. Calzado
 Liliana Carrera
 Trinity-Laela Castro
 Chloe Andrea Centeno
 Nikkolas Vannara Chhou
 Joyce Choi
 Claribel Thuykhang Chung
 Logan Royce Conner
 Natalie Joyce Mallare Conte
 Abraham Corona
 Morgan Racine Deuschle
 Megan Dinh
 Jacqueline Do
 Kennedie Doyle
 Angela Orias Edrada
 Zeina Hilal Elrachid
 Arleth M. Estrada
 Christian Orcullo Fabiana
 Avesta Mina Fakhry
 Tara Fareghbal
 Kendal Joan Faynor
 Brianni Marie Flores
 Elizabeth Mae Lorenzana Florido
 Abigail Jean Fricke
 Kelly J. Funez
 Kayla Leilani Galo
 Mia Garcia
 Julianna A. Garcia
 Letecia Garcia
 Pamela Gatchalian
 Earl Keevin Givens
 Bernadette Goluya
 Katie Ann-Regan Gonzalez
 Laurennett Gonzalez
 Erin Kelley Gordon
 Bianca Reyna Graciano
 Erik Edward Gutierrez
 Angelina Haddad
 Grace N. Hanna
 Daniel Hernandez
 Natalie Thomas Hughes
 Alexxandra Hurtado
 Parvez Ibrahim
 He Jiang
 Melissa Jimenez Deras
 Remy Nicole Joachims

Max Jonsson
 Lis Maria Joshy
 John Joseph Jovel
 Angel Jubert
 Monique Elizabeth Jurado
 Catherine Kamel
 Douglas Ian Kelly
 Garooneh Khachatori
 Kenny Kholoma
 Julia Kulchytska
 Rashmika Kulshrestha
 Kenneth Ngoc Le
 Jacqueline Le
 Mercedes Vanessa Ledezma
 John Li
 Su Lin
 Jared Joseph Loayza
 Derron J. Lopez
 Andrea Elizabeth Lopez
 Adrian Lopez-Lopez
 Rudy F. Macias
 Sophia T. Manjarrez
 Rodolfo Medina
 Lucah Medina Guerra
 Tiarra Pacific Melancon
 Ashley Merari Minchu
 Kayla L. Miraftebi
 Kimberly Ann Mitchell
 Giovannie Georgio Mitri
 Aracely Montejano
 Mary Dominique Cabanero Montiel
 Giang Quynh Nguyen
 Ada T. Nguyen
 Stephanie Thuy Anh Nguyen
 Glory Nguyen
 Thaomi Hoang Nguyen
 Keona Elosia Nguyen
 Janelle Dieu Quyen Nguyen
 Jordyn Marie Nicolas
 Jasmine Naomi Pasillas
 Krupaly Jitendra Patel
 Ninfa Guadalupe Penaloza
 Angela Pham
 Camille Nhi Pham
 Noelle Merry Phan Ho
 Matthew Pivdee
 Kaylee Anne Prevratil
 Jessica T. Purwanto
 Briseida Quero Merino
 Lucas Valentino Rafello
 Andrew Rodriguez
 Cindy Elizabeth Romero
 Sadaf Sadegh Vaziri

Bachelor of Science - Biology - Molecular Cell Biology and Physiology, continued...

| | |
|-------------------------------|--------------------------------|
| Samantha Saenz | Thien Nhan Tran |
| Maria F. Salado | Idara Renitta Udo |
| Monique Julie Sayh | David Enrique Urias |
| Maya Masumi Shimizu | Nate Angelo Daculan Villanueva |
| Pawan Singh Sidhu | Shirley Vo |
| Carolina Sierra | Sanaa Waliuddin |
| Amber Simonpietri | Zion Walker |
| Jade Sinatra | Sara Christina Williams |
| Lydia Pamela Smith | Caroline Rose Wilson |
| Emaela Adriel Talavera Valdez | Steven Yu |
| Thomas Tanakun | Alexandra Zacatelco |
| Brittany Tran | |

Bachelor of Science - Biology - Zoology, Botany, and Ecology

| | |
|------------------------------|--------------------------|
| Christian Nathaniel Alderson | Matthew Marin |
| Evie Victoria Anthony | Alex Andrew Mendelson |
| Elena Armendariz | Kevin Edward Mills |
| Cristobal Arteaga Castillo | Annalise Iman Money |
| Alexander Avalos | Nhi Xuan Mai Thao Nguyen |
| Nicole Paige Bebout | Haley Pang |
| Reilly Elizabeth Borges | Joshua Michael Pawlowski |
| Hannah Louise Carrillo | Jade Hong Phan |
| Chidi Chima | Sarai Plata Ramos |
| Turner Arzadon Crinklaw | Freddie Portillo |
| Meghann Tran Do | Nigina Rustamova |
| Catherine Haley Gonzalez | Jasmine Hope Santiago |
| Nichole Barbara Hutchins | Lauren Renee Smith |
| Caden Bryson Leonard | Emily Nicole Stoddart |
| Allison Linskey | Michael Valdivia |

Bachelor of Science - Marine Biology

| | |
|----------------------------------|---------------------------|
| Sophia Isabella Alonzo | Celeste Frometa |
| Emma Lynn Baker | Cassandra Breana Griffith |
| Marika Emerson Bridges Blacklock | Morgan Brittany Harris |
| Bailey Bonham | Kara M. Hebing |
| Caitlyn Butz | Frances Marie Hernandez |
| Sabrina Canto | Mersades A. Hineman |
| Antonio De Jesus Chacon Munoz | Kaleigh Samantha Holguin |
| Ryan Sungho Chang | Arisa Emiko Jones |
| Nikki Suzanne Clark | Samantha Marie Jones |
| Alexis Coddling | Ashlee Korte |
| Madison Cooper | Haylee Michelle Kramar |
| Tanner Thomas DeLong | Holly Ann La Valley |
| Omar Diaz | Yolanda Isabel Leon |
| Kirsten Suasin Drennen | Ariana Loera |
| Taylor Marjorie Earle | Kelsey Hannah Lowe |
| Felicity Elizabeth Eriksson | Leslie Ma |
| Veronica Elizabeth Flores | Adrian Jose Martinez |

Erika Michelle Mascota
Anthony Russell McGinnis
Eric Moctezuma
Lauren Nicole Moore
Destiny Kaitlyn Moreno
Hernan M. Navarro
Ashlyn Zeda Nicholson
Lynsey Ninh
Sean Ono
Ivy Noel Pellerin
Cameron Christ Powell
Becca Prezgay
Kassidy Rene Prim
David M. Ramirez
Julia Ramos
Angela Sakura Richmond
Lolo Taylor Rostami
Ethan Ronald Rugg
Daniel Sanchez

Julianne J. Santos
Lizzy Schwegler
Megan Seasock
Hannah Minori Sherrod
Christina Rose Shryock
Jacob Charles Sobol
Ashley Soltis
Kara Ann Stella
Joseph Tadych
Helen Katherine Taitano
Darcy Jane Tate
Kristie Z. Tom
Angela Maricela Velazquez
Jonathan Vergara
Rylie Wilson
Chloe Winter
Eleni Sofia Wojcik
Justin Albert Yip

▲ CHEMISTRY

Bachelor of Arts - Chemistry

Imani Nadasia Tyson

▲ CHEMISTRY & BIOCHEMISTRY

Bachelor of Arts - Biochemistry

Malina Chan
Ahmad Mardini
Celeste Murga

Diego Gonzalo Perez
Benjamin Isaac Joshua Quintero
Elaine Le Vo

Bachelor of Arts - Chemistry

Amanda Francis
Isabella Rose Martinez
Eric Joel Moreira
Tracy Nguyen

Aylin Sojo
Brandon Taing
Amina Halima Tbaba

Bachelor of Science - Biochemistry

Adam Abraham Abawi
Karel Samira Aceituno
Hailey Nicole Angel
Natalie Marie Borba
Christa Ann Borellini
Dylan Bui
Bao Gia Bui
Nicole Anne Flores Burgos
Megan Gabrielle Siangio Calderon
Trevor J. Chapman
Ronald Chau

Kyra L. Childress
Rosalise Rosalina Contreras
Jordan Alyse Cook
Kayla Franco Crisostomo
Vincent Dang
Hailey Duong Hong Dang
Kayla Maelia De Castro
Jackson Tu Dinh
David Zachariah Dominguez
Shannon Canan Duckworth
Anjelina Salting Fajardo

Bachelor of Science - Biochemistry, continued...

| | |
|-----------------------------|-------------------------------|
| Branden Figueroa | Kenny K. Nguyen |
| Christian Gabriel | Kellie Kim Nguyen |
| Nicolas Blas Gonzales-Ginez | Jasmine Truc-Vy Nguyen |
| Elizabeth Gonzalez | Yanet Nunez |
| Suchana Gurung | Saeed Aman Osman |
| Lidia Hakopian | Destiny Padilla |
| Alexsa Nani Hernandez | Bruce Anthony Perera |
| Antonio Hernandez | Samantha Rose Perez |
| George Andrew Ibarra | Jessica Pham |
| Kimberly Izarraras | Madeleine N. Phan |
| Nolan Gray Johnson | Vanessa Plascencia |
| Serli Khanbabaei | Matthew Guy Plazola |
| Nicole Marie Kovaleski | Leticia Casandra Ponce Davila |
| Cindy Lai | Maansi Rathod |
| Caroline Hoang Le | Baleria Reyes |
| Rachel Lee | Colby Jack Rhodes |
| Breanna Yamilette Loaiza | Annaleesia Smallcomb |
| Alejandro De Jesus Lopez | Ebone Spence |
| Naieemah Aliya Mershon | Hutson Wyman Taylor |
| Ramiro Monteon | Terry Thach |
| Alan Joseph Montes | Amanda Myvan Tran |
| Danny Moon | Long Thi Kim Tran |
| Taylor Lynn Moore | Vincent Vuong |
| Alexia Morales | Adalyn Vuong |
| PhuongMy Ngoc Nguyen | Sylvia Judith Wedderburn |
| Christy Marie Nguyen | Nina Yang |

Bachelor of Science - Chemistry

| | |
|----------------------------------|---------------------------|
| Daniel Israel Aguilar | Joseph Christopher Kelly |
| Eyas Alnasser | Brian James Kilbane |
| Carla Janine Astorga | Vy Lam |
| Michael Atilano | Katlyn Lawrence |
| Nathaniel Cabral | Brittni Marena Lopez |
| Alexa Cabrera | Aylinn Daena Luna |
| Megan Gabrielle Siangio Calderon | Christian Matthew Luu |
| Khanh Cao | Kassady Barbara Marasigan |
| Tien Cao | Cassie Martinez |
| Justin Xavier Castillo | Malinali Martinez |
| Jacquelin Chen | Amy Yvette Melgar Peralta |
| Koshy Kochukoshy Cheriyan | Otto Alexander Meza |
| Lerma Fe Preposi Corpuz | Daichi Nakatani |
| Onur Culhaci | Karissa Emi Nakayama |
| Rachel Dang | Austin Joseph Nerhus |
| Alexander Pierce Fey | Cortney Lamchieu Ngo |
| Arianna Gomez | Susan Nguyen |
| Andres Gonzalez | Phuong Le Nam Nguyen |
| Duy Dac Hang Ha | Nhu Chau Nguyen |
| Lamisa Ashraaf Hossain | Jose Ochoa Sanchez |
| Kenneth Daniel Jacobo | Carlos Ortiz |

Jay Patel
Martina Pedrina
Loren Anthony Pendilla
Joel Perez
Helen Pham
Victoria Sarkisian
Bryan Arthur Skorka

Dian Sukarso
Trish Tang
Nhi Tran
Vivian Wynn
Narek Yegikyan
Mateo T. Ysmael

Bachelor of Science - Chemistry - Materials Science

Haley Fernandez
Vincent Thai Lam
Natalie Sanchez-Pleites

Julien E. Tournebise
Leah Nicole Webb

▲ ENVIRONMENTAL SCIENCE & POLICY

Bachelor of Arts - Environmental Science and Policy

Letty Griselda Aguilar
Jacob Alexander Amster
Alejandro Javier Andrade
Arianna Gist Bleau
Katarina Butler
Celeste Monique Cacho
Daisy Cervantes
Sienna Drew Dahl
Regino Damacio
Camille Marie Dampf
Priya Dhupar
Chris Jesse Dyas
Isabella Amaris Espinoza
Genesis Fernandez
Pamela Gonzalez
Rachel Elizabeth Guerrero

Ashley L Harris
Anayantzy Hernandez Nieblas
Lauren Alexandria Holcomb
Abygail Jimenez
Gabriela Leslie Lopez
Alex Lynch
Riley Elizabeth Mackinen
Nikolas Nathaniel Martinez
Sara Kate Mcgrury
Aileen Araiza Medina
Luis Angel Mendiola Luna
Jacob David Morris
Mackenzie Morgan Munguia
Keven Orlando Navarro
Yesenia Nuno
Chioma Jessica Nyenke

Bachelor of Science - Environmental Science and Policy

Jessica May Brogna
Michael Daniel Butler
Teodora De Leon Custodio
Vivian De Anda
William Ed Dinh
Elysia Renae Fields
Gabriela Concepcion Garcia
Zachary Steven James
Teresa Marie Mendiola
Jacelyn Michael
Emily Montes
Michelle Saligue Nemeth

Tahlia Padilla
Alexander Joseph Papac
Andy Poage
Terez Khadydja Sanogo
Savanna Lynn Schreiner Vanhoutte
Conor Heck Sweeney
Alexandra Denise Trujillo
Desiree Skye Ulman
Lauren Bethany Van
Haidee Anahi Vazquez
Sofia Yeatman
Ismaeil Zoabi

▲ GEOLOGICAL SCIENCES

Bachelor of Science - Geology

Tristan Abuana
Yousuf Abdullah Al Sukaiti
Alec R. Billmeier
Amanda Marie Carranco
Isabel Castillo
Alexis Cassandra Ceballos
Parker Concannon
Alexa Cruz
Curtis Delgadillo
Karina Dorawala
Julia Dunn
Demetria Lynn Eves
Hannah Elthea Fitzpatrick
Sarah L. Goodale

Natalia Gutierrez
Desiree Selena Guzman
Michael Hamorsky
Aaron Benjamin Kantrowitz
Jailene Lugo
Aaron C. Martin
RJ Mejia
Amber Neff
Michelle Thaomi Nguyen
Jason Anthony Pizzi
Roxy Schulman
Cheyenne Ray Senesac
Lam Thanh Truong
Darren Westby

▲ MATHEMATICS

Bachelor of Science - Applied Statistics

Maria Del Carmen Almanza
Lynette Alvarado
Angel Ayala
Tina Banh
Robby Born Born
Shawnee Michelle Carpenter
Julja Lim Eco
Daniel Ray Garcia

Derek Garcia
Aileen Rebeca Guzman
Grace Huang
Ethan Thanh Huang
Gregory Lent
Nicole Quynh Pham
Joe Soria
Nyssa Adara Yota

Bachelor of Science - Mathematics - Applied Mathematics

Damian Aguilar
Guadalupe Almaraz
Sovanvatey Cheng
Donovan Arturo Diaz
Maya Dye
Chengcheng Fan
Andre Gallegos
Ruben Galvez
Max Garcia Roldan
Sharon Gonzalez
Long Bao Huynh
Tammy T. Huynh
Jin Jeon
Luis Alberto Jovel
Kyle Lamento
Tracy Le
Jorge Alberto Limon
Nicolas Daniel Louie
Sonny Luong
Seth Robert Malonson

Miguel Angel Matias
Millie Vu Nguyen
Timothy Nguyen
John The Nguyen
Danny Ortiz
Izac Daniel Ortiz
Roxana Solange Quinones
Cheyenne Reed
Charles Robertson
Steven Michael Robles
Annabella Ross Rollieri
Saul Sanchez
Javier Sanchez-Navarro
Liliya Semenenko
Sonitha Alice Soth
Ian Robert Speers
Ulises Tello
Quynh K. Tran
Zachary Adam Velazquez
Keeyan Seballos Ventura

Bachelor of Science - Mathematics

Amira Esmat AbdEl Malek
Marco Tulio Aguirre Gutierrez
Joseph Ajos
Samuel Alvarez
Joshua Edwin Banfield
George Junior Blanco-Sanchez
Esmeralda Beatris Canas
Christian Kelly Castruita
Leilani Giselle Chagollan
Boshi Chen
Dominic James Cunneen
Christopher Hans Desrochers
Parker Ryan Evans
Phillip Franco
Michael Eric Garcia
Omar Garcia
Tongchen He
Eduardo Hernandez
Ha Le Nhu Huynh
James Alexander Yoshio Iwamasa
Hannah Kim
David J. Kish

Kyi Pyar Lin
Maritza Lopez
Angel Fernando Martinez
Ancian Sol Mccall
Roman Anthony Mcdaniel
Bryan Arath Miranda
Jacob P. Mitchell
Angelica Mora
Paul Hoang Nguyen
Tommy Nguyen
Steven Sothea Om
Charles Thanh Long Pham
Ally Nicole Pine
Aaron Ramales
Nico Daniel Saavedra
Cory Shigeto Suzuki
Noelia Valeriano
Edward Gerardo Vasquez Hernandez
Tram Nguyen Hong Vo
Daniel Wang
Madison Wilt

Bachelor of Science - Mathematics - Mathematics Education

Mae Alvarado
Stephany Noemi Alvarado
Emmanuel Alberto Anceno
Melissa Guadalupe Armas Gutierrez
Omar Avalos
Emily Christine Avrit
Bryan Steve Betancourt
Alaina Kristin Brunn
Charmaine Castle
Bethanie Ceja
Eunice Chavez
Alyson Bayley Clark
Jacqueline O. Diaz
Duyen Kim Do
Albert Genehyuk Gim
Alan Daniel Hernandez
Alonzo Gonzalez Hinojosa
Matthew Hoang
Mirissa Mae Jones
Jungwoo Lee
Jasmin Sarai Lopez

Juan Marquez
Jasson De Jesus Martinez
Lloyd Nguyen
Emily Nguyen
Chelsea Bao-Tran Nguyen
Vy N. Nguyen
Andrew Duc-Hoang Nguyen
Kelly Jocelyn Ortiz
Annie Pham
Duy Ngoc Pham
Soklay Pouch
Nicia Euniz Ramirez Castro
Alejandro E. Reyes
Felipe Angel Reyna-Lopez
Carlos G. Rodriguez
Navneel Kaur Sekhon
Myriam Johanna Siguenza
Jonathan Isai Tavera
Dominick Dat Tan Tran
Tri Quang Tran
Jaime Uriostegui

▲ MICROBIOLOGY

Bachelor of Science - Microbiology

Michael Thomas Anderson
Cynthia Benitez
Andrea Benitez
Francisco Javier Castillo
Jaelene Edenis Castro
Andrew Chavez
Natalie Angelique Colon
Micah Dea
Brandon James Gorme
Robyn Leslie Hillman
Diego Francisco Hooghkirk
AJ Vanessa Jaime
Kalvin Kha
Tasneem S. Khatib
Ashlyn Leang
Anna Bobeh Lee

Jeremie Berino Lim
Karla Patricia Malinis
Gabriela Adriana Martinez
Annisity Kathryn Miller
Emily Muilenburg
Tiffany Nguyen
Emily Thuylinh Nguyen
Jo Nguyen
Bryan Duong Phan
Gladys Rodriguez
Rosealy Rosales
Janeen Silva
Howard Ed Terrence
Meleia Vyrak
Janina Christine Alfonso Zaldua

▲ PHYSICS & ASTRONOMY

Bachelor of Arts - Physics

Prit Mahendra Ahir
Guadalupe Almaraz
Sovanvatey Cheng
Jake Anthony Connors
Jimwell Antuerpia Delos Santos
Jin Jeon

Timothy C. Liu
Seth Robert Malonson
Ahmad Mardini
Alyn Musselman
Logan Pierce
Samra M. Tekle

Bachelor of Science - Physics

David Tony Allen
Adrean Anthony Alva
Simon L. Boeger
Christian Kelly Castruita
Jose Antonio Chavez
Epi Garcia Garcia
Amilcar Gonzalez-Guzman
Mohamed Reda Hammoud
Dietrich Henson
Adam Jandga

Michelle Annette Mckenzie
William Pavel Sandoval
Alejandro Julian Smit
Owen Gerald Sneddon
Savena Sousakhone Soidara
Tommy Quang Thai
Raymond Theng
Ashley N. Ward
Ulysses Zepeda

Bachelor of Science - Physics - Materials Science

Caleb Joshua Anderson

Ziv Lee Gerbracht

College of Natural Sciences & Mathematics

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▲ **BIOLOGICAL SCIENCES**

Certificate - Biotechnology

Piunik Babakhanins
Trevor Conniff
Sophia Elena Estrada
Sergio Flores
Katerin Joachin

Skylar Hope Mcdonald
Victor Manuel Morales
Lillian On
Chance Everett Palmer
Ericka Yap



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