

Commencement

SPRING SEMESTER 2023



DONALD P. BELLISARIO COLLEGE OF COMMUNICATIONS

Saturday, May 6, 2023
The Bryce Jordan Center
1:00 p.m.



PennState



National Anthem

by Francis Scott Key

O say, can you see, by the dawn's early light,
What so proudly we hailed at the twilight's last gleaming;
Whose broad stripes and bright stars, thro' the perilous fight,
O'er the ramparts we watched, were so gallantly streaming?
And the rockets' red glare, the bombs bursting in air
Gave proof thro' the night that our flag was still there.
O say, does that Star-Spangled Banner yet wave
O'er the land of the free and the home of the brave!

Alma Mater

by Fred Lewis Pattee

For the glory of old State,
For her founders, strong and great,
For the future that we wait,
Raise the song, raise the song,

Sing our love and loyalty,
Sing our hopes that, bright and free,
Rest, O Mother dear, with thee.
All with thee, all with thee.

When we stood at childhood's gate,
Shapeless in the hands of fate,
Thou didst mold us, dear old State,
Dear old State, dear old State.

May no act of ours bring shame
To one heart that loves thy name,
May our lives but swell thy fame,
Dear old State, dear old State!

Commencement

SPRING SEMESTER 2023

Baccalaureate Degrees

May 5–7, 2023



PennState
Eberly College
of Science

Message From the Dean

On behalf of the Penn State Eberly College of Science, I offer my fullest congratulations to the Class of 2023. You should be so proud of all that you have accomplished during your time at Penn State. You have brought a fresh perspective to our classrooms, our laboratories, and our research groups, and you have been part of our powerful mission to solve complex global problems. As you embark on this next exciting step in your journey, carry with you the training you have received. Apply your critical thinking, quantitative analysis, fact-based decision-making, and communication of science to meeting the world's challenges—big and small. You will follow in the rich tradition of Eberly College of Science graduates who have positively impacted humanity. We know that you will take many different paths after graduation, joining the ranks of our alumni in academia, industry, government, or following opportunities you may not yet have dreamed of. As you do so, I hope you carry the personal connections, treasured memories, and important values you have gained at Penn State with you. You have forever made your mark on Penn State, and we wish you all the success that you have rightly earned.

Tracy Langkilde, B.S., Ph.D.

Verne M. Willaman Dean, Eberly College of Science

Spring 2023 Commencement Program

Academic Processional

Performed by Centre Brass

National Anthem

Led by Erica Harvey

The audience is asked to join in the singing.

Presiding

Justin Schwartz, B.S., M.S., Ph.D.

Executive Vice President and Provost, The Pennsylvania State University

Tracy Langkilde, B.S., Ph.D.

Verne M. Willaman Dean, Eberly College of Science

Commencement Address

Ala Stanford, B.S., M.D.

Regional Director, U.S. Department of Health and Human Services; Pediatric Surgeon

Authorization to Confer Degrees

Richard Sokolov, B.A., J.D.

Member, Board of Trustees

Recognition of Meritorious Achievement

Dean Langkilde

Recognition of Student Marshals

Christopher Palma, B.S., Ph.D.

Associate Dean for Undergraduate Students

Recognition of Military Commissions

Provost Schwartz

Conferral of Degrees

Provost Schwartz

Induction into Alumni Association

Andrew Santacroce, B.S.

President, Eberly College of Science Alumni Society Board

Alma Mater

Led by Erica Harvey

The audience is asked to join in the singing.

Recessional

The audience will please remain seated.

University Nomenclator

Ted Cristopher, B.M., M.M., D.M.A.

Commencement Speaker

Ala Stanford, M.D., FACS, FAAP

Regional Director, U.S. Department of Health and Human Services
Pediatric Surgeon
Founder, Black Doctors COVID-19 Consortium
Founder, Dr. Ala Stanford Center for Health Equity



Dr. Ala Stanford '91, '97g, is a pediatric surgeon and advocate for health-care equity. In her current role as U.S. Department of Health and Human Services' regional director, she ensures communities across her six-state region have access to the information and resources they need to stay safe and healthy, with a particular emphasis on advancing equity in all aspects of health care.

Early in the COVID-19 pandemic, Stanford created the Black Doctors COVID-19 Consortium in response to disparities in the health-care system that created barriers to testing and disproportionately high rates of COVID-19 infection and death among minority residents. The consortium brought together more than 200 health-care professionals to bring testing—and later, vaccinations—to thousands of residents in Philadelphia's minority neighborhoods. In 2021, she expanded the consortium's scope, creating the Dr. Ala Stanford Center for Health Equity.

Stanford has received many accolades, notably a 2021 Top 10 CNN Hero, USA Today's Pennsylvania Woman of the Year, and 2021 George H.W. Bush Points of Light Award. Most recently, she led a FEMA mission, Region 3 team, to vaccinate students in Philadelphia School District, and a mobile vaccination unit

in hard-hit southeastern Pennsylvania neighborhoods. She was recognized by Forbes magazine as a woman over 50 changing the world and by Fortune magazine as one of the 50 greatest leaders.

She also is the founder of R.E.A.L. Concierge Medicine, a medical consulting and health-advocacy service. She has served as director of pediatric surgery at Abington Memorial Hospital and director of the Center for Minority Health and Health Disparities at Temple University's School of Medicine. Stanford began her college career at Penn State Behrend, where she created the track and field program, graduating from the Eberly College of Science, at the University Park campus, with a degree in biology. She continued her education at the Penn State College of Medicine, receiving her medical degree in 1997. She is the first African American female pediatric surgeon to be trained entirely in the United States.

Stanford is a life member of the Penn State Alumni Association and lives in Philadelphia with her husband, Bryon Drayton, and three sons.

College Marshal and Faculty Escort

Bryan Manzano



Bryan Manzano of Glen Mills, Pennsylvania, will be honored as the student marshal for the Penn State Eberly College of Science during the University's spring commencement ceremonies on Sunday, May 7, on the University Park campus. His escort for the commencement exercises is **Cornelia Osbourne**, graduate student in biology.

Manzano will graduate with a 4.0 grade-point average and bachelor's degrees in biology and music performance. He is a Schreyer Scholar in the Penn State Schreyer Honors College and has been a member of the Dean's List every semester. Manzano was honored with an Evan Pugh Scholar Award in 2022 and a Penn State School of Music Scholarship in 2019. He was also recognized as the student marshal for the Penn State College of Art of Architecture. "I am extremely humbled to be selected for this honor and am happy that my hard work as a double major has paid off," he said.

While at Penn State, Manzano conducted research with **Illiana Baums**, then a professor of biology, as well as Osbourne. He used the hybrid coral species *Acropora prolifera* to study the mismatch that can occur between the genome in the nucleus of a cell and the separate genome within mitochondria in the cell, called mitonuclear conflict. He wrote a literature review about the effects of this conflict on the second-generation offspring of these coral hybrids. He later developed computer code using a gene

coexpression network analysis approach to compare the genome of the coral hybrid to that of its two parental species to look for evidence of mitonuclear conflict, which could impact future offspring viability. Manzano also worked with the lab to carry out a protocol to extract genetic material called RNA from the tissues of various species of corals.

In addition to his research activities, Manzano served as a teaching assistant for the course BIOL 220W: Ecology and Evolution. He was also the president of the School of Music's Encore Benefiting THON organization as well as a member of the Penn State Horn Society, the Penn State Symphonic Wind Ensemble, and the Penn State Philharmonic Orchestra. Manzano also performed as a part of the Nittany Valley Symphony and the Pennsylvania Chamber Orchestra.

"I think my most important experience was going to Carnegie Hall as part of the president's concert for the Symphonic Wind Ensemble in March 2020," he said. "It taught me that when one studies at university, it is important to be able to take advantage of any travel experience you can in order to make memories that you will never forget."

After graduation, Manzano plans to work as a research technician in the lab of Song Tan, Verne M. Willaman Professor of Molecular Biology at Penn State. He is excited to join this lab and help them work towards gaining further understanding of gene regulation, which could have implications for the development of future cancer treatments.

A graduate of Garnet Valley High School in Glen Mills, Pennsylvania, Manzano will be accompanied at commencement by his father, Patrick; sister, Alyssa; and partner, Carson Bechdel.

Department Marshals and Faculty Escorts

Maya Debski—Astronomy and Astrophysics

Representing the major of Astronomy and Astrophysics is student marshal **Maya Debski**. Debski is from Pittsburgh, Pennsylvania, and celebrates this honor with family Corinne Bohjanen, Ryan Debski, and Edward Horey, who are in attendance today. Debski is escorted by **Donald Schneider**, Distinguished Professor of Astronomy and Astrophysics.

Debski graduates with a bachelor's degree in astronomy and astrophysics and minors in classics and ancient Mediterranean studies, physics, and mathematics. Debski conducted research in the Mostafa group lab, Schneider group lab, and Villar group lab during her undergraduate career. She is a member of the Penn State Schreyer Honors College, the Society of Physics Students, and a NASA Space Grant Scholar. Debski was the recipient of the President's Freshman Award (2019), Schreyer Honors College Academic Excellence Scholarship (2019–2023), the Daniel and Conchi Fuoco Renaissance Scholarship (2019–2023), the Chapman Family Trustee Scholarship (2019–2023), the Penn State Provost's Award (2019–2023), and the Erickson Discovery Grant (2022), and was on the Dean's List from fall 2019 to fall 2022.

After graduation, Debski plans to attend the University of Texas at Austin for a Ph.D. in astronomy and become a professor of astronomy.

Abigail J. Stolinas—Planetary Science and Astronomy

Representing the major of Planetary Science and Astronomy is student marshal **Abigail J. Stolinas**. Stolinas is from Allentown, Pennsylvania, and celebrates this honor with parents Randy Stolinas and Christine Stolinas, who are in attendance today. Stolinas is escorted by **Robert Morehead**, assistant teaching professor of astronomy and astrophysics.

Stolinas graduates with a bachelor's degree in planetary science and astronomy. Stolinas is a NASA Eclipse Ambassador, a member of the Sign Language Organization, and was on the Dean's List six times. Stolinas was the recipient of the Hamilton Relay High School Scholarship (2020), the Hearing Loss Association of America-Pennsylvania Joe Meyer Memorial Grant (2020), the Traveler's Protection Association Scholarship (2020), the President's Freshman Award (2020–2021), the Donald E. Allen Memorial Scholarship (2020–2021), the Undergraduate Scholarship for Talented Students (2021–2023), and the Polis-Newcombe Students with Disabilities Scholarship

(2022–2023).

After graduation, Stolinas plans to work full-time in the field of planetary science with the hope of returning to higher education in the near future to pursue a graduate degree.

Ellie Kim—Biochemistry and Molecular Biology

Representing the major of Biochemistry and Molecular Biology is student marshal **Ellie Kim**. Kim is from State College, Pennsylvania, and celebrates this honor with parents Hojong Kim and Jonghee Song, who are in attendance today. Kim is escorted by **Moriah Szpara**, professor of biology and biochemistry and molecular biology.

Kim graduates with a bachelor's degree in biochemistry and molecular biology and a bachelor's degree in music. Kim conducted research in the Szpara lab, the Oliver lab, the Kim lab, the Schenke-Layland lab, and the Kottyan and Weirauch labs during her undergraduate career. She was a member of Vaccinate America and Science LionPride. Kim was the recipient of the Astronaut Scholarship (2022), the Goldwater Scholarship (2022), the Cincinnati Children's Hospital Medical Center Summer Undergraduate Research Fellowship (2021), the Eleanor Beane Award (2021), and the Homer Braddock Scholarship (2019–2023), and was on the Dean's List eight times during her undergraduate career.

After graduation, Kim plans to pursue an M.D./Ph.D. and specialize in immunology research and pediatric care.

Grace K. Buddle—Biotechnology

Representing the major of Biotechnology is student marshal **Grace K. Buddle**. Buddle is from North Wales, Pennsylvania, and celebrates this honor with parents Elizabeth Buddle and Douglas Buddle and grandmother Kathe Christensen, who are in attendance today. Buddle is escorted by **Beatrice Sirakaya**, associate teaching professor of biotechnology.

Buddle graduates with a bachelor's degree in biotechnology. Buddle conducted research in the Miyashiro lab. She was a member of Phi Sigma Pi, Phi Beta Kappa national honor society, and the National Society of Leadership and Success, and was on the Dean's List every semester. Buddle was the recipient of the President's Freshman Award (2020), the President Walker Award (2020), the President Sparks Award (2021), an Evan Pugh Scholar Award (2022), the Mary A. Stiles Scholarship (2022), and the Homer F. Braddock

Scholarship (2022).

After graduation, Buddle will be starting a neuroscience co-op position at Merck studying protein interaction in Alzheimer's and will be returning to Penn State in spring 2024 to finish a master's degree in biotechnology.

Kerry T. McCann—Forensic Science

Representing the major of Forensic Science is student marshal **Kerry T. McCann**. McCann is from Springfield, Pennsylvania, and celebrates this honor with parents Kara and Dave McCann, who are in attendance today. McCann is escorted by **Mitchell Holland**, professor of biochemistry and molecular biology and forensic science.

McCann graduates with a bachelor's degree in forensic science. She conducted research in the Ristenbatt lab. She was a member of the Schreyer Honors College, public relations captain for Penn State THON, a member of Penn State Lion Ambassadors, and a member of Delta Delta Epsilon forensic science honor society. McCann was the recipient of the Schreyer Honors College General Scholarship (2018–present), the Rocchino Family Scholarship (2018–2022), the Shapiro Family Scholarship Fund (2018–2020), the Walter and Lynn-Marie Wieland Student Research Fund in Forensic Science Scholarship (2020–2021), and the Elwood Graduate Scholarship in Forensic Science (2022–2023), and was on the Dean's List each semester.

After graduation, McCann plans to work in a DNA lab.

Aidan R. Donnelly—Microbiology

Representing the major of Microbiology is student marshal **Aidan R. Donnelly**. Donnelly is from Media, Pennsylvania, and celebrates this honor with parents John Donnelly and Anne Donnelly and brother Ethan Donnelly, who are in attendance today. Donnelly is escorted by **Tim Miyashiro**, associate professor of biochemistry and molecular biology.

Donnelly graduates with a bachelor's degree in microbiology. Donnelly conducted research in the Miyashiro lab during his undergraduate career. He served as director of testing on the executive board of the Science Olympiad at Penn State club (2021–2023) and was a member of the Schreyer Honors College. Donnelly was the recipient of a Schreyer Honors College Grant (2022), the Paul and Mildred Berg Undergraduate Research Endowment (2021), the Charles and Vickie Grier Research Fund (2021), and the President's Freshman Award (2020). Donnelly was on the Dean's List seven times.

After graduation, Donnelly plans to complete a gap year and then pursue an M.D./Ph.D. and a career as a physician-scientist specializing in infectious diseases.

Lizzie J. Giacobe—Microbiology

Representing the major of Microbiology is student marshal **Lizzie J. Giacobe**. Lizzie is from Bellefonte, Pennsylvania, and celebrates this honor with parents Nick Giacobe and Lisa Giacobe, who are in attendance today. Lizzie is escorted by **Tim Miyashiro**, associate professor of biochemistry and molecular biology.

Lizzie graduates with a bachelor's degree in microbiology. Lizzie conducted research in the Miyashiro lab and Guckes lab during her undergraduate career. She was a member of the Penn State Blue Band, family relations chair of the Band Together THON organization, and Science Olympiad test writer. Lizzie was the recipient of the Philip W. and Leann M. Mohr Undergraduate Scholarship in Microbiology (2022) and the Jacqueline Hemming Whitfield Undergraduate Sumer Research Endowment (2021), a BMB Scholar, and was on the Dean's List each semester. After graduation, Lizzie will be pursuing a Ph.D. through the Program in Microbiology and Immunology at the University of Pittsburgh School of Medicine.

Alexandria Auerbeck—Biology

Representing the major of Biology is student marshal **Alexandria Auerbeck**. Auerbeck is from Hollidaysburg, Pennsylvania, and celebrates this honor with parents David and Tracy Auerbeck, who are in attendance today. Auerbeck is escorted by **James Strauss**, teaching professor of biology.

Auerbeck graduates with a bachelor's degree in biology and a minor in health policy and administration. She conducted research in the Conroy lab. She was a member of the Alpha Epsilon Delta preprofessional health honor society, the Pre-Dental Society, Diversity in Healthcare Taskforce Member, and the Phi Eta Sigma national honor society, as well as making the Dean's List each semester. Auerbeck was the recipient of the President's Freshman Award (2020), the President Sparks Award (2021), the Evan Pugh Scholar Award (2022), the NASA Pennsylvania Space Grant (2019), the Summer Translational Cardiovascular Science Institute Grant (2021), and the National Induction into Alpha Epsilon Delta preprofessional health honor society (2021).

After graduation, Auerbeck will be attending the University of Pittsburgh School of Dental Medicine.

Ryan Lai—Chemistry

Representing the major of Chemistry is student marshal **Ryan Lai**. Lai is from Enola, Pennsylvania, and celebrates this honor with parents David Lai and Cyndy Song, as well as Michelle Lai and Noah Lingwall, who are in attendance today. Lai is escorted by **Jonathan Kuo**, assistant professor of chemistry.

Lai graduates with a bachelor's degree in chemistry.

He conducted research in the Zhang lab and Kuo lab during his undergraduate career. He was the president of the Nittany Chemical Society, member of the Department of Chemistry Climate and Diversity Committee, the Schreyer Honors College, the American Society for Microbiology, and the Music Service Club, as well as making the Dean's List each semester. Lai was the recipient of the Norman Feed Undergraduate Research Award (2023), the Stephen and Patricia Benkovic Summer Research Award (2022), the American Chemical Society Student Leadership Award (2022), and the John and Elizabeth Holmes Teas Scholarship (2020).

After graduation, Lai will be attending UCLA to pursue a Ph.D. in chemistry and eventually plans to pursue a career in the pharmaceuticals industry.

Isabelle Stepler—Mathematics

Representing the major of Mathematics is student marshal **Isabelle Stepler**. Stepler is from Jefferson, Maryland, and celebrates this honor with parents Mark and Annette Stepler, who are in attendance today. Stepler is escorted by **Cheryl Hile**, associate head of undergraduate studies and teaching professor of mathematics.

Stepler graduates with a bachelor's degree in applied and industrial mathematics and a minor in music studies. She conducted research in the Jabin lab and the Conway lab at Penn State and participated in a research experience for undergraduates (REU) at the Rochester Institute of Technology. She was a member of Science LionPride, Women in Mathematics, the Department of Mathematics Climate and Diversity Committee, Oriana Singers, and the Pep and Campus Bands. Stepler was the recipient of the Women in Math Fellowship (2022), the Mathematics Alumni Enhancement Fund for Undergraduates Grant (2022), the William B. Forest Honors Scholarship in Mathematics (2022), and the President's Freshman Award (2020), among others.

After graduation, Stepler plans to pursue a Ph.D. in applied mathematics at the University of Maryland with the goal of being a math professor.

Jack Piazza—Mathematics

Representing the major of Mathematics is student marshal **Jack Piazza**. Piazza is from State College, Pennsylvania, and celebrates this honor with his parents Steve and Sarah Piazza, who are in attendance today. Jack is escorted by **Steve Hair**, professor and adviser of mathematics.

Piazza graduates with a bachelor's degree in mathematics, graduate studies option. He worked on research projects in mathematical logic and algorithmic randomness with Jan Reimann as well as participating

in an REU at Cornell University. He is a member of Phi Beta Kappa honor society and gave talks at the Penn State Logic Seminar. Piazza was the recipient of the Erickson Discovery Grant (2021), Evan Pugh Scholar Award (2022), and Barry Goldwater Scholarship (2022), and was on the Dean's List each semester of his undergraduate career. After graduation, Piazza is planning to pursue a Ph.D. in mathematics and eventually become a professor where he can continue doing research and teach at the university level.

Jackson Ross MacTaggart—Physics

Representing the major of Physics is student marshal **Jackson MacTaggart**. MacTaggart is from Washington, Pennsylvania, and celebrates this honor with parents Rebecca and Scot MacTaggart, who are in attendance today. MacTaggart is escorted by **Sarah Shandera**, associate professor of physics.

MacTaggart graduates with a bachelor's degree in physics, a bachelor's degree in astronomy and astrophysics, and a minor in mathematics. He conducted research in the Sheikh and Shandera labs during his undergraduate career. He was vice president of the Pulsar Search Collaboratory at Penn State, vice president of the Astronomy Club, and member of the honor society of Sigma Pi Sigma, as well as being on the Dean's List eight times. MacTaggart was the recipient of the Bert Elsbach Scholarship in Physics for Academic Excellence (2020) and the President's Freshman Award (2020).

After graduation, MacTaggart will be attending the University of Michigan to pursue a Ph.D. in climate and space sciences and engineering in the subfield of heliophysics.

Marc Jason Lussier—Premedicine

Representing the major of Premedicine is student marshal **Marc Lussier**. Lussier is from Malvern, Pennsylvania, and celebrates this honor with parents Mathieu Lussier and Halaine Lussier, as well as sister Holly Lussier, who are all in attendance today. Lussier is escorted by **Lori Stepan**, associate teaching professor of chemistry.

Lussier graduates with a bachelor's degree in premedicine and a bachelor's degree in psychology. He conducted research in the Kwapis lab during his undergraduate career. He was a member of the Red Cross Club, a Penn State Learning assistant and guided study group leader, and a member of Alpha Epsilon Delta health preprofessional honor society. Lussier was the recipient of the President's Freshman Award (2020) and the Evan Pugh Scholar Award (2023), a member of the Schreyer Honors College, and was on the Dean's List seven times.

After graduation, Lussier plans to attend medical school and go into surgery.

Joshua Warden Howells—Science

Representing the major of Science is student marshal **Joshua Howells**. Howells is from Hollidaysburg, Pennsylvania, and celebrates this honor with parents Chuck and Stephanie Howells, who are in attendance today. Howells is escorted by **Song Tan**, professor of molecular biology.

Howells graduates with a bachelor's degree in science and a minor in psychological science. Howells performed undergraduate research in the Tan lab during his undergraduate career. He was a member of the Phi Chi Theta professional business fraternity, the Phi Eta Sigma freshman honor society, and the National Society of Leadership and Success. Howells was the recipient of the President's Freshman Award (2020), the Evan Pugh Scholar Award (2021 and 2022), and Honors in Biochemistry and Molecular Biology (2023), and was on the Dean's List seven times.

After graduation, Howells will be attending the University of Kentucky College of Dentistry with a commitment to enter the United States Air Force as a dental officer.

Nathan Charles Howells—Science

Representing the major of Science is student marshal **Nathan Howells**. Howells is from Hollidaysburg, Pennsylvania, and celebrates this honor with parents Richard and Stephanie Howells, as well as brother Christopher Howells, who are all in attendance today. Howells is escorted by **John Moses**, prehealth academic adviser.

Howells graduates with a bachelor's degree in science. Howells performed undergraduate research in the Perdeu lab at Penn State. He was a member of the Phi Chi Theta professional business fraternity, involved in THON, a member of Phi Eta Sigma freshman honors society and the National Society of Leadership and Success, and was on the Dean's List seven times. Howells was the recipient of the Balog Science B.S./M.B.A. Scholarship during his first year.

After graduation, Howells will be attending the University of Pittsburgh School of Dental Medicine.

Candace L. Todd—Statistics

Representing the major of Statistics is student marshal **Candace Todd**. Todd is from Woodbridge, Virginia, and celebrates this honor with family Karen, Devin, Haley, and Tiffany Todd, and Leah Can, Sarah Perez, and Cass Pitts, who are in attendance today. Todd is escorted

by **Murali Huran**, department head and professor of statistics.

Todd graduates with a bachelor's degree in statistics with minors in mathematics and computer science. She conducted research in Nathaniel Brown's STEM Diversity Lab and in the Haran and Ferrari labs during her undergraduate career. Todd was a member of Science LionPride, the Statistics Club, and Mu Sigma Rho national statistics honor society, and was on the Dean's List seven times. She was the recipient of the Millennium Scholars Program Scholarship, the Bunton-Waller Scholarship, the Penn State Provost's Scholarship, the Catherine V. Beath Trustee Scholarship, the D. Diehl Endowed Scholarship (2022), the M. Rosenshine Fund Statistics Scholarship (2023), and the Anderson Math Scholarship.

After graduation, Todd will complete a summer internship at the National Renewable Energy Laboratory and then pursue a Ph.D. in statistics at Penn State.

Owen W. Lloyd—Data Sciences

Representing the major of Data Sciences is student marshal **Owen Lloyd**. Lloyd is from State College, Pennsylvania, and celebrates this honor with family member Gwen Lloyd, who is in attendance today. Lloyd is escorted by **Murali Huran**, department head and professor of statistics.

Lloyd graduates with a bachelor's degree in data sciences and a bachelor's degree in mathematics. He conducted research in the Belemonte lab during his undergraduate career. Lloyd was a member of Alpha Kappa Psi coed professional business fraternity and chair of corporate communication and alumni relations for the Schreyer Consulting Group. He was the recipient of the Schreyer Academic Excellence Scholarship (2019–2023) and the William B. Forest Honors Scholarship in Mathematics (2022), as well as making the Dean's List each semester.

After graduation, Lloyd will be working at MathWorks in Natick, Massachusetts, as an associate software engineer and has long-term goals to work in the entertainment industry as a software engineer or data scientist.

Department and Program Representatives

Philip Bevilacqua, B.S., Ph.D.

Distinguished Professor of Chemistry and Biochemistry and Molecular Biology; Head, Department of Chemistry

Wendy Hanna-Rose, B.A., Ph.D.

Associate Professor and Head, Department of Biochemistry and Molecular Biology

Murali Haran, B.S., M.S., Ph.D.

Professor and Head, Department of Statistics

Beth Johnson, B.S., Ph.D.

Academic Adviser and Chair, Science program

Mark Levi, B.S., Ph.D.

Professor and Head, Department of Mathematics

Melissa Krajcovic, B.A., Ph.D.

Professor and Head, Premedicine program

Randall McEntaffer, B.S., Ph.D.

Professor and Head, Department of Astronomy and Astrophysics

Elizabeth McGraw, B.S., Ph.D.

Professor and Head, Department of Biology

Nitin Samarth, M.S., Ph.D.

Professor of Physics and George A. and Margaret M. Downsborough Department Head, Physics

Faculty Marshals

John Waters, B.S., M.S., Ph.D.

Teaching Professor of Biology and Anthropology,
Associate Head of Undergraduate Education, Biology

Carla Hass, B.S., M.S., Ph.D.

Teaching Professor of Biology,
Associate Head for Curricular Coordination, Biology

Carolyn Jensen, B.S., M.S., Ph.D.

Director of Academic Advising Center, Eberly College of
Science

Peter Jurs, B.S., Ph.D.

Professor Emeritus of Chemistry

Barbara DeHart, M.S.

Director of Undergraduate Advising, Biology
Assistant Teaching Professor of Biology

Janelle Malcos, Ph.D.

Teaching Professor of Biology
Associate Director, Center for Excellence in Science
Education

John Neisser, B.A., M.D.

Assistant Teaching Professor of Biology

Jennifer Stingelin Keefer, B.S., M.S.

Academic Adviser, Biochemistry and Molecular Biology

History of the Eberly College of Science



On March 17, 1990, Penn State's Board of Trustees renamed the College of Science to honor one of its most generous benefactors—the Eberly Family Charitable Trust of Uniontown—and at the spring commencement of the Class of 1990, the formal naming of the Eberly College of Science occurred, inaugurating a new chapter in the long and distinguished history of science education and research at the University. The occasion also marked the first time that a public research university named its basic science college for a benefactor.

The Eberly College of Science began as a department of chemistry, becoming the School of Natural Science in 1896, the School of Chemistry and Physics in 1926, the College of Chemistry and Physics in 1953, and the College of Science in 1963. It has always had as its central goals the education of first-rate scientists and generation of high-quality research. Today, with more than 46,000 alumni and more than \$95 million spent annually on research (provided mostly by grants and contracts from government and industry), the college demonstrates real success.

In 1986, the Eberly Family Trust gave \$10 million to establish a chair in each of the college's departments, to create endowments for biotechnology, and to provide funding for the Hobby-Eberly Telescope. The gift was among the largest donations made to the campaign for Penn State, the University's successful six-year

effort to raise \$300 million in private support. Trustee Manager Robert Eberly, who graduated from Penn State in 1939 with a bachelor's degree in chemistry, served as campaign treasurer. It was the first time in all of higher education philanthropy that an academic college received, in a single gift, endowed chairs for every one of its departments.

The support of the Eberly family and other generous benefactors has allowed the college to attract and retain faculty members of worldwide renown, to provide access for able students from a wide range of backgrounds, and to enhance academic programs.

This margin of excellence is readily evident within the college and in the enhanced national and international prestige of Penn State and its science programs. Current and prospective students and faculty members are excited about the vitality of these programs and the energy with which they are being pursued.

The Eberly College of Science stands as a legacy to the vision and commitment of the Eberly family and other benefactors whose philanthropy will be felt for generations to come.

To Our Guests

We welcome you to the commencement exercises for baccalaureate degree candidates.

Commencement, the solemn but joyful climax and recognition of the graduates' years of study, is an important occasion to the University, its faculty, staff, and students. All guests and participants are requested to avoid unnecessary conversation or moving about during the exercises.

Only authorized press and University photographers are permitted on the floor to take pictures once the exercises are in progress.

When the processional party enters at the beginning of the ceremony, the audience rises. They remain standing until all members of the platform party have taken their places on the platform and during the singing of the national anthem.

Applause should be withheld during the presentation of the individual candidates; however, they may be applauded after all candidates have been recognized.

Following the singing of the alma mater, there is a recessional. The audience is requested to remain seated during this period

Bryce Jordan Center Information

A **first aid station** is located on the concourse level (south side) between Gates C and D.

Restrooms are located throughout the concourse area.

Lost and found articles will be taken to the administrative offices located on the second level of the facility (Room 127).

To order official transcripts: call 814-865-6357 for instructions, or visit the University Registrar website at registrar.psu.edu.

Penn State encourages persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation or have questions about the physical access provided, please contact the Office of Strategic Communications at 814-865-2501.

Notice: the possession or consumption of alcoholic beverages in any indoor commencement facility is prohibited. Your admission to any of these facilities is conditional upon compliance with the above. The University reserves the right to refuse admission to or remove, any person who violates this prohibition.

We also ask that cell phones be turned off.

Commencement Ceremony Reception

We invite all graduates and their guests to an informal outdoor reception beginning at 3:00 p.m. The reception will be held in the courtyard between Huck Life Sciences Building and Thomas Building. Please visit anytime between 3:00 p.m. and 4:30 p.m. to enjoy light appetizers and mingle with faculty and other graduates.

Parking may be available at the Eisenhower Deck or the HUB Deck at no cost on graduation day. Please note that parking spaces may be at a premium because of the many events taking place on campus for graduation.

Graduates

Please note: the information in this document was produced March 23, 2023, as an unofficial list of students who indicated intent to graduate spring semester 2023. Students who indicated their intent to graduate after that production date are not listed.

Subject to completion of all degree requirements, degrees will be conferred as indicated upon the individuals listed herein and upon such others as may meet the requirements.

*** Summa Cum Laude (3.99)

** Magna Cum Laude (3.96)

* Cum Laude (3.89)

+ Schreyers Honors College

◆ Millennium Scholar

✦ Science Dean's Scholar

Astronomy and Astrophysics

Bachelor of Science

Grayce Brown+
Maya Debski**+
Robert Frazier**
Hannah Grzybowski
Joshua Hartssock
Erica Heller*+
Evan Jennerjahn
Jordan Josties
Mary Kaldor+
Matthew LaFountain
Yu-Chen Ma
Jackson MacTaggart**
Grace Martorano
Mark Phillips
Luke Powers
Ryan Rearick
Pierce Rhine
Kyle Rupp
Liam Schwartz
Vincent Smedile+
Grant Sommer

Biochemistry and Molecular Biology

Bachelor of Science

Danah Altassan
Fatima Althunayan
Nikhita Arunprakash
Annabelle Bernard***+
Morgan Bonner
Ashley Capone
Emma Colo
Nathan Connolly
Jeanna Dickson
Matthew Egner***
Grace Ellis◆
Julia Faust**+
Geneva Flarend
Anna Foltz
Zachary Fuchick
Joseph Gariffo
Ryan Gaudlip
Dana Geisenberger
Eliza Giannetti
Kaiya Grayson
Alexander Gribik
Haoyang Guo**
Claudia Harrison
Emily Hassett
Devyn Hauser+
Ahnika Hay*
Dylan Heath
Abigail Heilenman**+
Allyson Hinks**
Katherine Hogan
Hsuan-Cheng Hu
Randy Hued
Alexander Hutsell**
Ellie Kim***+
Supriya Kumar
Matthew Kusluski
Hannah Lapoint
J Refugio Lara◆
Dalia Priscilla Layos
Ellen Lee***
Madison Leugemors
Trevor Levosky
Seunghyun Lim
Michelle Litvak
Jeanelle Loiseau
Eric Lundberg
Zijian Mai
Koshihiro Makino
Noah Mangan

Joseph Mao
Hannah Martin
Madeline McKay
Emily Meinert+
Dean Miller***
Aidan Miller
Advay Mongia*+
Phoebe Nabua
Mallie Nalevanko
MaryEllen Nealy
Phuong-Vy Ngo
Sarah Noel*+
Vanessa Oatley
Erin O'Donnell
Julia Olivant+
Dhruv Patel**
Yujing Qin+
Kaya Rogers
Pabitra Roy***
Eraj Sabeeh
Vanessa Saravia
Danae Schanbacher+
Evelyn Schendler
Shalini Shah
Ayush Sharma
Josie Stakem
Lucas Stauffer
Yen Jui Su
Alexandra Szydlak
Devyn Thomas**
Nicholas Tomasko***
Caroline Ulanoski**
Haozhe Wang
Jaron Wharton-Mohammed

Biology

Bachelor of Science

Rebecca Affleck
Sameer Aggarwal
Shehab Ahmed
Braydon Alaimo
Abdulmajeed Aldukhi
Anahi Anaya
Emma Anziano*+
Alexandria Auerbeck***
Alycia Auerbeck*
Marissa Aviles
Semilore Babawale
Ashley Baldwin
Amulya Bandari
Samantha Banning**
Elizabeth Baron+

Lena Bartoe
Benjamin Beiler
Caroline Bennett
Alicia Bernhardt+
Jacob Berry
Dia Bhatia
Alysha Biel
Emily Bober
Akhil Bolisetti***
Morgan Bosch
Hunter Boyd
Kailey Bray
Kylie Breneman
Julianna Bruce
Morgan Bucher
Collin Buerk
Rachel Burdyn
Alexandra Butler
Carley Calcao
Athena Cardenas Angulo
Abigail Carney
Serina Carrington
Olivia Casey
Jarid Chan
Desirae Chandran+
Nimrod Chapo
Yushan Chen
Benjamin Cherry
Cecilia Citro
Faith Coblentz
Alexa Connelly*
Katie Contino
Sean Conway
Isaiah Craft
Nicholas DeMario
Priya Devanarayan*+
Emma Dewit
My-Hoa Do
Ashley Dunleavy
Madison Edwards
Michael Eilberg
Leena Elmanzalawy
Carter Farinha
Anna Filipkowski
Cara Fliegel+
Kaitlyn Frack
Michael Frantz+
Abigail Frey
Jordan Futrell+
Kaitlin Gabbidon
Adam Gallagher
Mackenzie Galucy
Deanna Garcia
Mykia Garner
Carson Gausman
Alexa Gelzheiser

Anna Genda
Erin Gilbert
Shanike Gill
Allison Giombetti**+
Peter Godshall**
Mariah Goggins
Afton Greener
Nash Guinther
Karen Guo
Gauri Gurumurthy+
Anna Maria Haddad
Isabella Hale
Alexander Hamarich***
Liam Hamilton
Allison Hepler
Halle Hewitt+
Alyssa Hibbs
Trey Hill
Luke Hinsche
John Howard**+
Tyler Hudock
Christina Javakov
Alisa Jenkins
Caitlin Johnson
Sydney Jordan
Trijal Kaistha
Abiageal Keegan
Sean Kelleher
Meredith Kelly*
Caroline Ketterman
Sydni Kimble
Hannah Klatte**
Karisma Kore
Logan Kreutzberger
Esha Kunshetty*
Madeline Lamonica
Joshua Leshner
Elizabeth Lo
Alexis Lopez
Laura Loughlin
Patrick Lucas
Fiona Lum
Xiaoyang Luo
Emily Lutz
Haley MacNally***
Andrea Maniglia
Bryan Manzano***+
John Marchiafava*
Yarini Marte-Garcia
Emily Mattern*
Anastassiya Matveyeva
Matthew McGinley
Peyton McGuire
Brianna McNulty
Aureo Lucio Melo Zanon Neto
Nicholas Messner*

Kenzie Milne***
Amanda Monahan
Ashley Morales
Richard Mueller**
Bennett Myers
Timothy Mykulyyn
Kimberly Negrón-Morales
Colleen Nersten
Samantha Nguyen
Nickolas Nguyen
Peter Ocasio
Emma O'Connor
Chyanne O'Keefe
Skyler Oken*
Levent Ozbek
Nicholas Panase
Dipesh Patel
Logan Peters
Sopida Pimcharoen*+
Morgan Pratt
Swathi Presenan
John Purnell
Umar Qaiser
Joseph Rabbitt
Shugufa Ramin
Laisa Ramirez
Hailie Richards
Cole Ridgely
Alicia Rivas
Giselle Rodriguez Lopez
Sarah Rose
Matthew Roseman
Kamille Ruiz-Perez
Nassim Saidi
Katherine Samide
Alexis Schleinkofer
Nida Shamji
Thomas Shields
Caitlin Slack
Jenna Sloma
Maria Smereka***+
MacKenna Smith
Allan Smith
Katherine Smolenski
Jacob Snyder***+◆
Ashley Sucheski
Christopher Surkosky
Ryan Swartz
Sweetalana
Ashley Swope***
Tehreem Syed
Alicia Tauber
Kayla Taylor
Harshika Thard*+
Mackenzey Thomas
Emily Thomas

Madison Thompson+
Ashlyn Thuringer
George Tomko
Ashly Trabanino
Logan Unangst
Chloe Unis
Andrew Vanden Heuvel
Keila Vazquez-Perez
Sebastian Velazquez***
Deenah Voigt
Allison Warrington
Ayse Welch*
Morgan Werley
Lauren Willner
Zihao Yang
Sara Yi+
Grant Zemanek
Karina Zeplin**
Xiuyuan Zhang

Biotechnology

Bachelor of Science

Grace Buddle***
Flor De Maria Chavez Zarate
Vaishnavi Datta
Tanner Dierich+
Kayla Doebrich
Urvi Gadgil
Marissa Haughton
Aidan Matunis***
Kailey McCarron
Elizabeth McClatchy
Austin Mueller
James Mueller-Lewis
Promwadee Muneechai
Aditi Pallod
Xiaoou Su
Thomas Webb
Jessica Wilson
Brian Yu

Chemistry

Bachelor of Science

Anita Azhdari
Taylor Berek
Michelot Bien-Aime
Matthew Binder***
Noah Burckman
Robert Burns+
Joseph Cardina
Poom Chantarapornrat
Gary Chen**
Cole Clapperton

Kayla Constantini
Luke Cowart+
Ava Del Rio
Leila Filien+♦
Steven Ganescu***
Hannah Gizenski+
Anna Griggs+
Farraz Haider*
Matthew Herne
Nolan Jacob**+
Hannah Jacobs
Kara Kensing+
Soobin Kim
Alex Koretke
Anurag Kumar
Ryan Lai*+
Sindy Liu
Emma Marsho
Kayla McCreary
George Mundy
Alexis Nguyen
Thomas Pfeifer
Reikley Reiser
Lillian Ritz
Asna Rizwan+
Hao Wang
Jinying Wang

Data Sciences

Bachelor of Science

Aman Arora
Ray Chen
Robert Krimetz+
Sophie Lelei♦
Owen Lloyd**+
Nicholas Mangione
James McGrath
Damin Park
Aishwarya Penmetcha
Adithya Sadagopan
Julian Sim+
Nathan Thomas

Forensic Science

Bachelor of Science

Zahraa Al Lawati
Jamie Alegria
Gabrielle Appleby
Ashley Arzaga
Kassandra Shaina Bradburn
Madeline Casey
Kalyn Cayne
Ana Delgado

Karah Dickson
Morgan Downing
Gia Haemmerle
Brady Jefairjian
Madeleine Kelly
Payton Kuhn
Emma Law
Ashlee Loewy
Tara Lyons
Kerry McCann+
Grace Miller
Katiana Nelson
Abigail Northeimer
Paris Petersen
MacKenzie Reed
Reikley Reiser
Marissa Reith
Emanuel Rios+
Corey Rutt
Jerimiah Seba
Jayci Sekeras
Marina Smith
Katelyn Tedford
Sanjana Thiagarajan
Amy Vasquez
Alexandra Vinci
Phoebe Wentzell
Kenneth Wong

Mathematics

Bachelor of Arts

Tianyou He
Muhammad Afiq Danial Mohd Zamri

Bachelor of Science

Jared Albano+
Emilia Allison
Marwa Almansoori
Lily Ashery
Lei Bao
Leo Bell
Amanda Berdis
Michael Brueckner
Lilin Cai
David Cai***
Noah Chaffin
Longmai Chang
Minrui Chen*
Xinyi Chen
Davide Chen
Rachel Cole***
Cooper Conway**
Liman Dai

Teya Davis♦
Dhruv Dixit
Shuaipeng Dong
Jacob Elser
Bethany Fetsko*
Kyle Funck
Jianxiang Gao*
Sathwik Garimella
Devan Ghai
Enrico Green*
Linghan Guo
YuQi He
Cole Hogan
Jeremy Hoheneder
Christian Holmes
Junze Huang
Arjina Islam
Jie Ji
Yaoping Jiang
Margaret Jurich*
Samantha Kaelin
Vladimer Kellachow
Aryan Keshary
Hyuntae Kim
Brian Klammer**
Ethan Knight
Sai Karthik Reddy Koralla
Anoop Kosaraju
Evan Krysko
Luciana Lai
Zhiyuan Li*+
Jialong Li
Ziheng Li
Junyuan Li*
Yi Li
Jiana Li
Gaojie Lian
Anthony Lionetti
Zixuan Liu
Jiahui Liu
Owen Lloyd***+
Lauren Ludwikowski*
Yiyuan Luo
Andrew McConnell
Rachel McLeod
Christopher Miller+
Christian Motley
Luke Motter+
Jeffrey Natalone
Londyn Occhipinti
Keira O'Sullivan
Harsh Pandey
Varun Patel
Graceanne Paz
James Perry
Jack Piazza***+

Eli Plant
Mason Pruhs
Sirui Qi
Shi Qiu
Tyler Roell
Timothy Roell
Taran Samarth*
Emma Scholl
Justin Shields*
Julian Sim+
Vikramjeet Singh
Alexander Skvortsov***
Stephanie Snyder
Isabelle Stepler***+
Yiming Tian
Sean Tobin+
Emma Vehmeier
Wentao Wang
Yuqi Wang
Yining Wang
Anne Weldon
Shannon White
Rachel Woodman
Xinxuan Wu*
Weiqi Xia*
Yangfan Xiao
Jiahao Xu
Jiayuan Xu
Zekai Yan
Yifan Yang
He Zeng
Ranyi Zhang
Shenao Zhang
Weihuan Zhao
Yuchen Zheng
Jiangyi Zhu**

Microbiology

Bachelor of Science

Alexandra DaCosta
Aidan Donnelly***+
Ryan Frantz*
Elizabeth Giacobe*
Natalie Giacobe
Lillian Griffin
Necla Kara
Richard Massimino
Juan Nieto
Abigail Rullo
Krupa Shah
Annie Urban*

Physics

Bachelor of Science

Paul John Balderston
Maria Bressan*
Ethan Decker
Rui Deng
Daniel Esterkin♦
Robert Frazier**
Hannah Grzybowski
Michal Hacia
Quentin Hales
Joshua Hartsock
Zhangyin He
Corbin Heitzenrater
Erica Heller*+
Rose Hudson
Evan Jennerjahn
Yaoyang Ji**
Alexander Kapral
Tyson Kemp
Ethan Knight
Konnor Koons
Evan Krysko
Vorrpard Kumthongdee
Matthew LaFountain
Seth Landry
Kyle Linn*
Jackson MacTaggart**
Andrew McConnell
Blues McMahon
Ikhwan Hakim Mohd Raji
Dylan Monteiro
Hudson Pepper
Julia Rice
Benjamin Sawyer
Michael Saylor
Liam Schwartz
Aiden Shah
Stephanie Snyder
Grant Sommer
Donald Thompson
Sean Tobin+
Anze Ursic
Israel Wang
Zachary Zelensky
Zhiruo Zhang

Planetary Science and Astronomy

Bachelor of Science

Abigail Stolinas

Premedicine

Bachelor of Science

Kyle Aanstoots
Chance Ayers
Alyssa Connell
Yawen Deng
Andrew Freas
Aidan Gillespie
Angie Gutierrez
Joshua Harter
George Hoffman
Halah Keramane
Marc Lussier***
Kuriko Masuda
Breanna McCahan
Andrew Menig
Sophia Perry
Tyler Schmidt

Science

Bachelor of Science

Shari Abreu
Heather Adams Canino
Sophia Aksoy
Ryan Alt*+
Kathryn Amador
Alexa Bertelle
Christina Brown
Julia Ciampi
Kaylyn Clouser*
Maximilian Contreras
Aidan Farrell
Alexis Finkbeiner
Chris Flores
Racquel Giro
Ashley Grove
Juan Guerrero
Nathan Howells*
Joshua Howells**
Jordan Hughes
Humera Inam
Lauren Karp
Hana Khan
Alexandria Koehl***
Neo Koh
Olivia Lagrasta
Sofia Lyle
Zachary Malicky
Mariana Mbemba
Will Merrell
Mackenzie O'Donnell
Gabrielle Olson***
Kaiana Oquendo
Hanna Patel
Diksha Patel

Alyson Perez Wallace
Nicholas Polidoro
Jacob Quinones
Hailee Ramirez
Carolyn Reyes
Riyanna Roehrig-Hubert
Alyssia Roselle
Ricky Ruiz
Saara Safeer
August Smychynsky
Jennifer Soler
Jiaxuan Song
Madison Staab
Anahi Toro
Mercy Urena
David Vasquez-Cabrales
John Vorberger
Breiuana White
Elisabeth Wilkie
Tealine Williams+
Cody Young
Jackie Zou

Isabella Santori+
Michael Secosky
Sooraj Narayanan Sekar
Rosalind Shui
Abby Simon
Phichchaya Sutaporn
Xinyue Tang
Candace Todd*♦
Weiqi Xia
Hongyi Xia
Yiru Xiang
Ziyao Yang
Ruwen Yang*
Enhao Yu
Tristan Zanowic***
Steven Zeng
Yuhan Zhao
Xuanying Zhao
Shengkai Zheng
Dengchen Zhu

Statistics

Bachelor of Science

Ahmad Abu Bakar
Abdallah Alrahbi
Abraham Arbelaez
Omer Canca
Simiao Dong
Luyang Feng
Zongshuo Guo
YuQi He
Junjie He
Justin Huang
Mackenzie Johnson
Divyesh Johri
Luciana Lai
Chenxing Li
Qianxue Li
Yvonne Lim
Jack Lu
Aureo Lucio Melo Zanon Neto
Congqi Miao
Christopher Miller+
Miza Syafiqah Mohamad Shanudin
Nurul Syafiqah Mohammad Hamdi**
Christiana Mokube
Rohith Natarajan
Radha Patel*
Lauryn Pavlik
Peter Phillips
Kristina Phillips
Vincent Purr
Shravani Samala

Seating Chart

Stage

Student Marshals and Escorts

Student Marshals and Escorts

Faculty

Faculty

Astronomy and Astrophysics

Chemistry

Planetary Science and Astronomy

Mathematics

Biochemistry
and
Molecular Biology

Physics

Biotechnology

Premedicine

Forensic Science

Science

Microbiology

Statistics

Biology

Data Sciences

Dear graduates: if you have a question about your name, degree, or distinction listed in this program, please reach out to the Office for Undergraduate Students at cab408@psu.edu or 814-863-5234. Congratulations on your achievements!

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