TEACHING · RESEARCH · OUTREACH

SYNERGIES

COLLEGE OF PUBLIC HEALTH AND HUMAN SCIENCES
Spring 2019



What's

OUTTHERE

today

The arts are essential and make us human, and education should fuse mind and heart.

Carol Ryff, PhD, professor of psychology and director of the Institute on Aging at the University of Wisconsin-Madison, shared these key themes during her thought-provoking presentation, "Bridging the arts and sciences for human betterment," in November. The event was sponsored by the college, the provost's office and the colleges of Engineering and Liberal Arts.

HEALTH AND WELL-BEING FOR ALL

"Health and well-being for all" is the theme of our new 2018–2023 strategic plan, as well as the heart of our college's vision.

The statement is more than just words — it's something we aspire to achieve every day though teaching, research and outreach programs, such as those led by 4-H Latino Outreach Specialist Mario Magaña Álvarez. Mario works with underserved youth in the state, helping them access and navigate higher education.

His commitment lies in his own compelling story, which I hope you'll read on pages 4–5. "I love what I do because I have witnessed many youth and adults achieve their dreams," Mario says. "I know many more will follow my footsteps, and that is what brings me joy and gives me the strength to continue this journey."

This issue also features college research highlights, students and alumni effecting social change in their communities, and a story on the OSU Child Development Center, an important research and training center for faculty, students, staff and local families.

I invite you to read these stories, and more, in their entirety at synergies.oregonstate.edu. And if you're interested in reading our new strategic plan, that can be found at health.oregonstate. edu/strategic-plan.

Onward!

F. Javier Nieto, MD, PhD, MPH
Dean, College of Public Health and
Human Sciences
Oregon State University

4-H specialist helps Oregon Latino youth succeed in college, life

RESEARCH BRIEFS
Solving current and emerging public health and societal challenges

THE OUTDOORS IS FOR EVERYBODY

Alumna isn't satisfied with outdoor access and is doing something about it

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Pre-med student squeezes global health, clinical practice out of one career-affirming internship



Committed to compassion.

In her new book, "Creating Compassionate Kids: Essential Conversations to Have with Young Children," Shauna Tominey offers parents, caregivers and other adults who work with young children tips and tools for navigating those important and sometimes difficult conversations about everything from learning and making mistakes to relationships, race, sex and gender.

"If parents are wondering whether they should talk with their kids about a topic, then the answer is probably yes," says Shauna, an assistant professor of practice and parenting education specialist. "Be open and honest with your child and let them know it's OK to talk with you about anything."

Read the full story at synergies.oregonstate.edu/2019/committed-to-compassion.

SYNERGIES is published biannually by Oregon State University's College of Public Health and Human Sciences.

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FORWARD

4-H specialist helps Oregon Latino youth succeed in college, life BY HANNA KNOWLES

At age 7, Mario Magaña Álvarez worked on his family's farm in México. He helped grow corn, sesame seeds, watermelon and more.

Mario is now in Oregon State's College of Public
Health and Human Sciences as an associate
professor and 4-H Latino state outreach
specialist engaging underserved youth
in Oregon.

JOURNEY TO OREGON STATE

Mario's journey to Oregon State began in the summer of 1990 while he was picking apples in Washington and listening to a Spanish radio station. The host announced that Washington State University (WSU) was offering the High School Equivalency Program and an opportunity to earn a General Education Diploma (GED) in Spanish.

Mario took note, earned his GED that fall and planned to apply for any job that would provide benefits for him and his family. His WSU advisor, Ronald Rosebrook, urged him to think bigger.

"Ronald asked me, 'What do you want your daughters to do when they grow up?' When I responded that I wanted them to go to college and become teachers, lawyers or doctors, he told me I had to show them it was possible."

When Mario applied to Oregon State through the College Assistance Migrant Program, his wife was pregnant with their third daughter, they had house and car payments, and he didn't speak, read or write English.

His interest in higher education far outweighed the obstacles.

"My first year in college was a big challenge," Mario says. "I barely finished elementary school in México. My speaking, reading and writing skills were very poor in Spanish, and I did not know more than 200 words in English when I started college. I had to translate my books into Spanish and then into basic Spanish so I could understand the subjects. I recorded most of my classes and listened to them every night while I was in bed."

With hard work and perseverance, Mario graduated in 1997 with a bachelor's degree.

Thanks to the support of Scott Reed, PhD, now vice provost for university outreach and engagement, he received a teaching assistantship to continue on to graduate school. Mario earned his master's degree in interdisciplinary studies in 1999.

CLOSING THE GAP

Mario became involved with 4-H as a PROMISE Intern in 1995, which evolved into a specially created position — 4-H Latino outreach county agent for Morrow and Umatilla counties.

"I created, developed and implemented after-school enrichment clubs, classes and events using fun, safe and educational environments," Mario says.

"I also created new programs, projects and activities that were culturally appropriate for Latino youth and families."

Today, Mario seeks to close achievement gaps among Oregon youth by expanding the population that 4-H serves.

"Oregon's underserved youth significantly lag behind their peers in academic achievement," Mario says. "Latinos, in particular, have an abnormally high dropout rate compared to their white peers."

Mario says some contributing factors to the achievement gap include lack of access to culturally diverse role models, not knowing how to navigate higher education systems or being unaware of financial resources.

This is where the value of 4-H comes in.

Mario created the Oregon 4-H Outreach Leadership Institute (OLI) to specifically address the achievement gap. It uses the role model philosophy and includes events focused on college preparation, leadership development, career exploration and community service.

So why has Mario dedicated the past 19 years of his life to Oregon youth? The answer lies in his own story.

DETERMINED TO CREATE A BETTER LIFE

To complete elementary school, Mario traveled to a village about 7 miles away — some days on bicycle, some days on horse and some days by foot. By the age of 15, he finished elementary school and set his sights on middle school.

Despite his educational aspirations, Mario worked on the family farm until he was 20 years old before emigrating to the United States. His goal was to work hard in the fields, save money and return to México to help improve his family's life.

He realized, after a few years of working in agriculture earning minimum wage, that this wouldn't be possible. So he planted roots, realized his educational dreams and began his journey toward serving youth in Oregon.

"I want to give back to this country that has given me so much," Mario says. "By reaching and serving the most vulnerable and less fortunate people in Oregon, I am helping hundreds of people who are in the same or worse situation than I was before I came to study at Oregon State University in 1991."

MARIO IS COLLABORATING WITH CPHHS ASSISTANT PROFESSOR JONATHAN GARCIA ON A THREE-YEAR, \$405,065 ROBERT WOOD JOHNSON FOUNDATION GRANT TO COMBAT SOCIAL ISOLATION EXPERIENCED BY LATINO LESBIAN, GAY, BISEXUAL, TRANSGENDER AND QUESTIONING YOUTH LIVING IN THE UNITED STATES.

insights

MEET YOUR NEW MULTIVITAMIN: HAZELNUTS

Recent research indicates older adults who added hazelnuts to their diet for a few months significantly improved their levels of magnesium and vitamin E. In the study, 32 people age 55 and older ate about one-third cup of hazelnuts daily for 16 weeks.

"The findings demonstrate the power of adding hazelnuts to your diet, of just changing one thing," says Professor Maret Traber, the study's corresponding author. "Vitamin E and magnesium are two of the most under consumed micronutrients in the U.S. population, and there's much more to hazelnuts than what we analyzed here. They're also a great source of healthy fats, copper and B6. People don't like taking multivitamins, but hazelnuts represent a multivitamin in a natural form."





Adults play key role in recess

participation

A new study suggests that when adults participate in school recess — leading games, monitoring play and ensuring that conflicts are mediated quickly — children are more likely to engage in recess activities.

"This doesn't mean that adults should dictate what children do during recess," says William Massey, assistant professor and lead author of the study. "It means recess should be viewed as a continuation of the school day in which children can play, interact and learn in a natural environment."

William Massey playing basketball with children

Find more research from the CPHHS at synergies.oregonstate.edu/research.

NEW FACES, NEW MOMENTUM

Marina Muñoz de Martínez

DIRECTOR OF DEVELOPMENT

Marina serves as a development officer for the CPHHS and will work closely with the OSU Foundation and the college to identify

and advance philanthropic

priorities. In partnership with the director of alumni relations, the team will develop and manage volunteer structures, corporate partner programs and events. Marina, who spent a decade working in the Southwest and

who has more than 15 years of experience working in development, joins the college after serving as major gifts officer for

Reed College in Portland.

Casey Farm

DIRECTOR OF ALUMNI RELATIONS

Casey is responsible for growing the engagement of alumni, parents, friends and organizations of the college. In close collabora-

tion with CPHHS, OSU Foundation and OSU Alumni



Health Peace Harbor Medical Center Foundation in Florence, Oregon. Prior to PeaceHealth, Casey worked for United Way of the Columbia-Willamette, serving as senior manager of the Pacific Northwest Combined Federal Campaign.

HEALTH IN action

KUDOS



Physical Activity Courses badminton, swimming and bowling were named to OSU students' "Best of..." list in the Daily Barometer.

Kinesiology student and volleyball player Kayla Ellis was selected to the Pac-12 NCAA student-athlete autonomy structure committee.



Lu Seapy, STEM outreach program coordinator for Wasco County

4-H Youth Development, was awarded the firstever STEM Education Leader of the Year award by the Gorge Technology Alliance.



Professor Brad Cardinal has been inducted into the National Association for Kinesiology in Higher Education 2019 Class of Fellows.





DESPITE GROWING UP IN THE SHADOW OF MT. HOOD, YESINA CASTRO didn't know what being outdoors meant other than playing in her backyard, running through orchards and getting lost

in the woods. "In high school I started hearing about hikes," recalls

Yesina. She was shocked when her social media feed began showing pictures of trails near Parkdale, Oregon, her hometown. She had no idea they were also part of her backyard.

Yesina's story, unfortunately, is not rare for Latinos. The most recent survey commissioned by the National Park Service found that 9 percent of visitors were Latino. The majority, roughly 78 percent,

"People didn't look like me," remembers Yesina, who studied health promotion and health behavior. "I was nervous about not having the right gear or getting looked at weird because growing up I was often in settings where me and my family were 'different."

After getting her driver's license, and thanks to help from a Latina girlfriend who landed a summer job with the U.S. Forest Service, she gradually became more comfortable and confident on the trail.

Yesina says she loves being outside, as well as the peace it brings her. She says she wants to share this love by helping Latinos understand the outdoors is for everyone.

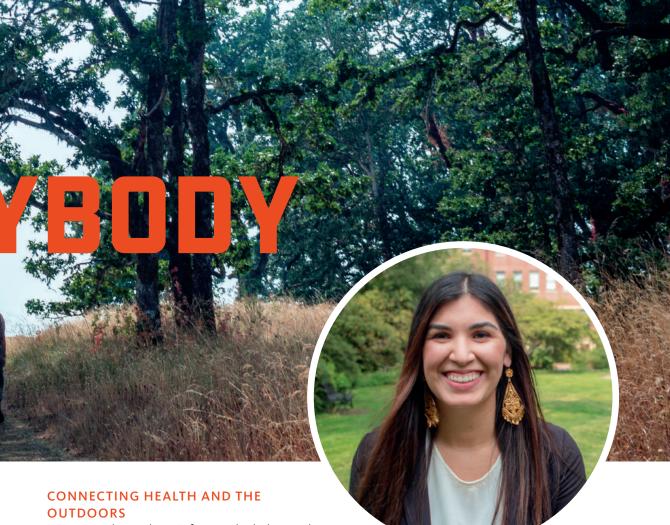
BRINGING LATINOS TO THE OUTDOORS

"Since graduating, I have done a lot of work around the social determinants of health," Yesina says. "I have been leading and taking vulnerable communities out on hikes and having conversations with folks about the connection between health and the outdoors."

This effort started with a grant she was managing for The Next Door Inc., a nonprofit in Hood River, Oregon, where she worked for three years after graduating. After grant funds ran out, the hikes evolved into a community-led effort under the name LatinXplorers. Yesina and other community members post announcements on social media about hikes they lead around Oregon.

"One of the biggest barriers is getting people to the trails," Yesina says. "Because if it's not me driving people around, we need buses or vans, and that's expensive."

It's not a barrier for which she has a solution, but it's not slowing her down.



Yesina says the outdoors is for everybody, but until they experience it they don't know about recreational options or potential health benefits.

"I've talked to people who I've taken on hikes for the first time, and after the hike they say, 'Wow, I feel happier. I was so depressed being indoors and I didn't know that simply being outside, listening to the birds or listening to the leaves rustle would make me so happy," Yesina says. "I want to bring more of that happiness and health into people's lives."

When on the trail, Yesina and other hike leaders don't lecture about health. Instead, she says, they take a conversational approach. "We present the hikes as an adventure. The conversations about connecting health and the outdoors comes when we start hearing comments from the people we take outside."

DISCOVERING HER PASSION HAS A NAME - PUBLIC HEALTH

In high school, Yesina was in a number of healthoriented clubs. Despite this, when starting at Oregon State, she enrolled as a business major.

Soon disheartened with business, she visited OSU's Career Development Center. "I took this fancy career test that was \$30 at the time," Yesina says. "It was the best \$30 I have ever spent. The test said public health was my No. 1 career match. I had no idea what that was, and after someone explained it to me, it was exactly what I always wanted and still love to this day. I am so glad one of my passions has a name — public health."

"I've talked to people who I've taken on hikes for the first time, and after the hike they say, 'Wow, I feel happier." - Yesina Castro



BY JADA KRENING, NEWS CONTRIBUTOR FOR THE DAILY BAROMETER EDITED AND CONDENSED BY HANNA KNOWLES

DARIUS NORTHERN, A SENIOR STUDYING PUBLIC HEALTH, is the founder and creator of the clothing brand, People of Colour. The mission of the brand is to create unity among people of color and to educate and generate conversations on topics relating to racism and discrimination.

The brand developed as a result of Darius' experiences as an African-American student on the Oregon State campus. Born in Nashville, Tennessee, raised in Atlanta, Georgia, and employed in the military in Arkansas, Darius explained the "culture shock" he experienced after his move to Corvallis. He says when he arrived on campus, it took him three days to see another black student.

The inspiration to create the brand arose after eating at a restaurant near campus.

"I remember walking in and being the only person of color in the room," Darius says. "I had someone ask me if I was on the football team. Then someone asked me if I was on the basketball team. Then someone complimented me on my hair. From that moment, I started thinking about how I could transfer that uncomfortable feeling from me, to the room."

In September 2017, he started creating shirts featuring provocative statements.

The brand took off after Darius wore one of his shirts to play basketball at Dixon Recreation Center. A student-athlete noticed

the shirt, and after discovering it was Darius' creation asked if he could have one. Darius followed through with the order and gained attention on social media after the student-athlete posted it on Instagram.

"Before I knew it, I had 75 people in my [direct messages] trying to order shirts," he says. From that moment on, he realized the brand could be bigger than himself.

He began publicly selling his shirts in February 2018. Since then, he has shipped shirts across the United States and internationally to Germany and England.

The basic layout of Darius' clothing designs includes the People of Colour logo on the front, which serves to represent unity, diversity and culture among people of color. The back features statements intended to create awareness and spark conversations surrounding race and discrimination.

Darius says the goal of the brand is to make people aware and think, without being disrespectful.

"Creating those statement pieces, creating those conversation pieces, has allowed me to channel my frustration with my environment, with society, with the bigger picture," he says. "As a black person, I have to carry my race everywhere, and it's something that I constantly have to think about. But when I wear a People of Colour shirt, or garment, or hoodie, I feel like I don't have those thoughts anymore."

Ultimately, Darius aims to make an impact by empowering people of color, not only on the OSU campus, but on campuses and communities across the nation.



"It feels amazing to know we are providing the Corvallis Police Department with proper nutrition information and will hopefully be making a positive impact on their lives."

> - Bailey Pruner, junior dietetics student

BY HANNA KNOWLES

The schedules of a police worker and college student are surprisingly similar. They're often tired, stressed and constantly on the move. Oregon State dietetics students marinated in this similarity as they created a pilot nutrition program for the Corvallis Police Department (CPD).

Class project comes to life

Neilann Horner, clinical associate professor and dietetic program director, says the CPD wellness committee contacted her seeking help in developing nutrition information for their employees.

To meet the need, students in her Promoting Food and Nutrition course tailored their class project to the lifestyle of police workers. Neillan also offered to help a group with implementation after the course ended.

Brooklyn Reeves, along with fellow students Dana Bean, Prabha Honrath, Madeline Nutter and Bailey Pruner, seized the opportunity.

Fueling the force

Over the next six months, they dedicated their free time to evolve the in-class project into a pilot nutrition program called Fuel the Force.

The eight-week Fuel the Force program is composed of weekly goals, all focused on promoting healthy eating habits — specifically, increased consumption of fruits, vegetables and whole grains, as well as healthy protein sources and hydration.

"The behaviors we're promoting have been shown to reduce the risk of chronic illness," Dana says. "Especially the ones officers would be susceptible to, such as heart disease, which is related to high-stress jobs."

The team will conduct a postsurvey and a wrap-up session to evaluate the pilot and to determine if it could be replicated at other police and fire departments across the state.

The BEST START in life

Center optimizes development and well-being of young children and their families

BY HANNA KNOWLES

"Our philosophy is that children thrive when they are in a caring, warm and fun learning environment, and we strive to create that for them," says OSU Child Development Center (CDC) Director Kathleen McDonnell.

The center, part of Oregon State's College of Public Health and Human Sciences, accomplishes this through learning, service, community outreach, research and teaching.

Early learning at its best

With playtime, snack time and outdoor recreation, the center seems similar to other prekindergarten programs.
But on closer evaluation, the CDC's classrooms are made up of children with unusually diverse socio-economic backgrounds.

Seventy-six of the
114 slots are dedicated
for children enrolled
through the Head
Start program, which
comes with waived
tuition and support
services. The remaining
slots are open to the
Corvallis community,
resulting in an ethnically
and culturally diverse
learning environment.

"When you look in our classrooms, you're not able to distinguish between Head Start and tuition paying families," Kathleen says. "We welcome families from all backgrounds."

Facilitating access to health

Instilling healthy habits is an integral part of the center's mission. In the 1940s, children were offered cod liver oil as part of the nutrition program. Today, snacks typically consist of whole grains and fresh, local fruits.

The preschoolers also learn practical skills for lifelong health. "They learn about washing their hands, covering their coughs and brushing their teeth," says

Health and Nutrition Services Coordinator
Dana Crawford. "All things we hope will

Integrated family services

Family Services Coordinator Jacquie
Keller says to help children get the best
start possible, they also work closely with
parents, taking family goals and needs
into consideration.

contribute to positive health outcomes."

Family advocates partner with parents to make sure they know about and are comfortable accessing community resources such as crisis services and temporary housing, medical and dental services, and training and education opportunities. Family advocates and teachers also visit Head Start families throughout the year.



Advocates in the community

Head Start families, due to generational or circumstantial reasons, are at or below the poverty line. "Part of our role is advocating for these families," Dana says. "We connect with our community partners to stay up-to-date with available resources and to advocate for the needs of children and families."

For instance, when parents had questions about the meningococcal B outbreak on campus last year, the program brought in a local pediatrician to speak with parents and address concerns, highlighting the importance of regular immunizations.

An active research and training lab

Megan McClelland, Hallie Ford Director for the Center for Healthy Children and Families, says the center provides researchers the opportunity to conduct and translate research with children and families from diverse backgrounds.

Oregon State students enrolled in HDFS 430, Student Teaching in Early Childhood Development and Education, also have access to the center as an internship location, and students frequently accompany family advocates on home visits.

Yeng Thao, '15, was hired as a behavior technician for children with autism immediately after graduating. "I was hired on the spot after telling them about my experience with HDFS 430 and the CDC and how much it has impacted me," Yeng says.

Kinesiology students in Jennifer Beamer's Facilitating Physical Activity for Children and Youth course lead children in 20-minute physical activity lessons. "Typically, they work on gross motor skills and touch on the cognitive and emotional learning aspects related to physical activity," Jennifer says.

"We are a multi-faceted program," says Kathleen, who taught for five years before becoming director in 2014. "We respect and honor the uniqueness of everyone who walks through our doors and offer support to hone the skills needed to be successful once they leave our program."

"The center is one of the only university preschools in the country, if not the only one, that combines a Head Start program with a community-based program, which helps to better serve children and their families."

MEGAN MCCLELLAND

HALLIE FORD DIRECTOR FOR THE CENTER FOR HEALTHY CHILDREN AND FAMILIES & KATHERINE E. SMITH HEALTHY CHILDREN AND FAMILIES PROFESSOR

MEDICINE AND PUBLIC **HEALTH COME TOGETH**

An internship could be located just 10 minutes from campus, but Emily Burney would rather travel to Ecuador, some 4,000 miles away.

Emily is an Honors College student studying public health, with an option in health management and policy. She has also thrown two minors into the mix — one in business and entrepreneurship, and one in chemistry.

To say she is up for a challenge is an understatement.

WHAT WERE YOU DOING IN ECUADOR?

I worked in several urban and rural community clinics, where I learned about public health and the Ecuadorian health care system from doctors and other clinic personnel.

WAS YOUR INTERNSHIP **ALIGNED WITH WHAT** YOU WANT TO DO IN THE FUTURE?

My internship experience was definitely aligned with my future goals, since it combined public health work and clinical medicine. I was able to work with a range of populations and cultures, and learned from many diverse viewpoints about health and medicine.

Through my internship, I decided how I plan to serve patients, and I learned more about the opportunities for public health and medicine to change lives in the future.

WHAT WAS THE MOST INTERESTING EXPERIENCE YOU HAD AT PUYO GENERAL HOSPITAL?

The most interesting experience I had was a very eye-opening one, in which I worked with one of the head nurses at the hospital to organize housing and a treatment plan for a patient. This patient was a 17-year-old mother who had arrived at the hospital with an active tuberculosis infection, AIDS and a young child who had been born with HIV.

Her family had shunned her because of stigma associated with her AIDS diagnosis, leaving her in Puyo with no money and no support. We prepared housing for this patient and her daughter, arranged support and developed a long-term treatment plan.

This young woman and her daughter had many obstacles, but seeing the dedication and support of the nurse is something I'll never forget. Her selflessness and service to her patients is something I aim to live up to as a doctor.



DID YOU LEARN ANYTHING UNEXPECTED?

I spent about a week learning about indigenous culture and traditions from members of the Quechua San Virgilio community. I learned about medicinal plants and healing practices, as well as how the community works with the Ecuadorian government to maintain their culture and way of life in Ecuador's plurinational society.

Learning from the San Virgilio community reinforced my understanding of how public health permeates every part of life, and how it can empower everyone to live healthy and happy lives as they wish to, through respecting and celebrating differences among people.



PRE-MED STUDENT SQUEEZES GLOBAL HEALTH, CLINICAL PRACTICE OUT OF ONE CAREER-AFFIRMING INTERNSHIP

BY HANNA KNOWLES





WHAT LED YOU TO MAJOR IN PUBLIC HEALTH?

I was interested in health and medicine, so I took a class called Social and Individual Health Determinants. I had never heard of public health before, but learning about the myriad ways in which public health work impacts our lives made me want to learn more, so I could work to make others' lives better in the future.

I believe public health gives me a great way to approach medicine, as I am able to understand health and health determinants at a macro and a micro level.

HOW HAS BEING AN **HONORS STUDENT ENHANCED YOUR** COLLEGE EXPERIENCE?

I have grown academically because of the Honors College through my work on my thesis in the CPHHS Translational Metabolism Research Laboratory. Thanks to that experience, I learned laboratory techniques and scientific practices, and I gained an understanding of highlevel scientific work. Because of my experiences in the lab, I know I am better prepared to move into the next stages of my academic career.





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