THE UNIVERSITY OF NEW MEXICO SCHOOL OF ENGINEERING

SPRING CONVOCATION



Message from the Dean

To the Spring 2024 University of New Mexico School of Engineering Graduates

Welcome to the sring 2024 School of Engineering Convocation ceremony. I am honored and excited to be part of this important milestone in your lives.

Since becoming dean a little over a year ago, I have been impressed and greatly moved by the accomplishments and hard work of our students, as well as the various support they have in their lives, including family, friends and the School of Engineering staff and faculty. Earning a degree in engineering requires a lot of dedication — both personal and in your community — and everyone attending here today had a role to play in the success of each student graduating. Thank you for your hard work and tireless dedication. You truly make the School of Engineering a great place to be.



Congratulations, graduates! I look forward to hearing about the transformation you will make in the world in the years to come.

Donna Riley

Jim and Ellen King Dean of Engineering and Computing

SPRING CONVOCATION

UNIVERSITY OF NEW MEXICO SCHOOL OF ENGINEERING SATURDAY, MAY 11, 2024 • 2 P.M.

University Arena

BOARD OF REGENTS

The laws of New Mexico provide for a Board of Regents which is responsible for the governance of The University of New Mexico. The Board's power to govern the University includes fiduciary responsibility for the assets and programs of the University, establishment of goals and policies to guide the University, and oversight of the functioning of the University.

The Board is comprised of seven members who are appointed by the governor of New Mexico, with the consent of the Senate, for staggered terms of six years except for the student regent, who is appointed for a two-year term. The governor and the secretary of education are designated as ex-officio, non-voting members.

The Regents

Kim Sanchez Rael, Chair
Jack L. Fortner, Vice Chair
Robert L. Schwartz, Secretary-Treasurer
William H. Payne
Paul Blanchard
Paula Tackett
Victor Reyes, Student Regent

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Convocation Program

Processional

FACULTY MARSHAL

Tang-Tat Ng, Professor Emeritus, Gerald May Department of Civil, Construction and Environmental Engineering

BANNER CARRIER

Nicole Bingham, Gerald May Department of Civil, Construction and Environmental Engineering

PROCESSIONAL MUSIC

"Pomp and Circumstance March Number 1,"

Composed by Sir Edward Elgar

"Procession of the Nobles," Composed by Nicolai Rimsky-Korsakov

Performed by The New Mexico Brass Quintet

MASTER OF CEREMONIES

Charles B. Fleddermann, Senior Associate Dean for Academic Affairs and Community Engagement

KEYNOTE SPEAKER

Sal B. Rodriguez, Ph.D. Nuclear Engineering

STUDENT SPEAKERS

Kevin S. Garcia, B.S., Nuclear Engineering Joseph Erwin, M.S., Mechanical Engineering

PRESENTATION OF BREECE AWARD

Presenter: Steven Graves, Associate Dean for Research and Innovation Luke M. Lucero, B.S., Chemical Engineering

PRESENTATION OF DEGREE CANDIDATES

Charles B. Fleddermann, Senior Associate Dean for Academic Affairs and Community Engagement

RECESSIONAL

Platform Party

SCHOOL OF ENGINEERING ADMINISTRATION

Donna Riley, Dean, School of Engineering

Charles B. Fleddermann, Senior Associate Dean for Academic Affairs

and Community Engagement

Eva Chi, Associate Dean for Faculty Affairs

Steven Graves, Associate Dean for Research and Innovation

Nicholas Carroll, Associate Chair, Department of

Chemical and Biological Engineering

Susan Bogus Halter, Interim Chair, Gerald May Department of Civil, Construction and Environmental Engineering

Patrick Bridges, Professor, Department of Computer Science

Mark Gilmore, Interim Chair, Department of Electrical and Computer Engineering

Yu-Lin Shen, Chair, Department of Mechanical Engineering

Osman Anderoglu, Associate Chair, Department of Nuclear Engineering

Matthias Pleil, Director, Manufacturing Engineering Program

Christina Salas, Director, Biomedical Engineering Program

Nathan Jackson, Director, Nanoscience and Microsystems Engineering Program

Daniel Feezell, Director, Optical Science and Engineering Program

Keynote Speaker

Sal B. Rodriguez

Ph.D., Nuclear Engineering

Even early on, and in an environment where many shine brightly, Sal Rodriguez's first manager at Idaho National Laboratory called him a "rising star." Four decades later, Rodriguez continues his upward journey, being described as "Rocketing to the Top" in a front-page article in the *Albuquerque Journal* last fall.

Now a principal member of the technical staff at Sandia National Laboratories, he has experienced a series of amazing career milestones of late. Last year, he received Sandia's highest award for technical excellence for his research in refractory high-entropy alloys. Also in 2023, he received the Scientist of the Year Award by Great Minds in STEM, which was the first time that any U.S. Department of Energy national laboratory has ever received the award. This is also the first time that New Mexico received this prestigious award.



Rodriguez is also proud of his work last year with UNM's Lobo Launch rocket team to incorporate a passion of his — dimples, like that on a golf ball — into the design of the nosecone of the rocket. He explains that the dimples increase the aerodynamics of the rocket (40% more, in the case of the UNM rocket). He is a believer that dimples have a huge potential in a variety of other applications, including transportation and more environmentally sustainable energy. "I sleep, dream and breathe dimples," he said.

All the career success he is experiencing now might not have been predicted from his humble beginnings. The Calexico, Calif., native spoke only Spanish until first grade, and he was raised by parents with grade-school educations. He said he traces his true passion for STEM to his sophomore year in high school, when students from nearby UCLA visited, distributing marketing

material about careers in engineering. "That instant changed my life," he said.

Rodriguez earned several degrees over his life: a bachelor's degree in nuclear engineering from the University of California, Santa Barbara; a master's degree in mechanical engineering from University of Idaho; a master's degree in applied mathematics from UNM in 2004; a scientific and engineering computation interdisciplinary graduate program degree from UNM in 2000; a Ph.D. from Trinity College and Seminary; and finally, a Ph.D. in nuclear engineering from UNM in 2011, which he earned while working at Sandia. He was proud that both his parents were able to see him graduate as a "Dr."

He undoubtedly has an insatiable curiosity and passion for learning that continues to this day. "There is so much we don't know yet." Rodriguez said that he is an advocate of lifelong learning, no matter where you are in life. "If you work hard, the education you have, that is your superpower."

In the latest development, he continues working with Sandia National Laboratories while also serving as chief science officer for Applied Surface Engineering. This is an Albuquerque business that his children started for the development of more efficient energy and aerospace systems.

In his spare time, he enjoys spending time with his wife and three children (including a current mechanical engineering student at UNM), cooking seafood dishes, and metal detecting on the beach.

"I like to keep busy," he said. "I'm enjoying the ride."

About the George E. Breece Award

The George E. Breece Award was established in 1921 to honor the UNM School of Engineering senior with the highest grade-point average from each graduating class. The recipients of this award consistently have grade-point averages higher than 4.0, reflecting a majority of A+ grades throughout their undergraduate courses.

Luke M. Lucero

B.S., Chemical Engineering

Luke Lucero was born and raised in Albuquerque (a graduate of Albuquerque Academy), and while some natives can't wait to leave the city or state for college, he felt differently. For him, attending UNM School of Engineering was a calculated choice.

"It was close to home, a great engineering school, as well as close to industry and Sandia National Laboratories," Lucero said. "There were great opportunities if I stayed."



And he made the most of those local opportunities while earning his degree in chemical engineering. He completed an internship with Sandia in nanoscale science department. And he recently completed an internship with the Kansas City National Security Campus in Albuquerque, which he discovered thanks to the School of Engineering's Corporate Affiliate Program that allowed a representative from KCNSC (operated by Honeywell) to have a part-time office in the School to recruit students like Lucero.

He said he worked most closely with Steven Graves, professor in the Department of Chemical and Biological Engineering, and learned a lot from classes by Sang Eon Han and Andrew Shreve, now a professor emeritus.

Although he undoubtedly always excelled academically in everything he did, Lucero said his hardest course was partial differential equations (which he took as part of his math minor). Although it was challenging, he said he took it to improve his knowledge of how partial differential equations work in heat transport.

Lucero said some of his favorite memories at UNM were of working with other students, either studying or in group projects, like the senior capstone design he has been working on this semester.

"Everyone is going through the same thing and learning together," he said. "It's stressful, but we're doing it together."

Lucero said that one of the most tasks that made him a better student was teaching others, something he started in high school as a tutor.

"If you're able to teach, you know you understand."

After graduation, he will begin a full-time job at Intel in Albuquerque. "I want to spend some time working in the 'real word,' then I might consider going to grad school," he said.

His hobbies include snowboarding, hiking, playing classical guitar and spending time with friends and family.

Undergraduate speaker

Kevin S. Garcia

B.S., Nuclear Engineering

Kevin S. Garcia remembers how he first got the idea to pursue engineering. The Tampa, Fla., native was still in his home state of Florida, working as head of reception at a radiologist's office. He had earned an associate degree in arts at Hillsborough Community College and was helping to put his wife through the University of South Florida for her bachelor's degree in chemical engineering.

"It was time to figure out what I wanted to do after she graduated" he said.

Then Garcia's path started to take shape after his wife accepted a job at Los Alamos National Laboratory. The move to New Mexico, a state with a strong nuclear history and current industry, helped to push him

into pursuing his degree in nuclear engineering, along with a growing curiosity about fusion technology.



His curiosity drove him to cold email Dennis Whyte, former director of the Plasma Science and Fusion Center at MIT and a foremost expert in nuclear fusion. Encouraged, he started taking some nuclear engineering classes at UNM, doing some reasearch into nuclear engineering on his own, then after meeting with Hank Lee, chair of the Department of Nuclear Engineering at UNM, that sealed the deal.

"Dr. Lee convinced me. He is a very good salesman," Garcia said.

Although the degree was challenging, he enjoyed the "mutual stress" with fellow students in the department. Garcia said he has enjoyed the "small, tight-knit community" that is UNM's Department of Nuclear Engineering, as well as all they have accomplished through the student chapter of the American Nuclear Society (including the fact that UNM will be hosting the 2025 student national conference).

In any free time, he has between working and studying, he enjoys woodworking, music (he has performed as a percussionist specializing as a Conguero and Bongosero playing Latin Jazz), and spending time with his wife and two young children (soon to be three). "I like to stay busy."

After graduation, Garcia will be starting a position as an associate research nuclear engineer at the Air Force Research Laboratory.

Graduate speaker

Joseph Erwin

M.S., Mechanical Engineering

Joseph Erwin, a Portales, N.M., native, considers himself a bit of a "black sheep" in his family in terms of his interests and aspirations.

Born to an English professor mother and a musician father, Erwin is the only STEM inclined member of his immediate family. He was attracted to the field because he was good in math and science, and also has always been interested in the application of math and science to solve real world problems.

Erwin said he chose UNM because it was close to home, affordable (especially with the academic scholarships he received), but also offered advantages that other schools lacked, such as proximity to Sandia National Laboratories and other such facilities.

Erwin has focused his research in the Department of Mechanical Engineering on additively manufactured metals, the behavior of threaded fasteners under multiaxial loading, and crack tip plasticity zones, working with Pankaj Kumar and Tariq Khraishi.

"Since it is an R1 institution, UNM offers levels of research that other institutions do not, even for undergraduates," he said. "I'm thankful for the research opportunities."

Erwin also participated in the shared-credit program, which allowed him to make progress toward a master's degree when he was still earning his bachelor's degree.

He said that if he could impart wisdom to younger students, he would advise that they develop strong relationships with professors. Also, "Core classes may not seem all that interesting, but learn everything you can from them because you will need that knowledge later."

In his free time, he enjoys hiking the trails, biking, playing guitar and cooking. He also likes to cook chicken piccata and a dish not expected in landlocked New Mexico: "I'm good at mussels."

Erwin said the next chapter of his life will involve working at Sandia, and possibly eventually pursuing opportunities in the space industry.

Degrees Awarded

Order of Presentation

Gerald May Department of Civil, Construction and Environmental Engineering

Department of Computer Science

Department of Electrical and Computer Engineering

Department of Mechanical Engineering

Department of Nuclear Engineering

Department of Chemical and Biological Engineering

Biomedical Engineering

Nanoscience and Microsystems Engineering

Optical Science and Engineering

STUDENT HONORS RECOGNITION

"Graduating with Distinction" (symbolized by a † by the student's name) recognizes the exceptional performance of students who graduate with a master's or doctor of philosophy degree. The status is determined at the time of the final examination through agreement of the examining committee members, with final approval given by the department chair.



Civil, Construction and Environmental Engineering

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Ahmed H. Al Saedi Ethan B. Kapp Victor S. Valles

David Aragon Jesus A. Moncada Christopher J. Vreeland

Jack H. Dugan Joshua D. Morgan Zachary R. Weaver

Logan Fairhurst* Alexandria M. Morrow Lonnie L. Wilhite

Erica E. Gamblin Nicole J. Nimeh Nathaniel Winters-Hilt

Duncan G. Gardner Syanna P. Padilla
Astrid C. Gonzaga Savannah A. Tapia

BACHELOR OF SCIENCE IN CONSTRUCTION MANAGEMENT

Saul Bencomo Irvin O. Rubio Logan C. Whitaker

Adrian Jimenez Dillon R. Sala

Shenoa I. Jones Geena M. Villasenor

MASTER OF ENGINEERING

Amabilis G. Baca Matthew J. Gonzales Bradley D. Torres

Derrick L. Brown Ryen D. Gonzales-Martinez

MASTER OF SCIENCE IN CIVIL ENGINEERING

Alan J. Barney* Arian Golrokh Amin* Brittney D. Seaburn

Dominica J. Bennett* Fatemeh Hamidi Kritan Subedi*

Travis B. Broadhurst* Sara Rassa* Odey H. Yousef+

Yully T. Chaves Lasso* Ossiris E. Sanchez Rodriguez+ Daiquiri D. Zozaya*

MASTER OF CONSTRUCTION MANAGEMENT

Robel Mesfin

DOCTOR OF PHILOSOPHY IN ENGINEERING

Md Mehedi Hasan Zafrul Khan*

Md Amanul Hasan Muhammad Saeed Zafar*

Computer Science

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Adrian J. Abeyta Kelsey N. Knowlson Manjil Man Pradhan

Ester Aguilera Tristan J. Larkin Lester Nathan L. Racca

Alexander P. Alvara Victoria M. Lien Jacob A. Rodeheaver

Danial F. Anwaar-Maximo Utsav Malla Wayne T. Rudnick

Joseph E. Barela* John Augustin A. Materum Marina E. Seheon

Elektra Caffrey Erin K. McClure Ge Shi

Sean Davies Luke E. McDougall Pavan Kumar Singara

Althea R. Denlinger Spoorthi Menta Vamsi Krishna Singara*

Abhinay Dev Michael A. Millar Loc T. Su

Caleb Frisch* Ryan L. Mills Logan J. Sullivan

Christopher R. Frost Jerry M. Nieto Nicholas P. Sullivan

Andrew V. Geyko Atah B. Omar Randall J. Suski-Oppedahl

Ricardo A. Gonzales Diego Ornelas Meiling T. Traeger

Brian J. High Michael A. Pacheco* Jack Vanlyssel

Vincent Hilario Bryce R. Palmer Jack E. Wickstrom

Sebastian L. Hoang Franklin Pezzuti Dyer Henry O. Wikle

Thomas J. Hynes Thinh M. Pham Erick Yin

Del B. Jones Andrei Popa-Simil

MASTER OF SCIENCE IN COMPUTER SCIENCE

Mari A. Aoki Praneeth Marri John H. Tran

Mike T. Dinh Benjamin T. Ogden Ariana M. Villegas Suarez

Christopher A. Leap Bennett G. Poulin
John E. Leonard+ Jason R. Stewart

DOCTOR OF PHILOSOPHY IN COMPUTER SCIENCE

Andisheh Dadashi Humayra Tasnim *

Electrical and Computer Engineering

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Rena L. Berdine Andrew Gilbert Vishnu V. Nampoothiri

Gregory M. Brown Joseph V. Likar Elmer Ramos

Aaron D. Catanach* Juan Diego A. Montoya Tyler J. Rocha

Ian D. Cornwell Anna R. Moore James D. Tapia

BACHELOR OF SCIENCE IN COMPUTER ENGINEERING

Imane Bahji Dorothy Mberile* Matthew M. Simone

Lawrence R. Calais Sankalpa Regmi Lucas Zhou

Phat G. Chu Muhammad Shuja Saleem

Yaniksa Mata Oreoluwa G. Sanya

MASTER OF SCIENCE IN ELECTRICAL ENGINEERING

Asad M. Abdullahi Darren M. Kressaty Jesus Sanchez
Mohammad Abedi Ken V. Le Benjamin Surman
Robert J. Beattie-Rossberg Nolan Rebernick Sriram Thotakura
Michael D. Crabtree Beatrice Sabatella Andrew J. Zamora

MASTER OF SCIENCE IN COMPUTER ENGINEERING

Anindya Bal Nitish Kota Chaeeun Park
Sasi Kumar Bondila Adrian J. Lewis Nicholas C. Ross
Michael Calzadillas Sai Surya Kumar Meesala Matthew P. Salcido +
Neeraj Chityala Zachary L. Montoya Aban Samimi Motlagh

Ugesh Egala Vamsi Krishna Nalabolu Sai Naveen Vasa

Pavan Kumar Kantu Harishanmukha Chowdary

Navya Kasarla Nalamothu

DOCTOR OF PHILOSOPHY IN ENGINEERING

ELECTRICAL ENGINEERING

Maren W. Hatch Raul E. Gutierrez David N. Smith

Andre M. Chavez+ Sajay Krishnan Paruthiyil

COMPUTER ENGINEERING

Harsh Kumar+ Seth A. Miller Liangkun Yu

Daniel Manu Jean-Elie Pierre

Mechanical Engineering

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Tobechukwu Agu Joshua P. Gabbard Ryan A. Patricelli Ryan J. Alford Olivia E. Garcia Cameron N. Reeder

Hussain Alhasan Cody T. Henry Brennan B. Roberts

Richard Armijo Shawn C. Johnston Daniel J. Romero

Jared E. Banteah Nicholas B. Jones Antonio M. Rubio

Ryan D. Bingham Auron D. Joyner Dominic A. Sanchez

David A. Boese Patrick J. Kingsbury William D. Sands

James B. BriningHelio LopezGabriel A. SerranoAdrian C. CampbellAidan C. LottKayla B. Singer

Hyein Choi Morgan A. Lucero Christopher R. Solis

Giovanni Cordova Antonio B. Martinez Max J. Tafoya

Patrick Kyle E. Delos Reyes Lucas J. Muller Joshua T. Tarantino
Shawn W. Devore Collin T. Nesbit Isaac M. Viramontes
Brandon T. Doehne Kien T. Nguyen Jacob A. Whisenhunt

Daniel J. Emrick Sophia I. Orona Yang Nathan P. Wolff

Samuel K. Fisher Cesar I. Ortega

MASTER OF SCIENCE IN MECHANICAL ENGINEERING

Ahmed Mohamed Ahmed Nicholas J. Garcia Clayton D. Milla
Mohamed Matthew A. Garrett Evan A. Paskow
Zully T. Avila Kevin Kim Nicholas Phelps

Jacob R. Barry Joseph N. Kjeldsen Christopher N. Rice-McClure

Maren S. Baur Hannah Klopstock Kevin C. Simms

Trevor J. Bird Alexandra P. Kozai Cameron L. Thomas
Felicia Brimigion Evan R. Lucero Tristin M. Zimmer
Zachary J. Casias + Madison T. Lund Samuel G. Zsiga*

Joseph C. Erwin + Anthony M. McMaster

DOCTOR OF PHILOSOPHY IN MECHANICAL ENGINEERING

Rubel C. Das Kaveh Malek*

^{*}Summer 2024 Graduate

Nuclear Engineering

BACHELOR OF SCIENCE IN NUCLEAR ENGINEERING

Xavier S. Angus Kevin Garcia Richmond J. McDonald

Lauren S. Bailey Jomanah J. Khudabakhsh Bao H. Nguyen

Erik R. Boldt Daniel E. Levario Alana C. Pankopf

Antonio M. Connelly Josephine R. Lewis Gibson D. Prall

Maxwell A. Dimsha Courtney B. Mace Thomas K. Smith

Maggie C. Friemel Alexandra D. Martinez William A. Todd

MASTER OF SCIENCE IN NUCLEAR ENGINEERING

Dennis M. Ahorlu Christopher L. Hooper Julia E. Minton-Hughes

Phat D. Doan Roberts E. Ituah Ahmad N. Shaheen

DOCTOR OF PHILOSOPHY IN ENGINEERING

Kyle S. Beling Yuqi Liu Jawad Moussa*

Rowdy Davis+ Cain Manzira*

Chemical and Biological Engineering

BACHELOR OF SCIENCE

Carina N. Anastasio Benjamin D. Harvey Marelessis Palomino

Abdulrahman A. Bahri Luke M. Lucero Dhruv V. Patel

Francesca C. Chioda Jenna N. Marek Raphael Angelo A. Reyes

Lillian N. Elam Tristan L. Martinez Mikayla D. Romero

Angelina M. Encinias Daniela M. Mendez Banda Alix A. Rule

Ezekiel Garcia Joshua A. Olguin Patrick C. Survis Cynthia M. Guerra Gracee M. O'Toole Ciara N. Wright

MASTER OF SCIENCE IN ENGINEERING

Alexander J. Baten Crucificio G. Caputo* Matthew Powell

Kristen Batt Cielo Gonzales Kirkpatrick

DOCTOR OF PHILOSOPHY IN ENGINEERING

Mary Louise Gucik Angelea M. Maestas-Olguin

Sleight Halley+

^{*}Summer 2024 Graduate †Graduating with Distinction

INTERDISCIPLINARY PROGRAMS

Biomedical Engineering

MASTER OF SCIENCE IN BIOMEDICAL ENGINEERING

Esteban M. Baca Lauren A. Ostermann Kali A. Wolf

Matthew P. Justus Ashley N. Tafoya

Aidan L. Leyba + Alexander S. Torres

Nanoscience and Microsystems Engineering

MASTER OF SCIENCE

Melvin D. Foster Chanida S. Yoo

Margaret M. Turpin

Optical Science and Engineering

MASTER OF SCIENCE

Mega Frost* Hosuk Lee* Ali Kazemi Nasaban Shotorban*

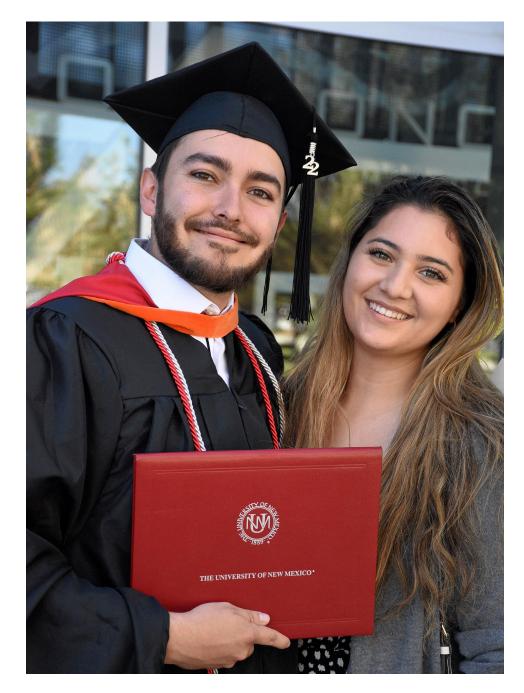
Amilcar Jeronimo Perez* Meagan Parker* Johnathan V. White*

DOCTOR OF PHILOSOPHY

Arjun Aryal* Nazanin Mosavian*

Dominic F. Bosomtwi* Sami Nazib*

Fatih F. Ince Mingyang Zhang*



Congratulations and Welcome!

Congratulations, graduates! Now that you have graduated, you are automatically a member of the UNM Alumni Association. There are no dues. Visit the UNM Alumni Association website for information and a complete listing of benefits at http://www.unmalumni.com.

We also welcome you to the School of Engineering alumni family. The UNM School of Engineering strives to keep you connected to the School in the most convenient way possible. As you move forward, please keep us informed regarding address changes, career moves, and significant events in your life. If you are interested in collaborating on an activity to engage fellow alums, let us know.

Keep us posted at engineeringinfo@unm.edu or at goto.unm.edu/alumniupdate