Humboldt's Polytechnic Future

Plus: Groundbreaking renewable energy research and more.
There will be new opportunities and new innovation. More of the community that we have always known was possible.

Humboldt is providing the education that students want and that employers need.

The state invested in our shared vision for a modern polytechnic, including our demonstrated capacity to expand high-demand programs in STEM fields. The investment was also in our hands-on teaching approach combined with a strong liberal arts foundation, the access we provide to a diverse group of students, and our long commitment to environmental sustainability.

Humboldt alumni have the skills and knowledge to tackle some of the toughest challenges we face. Challenges like climate resiliency, wildfire mitigation, renewable energy, and more. They change their communities and their workplaces for the better. Frankly, the world needs more Humboldt graduates, and now it is going to be getting them.

Since receiving the state investment, we have been moving quickly to make the vision a reality. Fully 12 new graduates, and now it is going to be getting them.

We will always be Humboldt. So you may have graduated from “Humboldt State Normal School.” Or you may have worked for “Humboldt State College.” Or you may look back fondly to the original days of “Humboldt State Normal School.”

You are all Humboldt. And we are very proud that you are part of an incredible, far-flung, and unique Cal Poly Humboldt family.
As Sea Levels Rise, So Does Research to Address It

CAL POLY HUMBOLDT has been at the forefront of research to address the challenge of sea-level rise in the California North Coast region. Due to geologic factors, Humboldt Bay, or Wigi, its Wiyot name, is facing the fastest rate of relative sea-level rise on the U.S. West Coast. Sea level in Humboldt Bay is projected to rise as much as three feet by 2060, which could lead to severe social, cultural, economic, and environmental consequences without an effective adaptive response.

In 2018, a group of faculty, students, and staff formed a partnership with tribes, governments, and members of the broader community to study and seek to address this local challenge. This group was recently approved to become a formal institute, the Cal Poly Humboldt Sea Level Rise Institute (SLRI) “envisions a diverse network of collaborators working together across disciplines, sectors, and ways of knowing to develop sea-level rise research and planning that informs equitable, sustainable, and community-centered local climate action.”

The institute has been engaged in numerous research and planning projects related to sea-level rise in the local region. Prominently, in 2021, members of the SLRI joined a coastal resiliency research hub led by Oregon State University and the University of Washington focused on the impact of earthquakes, coastal erosion, and climate change on coastal communities in the Pacific Northwest.

With a total of $18.9 million in funding from the National Science Foundation, the Cascadia Coastlines and Peoples Hazards Research Hub, or Cascadia CoPes Hub, coordinates research in Pacific Northwest coastal communities between numerous academic and government organizations to inform and enable integrated hazard assessment, mitigation, and adaptation. Jennifer Marlowe and Laurie Richmond, faculty from the department of Environmental Science & Management, are leading Humboldt’s connection to Cascadia CoPes Hub.

Nearly 40% of the U.S. population lives within a coastal county. The Pacific Northwest coastline is at significant risk of earthquakes from the Cascadia Subduction Zone, which stretches nearly 700 miles along the coast from Cape Mendocino in California to Oregon, Washington, and Vancouver Island, Canada. In addition to this acute threat, the region also faces chronic risks such as coastal erosion, regional flooding, and sea level rise due to climate change.

“The Hub is a great tool for funding student researchers, and providing them with an opportunity to connect with a network of some of the best scientists in their field,” Richmond says. The collaboration is also an important tool for sharing and layering research, and the respective projects by each institution will inform each other and lead to a broader understanding of threats facing the West Coast.

Cal Poly Humboldt will receive $450,000 from the National Science Foundation to support student and faculty research into coastal resilience and hazards in California’s North Coast region.

One graduate student, Kristen Orth-Gordiner, recently completed a thesis in which she implemented a survey of North Coast professionals and organizations to determine how best to design a collaborative governance system on sea-level rise with an equity focus. She won the Patricia O. McConkey Outstanding Graduate Student Award for this work.

Marlowe’s ongoing research for the institute explores the Humboldt Bay Nuclear Power Plant’s spent nuclear fuel storage vulnerability to sea-level rise.

Go to humboldtstri.org for details about the Sea Level Rise Institute.

Institute Fights Fire with Brainpower

STOKED BY DROUGHT, fire-suppression policies, and climate change, wildfires are becoming larger and burning hotter and more frequently—a perfect storm that threatens thousands of communities and ecosystems.

Meeting that challenge head on is Cal Poly Humboldt’s Fire Resilience Institute. Founded in 2021, the Institute sits at the nexus of research, training, education, and outreach to fight fire on multiple fronts. The institute draws on the expertise of university researchers and professionals while preparing a new generation of fire professionals to solve a growing crisis.

“Wildfires in California have always been daunting, but over the last five years, they’ve reached a much faster pace of impact. While that’s not unexpected, the rate at which it’s changing is alarming,” says Jeff Kane, a professor of Forestry and director of the institute. “This circumstance was a major impetus to formalize the Fire Resilience Institute.”

The multidimensional model reflects the complexities of fire-related issues that the institute hopes to address from many angles and disciplines. The institute also centers on the notion of partnerships—with everyone from landowners and local tribes to fire professionals—while providing Cal Poly Humboldt students practical experience in fire science and management.

For example, Kane, Forestry Professor Erin Kelly, and Psychology Professor Ben Graham, in addition to graduate students, will assess the ecological, social, and psychological impacts of recent wildfires on communities in Northern California and southern Oregon. This project involves several regional community groups—such as the Modoc Water Quality Board, Alturas Fire Recovery Group, Watershed Center, and Remake Talent—that are working to recover and promote community resilience to future wildfires.

Read more about the Fire Resilience Institute at fireinstitute.humboldt.edu.

“Wildfires in California have always been daunting, but over the last five years, they’ve reached a much faster pace of impact. While that’s not unexpected, the rate at which it’s changing is alarming. This circumstance was a major impetus to formalize the Fire Resilience Institute.”

Jeff Kane, professor of Forestry and director of the Fire Resilience Institute.
**Run, Bike, and Swim: Women’s Triathlon Becomes 12th Varsity Sport**

**CAL POLY HUMBOLDT will field a Women’s Triathlon team starting in the 2022-23 fall season.** The addition of Cal Poly Humboldt to the division is a major triumph for both the University and for the sport’s national governing body, USA Triathlon.

The commitment by Humboldt to become the 40th school is an important milestone in triathlon’s journey to becoming an NCAA Championship sport. Deemed a National Collegiate Athletic Association (NCAA) Emerging Sport for Women in 2014, USA Triathlon had a 10-year window to demonstrate sustainability and success before the run, bike, and swim event could become fully managed by the NCAA as a championship event. One of the benchmarks included recruiting 40 schools to offer the sport on a varsity level.

**Women’s Triathlon is a Fall sport, and the varsity season includes national qualifiers followed by the Women’s Collegiate Triathlon National Championships. Races are sprint distance, featuring an open-water 750-meter swim, Draft Legal 20-kilometer cycling, and a 5K run.** This is a monumental moment for not only Cal Poly Humboldt and the sport of triathlon, but also for women’s sports, USA Triathlon CEO Rocky Harris says. “It’s fitting we’ve hit this milestone on the 50th anniversary of Title IX as this sends a resounding message across the country that women’s sports are thriving.”

Cal Poly Humboldt is excited to welcome Triathlon to our campus as the 39th NCAA varsity sport,” Cooper Jones, executive director of Intercollegiate Athletics & Campus Recreation, says.

**Renowned Stem Cell Research Program Secures $3.6 Million for Student Internships**

**CAL POLY HUMBOLDT’S distinguished CIRM Bridges Program has once again been awarded with grant funding from the California Institute for Regenerative Medicine (CIRM).** Led by Biology Professor Amy Sprowles, the program supports students from diverse backgrounds committed to improving human health through stem cell research and gene therapy.

Cal Poly Humboldt is one of 15 California universities to secure funding from the 2021 CIRM Bridges 3.0 program. The more than $3.6 million award will fund a diverse cohort of 10 undergraduate and graduate CIRM scholars each year over the next five years. Each paid student internship is sponsored by one of the program’s collaborating host institutions: Cedars-Sinai Board of Governors Regenerative Medicine Institute, The Stanford University Institute for Stem Cell Biology and Regenerative Medicine, The University of California Davis Stem Cell Program, The Gladstone Institute, and Takeda California.

The program kicks off each summer with CIRM immersion, a Cal Poly Humboldt course that introduces students interns to the fields of stem cell biology and regenerative medicine. They also receive hands-on training in Humboldt’s teaching labs and participate in a workshop in bioinformatics and computational biology co-led by Biological Sciences professors Catalina Cuellar-Gempeler and Oscar Vargas and faculty from Stanford University.

Over the 12-month internship, students relocate to work in-person at their sponsoring institution’s lab while being mentored in hybrid courses by Humboldt faculty. “Our interns receive advanced training in the research methods and manufacturing practices required to develop cellular-based therapies for emerging and unmet medical needs,” Sprowles explains. “They also receive personalized career mentoring so they are poised to enter graduate programs, medical school, or begin careers as laboratory scientists.”

Since receiving CIRM awards in 2009 and 2016, Humboldt’s program has trained more than 100 students. To date:

- 39% are first-generation college students
- 43% are from low-income families
- 89% are pursuing careers in the biomedical sciences
- 11 have completed Ph.D.s
- 5 have completed M.D. or D.O. degrees
- 18 are currently working on doctoral degrees
- 8 are currently enrolled in M.D. or D.O. programs

In the third iteration of the program, inclusivity is a top priority and supported through a partnership with Cal Poly Humboldt’s Indian Natural Resources Science & Engineering Program. CIRM scholars also make an impact on the North Coast, where gaps in the rural healthcare system disproportionately affect tribal members and underrepresented minorities.

“In collaboration with the Humboldt Medical Society and Pre-Medical Task Force, CIRM scholars return from their internships to help educate our campus and rural, medically underserved community about regenerative medicine, all while gaining awareness of socio-economic issues and disparities among health care and access,” Sprowles says.

**Undergraduate students work in the lab with Biological Sciences Professor Amy Sprowles (right), who leads the CIRM Bridges Program at Cal Poly Humboldt.**

“Getting to this point has been a 13-year process with contributions from so many,” Tim Yount, USA Triathlon chief sport development officer, says. “Throughout this process, Cal Poly Humboldt has shown their dedication to not only supporting a triathlon program but also investing in its continued success.”

Humboldt is the 7th Division II institution in the country to add Women’s Triathlon as a varsity sport and the second in California, joining the University of San Francisco. The addition of Women’s Triathlon was made possible through a grant from the USA Triathlon Foundation as well as a donation from the IRONMAN Foundation.

“Cal Poly Humboldt is excited to welcome Triathlon to our campus as the 12th NCAA varsity sport,” Cooper Jones, executive director of Intercollegiate Athletics & Campus Recreation, says.

“I look forward to growing the sport both regionally and nationally.” The USA Triathlon Foundation Women’s Emerging Sport Grant is distributed to select NCAA membership institutions to develop, implement, and sustain Women’s Triathlon programs at the varsity level.

Women’s Triathlon is a Fall sport, and the varsity season includes national qualifiers followed by the Women’s Collegiate Triathlon National Championships. Races are sprint distance, featuring an open-water 750-meter swim, Draft Legal 20-kilometer cycling, and a 5K run. This is a monumental moment for not only Cal Poly Humboldt and the sport of triathlon, but also for women’s sports, USA Triathlon CEO Rocky Harris says. “It’s fitting we’ve hit this milestone on the 50th anniversary of Title IX as this sends a resounding message across the country that women’s sports are thriving.”

Humboldt students get hands-on experience with stem cell research and regenerative medicine.
News in Brief

New Food Sovereignty Lab will Promote Research, Indigenous Representation, Tribal Collaboration

A GROUNDBREAKING FACILITY at Cal Poly Humboldt is in the works to explore healthy, traditional Indigenous food systems and highlight Indigenous representation at the University.

The Food Sovereignty Lab & Cultural Workspace, adjacent to the Native American Forum, Goud’ni Gallery, and Behavioral & Social Sciences building, will operate as a commercial kitchen, with a plant-drying station and salmon pit for working with and preparing food, baskets, and regalia. It will serve as a study and research space and will host University and community events.

When the facility is complete this fall, Cal Poly Humboldt will become the first university in California with a space dedicated to uplifting tribal sovereignty through the research, practice, and preservation of food sovereignty.

Food is a complex subject, and its study is one of the most interdisciplinary fields imaginable. Agriculture is biology, geology, geography, and more. Food systems are economics and social sciences. Food is art and culture—a basic human need that suffers from social inequities and has significant ecological impacts.

The Declaration of Nyéléni—an international coalition that explores Indigenous food sovereignty—defines food sovereignty as “the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods and their right to define their own food and agriculture systems.”

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Studying food—and all of its multidisciplinary implications—is a natural fit for the Department of Native American Studies (NAS), which itself encompasses the studies of natural sciences, social sciences, arts, and humanities. NAS also incorporates knowledge sources from tribes around the country, many of which must be resurrected from the destructive practices of Western colonization of this United States.

Food has been uniquely impacted for Native communities, with the loss of traditional knowledge, damage to food ecosystems, and social and economic inequities that cause a lack of food resources for many tribes. For many people, food and subsistence practices are one of the few ways to maintain tribal traditions after hundreds of years of cultural erasure.

New Food Sovereignty Lab & Cultural Workspace, which explore traditional Indigenous food systems, held a ribbon-cutting ceremony in spring of 2022. The Humboldt community learned more about these food systems at the Indigenous Foods Festival in April (center and bottom).

Now Open for Business: Campus Stores

CAL POLY HUMBOLDT now has two campus stores to serve the community, visitors, and students of all ages. The Campus Store in Arcata is on the southeast corner of 8th and G streets on the Plaza. The Campus Store in Eureka is located at 218 F Street in the Ritz Building. The stores sell apparel and gear from Humboldt; College of the Redwoods; McKinleyville; and St. Bernard’s Academy; and Arcata and Eureka high schools, in addition to locally made gift items that locals, tourists, and students and families will enjoy.

The Campus Stores came out of a desire to have a University presence downtown and have the University represented at events like Arts Alive and farmers markets. The stores will help the University be more connected with the community and visitors and give students a destination to visit in Eureka.

On campus, the College Creek Marketplace will continue to sell University apparel and merchandise. School supplies—including scantrons, textbook pickup and returns, etc.—will be available in The Campus Store Textbook Warehouse at the former bookstore location on the third floor of the Gutswurrak Student Activities Center.

More: thecampusstoreeureka.com and bkstr.com/calpolyhumboldtstore

Black to the Land Nurtures Growth and Connection

WORKING AS AN INTERN at a local farm in Humboldt County gave Douglas Smith (‘13, International Studies) the sense of belonging he had struggled to find when he transferred to Cal Poly Humboldt from Los Angeles. Now an Applied English Studies graduate student and coordinator of the Umoja Center for Pan African Student Excellence, Smith is helping students find similar kinship with the land and the community through the Black to the Land Farm Project, which trains and supports Black students to be the next generation of farmers.

“Farming and community-supported agriculture is a large part of the culture here on the North Coast. It offers a special platform to learn while doing and to build bridges with the local community,” Smith says.

Smith launched the program to encourage Black students to engage with farming in 2019, soon after he became the Umoja Center coordinator. Since then, he has brought students to Bayside Park Farm in Arcata to grow kale and collard greens. They will soon be raising chickens, too.

The students’ expressions when they see the farm for the first time is all the validation Smith needs of the program’s value.

“It’s so rewarding to see students take in their surroundings and get excited about the opportunities to settle into a space here in the local community while engaging in multiple forms of learning,” Smith says.

Gloria Thompson, a Child Development major, says working the land is fun and reminds her of family. “I enjoy going to the farm because I do well growing things, and it helps me feel connected to my grandpa, who was a farmer.”
Calling out Aversive Racism in Academic Medicine

A STUDY IN The New England Journal of Medicine by Cal Poly Humboldt Psychology Professor Gregg Gold and physicians at UCLA and UC San Francisco examined how unconscious racist tendencies—despite the endorsement of egalitarian values—remain prevalent in academic medicine.

“There is a disproportionate lack of people from traditionally underrepresented groups in academic medicine,” Gold says. “Research shows that patients respond better and receive better care when doctors and caregivers look like them. So aversive racism, which individuals in the dominant group often internalize, has real and harmful outcomes in the healthcare system.”

The study, “Calling Out Aversive Racism in Academic Medicine,” found that diverse applicants to competitive residency programs and clinical clerkships were routinely evaluated less favorably than their white peers, even by those who considered themselves to be informed and unbiased regarding race.

Virtual Reality Helps Nurses See Different Perspectives, Build Compassion in Care

GREENED IN THE SCIENCE of caring, Cal Poly Humboldt’s RN to BSN Nursing program prepares nurses to become community leaders as they face a changing healthcare landscape and the complex needs of the North Coast’s rural population. The program is working with Embodied Labs, an immersive training platform, to add an element of virtual reality—or more aptly, someone else’s platform, to add an element of virtual reality—to students’ education.

A pillar of the Nursing program is its holistic approach to patient-centered care, which prioritizes empathy and cultural humility in every interaction. It’s a value that cannot be easily taught, Cal Poly Humboldt Nursing Director Kimberly Perris says. This is where virtual reality (VR) technology can deliver an outsized impact.

A study shows that patients respond better and receive better care when doctors and caregivers look like them. So aversive racism, which individuals in the dominant group often internalize, has real and harmful outcomes in the healthcare system.

The article is making an impact as essential reading for leaders at University of California medical schools. The authors are also putting their principles to work this summer. For the first time, Cal Poly Humboldt students are participating in a prestigious and highly competitive one-month premedical program at David Geffen School of Medicine (DGSOM) at UCLA. Gold’s colleague and the study’s co-author, Dr. Jennifer Lucero, a physician and DGSOM’s associate dean of Admissions, worked with others to create 10 spots reserved exclusively for Humboldt students every year. Intended to provide opportunities to more diverse and first-generation students, the program will be funded through a $2.5 million federal grant for the next five years.

“Using scholarship and research to make positive social change is what Cal Poly Humboldt is all about,” Gold says. “Our shared values of inclusion and equity empower our students to make the world a more just place.”

Read the research in The New England Journal of Medicine at link.humboldt.edu/NEJM.
News in Brief

$18 Million for Cradle-to-Career Collaborative on the North Coast

CAL POLY HUMBOLDT and its partners have been awarded $18 million from the state to launch the Redwood Coast K-16 Education Collaborative. The partners include Sonoma State University, UC Davis, College of the Redwoods, Mendocino College, ProjectAttain!, and the Offices of Education in four counties.

The initiative is a unified effort to increase higher education access for underrepresented students in Del Norte, Humboldt, Mendocino, and Lake counties and to prepare a new generation for careers in health care and education. The goal is to ensure young people take advantage of regional educational opportunities that lead to living wage jobs in the community.

The collaborative—one of five recently created and funded by the state—is part of California’s ground-breaking K-16 Education Collaboratives Grant Program, which will build pathways to career opportunities for students in their local communities while addressing long-standing equity challenges in higher education and workforce participation.

Led by Cal Poly Humboldt’s Mary Gonzalez in the Office of Initiatives, and Carmen Bustos-Works, associate vice president of Academic Programs, the collaborative is an inspiring effort to remove barriers to a college degree and career opportunities. The award will provide four years of funding for initiatives and resources including:

- Dual enrollment program, which allows high school students to take college courses and earn college credit
- Career-counseling support
- Additional professional development and certification programs for K-12 teachers
- Additional staff and educators to support programming, advising, and courses
- Improve tracking of students’ progress from grade school through college

Addressing specific needs of communities throughout the region is another important aspect of the collaborative. The health care pathway, for instance, creates opportunities for professional and aspiring health care practitioners to pursue a specialized degree or certification programs that will include stipends, apprenticeships, and job shadowing.

Telling the Story of Humboldt

IF YOU COME ACROSS the R/V Coral Sea, you’ll notice Cal Poly Humboldt’s ocean-going research vessel is sporting a new logo, along with a fresh coat of paint. This makeover is the direct result of a comprehensive initiative to energize and elevate the Humboldt brand.

In creating the new brand the University worked with higher education marketing experts SimpsonScarborough. The work included gathering extensive input from thousands of students, faculty, staff, alumni, University supporters, families, and prospective students.

From that feedback, SimpsonScarborough identified Humboldt’s distinctive characteristics: providing hands-on learning experiences, a commitment to sustainability, embracing perspectives that have been historically disenfranchised, and opening pathways for higher learning.

These characteristics help inform our brand story—who we are and how we talk about ourselves.

The rebranding includes every aspect of the University’s visual presence: websites, graphics, banners, advertisements, and more. The most prominent representation is the Humboldt logo and the “H.” logomark. Both use a period, elevating a word and letter into a confident, definitive statement: There is no other “Cal Poly Humboldt.” The H stands for more than the name. It reinforces everything the Humboldt experience is, does, and impacts.

There’s also a fresh new color palette that embraces Humboldt’s traditional green and gold spirit colors. The palette’s supporting colors reference the natural landscape that surrounds us, including the sand and ocean.

The Coral Sea makeover is only the beginning. Over the Fall semester and into next year, the University will roll out guidelines on how to use the new visual identity, launch a refreshed web and digital presence, and implement a comprehensive long-term advertising strategy and media campaign. All will capture the spirit of what makes Humboldt a special place to live, learn, and work.

The Redwood Coast K-16 Education Collaborative is aimed in part at increasing access to higher education for North Coast students like these Hoopa eighth graders visiting the Wildlife Museum during a campus tour.
Giving
by the Numbers

It has been a record-breaking year for donor support at Cal Poly Humboldt. Donors have invested more than $14 million to help students and elevate the University. Thank you to our generous community of alumni, parents and families, and other supporters!

$14,200,000
Total Raised

800
New Donors

1,700
Alumni Donors

3,300
Total Donors

9,700
Total Gifts

400
Student Scholarships and Awards

$1,400,000
Endowment Distribution for Scholarships and Program Support

$38,300,000
Total Endowment

To learn more about giving opportunities at Cal Poly Humboldt, visit giving.humboldt.edu, call (707) 826-5200, or email giving@humboldt.edu.

*Based on 2021-22 figures.
Casting a Spell

Student sculptors at Cal Poly Humboldt get the incredible opportunity to cast and fabricate their creations in molten bronze in the Foundry.

It’s one of the hottest tools available to students who have many ways to bring their ideas into a three-dimensional reality.

Many civilizations have worked in bronze—a blend of copper and tin—dating back to at least 3500 BCE. Bronze is strong and less brittle than other kinds of metals, and it lends well to fine detail in molds, and is malleable by tools when it’s hardened.

Humboldt’s bronze sculptors start by creating a full-size model of their sculpture with a material like clay, 3D printing, or cast from life. Using that replica, they prepare a mold using a pliable material. Wax is then poured into the mold, creating a shell where bronze will be poured.

Pouring is one of the most exciting, but safely performed, steps of the foundry process. The bronze is heated to about 2,000 degrees in a furnace and carefully poured into a shell by a team of students, staff, and faculty. Once the bronze is cool, it is broken out of the shell, then finished, polished, and patinated.
AT THE FOREFRONT of the race to heal our changing planet are the scientists and engineers at Cal Poly Humboldt’s Schatz Energy Research Center, which was established in 1989. Schatz Center is leading the charge through groundbreaking research on an issue that has made national news—offshore wind energy.

The winds that blow off the coast of northern California and southern Oregon are the strongest in the country. Power generated by wind is considered a clean source of energy, free from carbon emissions or other toxic byproducts that plague conventional energy systems. Twenty miles offshore from Humboldt County may be an ideal location for a wind farm, and Cal Poly Humboldt researchers, who include students, professional staff, and faculty, are applying rigorous scientific and policy research to explore this possibility.

“Offshore wind on California’s North Coast has great potential to contribute to regional, state, and national climate and clean energy goals, while also contributing to economic development in our region,” says Arne Jacobson, director of the Schatz Center.

In 2021, the White House announced that Humboldt County was a prospective location for the Pacific Coast’s first commercial-scale offshore clean energy project. The Biden administration hopes to have offshore wind farms producing 30 gigawatts of energy by 2030, enough to power more than 10 million homes.

Humboldt County could play a major part in reaching that goal, a win-win for the local economy, the state, and the planet. If the full federal Wind Energy Area were developed, wind farms off Humboldt Bay could provide about 4 percent of California’s current energy needs.

To understand the feasibility of offshore wind for Northern California, state and federal agencies have turned to the Schatz Center. Over the last four years, the Schatz Center and its partners have produced 30 different studies on the risks, rewards, benefits, and constraints of offshore wind energy and what it might mean for our region. Those studies have focused on key areas such as wind energy generation potential, transmission and port infrastructure, economic viability, environmental impact, geologic hazards, and community benefits and concerns.

In 2020, working in partnership with researchers from H. T. Harvey & Associates, the Schatz Center embarked on a two-year study on the potential impacts of wind energy on seabirds. This study will help identify which species could be at risk from the wind turbines, based on their spatial distribution and flight behavior, and will inform wind farm siting and design.

Transporting and installing these behemoths present their own set of challenges, as the floating turbines would stand up to 900 feet tall. Heavy commercial traffic and bridge infrastructure make turbine construction difficult, if not impossible, for most California ports. For example, the turbines are simply too large to fit underneath the Golden Gate Bridge. Humboldt Bay has comparatively little vessel access to wind farms, which makes this potential project even more unique.

“As part of the polytechnic transition, the university is developing a multi-disciplinary offshore wind marine research facility on Humboldt Bay that will allow for an expansion of research and additional opportunities for student involvement. This will help us continue to carry out rigorous research aimed at understanding how offshore wind can best contribute to efforts to address climate change while also benefiting communities in our region.”

Arne Jacobson
Director of the Schatz Energy Research Center
“Through our partnership with Schatz, Cal Poly Humboldt, and the Redwood Coast Energy Authority (RCEA), we can ensure that gateway remains accessible during energy emergencies in our region with a clean and renewable source of power. We hope this project can serve as a model to other airports, and communities, across the State of California (and the greater United States) on sustainable energy generation and critical infrastructure resiliency.”

Cody Roggatz
Director of Aviation for the County of Humboldt

traffic and has no aerial obstructions between the anticipated turbine construction sites and the open ocean.

Earlier this year, the California Energy Commission approved a $10.5 million grant that will fund engineering and design work to renovate Humboldt Bay’s port to accommodate offshore wind development. The Schatz Center is analyzing the potential to create an all-electric port that relies primarily on renewable energy.

As part of its polytechnic plans, the University is developing an offshore wind marine research facility on Humboldt Bay. The facility will support new and ongoing research on how offshore wind energy can ease the impact of climate change while also minimizing regional environmental impacts, and benefiting communities in the region.

“This facility will bring together wind-related research from multiple disciplines under one roof—and that’s exciting,” says Jacobson.

The Schatz Center’s team has plenty of experience in thinking outside the grid, having designed and developed the first 100% renewable, multi-customer microgrid in California. The Schatz Center also worked closely with PG&E to write a technical guide for communities that want to replicate this groundbreaking project.

The Redwood Coast Airport Microgrid (RCAM) powered on last year and features solar arrays that can generate enough electricity each year to power the equivalent of 500 households on the North Coast. During power outages, RCAM will typically be able to island and run independently for at least two weeks. RCAM was made possible by an extraordinary interagency collaboration between the Redwood Coast Energy Authority and PG&E, as well as the county’s regional airport.

“Our California Redwood Coast-Humboldt County Airport serves as a gateway for connecting the Redwood Coast region to the world and the world to the Redwood Coast,” says Cody Roggatz, director of aviation for the County of Humboldt. “Through our partnership with the Schatz Center, Cal Poly Humboldt, and the Redwood Coast Energy Authority, we can ensure that the gateway remains accessible during energy emergencies in our region, using a clean and renewable source of power.”

Two microgrids designed and developed by the Schatz Center for the Blue Lake Rancheria Tribe were put to the test in 2019 during a statewide power outage, with outstanding results. These solar-based microgrids helped keep food safe, phones charged, and medical devices for vulnerable county residents running during the blackout. The Schatz Center is currently working with multiple local tribes to support their clean energy and resiliency goals.

The collaborative approach to these projects is as much a part of the student learning experience as the field work. Reimagining the energy infrastructure of Humboldt County means working with multiple stakeholders and engaging community support and feedback to produce an equitable outcome, with Cal Poly Humboldt students involved in the process from its design all the way to implementation.

“Conducting a resource assessment and load compatibility study for offshore wind in Humboldt County with the Schatz Center helped me realize that this is something I want to do for the rest of my life,” says Tina Ortega (‘20, Environmental Resources Engineering), a former student researcher for The Schatz Center. “Working with this team helped me land a position at the National Renewable Energy Laboratory, get accepted for my current master’s program in Advanced Energy Systems, and one day will hopefully help me bring renewable energies to the places I love most.”

This is Humboldt: Remote. Windy. Wild. Ready.

Read more about Schatz Energy Research Center at SchatzCenter.org.
For the first time in nearly 85 years, California has a new polytechnic. It’s a long time in the making, but for Humboldt, it’s a natural fit.

Cal Poly Humboldt:
This is Our Moment

by Aileen Yoo
DABID GARCIA AND HIS COLLEAGUES are hiking up a steep slope of the Jenner Headlands, a sprawling prairie in coastal Marin County. It’s a cool February morning, and along the way they pass purple needlegrass (the official grass of California) and irises (which are blooming a little too early if you ask Garcia). The smell of the sea is in the air. So is the manure of belted Galloway cows idly grazing nearby. Garcia is a seasonal field technician for Point Blue Conservation Science who, with other biologists, is preparing to take samples of rangeland soil for analysis of carbon content and other properties that measure the health of the land.

The son of farm laborers—Indigenous Purépecha immigrants from Mexico—Garcia is the first in his family to get a college degree. After graduating from Humboldt in 2020 with a degree in Rangeland Resource Science, he was hired by Point Blue, a conservation and research nonprofit. Among its initiatives is working with California landowners to study the impact of grazing on soil and help implement agricultural practices that better sustain the ecosystem and, in turn, their businesses.

“Plants are the beginning of all ecosystems. I’m applying what I learned from Humboldt, and using my knowledge as an Indigenous person to care for the earth,” he says. Garcia embodies what has long been the raison d’être of Humboldt State University and a clear focus as it became Cal Poly Humboldt: providing diverse students a unique experiential education that prepares them to solve the complex challenges of our time.

The First Polytechnic University in California in 84 Years

IT’S NOT EVERY DAY a polytechnic comes along in California. To put things into perspective, the first polytechnic college in the California State University system—Cal Poly in San Luis Obispo—was established in 1901, followed by Cal Poly Pomona in 1938.

As these campuses evolved, so did Humboldt and its name, from 1913 until January 2022, when it took on its new moniker—California State Polytechnic University, Humboldt—the first polytechnic in Northern California and only the third in the state.

“This is truly a historic moment for our institution, this region, and the state. Please take a moment to let this sink in,” Cal Poly Humboldt President Tom Jackson, Jr., remarked when the California State University Board of Trustees approved the new designation and new name in January. “It’s important to reflect on everything that the Lumberjack community has accomplished to help us arrive at this transformational opportunity.”
New Role for the 21st Century

SO WHAT EXACTLY is a polytechnic university? In the classic sense, a polytechnic university typically emphasizes applied and natural sciences, technology, and engineering. Polytechnics typically focus on experiential learning and preparing students for meaningful careers. In other words, all the hallmarks of a Humboldt education.

These characteristics weren’t lost on Timothy White, then chancellor of the California State University system, who in 2020 invited the University to launch a self-study to explore the possibility of becoming a polytechnic.

The unparalleled examination of the University—compiled by hundreds of University staff, faculty, alumni, and local community members—highlights Humboldt’s strengths and challenges. The study also articulates a vision for the future. One that doubles down on an educational experience rooted in environmental and social responsibility. And one directly aimed at solving the state’s key issues such as climate resiliency and wildfire management.

That vision is now reinforced by an investment of nearly a half-billion dollars from the state. Proposed by Governor Gavin Newsom, $458 million for the polytechnic transformation was approved by lawmakers. The unprecedented financial infusion fasttracks a process that could have taken two decades or more. Of that money, $433 million in one-time funding was allocated to infrastructure improvements and new facilities. The other $25 million is ongoing funding, which is supporting the immediate buildout of 12 new academic programs for Fall 2023. The ongoing funds will also support hiring additional faculty, expanding student resources and programming, recruitment, classroom renovations, marketing and outreach, and more.

“We’re incredibly excited and humbled by the opportunity to become a polytechnic university,” says Jenn Capps, provost and vice president for Academic Affairs. “In many ways we’re already a polytechnic, and this is a great time for us to expand and improve California’s expertise on the global stage. We are grateful for the State and CSU’s confidence in our ability to do this.”

More Diverse, Equitable STEM

OVER MORE THAN A CENTURY, Cal Poly Humboldt has developed highly regarded programs. Now, among 660 master’s level institutions nationwide, Humboldt ranks eighth for the rate of STEM students who go on to earn Ph.D.s, and first out of California State University’s 23 campuses. In the CSU, Humboldt also has the third-highest percentage of STEM majors overall and the highest percentage of science and natural resource majors.

Adding to the statistical mix are the demographics of an increasingly socioeconomically diverse student body: 51% of recent graduates were the first in their families to earn a college degree; 41% of current students are from underrepresented populations; and within Humboldt’s STEM programs, 59% are women.

“My degree in mechanical engineering not only taught me the value of investing in STEM education for our students, but the benefits these programs have on our communities as well. By establishing itself as a polytechnic institution, Cal Poly Humboldt will help develop a new class of leaders and a highly educated workforce in the North Coast. I’m proud to support higher funding for Hispanic-serving institutions like Humboldt that are doing the day-to-day work of investing in the next generation and putting the future of our students first.”

Alex Padilla
U.S. Senator

Clockwise from left: Practicing the marimba; filming on a trail in Trinidad; open house for Studio Art; the human body in motion at the Biomechanics Labs; teaching local elementary school students; and playtime at the Child Development Lab. A cornerstone of a 21st century education—polytechnic or otherwise—the liberal arts are alive and well at Cal Poly Humboldt.

Humboldt is now looking to the future by preparing students like these Environmental Resources Engineering majors for careers in STEM.
The state has had full confidence in you, unmet workforce needs. The expansion of STEM fields that can support our climate goals, wildfire management, and other new applied science degree programs are issues close to my heart and this expansion enhances your standing in higher education and will have a major and positive impact on the North Coast’s economy, potentially revitalizing it for decades to come.

Well done, and well deserved!”

Jim Wood
Assemblymember

What the data points to are the University’s ongoing role in diversifying the STEM workforce at a time when it’s needed more than ever. According to a 2021 study, the Pew Research Center, “Black and Hispanic workers remain underrepresented in the science, technology, engineering, and math (STEM) workforce compared with their share of all workers, including in computing jobs, which have seen considerable growth in recent years.”

Fisheries Biology graduate student Juli LaFuente is acutely aware of the importance of representation and believes Cal Poly Humboldt can now do even more to change the face of STEM.

“It’s empowering to see someone in your field who looks like you, and as a woman of color in STEM, I want to be a role model for other underrepresented students who are interested in marine science,” LaFuente says. “With the polytechnic designation, Cal Poly Humboldt has the chance to set an example for diversity in STEM.”

Capps points out that diversifying the ranks of academia in all fields is a University imperative. Of the new faculty hired in 2021-22 academic year, 55% are faculty of color. With STEM in particular, the diversity gap is all the more reason for creating another polytechnic. “We can meet California’s need for not only more STEM professionals but also professionals who reflect the demographics of the state,” says Provost Jenn Capps. “We are defining ourselves by who we include and not who we exclude.”

The CSU, for instance, has seen demand for certain STEM degree programs exceed the number of available spaces at other campuses. With several new STEM programs being created, Humboldt will have the capacity to serve hundreds or thousands of additional students in high-demand programs.

Access to Humboldt means access to a “sandbox” where students like Dabid Garcia apply their learning through experiences that are distinctively Humboldt. Passionate about conservation since childhood, Garcia says studying plants and being hired as a student technician at the Dennis K. Walker Greenhouse brought out the plant nerd in him. The facility with the iconic geodesic dome has one of the largest “lab” around is the North Coast itself, where the Pacific ocean, mountains, rivers, and world-famous redwoods meet.

Along that dramatic stretch is the Telonicher Marine Lab. Perched on a bluff in Trinidad overlooking the ocean, the Marine Lab pumps, filters, and recirculates seawater from the Pacific into tanks to keep marine organisms alive. Here, Juli LaFuente works directly with Fisheries Biology professor and NOAA scientist Eric Bjorkstedt to examine the impact of climate change and other stressors on North Pacific krill. The study, supported by NOAA, is part of the agency’s ocean acidification program. Gathering krill is an adventure in itself. LaFuente occasionally heads out to sea aboard the University’s ocean-going research vessel (and workhorse of the marine science programs), the R/V Coral Sea, to collect these crustaceans, bringing them back to the lab for analysis.

Putting Student Learning to Work

THE GREENHOUSE IS ONE of more than 180 specialized campus facilities that support practical experience and research in many disciplines. At the Biomechanics Lab, students study movement and the mechanics of the human body, using cutting-edge motion-capture equipment and software. The Child Development Lab doubles as a teaching facility to observe child behavior and a preschool for local families. The Ceramics Lab is an 8,500-square-foot studio with several kilns and areas for glazing, molding, mixing, and throwing.

However, the largest “lab” around is the North Coast itself, where the Pacific ocean, mountains, rivers, and world-famous redwoods meet.

The Ceramic Lab is an 8,500-square-foot studio with several kilns and areas for glazing, molding, mixing, and throwing. The Pottery Lab pumps, filters, and recirculates seawater from the Pacific into tanks to keep marine organisms alive. Here, Juli LaFuente works directly with Fisheries Biology professor and NOAA scientist Eric Bjorkstedt to examine the impact of climate change and other stressors on North Pacific krill. The study, supported by NOAA, is part of the agency’s ocean acidification program. Gathering krill is an adventure in itself. LaFuente occasionally heads out to sea aboard the University’s ocean-going research vessel (and workhorse of the marine science programs), the R/V Coral Sea, to collect these crustaceans, bringing them back to the lab for analysis.

Congratulations to Humboldt State University on its tremendous transformation to Cal Poly Humboldt, with all the incredible resources and opportunities that will bring to the students and communities of the North Coast. This massive investment addresses many of the challenges Cal Poly Humboldt has faced in the current climate of education and brings with it significant benefits to the state and our local economy.”

Jared Huffman
Congressman

Opposite page: Students prepare specimens for Cal Poly Humboldt’s Vertebrate Museum, which has a vast research and teaching collection of 15,000+ mammals, amphibians, and reptiles.

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Congressman
“This is a game changer for this amazing campus community, our regional economy, and the greater North Coast. This name change is just the first step in a transition that will bring more family-sustaining jobs, resources, and investment into Northern California. Big congrats to the hard-working Cal Poly Humboldt students and dedicated staff—the future is bright for Humboldt County.”

Mike McGuire
State Senator and Senate Majority Leader

“The fact that I can conduct this research in such a beautiful place is pretty incredible,” LaFuente says. “Being fully immersed in something allows me to put my skills and knowledge into practice.” The people, culture, and history of the North Coast play a significant role in the learning experience.

This past summer, Anthropology students had the rare opportunity to conduct archaeological excavations on the territory of the Bear River Band of the Rohnerville Rancheria in southern Humboldt. The program, called the Bear River Applied Anthropology Field School, was initiated by the Bear River Band of the Rohnerville Rancheria and coordinated with the Anthropology department and Cultural Resources Facility at Cal Poly Humboldt. The facility consists of a team of faculty from the Anthropology department, researchers, and staff who provide cultural resource management services to local, state, and federal agencies and nonprofits.

The purpose of the field school, to decolonize archaeology by ensuring work on Native ancestral lands, is driven by Native peoples. As part of that effort, students learned archaeology techniques and cultural feature identification onsite. A classroom component included history and culture of Native Tribes by Tribal members and faculty. Members of the Bear River Band of the Rohnerville Rancheria also received training as Tribal monitors to oversee excavations and to identify and protect culturally sensitive items.

“We are pleased to see the curriculum of the field school as one that is inclusive of Tribal cultural knowledge, history, and ethnography,” said Josefina Frank, chairperson of the Bear River Band of the Rohnerville Rancheria, and Melanie McCavour, cultural director of the Tribal Historic Preservation Office, in a joint statement. “This school is a welcome shift away from curricula focused solely on the archaeology of Tribal cultural resources, and we look forward to collaboration with Cal Poly Humboldt on future projects, off and on our ancestral territory.”

The field school is a reminder that collaboration beyond consultation with Indigenous peoples provides a perspective that is invaluable to our understanding of the world. Now, Cal Poly Humboldt, which is located on the ancestral homelands and unceded territory of the Wiyot people, is working toward building a polytechnic curriculum more centered around Indigenous knowledge systems. (See page 33 for more on Traditional Ecological Knowledge.)

The field school also challenges a long-held assumption that the arts, humanities, and social sciences are separate from the sciences. That siloed notion is not only antiquated, says Provost Jean Capps, but also counterintuitive to a contemporary education—polytechnic or otherwise.

“Science and liberal arts and humanities cannot exist without each other,” Capps says. “The new high-demand polytechnic programs will draw from many disciplines—all of which develop critical thinking skills that build a nuanced understanding of urgent issues that need our attention.”

Art Professor Stephen Nachtigall, for example, integrates socioeconomic, political, and historical issues of climate justice into his course on radical graphics. Students explore the history and efficacy of protest posters and activism in contemporary arts.

“Contemporary arts give students the tools to interrogate their own mediums and approaches to the ways that they work,” says Nachtigall, who is helping to build the Digital Arts & Media program, one of 27 new programs that will be developed by 2029. “Artists are dreamers. We have a picture of what’s possible. We think about things that are both idealistic and concrete, and come up with new ideas.” (See a full description of new academic programs for Fall 2023 on page 36.)

North Coast’s Bold Future

AN IMPORTANT ASPECT of the polytechnic conversation continues to be the economic symbiosis between the University and the North Coast. The largest employer in the county and poised for major growth, Cal Poly Humboldt supports more than 1,513 million in statewide industry activity. Humboldt’s polytechnic designation is expected to stimulate the North Coast economy by growing student enrollment and expanding the labor force with career-ready graduates. It’s also expected to inspire strategic investments in infrastructure such as a research facility in Eureka, which will support offshore wind and related research led by Schatz Energy Research Center and academic departments. (See page 34 for a map of Cal Poly Humboldt’s infrastructure plans.)

Some say that in the context of the local economic ecosystem, you can’t talk about the polytechnic transformation without each other,” Capps says. “The new high-demand polytechnic programs will draw from many disciplines—all of which develop critical thinking skills that build a nuanced understanding of urgent issues that need our attention.”

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Fisheries Program, students monitor fish populations in the Trinity River (top) and participate in a prescribed fire training exercise on Yurok land. By collaborating with and learning from local Native tribes, students experience the world from a Native perspective. Here, working with the Yurok Tribe and locate parts of the wind energy supply chain locally.

Together, they’re poised to bring prosperity to the region now underway without also talking about three other major projects that are taking shape—at the same time, no less. Together, they’re poised to bring prosperity to the region and pave the way for partnerships, collaboration, and research opportunities. They include a proposed project by Nordic Aquafarms, a Norwegian aquaculture company, to clean up a superfund site on the Samoa Peninsula and build a $500 million fish farm facility that would generate approximately 150 full-time jobs. There is also a subsea fiber-optic cable, connecting Singapore to the United States through Eureka, in the works. Finally, the federal government plans to sell offshore wind leases this fall 20 miles off the coast of Humboldt Bay, opening future opportunities to expand the existing port and pave the way for environmental restoration and the urgent strategies to confront and mitigate climate change.

Creating a PolyTEK

By Kaitlin Reed, Professor of Native American Studies

TEK is fundamentally interdisciplinary and embedded in community practices, rituals, and relationships.

It is valid in its own right and does not need to be verified or legitimized by other bodies of knowledge.

1. TEK is fundamentally interdisciplinary and embedded in community practices, rituals, and relationships.

2. It is valid in its own right and does not need to be verified or legitimized by other bodies of knowledge.

3. TEK adapts to reflect the dramatic changes reoccurring within Indigenous communities today.

4. Tribal peoples are sovereign nations and have the right to exercise self-determination over their knowledge systems. Some TEK is culturally sensitive and includes information that tribal nations may not choose not to share with researchers or universities. Simultaneously, some TEK can and should be accessed by all, including Indigenous perspectives on law, business, government, technology, health, art, history, etc. Therefore, the University needs to work in partnership with tribal nations—not extract knowledge from them.

Engagement with TEK is centered around knowledge-sharing. Other considerations include how our University is dedicated to upholding sovereignty and self-determination, and working to empower Indigenous communities and ongoing projects of land return, environmental justice, and education.

The University has consistently highlighted the importance and necessity of integrating TEK into its curricula across campus. In the polytechnic prospectus—which serves as a blueprint of the University’s polytechnic plans—terms like “tribe,” “Indigenous,” “Native American,” “Indian,” and TEK appear 198 times.

In 2020, the University hosted “Poly-TEK?,” a discussion with distinguished author Robin Wall Kimmerer about ethical and sustainable incorporating Indigenous sciences into the University’s development as a polytechnic institution. Kimmerer demonstrated the need to honor the knowledge of Indigenous peoples, knowledge systems, and philosophies in community practices, rituals, and relationships. The University needs to work in partnership with tribal communities and institutions and investing in Native students, staff, and faculty. TEK can no longer be treated as a backup plan. Indigenous peoples, knowledge systems, and philosophies must be central to environmental restoration and the urgent strategies to confront and mitigate climate change central to environmental restoration and the urgent strategies to confront and mitigate climate change.

Visit humboldt.edu/polytechnic for a detailed overview of the implementation process, academic programs, infrastructure plans, announcements, and more.

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Building for the Future

By Grant Scott-Goforth

With Polytechnic comes more students, more faculty and staff, more programs—and more infrastructure.

Much of the state’s one-time $425 million allotment to Cal Poly Humboldt will fund new construction of mixed-use space for housing and other basic needs, academic instruction, and the support of students’ success. The investment will also go toward the technology and broadband support vital to campus, lab and classroom renovations, equipment modernization, and other infrastructure.

Humboldt also continues to explore purchasing properties around the North Coast that may serve student and community needs as well.

Here are some of the most noteworthy initial projects.

1 Student Housing Project
What it is: Building complex consisting of up to 1,050 beds and connected by various courtyards, meeting spaces, and student activity areas. The site will incorporate parking and pedestrian and biking paths, as well as a small cafe that will be open to the public.
Where it’s located: Along St. Louis Road just north of campus adjacent to Highway 101 at the former Craftsman Mall site
When it will open: Fall 2025
Budget: $200 million

2 Engineering & Technology Learning Community Building
What it is: 90,000-square-foot building and adjacent 250-bed residence building. It will include academic departments, lecture halls, labs, offices, student space, communal space, conference space, and other student-experience space.
Where it’s located: Eastern side of Harpst & B streets at the former Campus Events Field site
When it will open: Fall 2025
Budget: $135 million

3 Microgrid & Sustainability Building
What it is: 25,000-square-foot building that will include spaces dedicated for academic departments, lab research, offices, conferences, and students, plus a common area. The building will primarily serve as a testing facility for energy systems and a home for sustainability on campus.
Where it’s located: Near B Street south of the Schatz Energy Research Center
When it will open: January 2025
Budget: $175 million

4 Student Housing, Health & Dining Building and Parking Structure
What it is: 200,000-square-foot building with a new health center, expanded dining services, and 650 beds. The project will also include a new parking structure located north of the project along Granite Avenue.
Where it’s located: Northwest corner of Library Circle and LK Wood Boulevard
When it will open: Fall 2026
Budget: $175 million

5 Existing Building and Lab Renovations
What it is: Improvements to bring critical academic facilities in Science A and C buildings and Alistair McCrone Hall up to contemporary standards, which will help support growth of programs and departments.
Budget: $36.3 million

6 Eureka Research Lab (Offshore Wind Lab) and Marine Facilities
What it is: A new lab that will support offshore wind and marine research. Updates to offsite marine facilities, including the Telenicher Marine Lab, and the University’s ocean-going research vessel, the R/V Coral Sea.
Budget: $11 million for the lab and $6 million for the R/V Coral Sea
**New Degrees for a 21st Century Education**

**TWELVE NEW ACADEMIC PROGRAMS** will begin at Cal Poly Humboldt in Fall 2023, with 15 more slated by 2029. These programs build on strong existing faculty expertise in natural resources management and environmental sustainability and are aligned with the State of California’s goals regarding areas like climate resilience and wildfire mitigation. They will also create access to impacted degree programs in the California State University system that correlate with huge workforce gains.

Many of the new programs are highly interdisciplinary by design. They align with Humboldt’s strategic objectives of being rooted in place and meeting the needs of the region’s rural communities, with particular emphasis on underserved populations. A large emphasis will be placed on authentic engagement and collaboration with Indigenous communities to leverage their expertise and community practices.

**Degree Programs**

- **Applied Fire Science & Management.** Bachelor of Science, will give students the practical knowledge and skills to become fire science or management professionals. Created in collaboration with Humboldt’s respected Forestry & Wildland Resources and Native American Studies programs, the Applied Fire Science & Management major will also include a breadth of perspectives and Indigenous knowledge (also known as traditional ecological knowledge), with an emphasis on incorporating Indigenous practices.

- **Cannabis Studies.** Bachelor of Art, will prepare students to act as socially engaged, historically informed stewards of an unprecedented sea-change in local, national, and global cannabis laws and policies related to cannabis legalization. Students will engage critical perspectives on both cannabis prohibition and legalization in route to concentrations in Equity and Social Justice and Environmental Stewardship.

- **Data Science.** Bachelor of Science, will prepare students to synthesize knowledge and apply contemporary statistics, data analysis, and computational science methods to solve social and environmental problems. Students will work with data that relates to local issues. For example, sea-level rise data for Humboldt Bay and Crescent City is currently being used in some courses and could further be leveraged in introductory data science courses, weaving a theme throughout several classes to give students a holistic perspective of local challenges and solutions.

- **Energy Systems Engineering.** Bachelor of Science, incorporates elements commonly included in civil, environmental, mechanical, and electrical engineering disciplines. It is designed to prepare students for careers in developing, designing, operating, and analyzing clean energy systems. The program will be focused on energy-related infrastructure, devices, planning, and operations. It will emphasize systems integration and use an interdisciplinary approach to considering how energy systems are situated in social, ecological, and economic contexts.

- **Engineering & Community Practice.** Master of Science, is a one-year program designed to develop future engineering leaders who will sustain, restore, and protect natural resources and the environment. The degree is tailored to those who wish to pursue resource management positions that require strong technological and management skills with a particular focus on interfacing and working with Indigenous and traditionally under-served communities.

- **Geospatial Information Science & Technology.** Bachelor of Science, prepares students for careers as Geographic Information System analysts and specialists, remote sensing analysts, cartographers, photogrammetrists, and geographers. Geospatial Information Science & Technology is critical to solving some of the world’s greatest challenges, as well as local problems like sea-level rise, emergency preparedness, and providing health services. The size and complexity of the data involved are second only to genetics data. The data and methods involved require experts who are trained in geospatial skills and how to apply these skills to other disciplines.

- **Marine Biology.** Bachelor of Science, explores the diversity of marine life, its evolutionary history, the importance to our planet, and how it is impacted by human activities. Students will take advantage of the Telocircher Marine Laboratory, which gives students opportunities for hands-on observation and experimentation with living marine organisms, and Humboldt’s research vessel, the 90-foot R/V Coral Sea. Students travel aboard this vessel to observe whales offshore, collect and examine seawater samples, and travel for marine fishes and invertebrates. Several smaller boats are used in nearshore waters, coastal lagoons, and in nearby Humboldt Bay.

- **Mechanical Engineering.** Bachelor of Science is an evolving discipline that adapts to the current needs of society. Mechanical engineers design, develop, build, and test mechanical and thermal systems, sensors, and devices. Due to the variety of fields relevant to this profession, the undergraduate program covers areas in dynamics, materials, thermal/fluids, vibrations, controls, computer-aided engineering, design, and manufacturing. Areas of advanced coursework and research could include advanced energy systems, sustainable energy systems, biosensors, computational modeling, and sustainable manufacturing.

- **Software Engineering.** Bachelor of Science, applies engineering concepts to software development. It encompasses the development, operation, and maintenance of programs. The curriculum of software engineering programs includes computing fundamentals, software design and construction, requirements analysis, security, verification and validation; software engineering processes and tools appropriate for the development of complex software systems; and discrete mathematics, probability, and statistics, with applications appropriate to software engineering.

**Certificates**

- **Cybersecurity Stackable Certificate** aligns well with cybersecurity job requirements and pathways for community college transfers or employed adults seeking to upskill and advance in their careers. In addition to relevant leadership coursework, the certificate will advance understanding of computer and network security, hacking and risk analysis, computer forensics, intrusion detection and investigation, prevention, and recovery. The program will incorporate apprenticeship and internship opportunities to provide real-world experience, working with Humboldt ITS and other partners.

- **Equitable & Sustainable Future Certificate** is designed for professionals in the educational workforce and prepares administrators, faculty, and staff to be sustainability leaders and foster social and environmental responsibility in educational settings. The courses are designed to provide applicable knowledge and skills to promote equity and sustainability. Upon completion of the certificate, an individual will have acquired foundational knowledge, creative abilities, and practical skills to reduce environmental impacts and associated costs for an educational setting, to promote health and wellness for students and staff, and to advance climate justice and sustainability.

**This is what a 21st century education looks like:** programs where students build the skills to have meaningful careers and a nuanced understanding of society’s complex issues so they can make the world a better place.”

**Jenn Capps**
Proost and Vice President of Academic Affairs

**Information Technology Certificate** offers a range of learning experiences that connect student learning in cohorts and projects that culminate in a portfolio team-based project, with learners accumulating various industry certificates. An affordable and scalable strategy combines existing industry resources with a flexible curated learning program designed to meet the plethora of IT job requirements that emphasize IT skills and experience with industry certificates.

**Current Plans for Future Academic Programs**

**By 2026**

- Biotechnology B.S.
- Biotechnology Certificate
- Clinical Lab Science Certificate
- Computer & Information Technology B.S.
- Digital Arts & Media B.A.
- Food Systems Science B.S.
- Health Advocacy B.A.
- Indigenous Science & the Environment B.S.
- Nursing M.S.N.
- STEM Education M.Ed.

**By 2029**

- Agriculture B.S.
- Cybersecurity B.S.
- Forest Engineering B.S.
- Regenerative Engineering Design & Technology B.S.
- Speech Language Pathology M.S.
2021 Distinguished Alumni

Rich Casale (’75, Natural Resources Management) has spent more than four decades protecting California’s natural resources and agricultural industry. He worked for the USDA Natural Resources Conservation Service as a district conservationist for 43 years until his retirement in 2019. Following retirement, he worked as an NRCS wildfire restoration contractor, assisting California communities recovering from devastating wildfires. He has also written numerous technical articles and publications.

Heidi Moore-Guynup (’98, Psychology, ’00, M.A. Psychology) has served the students and families of Humboldt County for two decades. In 2017, Moore-Guynup was named assistant superintendent of educational services with the Humboldt County Office of Education, where she now serves as superintendent of educational services with the Humboldt County Office of Education, assisting California communities recovering from devastating wildfires. She serves on the Cal Poly Humboldt Board of Trustees.

Drew Petersen (’91, Physical Education) began the strength and conditioning program for Cal Poly Humboldt’s Athletics department in 1991 and is responsible for the design and implementation of the strength-and-conditioning program for all sports. Petersen has coached 50 strength and conditioning All-Americans and mentored strength-and-conditioning coaches throughout the years who have gone on to positions at NCAA Division I, II, and III schools and the NFL.

Robert Romano (’95, English, ’96, M.A. English) is the co-founder and CEO of BookheadEd, featuring the online language arts curriculum StudySync, which develops and publishes English language arts curricula and provides multimedia exercises, lessons, and other materials. In less than 10 years, the company has established a major foothold in classrooms across the nation. Today, over 3 million students and teachers use StudySync daily.

Cathy Sandeen (’76, Speech Communication) is the president of California State University, East Bay. Sandeen earned a Ph.D. in communications from the University of Utah and a Master of Business Administration degree from the UCLA Anderson School of Management. She was named an American Council on Education Fellow in 2010-11. Sandeen was chancellor of the University of Nevada, Anchorage from 2018 to 2020.

2021 Distinguished Faculty

Distinguished Faculty

2021 Recipients

Excellence in Teaching Award—Lecturer

Environmental Resources Engineering instructor Lonny Grafman is known for his commitment, his humanity, and his positive impact on students.

Excellence in Teaching Award—Tenure Line faculty

Child Development Professor Meenal Rana’s dedication to teaching shows in her scholarly work, service, and collaborative partnerships.

Excellence in Teaching Award—Tenure Track faculty

Criminology & Justice Studies Professor Michihiro Clark Segata is praised for his commitment to justice, learning, and the campus community.

Excellence in Teaching Award—Lecturer

Mathematics instructor Sonja Manor excels at closing the equity gap in the Math department’s supported courses, which serve some of the University’s most vulnerable students.

Scholar of the Year

Forestry Professor Jeff Kane’s work has been centered around forest and fire ecology, including advancing fire and forest science and informing better management of fire-prone ecosystems.

2021 Scholar of The Year Awards

Psychology Professor Chris Aberson is a Psychology professor, nationally recognized social psychologist, and statistical methods researcher.

Environmental Studies Professor Sarah Jaquette Ray has risen to prominence in the climate justice movement. Ray’s book, “A Field Guide for Climate Anxiety: How to Keep Your Cool on a Warming Planet,” addresses climate grief that young people face today.

History Professor Benjamin Marachek has established a reputation as a leading expert in early modern German history.

Full bios of awardees: link.humboldt.edu/2022-DistFaculty and link.humboldt.edu/2021-DistFaculty
Outstanding Students

2021

Outstanding Student of the Year (Academic)

Seth Mattingly
21, Music
performed in every major musical group available on campus
including the jazz orchestra, jazz combos, wind ensemble, calypso band, percussion ensemble, and the University Singers. In total, Seth participated in 27 semesters of performances by contributing to multiple groups each semester. As comfortable playing jazz as performing with classical and chamber ensembles, Mattingly has also shone as a marimba, timpani, drumset, snare drum, and multiple percussion soloist. Featured in numerous Music department recitals, including the prestigious honors recital, Mattingly’s professional commitment to music was consistently on display. An accomplished composer, Mattingly brought a passion for scholarship and performance when composing original music. Always the “go to” musician on campus when anyone needed a talented player, Mattingly was also an informal mentor in the Music department, offering peers guidance and support on coursework and music theory.

Outstanding Student of the Year (Co-curricular)

Roman Sotomayor
21, Philosophy and Religious Studies
was an insightful student with an admirable work ethic and unyielding commitment to his peers and social justice on campus. An active member of the student body, Sotomayor sat on several Associated Students (A.S) committees and chaired the Diversity, Equity & Inclusion committee. Among his passion projects was helping to develop the Student Legal Lounge, which offers free legal services to all students, and advocating for the Trans, Gender Non-conforming, Non-binary Task Force. He brought a justice-driven perspective to issues like sharp disposal and antracism on campus. During virtual instruction, Sotomayor worked closely with faculty and staff to humanize online learning and increase accessibility for remote learners. A resourceful organizer and advocate dedicated to social justice, Sotomayor’s positive, can-do attitude reflects the University’s mission and dedication to students’ success.

2022

Outstanding Student of the Year (Academic)

William Randolph Hearst Scholar
Julia Jones
Sociology & Native American Studies
is committed to community service and working for various projects that serve Native American youth. She also has demonstrated a wide spectrum of knowledge about Native American history and contemporary issues throughout her work. She has been an indispensable teaching assistant for Native American Studies, helping students navigate their first year of school and providing opportunities for students to further engage with Native American Studies curriculum by leading discussions and contributing to their classroom experiences. Jones led group discussions at Graton Rancheria’s online writing camp for Native youth, who wrote personal essays designed to educate people about Native American history. Jones has also mentored and tutored Hoopa Valley High School math students and created activities as a summer youth worker for Hoopa Valley Child Development.

Outstanding Student of the Year (Co-curricular)

An enrolled Hoopa tribal member (also Yurok/Karuk), Princess
Bionton Colegrove
Environmental Studies
has been a mentor at Two Feathers Native American Family Services, a camp planner for Hoopa Tribal Education, an intern for Hoopa Tribal Fisheries, and a guest speaker for the Humboldt County Department of Health & Human Services. She has been a senior park aide and interpreter at Sue-meg State Park, where she has taught visitors about Native history and uses of the land. Her commitment to Humboldt has been demonstrated through her work with the Department of Child Development department on an ACES Aware grant and the Ka’m-tem Speaker Series, as well as her participation in Indian Teacher & Educational Personnel Program and curriculum programs for youth. She was an invited speaker for “Hidden Heroes of the Environment,” an environmental speaker series hosted by Wade Crowfoot, California’s Secretary of Natural Resources.

Staff Recognition

Job titles are based on recipients’ positions at the time they were recognized.

2021 Recipients

Yvonne Doble
Director
Social Work Field Education

Marlette Grant-Jackson
Coordinator, Native American Center for Academic Excellence/Indian Tribal & Educational Personnel Program

Michele Miyamoto
Tutorial Coordinator
Learning Center

Amie Rodríguez
Administrative Support Coordinator
Testing Center

Karen Selin, MD
Center Physician
Student Health & Wellbeing Services

Michael Serrano
Lead Custodian
Facilities Management

Molea Smith,
Coordinator,
Youth Educational Services

Annette Trexel
Budget Analyst
College of Professional Studies

Corrina Wells
Coordinator and Lecturer
School of Education

Sabrina Zink
Risk Management Specialist
Risk Management & Safety Services

2022 Recipients

Alexander Bippus
Premedical and Biomedical Pathways Coordinator, Indian Natural Resources, Science & Engineering Program

Jessica Citti
Writing Specialist / Writing Studio Coordinator
Learning Center

Kristina Hunt
Career Advisor
Academic & Career Advising Center

Rob Keefer
CARE Services Coordinator
Dean of Students Office

Pamela Kirschner
ASC II/Office Manager
Student Life

Samantha (Sammi) Martinez
First-Year RAMP Coordinator
Retention through Academic Mentoring Program

Nora Montoya
Career Advisor
Academic & Career Advising Center

Janeth Serrano
Financial Aid Counselor
Financial Aid

Laura Sullivan
Clinical Laboratory Scientist II
Student Medical Services

Nicki Viso
Program Analyst and Clery Coordinator
Title IX & Discrimination, Harassment, & Retaliation Prevention

Susan Wright
Biological Stockroom Manager
Biological Sciences
President’s Distinguished Service Awards

Cal Poly Humboldt President Tom Jackson, Jr. recognized the accomplishments of six honorees for their meritorious contributions to the University and community.

2021 Recipients

Loren Blanchard, president of the University of Houston-Downtown, is the former executive vice chancellor for Academic and Student Affairs at California State University. During his tenure at CSU, Blanchard supported Cal Poly Humboldt’s efforts to become a polytechnic. He also helped implement CSU’s groundbreaking Graduation Initiative 2020, an ambitious effort to increase graduation rates for all students while eliminating equity gaps and preparing students to meet California’s workforce needs.

Emergency Coordinator and Director of Risk Management & Safety Services Christina Koczera has worked in the field of emergency management and risk analysis for more than two decades. She brings with her the partnerships from the federal, state, and local levels she has built over two decades. She has responded to several nationally declared disasters including 9/11. She is the recipient of the Presidential Lifetime of Service Award. She has guided the campus through unprecedented emergencies, including the pandemic.

2022 Recipients

Eileen Cashman ('84, Environmental Resources Engineering), professor and chair of the Department of Environmental Resources Engineering at Cal Poly Humboldt, has 25 years of experience teaching environmental engineering courses. Cashman worked in Electric Resource Planning at PG&E, the U.S. Geological Survey, the Wisconsin Energy Conservation Corporation, and James Madison University. She is currently a co-leader for the Polytechnic Curriculum & Academic Programs Working Group with Provost Jenn Capps, and has been instrumental in helping the University plan and launch 27 new polytechnic programs, which will be implemented by 2024.

Gary Rynearson ('78, Forest Production Management), a Forestry instructor, was the president of the Natural Resources Management Corporation for 20 years. He was appointed to the Board of Forestry and Fire Protection by governors Gray Davis and Arnold Schwarzenegger. As a manager for the Green Diamond Resource Company, he helped pass legislation that allowed for thinning of North Coast forests and supported the reinstallation of the California condor in the lower Klamath-Redwood Creek area. He has also directly impacted the development of an entire generation of forestry graduates.

Honorary Degrees Recognize Local Luminaries

Walter James Lara, Sr. and Betty Kwan Chinn received Honorary Doctorates of Humane Letters at the 2021 and 2022 Commencement ceremonies, inspiring a new generation of leaders.

Walter James Lara, Sr. is a respected spiritual leader and wisdom keeper of the Yurok Tribal people and recognized as a Native cultural and political luminary among Tribal Nations throughout California. “I will always be thankful for the choices that Walt and like him others made to hold on to and outspokenly protect the ceremonial places, the Yurok values, and expertise in so many areas of Yurok life and ceremony,” Yurok Education Department Director Jim McQuillen says. “I am even more grateful for his tireless efforts to pass on the knowledge that he learned from his elders and how he continues to teach, share, and work with the next generations.”

Lara has invested in establishing and nurturing partnerships with Cal Poly Humboldt. As a forester for the Yurok Tribe, Lara and his team guest-lectured in the Department of Forestry & Wildland Resources for several years. He has guest-lectured on topics such as Native American art of the North Coast and environmental justice. Lara is actively involved in student-led activities on campus such as American Indian College Monticello, California Indian Big Time & Social Gathering, and Indigenous Peoples Week. He is an advocate of higher education, and his children have earned degrees from Humboldt.

Betty Kwan Chinn is a local philanthropist and hero for her work helping the homeless. In 2010, Chinn was awarded the Presidential Citizens Medal, the second highest civilian honor in the country, by then-President Barack Obama, who praised her effort and success in “renewing America’s promise by serving those in need.”

Chinn was 7 when her family was violently forced from their home in China during Mao Zedong’s Cultural Revolution. She endured untold physical and mental abuse, torture, and near starvation until she escaped to Hong Kong four years later. After emigrating to the United States, she took refuge with relatives in California, later marrying retired Humboldt Physics Professor Leung Chinn and raising two sons in Eureka. One day when she noticed that one of her son’s classmates was living out of the family car, Chinn started sending extra food to school for the family, and her service to the community began.

Today, the Betty Kwan Chinn Homeless Foundation consists of Chinn’s Day Center, offering transitional housing and employment and family services; Betty’s House, a 32-bed family shelter; Betty’s Blue Angel Village, a temporary housing shelter built from shipping containers; Betty’s Annex, a women and children’s center that opened during the pandemic; Betty’s Showers, a public shower facility; and Betty’s Blue Angel Outreach, which provides wraparound services for hard-to-reach individuals in need of specialty services.

Chinn is a visionary leader and an inspiration to the entire Humboldt community. She calls every day an opportunity to give back, a gift in itself.

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1960s
Deanna Claire Dick, 1964, Zoology, had a 30-year career in clinical laboratory science, working in hospital and outpatient laboratories in California and Washington. She retired from Humboldt Central Laboratory in 2000 but returned in 2016. She worked for United Indian Health Services, traveling from Arcata to Weitchpec, Klamath, and Fortuna. She retired again in 2018.

Donald Moseley, 1964, Economics, was born in Scotia, California, to Adeline (Safford) and John Moseley on March 10, 1942, and passed away on May 11, 2020, surrounded by his family. He graduated from Eureka High School, served in Vietnam, and worked as a regional transportation manager for Hershey Chocolate in Oakland. He was a Stockton resident for 46 years. In retirement, he often taught digital photography for Stockton Institute for Continued Learning at San Joaquin Delta College. Photography was his passion, and he enjoyed world travels that gave him photo opportunities. He was an avid reader and loved movies and games. He is survived by his wife, Carolyn, daughters Jennifer Moseley and Michelle Espy, and grandchildren Carolyn, Jennifer Moseley and Michelle Espy.

1970s
Gary Coyne, 1973, Oceanography, worked for 40 years as a scientific glassblower, with over 30 years at Cal State University, Los Angeles. While working at CSULA, he wrote The Laboratory Companion and had a wonderful career helping to make glass apparatus used in general labs and many one-of-a-kind apparatuses used by chemists, geologists, biologists, and physicists. He retired in 2015 and since then has gone deeper into his hobby of woodworking and has spent more time on his bike. He also helps Adobe in its forums, answering questions on things such as Lightroom, Photoshop, Acrobat, and other related programs. In addition, he still provides support to the national organization American Scientific Glassblowers Society.

Barbara Brovelli-Moon, 1967, Sociology, was awarded the 2021 Alaska SeaLife Center’s Marine Science Outreach Award. This award is given to a person or team that has made an outstanding contribution to ocean literacy. It is sponsored by the Alaska Ocean Observing System. After retiring from over 40 years in education, Brovelli-Moon’s passion for teaching and Alaska’s wildlife continues through her company, Ocean Otter Publishing. She has written and published six field guide books for children and families about Alaska’s animals, filling a niche previously unavailable to youth. Her work is a valuable resource that helps children connect to the living creatures in Alaska and teaches them they can make a difference.

Amy Mathers: On the Front Lines of COVID-19
Mathers went on to attend the Loyola Stritch School of Medicine in Chicago, then a residency in internal medicine at Maine Medical Center.

“In Maine, I returned to my first love of genetics and started doing research on the bacteria that causes Lyme disease,” says Mathers.

In the field, Mathers studied birds and mice on tiny rock islands off the Maine coast, using wildlife and bacteriology techniques learned at Humboldt.

“My education at Humboldt was so hands-on, it keeps returning in my career,” she says.

Mathers landed in Virginia in 2006 for an infectious disease fellowship and focused on how Gram-negative bacteria, such as E. coli, were being transmitted in hospitals. “I was using molecular bacteriology techniques that I learned in the lab with Biology professors Michael Bowers and Jacob Varkey at Humboldt.”

The research led Mathers to aabbatical at Oxford University in 2014, where she learned whole-genome sequencing techniques that helped determine a significant link between wastewater and disease spread.

In addition to helping run UVA’s cutting-edge medical lab, Mathers also oversees her Sink Lab, which works to understand disease spread.

In 2020, CNN’s chief medical correspondent, Sanjay Gupta, interviewed Mathers about her wastewater surveillance program. She presented her research in bacterial genetics to the World Health Organization in 2021. Her work is now focused on how to prevent drug resistance, a top priority for global public health.
Michael Lynch: Supporting Young Men of Color

GROWING UP, Michael Lynch (“I, Business Administration) was raised by a phenomenal single father and surrounded by a loving community in his hometown of Sacramento. Still, Lynch saw too many friends and family members fall victim to a criminal justice system that disproportionately targets young men of color. Defying the odds, he was the first in his family to graduate from college. Today, as the co-founder and CEO of the nonprofit organization, Improve Your Tomorrow (IYT), Lynch is helping other young men of color achieve their dreams.

“Arriving in Humboldt was a transformative moment for me,” Lynch says, “Michael, who was recruited to Humboldt to play football. “The beauty of the area was majestic.”

Settling into a busy schedule of practice and games, Lynch found himself immersed in the social justice issues that were baked into nearly every class. “My professors and classmates got me thinking about the purpose of my education and how to live a life of service,” Lynch says. “It was a very impactful time in my life.”

After graduating in 2011, Lynch headed home for an internship at the state capitol, followed by a fellowship and earning a graduate degree from Sacramento State. All of this stoked his interest in policy and community service. Lynch saw a glaring need for an organization that focused on helping young men of color get to college.

“Beginning in 2012, Lynch and his team focus on the potential “at-promise”(never using the stigmatic phrase “at-risk”) young men of color to have to offer the world. IYT services include tutoring, college advising, and mentorship, along with encouraging parent engagement.

For the past 10 years, he has been climbing 14,000+ foot peaks in Colorado with two other HSU alumni.

1980s

Dennis Halligan, 1980, Fisheries Biology, fished in the Gulf of Alaska and Bering Sea for 12 years before and after graduation. During that time, he also owned and operated an oyster mariculture company in Humboldt Bay. Halligan has been a fish and wildlife biologist for the past 30 years and has worked on hundreds of projects including the decommissioning of the Humboldt Bay nuclear power plant, permitting the Klamath Dam removal, and a wide variety of construction, watershed restoration, and fish and wildlife surveys. Halligan hopes to retire in a couple of years but loves his job and will probably work part-time until he drops. Cheers!

1990s

Kristin Klamz–Doneen, 1992, Philosophy, serves as the chair of the Philosophy & Humanities Department at Avoca Ramsey Community College in Cono Rapids, Minnesota, just outside Minneapolis. She obtained her Ph.D. in Practical Philosophy from Stockholm University, her M.A. in Individual Studies: Comparative Philosophy & Religion from Central Washington University, and an M.A. in Practical Philosophy. When pursuing one of her advanced degrees, she was very pleased to take a distance learning class in advanced logic from her Humboldt State University advisor, Michael Tuffly. Goodwin. She absolutely loves her job in Minnesota, where she has taught full-time in Philosophy for the past 15 years. “Thank you, HSU, for the great start!”

Go to improveyourtomorrow.org to learn more.
2000s

Robert Deane, 2007, History and Journalism, works in the Public Services Department of the Oregon Tech Library in Klamath Falls, Oregon. He graduated with his M.A. Ed. in Social Studies from Western Governors University in 2019 and is nearing completion of his master’s degree in Library Science: Children & Youth Services from St. John’s University.

Sara Dykman, 2008, Wildlife, has published her first book, Bicycling with Butterflies. She describes it as part science, part adventure, part love letter to nature. It tells the story of her 10,201-mile bicycle adventure following the monarchs from Mexico to Canada in 2011.

Chad Kaufman, 2008, World Languages & Cultures, Spanish Language & Literature, worked at a bilingual school before moving to Cholula, Mexico, to pursue a master’s degree. In 2011, he graduated with an M.A. in Applied Linguistics from La Universidad de las Américas Puebla, Mexico. He then moved back to Minnesota with his amazing spouse to be close to family. Kaufman has been working as a full-time Spanish interpreter at Children’s Minnesota, a system of pediatric clinics and hospitals.

Aydee Zielke, 2008, Environmental Science & Management, obtained her dream job, joining the San Diego River Park JPA, taking on the role as the park environmental planner. Her work includes habitat conservation, preservation, planning, permitting, and mitigation for trails and parkland. She is also using her cartography skills to create maps, exhibits and maintain and update GIS data. She worked for various private consulting firms and earned a Master of Urban and Regional Planning from the University of Hawaii (2015). She met her wife while studying at Humboldt, and they have taken on the role of parents, raising their two outstanding children in Coastal North County San Diego.

Jason Atherton, 2009, Communication, went to graduate school at Western Michigan University in Kalamazoo, Michigan. He lived with an HSU classmate while studying Educational Leadership and Policy. After completing his master’s degree, Jason held positions at universities in Florida, Michigan, and Utah. In 2019, Jason won Outstanding Academic Advisor for the local, state, and national advising conferences. He now lives in Salt Lake City and works with two other HSU alumni who share his same birthday.

Heron Morris, 2019, Political Science, is making a career, a deep moral undertaking that is rooted in his time at HSU.

Katrina S. Hagen-Radlick, 1994, Politics, was appointed by the governor of California as the director of the Department of Industrial Relations, based in Oakland. The Department of Industrial Relations’ core functions include Cal/OSHA, Division of Workers Compensation, and the Division of Labor Standards Enforcement.

Tyler Smurr, 1995, Forestry & Wildland Resources, was recently promoted to vice principal for an elementary school he helped reopen.

Matthew Woodman, 1998, English, was named the 2019-2020 Kern County Poet Laureate.

2010s

Rae Miller, 2010, Business, and her husband quit their jobs and hit the road to travel in an RV full-time. They started a blog (getawaycouple.com) and began sharing everything they have learned about RVing there. Along the way, they’ve made incredible friends who live the same lifestyle, and they created a business with them called RV Masterclass. This is an online education platform for new RVers who want to learn how they, too, can live full-time on the road. She wants to share with HSU that they recently sold their first business, RV Masterclass! She gives credit to her Business degree for helping her live this exciting lifestyle.

Ryan Bieker, 2012, Politics, utilizes Oregon’s excellence in cartography to explore and interpret changes in California retirement law and how it will affect CalFERS’’auricular responsibility to the State of California. Bieker is married to Rita Dunn (’13, Politics), who is in her final year of law school and is currently clerking with U.S. Magistrate Judge Allison Clure.

Brittany Britton, 1202, Art, received her Master of Fine Arts in Craft from the Oregon College of Art and Craft in 2015. Britton moved back home to Humboldt County and worked as an Art History lecturer at College of the Redwoods at the Klamath-Trinity Instructional Site in Hoopa. From 2018 to 2020, Britton was the curator/register of the Native American collection at the Clarke Historical Museum. In June, 2020, Britton was named the 2019-2020 Outstanding Academic Advisor for Humboldt State University.

Kaitlin Yarnall: National Geographic's Chief Storyteller

A CARTOGRAPHER BY TRADE, Kaitlin Yarnall ('05, Geography and Spanish) believes that maps are more about power and history than borders and roads. Mapping her own travels—Yarnall has crisscrossed the globe too many times to count—Yarnall’s story starts at the “X” marking Cal Poly Humboldt. Today, she is the chief storytelling officer at National Geographic, where she first arrived as an intern from Humboldt’s Geography department 16 years ago.

As a young person growing up in Humboldt County, Yarnall wasn’t very sure of her future career plans but fell into a rhythm in her Spanish class at Eureka High School. “it came easily to me,” she recalls. Yarnall’s grandfather, Jack Yarnall, was a Humboldt biology professor, and both of her parents are alumni. As a child, she often visited campus and Humboldt’s Marine Lab in Trinidad. She fondly remembers adventures at the beach and forest with her family. After graduating from high school, Yarnall’s transition to Humboldt was a natural fit.

Yarnall continued to study Spanish literature, spending a semester abroad in Quito, Ecuador. “it was so valuable to gain a different cultural perspective as a college student,” she remembers. “My experiences at Humboldt definitely sowed seeds for the work I’m doing today.”

Returning from Ecuador to Arcata, Yarnall stumbled into a Geography class during her junior year. Fueled by the blend of art and science in mapmaking, she went on to graduate as a double major in Geography and Spanish.

“The world makes sense to me through a geographic lens,” Yarnall explains.

At the time, the Geography department could nominate one student each year for a three-month internship at Nat Geo. Yarnall was the 2005 pick. She packed her bags and headed to Washington, D.C.

“My education in cartography at Humboldt was so hands-on that it helped give me the confidence I needed at National Geographic to dive in and start making maps,” Yarnall says.

She also remembers how environmental sustainability and social justice were “in the water” at Cal Poly Humboldt. In particular, Yarnall vividly recalls the September 11 attacks happening while she was sitting in class.

“An open-minded college campus was one of the best places to be, emotionally and intellectually, during 9/11,” she says. For Yarnall, it was a formative lesson in learning to explore a complex world and to listen in the power of listening, which she says is a crucial skill for a cartographer.

“Maps are a powerful narrative tool to understand how the world is changing,” Yarnall says. “Layers of information can tell a very different story.”

As a former senior editor at National Geographic’s world-famous magazine, Yarnall has traveled with the world’s most talented photographers. She has sat with mountain gorillas in Rwanda, watched get pulled from the earth in archaeological digs, and helped DACA Dreamers document their stories.

“It’s the quieter moments,” she says, “that help you see the world in a more expansive way.”
**Cal Mukumoto: Oregon’s Official Forester**

"I’m not a pure forestry guy."

So says Cal Mukumoto (’77, Forestry), who was appointed Oregon State Forester last year. “I’ve had a varied career, and for me to be in this position is a surprise.”

That Mukumoto leads hundreds of employees of Oregon’s Department of Forestry and helps manage 475,000 acres of state forests is not what one might expect of a kid from Los Angeles whose passion in high school was not trees, but breeding fish. He was a bit of an oddity, he admits. Mukumoto headed to Humboldt to pursue a degree in Forestry. He was awestruck by the stunning surroundings of the North Coast.

“We had to go out into the forest to do stadia measurements—regions that were dripping water,” he says. “Humboldt is a jewel of higher education. We had fun in the outdoors, and we learned from the outdoors, which was one giant laboratory.”

So says Cal Mukumoto (’77, Forestry), who was appointed Oregon State Forester last year. “I’ve had a varied career, and for me to be in this position is a surprise.”

That Mukumoto leads hundreds of employees of Oregon’s Department of Forestry and helps manage 475,000 acres of state forests is not what one might expect of a kid from Los Angeles whose passion in high school was not trees, but breeding fish. He was a bit of an oddity, he admits. Mukumoto headed to Humboldt to pursue a degree in Forestry. He was awestruck by the stunning surroundings of the North Coast.

“We had to go out into the forest to do stadia measurements—regions that were dripping water,” he says. “Humboldt is a jewel of higher education. We had fun in the outdoors, and we learned from the outdoors, which was one giant laboratory.”

After graduation, he earned an M.B.A. from the University of Colorado.

“Forestry issues are quite complex with many stakeholders,” he says. “Time is of the essence. Nature is out of balance from 100 years of fire suppression policies, forest management decisions, and climate change. We can’t just introduce prescribed fires and let it burn—we need to start managing forests in such a way they can be more resilient,” he says.

Mukumoto’s job is made more complex by the alarming surge in wildfires throughout the West over the last few years. “Time is of the essence. Nature is out of balance from 100 years of fire suppression policies, forest management decisions, and climate change. We can’t just introduce prescribed fires and let it burn—we need to start managing forests in such a way they can be more resilient,” he says.

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“Time is of the essence. Nature is out of balance from 100 years of fire suppression policies, forest management decisions, and climate change. We can’t just introduce prescribed fires and let it burn—we need to start managing forests in such a way they can be more resilient,” he says. “But by including a wider range of voices from underserved communities, we may find new services and solutions for all Oregonians.”

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Meet Humboldt
Grace Kasberger (’24, Kinesiology)

Being on the road, keeping up their grades, and competing can take a toll on student-athletes’ mental health. Grace Kasberger, a rising star in Cal Poly Humboldt’s Track & Field program and 2022 California College Athletics Association heptathlon champion, is helping change the conversation. Kasberger is the president of the local branch of Dam Worth It Co., a nonprofit dedicated to ending the stigma around mental health at colleges and universities.

Finding Her Passion
“When I realized I wanted to go into a career that involved athletics, I got a ton of support from my coach Sarah Ingram and others at Humboldt. They helped me explore future possibilities and connect with people on those career paths. I love being here and being a part of this school. I love the culture here; everyone is so welcoming.”

Time and Self-Knowledge
“I try to fit in self-care, which helps with my mental health and to stay as relaxed as possible with all of my extracurriculars. Not only am I on the road almost every weekend for track, I also work two jobs. I have definitely built a lot of resilience with academics and athletics.”

‘It’s OK to Not be OK’
“Dam Worth It started at Oregon State in 2017. Two student athletes started it after losing their teammates to suicide—they realized there wasn’t a lot of mental health support for athletes who were struggling. Cal Poly Humboldt now has a branch. We attend athletic games and bring awareness to mental health and allow student athletes to know it’s okay to not be okay.”

Pressure and Performance
“Student athletes struggle with pressure to perform well. We’ve made it to such a high level that when we fail to perform at our best, we feel like we’ve let down our coach, our team, and our spectators. Student athletes struggle with performing in the classroom as well. We’re often on the road and strive to maintain a fairly high grade point average.”

The Bigger Conversation
“There’s a growing awareness of mental health because a lot of professional athletes are talking about their struggle. Athletes talk about the injuries they have on the outside. We don’t talk about the injuries in our head. I have felt safe talking about my mental status with my coach, Sarah, and she does a great job directing me to the help and resources I need.”

Grit of a Champion
“The heptathlon is seven events: a 200-meter dash, 800-meter run, a long jump, high jump, shot put, javelin, and hurdles. That’s considered one event during the track meet. It’s a very, very tough event that takes mental toughness and grit. I feel it in my body, but it’s definitely worth it. It helps me remember that I’m strong and I’m powerful and I can do lots of different things.”
It's been an exciting year for Cal Poly Humboldt, and it's truly a great time to be a Lumberjack!

We have been officially designated a polytechnic. The state has made an unprecedented investment in our new programs and facilities. We are seeing significant new interest from prospective students.

It's big. And it's also just the beginning.

This is our time to be bold. Our time to rise and embrace the bright future for Cal Poly Humboldt and our Humboldt Family.

Humboldt alumni and donors are energized, supporting the University like never before. Together, we are shaping a better future for the institution and our students, and we are expanding Humboldt's positive impact in the world.

You can be a part of it.

Learn how you can support students and programs at Cal Poly Humboldt at giving.humboldt.edu or by calling (707) 826-5200.

Watch for the next big thing!
It happens during Donor Appreciation Week, October 24-28.