College of Natural Sciences & Mathematics

2022 COMMENCEMENT CEREMONY
Welcome to

CALIFORNIA STATE UNIVERSITY LONG BEACH

SEVENTY-THIRD 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 from the 25 courses offered in Teacher Education, Business Education, and Liberal Arts which 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 73rd annual Commencement Ceremonies.
A Message from the President...

Dear Graduate,

Today, you join more than 355,000 fellow Cal State Long Beach alumni who are contributing to their communities and reshaping the world we live in. On behalf of the entire Beach Family; congratulations on your achievement. You have reached a significant milestone in your life, and we are proud to count you among those who call The Beach “home.”

During this celebration, I know you must be feeling appreciation to those who have supported and loved you throughout your educational journey. I encourage you to think about those who touched your life, as well as those whose lives you have lifted up. Savor the memories of the relationships, friendships and connections you made here; they will be with you for the rest of your life.

Whatever your course in life is, I know that you have been equipped to make this world a better place. You proven this during your time here: you contributed to our community in ways that helped make CSULB one of the most diverse, vibrant and transformative communities anywhere in the world.

As you join fellow graduates in celebrating this landmark moment, realize this is not the end of your “learning journey.” There is always more to learn, explore and understand. Today’s ceremony marks a start, not a conclusion – today can be a new beginning. Remember that The Beach can be your partner for lifelong learning.

Finally, please know that your presence here has inspired us and continues to drive us. Because of you, we are a better campus. I know you will carry that spirit forward and continue achieving, leading, inspiring and succeeding as an alum. I encourage you to stay connected, personally and professionally with your alma mater. You will always be a member of this community.

Go Beach!

Sincerely,

Jane Close Conoley, Ph.D.
President

A Message from the Interim Chancellor...

Dear Class of 2022,

Please accept my warmest and most heartfelt congratulations on achieving a truly momentous goal in your life. You set your sights on earning a degree; and now, that goal is a reality. That is a wondrous accomplishment, and I hope you feel a well-deserved sense of pride.

I hope you are filled with a sense of kinship and gratitude, as well. So many people have given so much to enable your success: faculty who illuminated your academic path; counselors, advisors, librarians, coaches and support staff who fostered an encouraging environment; family, friends, mentors and colleagues who gave their time and treasures to facilitate your journey. As you celebrate your success, please remember to celebrate their support as well.

Unlike any other graduating class, your university experience has been shaped in extraordinary ways by more than two years of a global pandemic. During those years, you have developed and honed attributes that will benefit you for a lifetime. Your resilience and adaptability will become career strengths. Your creativity and resourcefulness will define you. Your courage and determination are, in my eyes, already legendary. While it might have been different than the college experience you envisioned when you started your journey, these years have made you sharper, tougher, brighter and more purpose-driven than ever before.

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

As you step boldly into your future, I know I speak for every member of the California State University community when I express our collective pride in your perseverance and success. Your resolve shines as a symbol of hope and optimism. Again, congratulations, class of 2022!

Sincerely,

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.
OUTSTANDING THESIS AWARDS
Parker Richardson, M.S. Biology
Steven Guillen, M.S. Biochemistry
Christina Anne Meadows, M.S. Geology
Ted Si Yuan Cheng, M.S. Applied Statistics
Cristien L. Arzate, M.S. Physics - Computational Physics
Justin Fournier, M.S. Science Education - Secondary Science Education

GRADUATING PHI BETA KAPPA NOMINEES FROM MEMBERS IN CLASS 2020-2021
Danna De Boer, Chemistry and Biochemistry
Malia Kaye, Mathematics and Statistics
Millie Nguyen, Mathematics and Statistics
Makena Pollon, 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
Kambria Christine Schwalen, B.S. Biology - Organismal Biology
Taylor Jo Woodruff, B.S. Marine Biology
Sabina Grace Timothy, B.S. Biology - Organismal Biology
Abbas Abdulhasan, B.S. Biology - Molecular Cell Biology and Physiology
Alexa Dickey, B.S. Biology - Molecular Cell Biology and Physiology
Tarek El Massri, B.S. Biology - Molecular Cell Biology and Physiology
Kevin Jae Hyuk Choi, B.S. Biology - Molecular Cell Biology and Physiology
Nicole Marie Lopez, M.S. Biology
Hannah Rabitoj, M.S. Biology
Elishebah Tate-Pulliam, M.S. Biology

CHEMISTRY AND BIOCHEMISTRY
Tina Nguyen, B.S. Chemistry
Danna De Boer, B.S. Chemistry
Natalie Tran, B.S. Chemistry
Patrick Allen, M.S. Biochemistry
Adam Smith, M.S. Chemistry
Vernon Benedicto, M.S. Biochemistry

CHEMISTRY AND BIOCHEMISTRY
Spencer Horton Cooper, B.S. Geology
Desiree Selena Guzman, B.S. Geology
Amanda Seckington, M.S. Geology
Bedig Charkhutian, M.S. Geology

MATHEMATICS AND STATISTICS
Tu Tran Thieu Nguyen, B.S. Mathematics Education
Millie Vu Nguyen, B.S. Mathematics - Applied Mathematics
Mika Wong, B.S. Mathematics - Applied Mathematics
Wendolyn Lopez, B.S. Mathematics
Andrew Stapleton, B.S. Applied Statistics
Ivy Nguyen, B.S. Mathematics
Brandon Davis, B.S. Applied Statistics
Basanth Shankar, M.S. Applied Statistics
Victoria Lim, M.S. Mathematics - Applied Mathematics
Rosita Oey, M.S. Mathematics - Mathematics Education for Secondary School Teachers
Tu Li, M.S. Mathematics

PHYSICS AND ASTRONOMY
Michael Carroll, B.S. Physics
Blake Reid Koford, B.S. Physics
Mathew Andrew Leon, B.S. Physics
Derek Bergner, M.S. Physics - Applied Physics
Francisco Ramirez, M.S. Physics - Applied Physics
Spencer Halls, M.S. Physics
Michael Grant Roberts, M.S. Physics

SCIENCE EDUCATION
Mary Marguerite Nowak, M.S. Science Education - Informal Science Education
Adam Underwood, M.S. Science Education - Secondary Science Education

OUTSTANDING COLLEGE BACCALAUREATE GRADUATES

RICHARD D. GREEN DEAN’S AWARD
Alex Yuan, B.S. Biology - Molecular Cell Biology and Physiology
Annika Gonzales, B.S. Geology
Helen Chang, B.S. Mathematics - Applied Mathematics
Sierra N. Breyer, B.S. Physics

RICHARD D. GREEN DEAN’S OUTSTANDING STUDENT TEACHER IN SCIENCE
Kelci Boynton, Single Subject Credential - Life Science
B.S. Environmental Science and Policy, CSULB
BIOLOGICAL SCIENCES

Master of Science - Biology

Max Jonathan Amaya Muñoz
Thesis: Effects of Development on Mesocarnivore Occupancy Across Different Landscape Classification Assessments
Advised by: Dr. Ted Stankowich

Eric Brothell
Thesis: Challenges In Validating Prior Studies Demonstrating HAC1 and MED25 Might Regulate ERF022, and the Development of Teaching Materials for a Course-Based Undergraduate Research Experience (CURE)
Advised by: Dr. Judy Brusslan

Katrina Elizabeth Cazel
Thesis: Activity Shifts in Defended Versus Non-Defended Mammals in Response to Predator Presence and Urbanization Throughout North America
Advised by: Dr. Ted Stankowich

James Ti Chhnor
Thesis: Effects of Microplastic Exposure on the Growth and Development of Larval California Grunion (Leuresthes tenuis)
Advised by: Dr. Darren Johnson

Altagracia Contreras
Thesis: Reduced Myo-Inositol Catabolism Alleviates Diabetic Symptoms But Causes Developmental Defects in Drosophila Melanogaster (Fruit Fly)
Advised by: Dr. L.S. Klig

Andrew Jeffrey Dunnigan
Thesis: Vascular Morphology and Env7 Localization as a Function of the Cell Cycle: Creating Synchronous Cultures of Saccharomyces Cerevisiae with Nocodazole
Advised by: Dr. Editte Gharakhanian

Cody J. Fees
Thesis: Quantifying ecosystem functions of living shorelines through fish and epifaunal invertebrate communities of Upper Newport Bay
Advised by: Dr. Christine Whitcraft

Justin Antoine Griffin
Thesis: Activity of Binary and Complex Environmental Polychlorinated Biphenyl Mixtures Toward the Ryanodine Receptor 1 (RyR1)
Advised by: Dr. Erika Holland

Mehernaz Haque
Thesis: Innate immune protein C1q modulation of endothelial cell responses in Atherosclerosis
Advised by: Dr. Deborah Fraser

Alvin Vu Huynh
Thesis: Identifying and Characterizing Oxygen Sensors in the Spinal Cord of Mice
Advised by: Dr. Douglas Pace

Dream Le
Thesis: Determination of Progesterone Receptor(s) that Mediate Neuroprogesterone Induction of the Luteinizing Hormone Surge
Advised by: Dr. Kevin Sinchak

Long Lertpanit
Thesis: Characterizing the Expression and Distribution of RNA-Binding Motif Protein 48 in the Developing Mouse Brain
Advised by: Dr. Houng-Wei Tsai

Nicole Marie Lopez
Thesis: The trade-offs and predictors of sexual weaponry in ungulates
Advised by: Dr. Ted Stankowich

Kyra Lynn MacFarlane
Thesis: Effects of Upland Habitat Access on Distribution and Diets of a Rodent Community in a Southern California Tidal Marsh
Advised by: Dr. Christine Whitcraft

Jack Howard May, III
Thesis: The influence of water temperature on aggregation behavior of the leopard shark (Triakis semifasciata) at Santa Catalina Island, California
Advised by: Dr. Chris Lowe

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 Perrett

Noor F. Osman
Thesis: Investigating the Role of 3B-Wheeler in Follicle Cell Migration
Advised by: Dr. Elizabeth Eldon

Hannah Morgan Rabitoy
Thesis: Risk perception and escape behavior of skunks, squirrels, and rabbits in response to predator and human approaches
Advised by: Dr. Ted Stankowich

Maria Carmen Ramos
Thesis: Trafficking of Protein Kinase Env7 to the Lysosomal Vacuole of Saccharomyces cerevisiae
Advised by: Dr. Editte Gharakhanian

Parker J. Richardson
Thesis: Restoration Following Sediment Addition in a Southern California Salt Marsh: Limitations of Seed Availability and Analyses of Planting Methods for Spartina foliosa
Advised by: Dr. Christine Whitcraft
Master of Science - Biology, continued...

Josephine Rodriguez
Thesis: Evolution and diversity of pollinator associations in western hemisphere Justicia (Acanthaceae)
Advised by: Dr. Amanda Fisher

Callyn Elizabeth Shelley
Advised by: Dr. Darren Johnson

Taylor R. Smith
Thesis: The influence of environmental and social factors on aggregation behavior of the leopard shark (Triakis semissilasa) along the Southern California Coast
Advised by: Dr. Chris Lowe

Bridget Marie Steiner
Thesis: Do the Feeding Pluteus and “Dipleurella” Larvae of Echinoderms Differ in Their Constructional Costs and Their Expression of Phenotypic Plasticity?
Advised by: Dr. Bruno Pernet

Caitlin Sierra Stapp
Thesis: Comparing Contaminant-Induced Gene Expression in Native and Non-Native Oysters in Southern California Estuaries
Advised by: Dr. Erika Holland

Alyssa Jean Syverud
Thesis: The Role of Digestive Enzyme Activity in Phenotypic Plasticity During Larval Development of the Pacific Sand Dollar
Advised by: Dr. Douglas Pace

Elishebah Divyne-Diamond Tate-Pulliam
Thesis: The Effects of Restoration Methodology Using Olympia Oysters (Ostrea Lurida) and Eelgrass (Zostera Marina) on Infaunal Invertebrate Community Composition in Newport Bay, California
Advised by: Dr. Christine Whitcraft

Benjamin Verbooren
Thesis: Exploring the Role of TETB-Associated Apolipoplastic Vesicles in the Regulation of Leaf Senescence in Arabidopsis Thaliana
Advised by: Dr. Judy Brusslan

Juliana Vitagliano
Thesis: Determining the relationship between chemical cues, protein metabolism, and the induction of phenotypic plasticity in the Pacific Sand Dollar, Dendroaster excentricus
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Kathy Uyen Vo
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Thesis: Unraveling the effects of MICAL-induced oxidation on actin isoforms
Advised by: Dr. Elena Grintsevich

Joshua Mercado
Thesis: Thermodynamic stability of loop 6 motion in human bisphosphatase variants
Advised by: Dr. Jason Schwiars

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Thesis: Fluorescence spectroscopic analysis of apolipoprotein AI during HDL particle modulation
Advised by: Dr. Vasanthy Narayanaswami

Koyinsola Oloja
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Advised by: Dr. Deepali Bhandari

Master of Science - Chemistry

Edwin G. Avila
Thesis: Water-soluble palladium nanoparticles for the oxidation of terminal alkenes
Advised by: Dr. Young-Seok Shon

Cecilia Cisneros
Thesis: Assessing the viability of hydrated electron reduction of perfluorooctanoic acid
Advised by: Dr. Stephen Mezyk

Douglas Arano Fowler
Thesis: Synthesis and characterization of dinitrosyl iron complexes containing pyrazole derivatives
Advised by: Dr. Liujun Li

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Thesis: Reactions of Monobromamine with Wastewater Chemical Constituents
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Thesis: Molecular dynamics simulations of previtamin D3 in a phospholipid bilayer
Advised by: Dr. Enrico Tapavicza

Shinta Tanamas
Thesis: Synthesis, Crystal Structure, and Magnetic Properties of Novel Nickel Ruthenate Series: Li$_x$Ni$_{2+x}$RuO$_5$
Advised by: Dr. Shahab Derakhshan

Jiam Hoang Vuong
Thesis: Oxygen deficiency, structural transition, electrical conductivity, and oxygen intercalation trends in the perovskite-related family of compounds, RuO$_2$-xCoO$_{2-x}$, related to water oxidation electrocatalysis
Co-Advised by: Dr. Shahab Derakhshan and Dr. Keith Tavassoli

Caitlin Marie West
Thesis: Methyl benzoate/формate photo-initiated synthesis of gamma-keto esters
Advised by: Dr. Paul Buonora

Chemistry & Biochemistry

Muhammad imam Ud Abeer
Thesis: Modification of apolipoprotein E as a cholesterol transport protein, by 4-hydroxymonenal, a lipid peroxidation product
Advised by: Dr. Vasanthy Narayanaswami

Patrick Walter Allen
Thesis: Forbidden protein angles: Exploitation of unfavorable dihedrals for the enhancement of human-designed enzymes
Advised by: Dr. Jonathan Hatem

Kelly Naomi Araujo Urey
Thesis: Missing Thesis Information
Advised by: Dr. Vasanthy Narayanaswami

Noemi M. Castro
Thesis: Effect of ros coviteline, a selective inhibitor of cyclin-dependent kinases, on the unfolded protein response and insulin signaling
Advised by: Dr. Deepali Bhandari

Steven Gonzalez Guillen
Thesis: Experimental and computational studies of MIL-88B(Fe) on COOH-terminated functionalized gold surfaces
Advised by: Dr. Fangwuuan Tan

Heather Nicole Hershberger
Thesis: Probing the antimicrobial activity of apopliprotein A-I
Advised by: Dr. Paul Weers

Juliette Marie Jauregui
Thesis: A pyrene conformational study on the self-association of apolipoprotein A-I
Advised by: Dr. Paul Weers

Iris Marquez
Thesis: Purification and activity analysis of recombinant CDK5-p52S complex harboring mutations on a potential autoprophosphorylation site
Advised by: Dr. Deepali Bhandari

Noemi Iris Stahle
Thesis: Investigating Serine 46 as a phosphoregulatory residue in cyclin dependent kinase 5
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Thesis: Solvent Effects in Photohydrolylation
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Josephine Rodriguez
Thesis: Removal of His6-tag from apolipoprotein A-I-N-terminal chimeras by TEV protease
Advised by: Dr. Paul Weers

Blair Alistair Russell
Thesis: Insight into the structure and function of fragments of apolipoprotein I from Locusta migratoria and the role of the individual helices in lipid binding
Advised by: Dr. Paul Weers

Jamie Jo Solorsa
Thesis: Effect of Akt inhibition on endoplasmic reticulum stress signaling
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Master of Science - Biochemistry

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Advised by: Dr. Paul Buonora
**GEOLOGICAL SCIENCES**  
**Master of Science - Geology**

Justin M. Arakaki  
Thesis: Formational Scale Differences in Styles of Deformation in the Poinsa-Husna Syncline and Implications for Petroleum Migration and Production  
Co-Advised by: Dr. Nate Onderdonk and Dr. Richard Behl

Vural Burc Cakir  
Thesis: Boron isotope studies of the Sierra C res  
Advised by: Dr. Gregory Holk

Bedig Charkhutian  
Thesis: Sedimentology, Stratigraphy, and Petrography of the Siliceous Lithofacies, Upper Modelo Turbidite system, Eastern Ventura Basin, Southern Lake Pinu, 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

Matthew James Graves  
Thesis: Tectonic Geomorphology and Recency of Faulting of the Northernmost San Jacinto Fault Zone, and Implications for Slip Transfer to the San Andreas Fault Zone  
Advised by: Nate Onderdonk

Christina Anne Meadows  
Thesis: Temporal and Spatial Patterns of Groundwater Recharge Across an Apline Headwater System in the California Sierra Nevadas  
Advised by: Dr. Benjamin Hagedorn

Cesar Mejia

**MATHEMATICS & STATISTICS**  
**Master of Science - Mathematics**  
**Master of Science - Applied Mathematics**

Bibek Acharya  
Thesis: Analyzing Premium Persistency Through the Use of Long Short-Term Neural Networks  
Advised by: Dr. Sung Kim

Luis Antonio Cervantes  
Thesis: Partitioning PAN into Various Sources Using Geographically Weighted Classification Methods  
Advisor: Dr. Kagba Suaray

Ted Cheng  
Thesis: Characterizing At-Risk Students Using Bayesian Profile Regression  
Advised by: Dr. Tianni Zhou

Jon Braswell  
Thesis: Student Retention at CSULB: Interpretable Classification with Imbalanced Datasets  
Advised by: Dr. Kagba Suaray

Michele Hale  
Thesis: Modeling Air Pollution Effect on Epidemiological Events: Regression and Machine Learning Approaches  
Advised by: Dr. Olga Korosteleva

David Marmor  
Thesis: Predictive Modeling for Baseball Pitch Success Rate  
Advised by: Dr. Xiyue Liao

Jose Manuel Marquez  
Jacqueline Stephanie Mejia Sandoval  
Thesis: Generation Methods and Statistical Inference for Random Variables and Processes  
Advised by: Dr. Olga Korosteleva

Kushal Mohnot  
Ryan B. Nguyen  
Chioma Akurulo Nwuzi  
Thesis: Prediction of Diabetes Prevalence Among the World’s Countries Using Aggregate Nutritional and Medical Data  
Advised by: Dr. Hojin Moon

Connor Scott Bergmann  
Ashleigh Bisbee  
Jacob Cornejo  
Andrew Jackson-Pardo  
Tu Li  
Nate Onderdonk  
Dr. Benjamin Hagedorn  
Dr. Gregory Holk  
Dr. Hojin Moon  
Dr. Olga Korosteleva  
Dr. Xiyue Liao

Ly Heng Phey  
Thesis: Predictive Modeling of Calibration Cycle and Calibration Conditions  
Advised by: Dr. Xiyue Liao

Dean Reeves  
Basant Shankar  
Joy May Taevajira  
Huy Truong  
Kha T. Vu  
Xuan Zhou

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

Daniela Arzate Zavala  
Reanna Bromley  
Rosita HENDRrwATI Oye

Stephanie Panameno  
Michael Peterson
## PHYSICS & ASTRONOMY

### Master of Science - Physics

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<tr>
<th>Name</th>
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<tr>
<td>Nicholas Cassar</td>
<td>Thesis: Mean Field Modifications to the Hadron Resonance Gas model</td>
<td>Thomas Klaehn</td>
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<td>Paul Fischer</td>
<td>Thesis: Realistic Fractional Quantum Hall Energy Gaps in Graphene via Monte Carlo Simulations</td>
<td>Michael Peterson</td>
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<td>Edgar Garcia</td>
<td>Thesis: Equilibrium Properties of Catenated Membranes</td>
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<td>Jiyeong Gu</td>
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<td>Lydia Juan</td>
<td>Thesis: Numerical Studies of Chiral Spin Liquids</td>
<td>Michael Peterson</td>
</tr>
<tr>
<td>Andrew Konz</td>
<td>Thesis: Equation of State and Lowest State Energies of Neutron Star Crust at Varying Temperatures</td>
<td>Thomas Klaehn</td>
</tr>
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<td>Andreas Bill</td>
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## SCIENCE EDUCATION

### Master of Science - Science Education - Secondary Science Education

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<td>Jerren Smith</td>
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### Master of Science - Science Education - Informal Science Education

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

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Candidates for the Bachelor's Degree

College of Natural Sciences & Mathematics

BIOLOGICAL SCIENCES
Bachelor of Science - Biology

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Jessica Aguiler
Sabrina Lisette Ahmed
Raneem Al Shoubaki
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Jaden Arasalde Alejo
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Yazen Hayman Alomari
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Sean Hoang Tran
Chris Tran

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Rosary Empett
Stefani Elizabeth Lang
Brandon Luong
Riley Lewis Meyer

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Carolina Yezmin Dominguez Maldonado Gladys Rodriguez
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Ramiro Monteon Elaine Le Vo
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Osama Ahmed Kenny Calderon-Godinez
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Maricarmen Amador Andrew T. Chau
Jaqueline Arciga Nga Tran
John Orlina Arcillas Nguyen T. Chiem
Joey Balba Jennifer Cisneros
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Suchana Gurung
Marian C. Gutierrez
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Christian Arne Johansson
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Aaqil Khan
Nicole Marie Kovaleski
Alexis Lazaro
Nathaly Lazcano
Sarah Azeret Lazcano
Caroline Hoang Le
Rachel Lee

Bachelor of Science - Chemistry

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Andrew Beshay
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Richard Carlos Camacho
Tien Cao
Ryan E. Cornista
Rachel Dang
Danna Lee De Boer
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Ryan Hoang Ngo
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Susu Nguyen
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Jay Patel
Loren Anthony Pendilla
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ENVIRONMENTAL SCIENCE AND POLICY

Bachelor of Science - Environmental Science and Policy

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ACKNOWLEDGEMENTS

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