

# OU Public Health

FALL 2018

A Publication for Alumni and Friends of the University of Oklahoma Hudson College of Public Health



## HUDSON COLLEGE *of* PUBLIC HEALTH

*The* UNIVERSITY *of* OKLAHOMA HEALTH SCIENCES CENTER

*A New Name for a Bright Future*



## Dear Alumni and Friends

This has been a remarkable year for the College of Public Health. In September, we celebrated a major milestone with the renaming of our College as the OU Hudson College of Public Health. We are proud to bear the Hudson name in honor of Dr. Leslie and Mr. Clifford Hudson's transformative gift and their continued commitment to this College and the University of Oklahoma.

The OU Hudson College of Public Health remains focused on providing the highest quality education for the future generations of public health scientists and practitioners, and on conducting cutting-edge research on contemporary public health problems. This edition places a special focus on those whose research and training is strengthened by the generosity of our donors as well as by the steadfast dedication of our faculty and staff.

I hope that you share our pride in the progress our College is making through the hard work of our faculty, staff and students. Over the past 15 years, our extramural grant and contract support has grown more than fourfold. The College portfolio of extramural-funded research and training is now more than \$50 million. These grants support more than \$700,000 in student support and outstanding opportunities of mentored research for our students. Through the generosity and commitment of our donors and friends, we have increased the number of endowed scholarships from 3 to 29, and the College awarded more than \$75,000 in scholarship support this academic year. And this year, our College was ranked in the top 10 schools of public health by *College Magazine*.

We go forward with a new name and a bright future. Our sincerest appreciation to Dr. Leslie and Mr. Clifford Hudson, and to all of our donors and friends for their generous support of our College and students. This support has been critical to our progress. We are truly grateful.

Sincerely,

A handwritten signature in black ink that reads "Gary Raskob".

Gary E. Raskob, Ph. D.  
 Dean, Hudson College of Public Health  
 Regents Professor, Epidemiology and Medicine

## PROVOST'S MESSAGE



The University of Oklahoma Health Sciences Center, the academic partner of OU Medicine, is proud to be a leader in public health.

The OU Hudson College of Public Health, which is the only accredited college of public health in the entire state, plays an essential role in improving the health and quality of life of Oklahomans through research, training, and innovation of the care delivery system. This year, we are especially grateful to Dr. Leslie and Mr. Cliff Hudson for their generous investment in these programs.

The OU Hudson College of Public Health has established a record of excellence and earned the respect of peers worldwide, marking yet another milestone this year.

We look forward with great hope and expectation, and ask that you stay tuned for exciting digital communications that we will be implementing soon.

Sincerely,

A handwritten signature in black ink that reads "Jason R. Sanders".

Jason R. Sanders, M.D., M.B.A.  
 Senior Vice President and Provost,  
 The University of Oklahoma Health Sciences Center  
 Vice Chair, OU Medicine

# Contents



**4 A New Name – A Bright Future**  
*Leadership gift advances mission of the College*

**8 Fellowships Foster the Future**  
*Gifted scholars work to elevate public health*

**10 The ABCs of Tobacco Use & Prevention**  
*Alumna uses college experience to advance research career*

**11 Serving the Underserved**  
*Inaugural Hudson Fellow targets community health and prevention*

**12 The Business of the Public's Health**  
*2018 Hudson Symposium features former U.S. Assistant Secretary for Health Dr. Howard Koh*

**13 Public Health in Action**  
*The dawn of a new era of excellence*

**17 Honoring Public Health**  
*Assisting the newest generation of public health scholars*

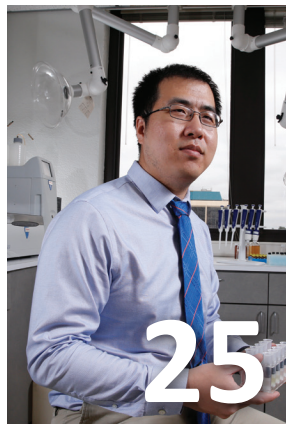
**22 More Than a Numbers Game**  
*Uncovering answers in a labyrinth of scientific data*

**23 Infectious Disease Super Sleuth**  
*Hunting for clues to prevent or halt disease*

**24 Understanding Childhood Cancer**  
*Studying environmental and genetic factors in childhood cancer risk*

**25 Averting Assaults on Health by Air**  
*Targeting environmental exposure to prevent illness*

**27 Marrying Passion with Purpose**  
*Combining love of nutrition, health sciences, public health and education*



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 **HUDSON COLLEGE of PUBLIC HEALTH**  
*The UNIVERSITY of OKLAHOMA HEALTH SCIENCES CENTER*

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# A New Name A Bright Future



**W**ith decades as a leader in public health in Oklahoma and the United States, the OU College of Public Health now proudly moves into a new age with a bright future and a new name – the OU Hudson College of Public Health.

University of Oklahoma President James L. Gallogly made the announcement on September 18, 2018. He also announced a \$5 million leadership gift from Dr. Leslie

Hudson and Mr. Clifford Hudson of Oklahoma City, providing even greater support for young scholars and scientific discovery at the College.

“The importance of public health cannot be overestimated. As you scan human history over the past three centuries and look forward to the next, the major contributions to the quality and length of human life have been, and will be, in the realm of advances in public health,” said Dr. Leslie

*“The Hudsons have shown their continued, steadfast commitment to education and to the power of public health to positively impact our state, our nation and the world.”*



OU President James L. Gallogly announces naming of the College of Public Health for Dr. Leslie and Mr. Clifford Hudson.



Standing-room-only crowd attends the Hudson Symposium and Naming event at the OU Hudson College of Public Health.



Broadcast and print media report on the announcement.



Campus leaders, including Marcia Bennett, Ph.D., and James Tomasek, Ph.D., joined hundreds of students, faculty, community leaders and others at the event.



Dr. Leslie Hudson visits with Chancellor Glen Johnson, chief executive officer of the Oklahoma State Regents for Higher Education.



Hudson Family Scholarship recipient Ross Ogden shares a moment with the Hudsons.

Hudson, an alumna and former faculty member of the college. “The College of Public Health at OU is engaged in the highest level of training for public health practitioners, researchers, and specialists in behavioral, environmental and occupational health. Its graduates lead health care institutions, protect and improve the public’s health, and shape health policy throughout the state and across the nation. Our expanded financial support speaks to our belief in the students, faculty and administration of the College of Public Health and the role they will play in all of our futures.”

In honor of the Hudsons’ generosity and longstanding commitment to the advancement of public health, Gallogly said the OU Board of Regents endorsed naming the college in their honor.

“This is an exciting day for this College and for the University of Oklahoma community. With the generous support of the Hudsons, the College of Public Health will expand and strengthen support for top graduate students from throughout Oklahoma, our nation and the world – students who will become our future public health scientists and professionals,” said President Gallogly. “By supporting public health research and education, the Hudsons are helping ensure healthier tomorrows for all of us.”

Leslie and Cliff Hudson have long supported the mission of the University and the College of Public Health at the OU Health Sciences Center, the academic partner of OU Medicine. Their aim is to help ensure the College provides the best possible educational experience for students.

“The College of Public Health is the premier institution of its type in Oklahoma and performs the unique function of preparing public health practitioners



Dr. Howard Koh meets with business, public health and community leaders prior to the Hudson Fellows Symposium.

and researchers for addressing specific issues of health concern affecting broad portions of our communities,” Cliff Hudson said. “Leslie and I are hopeful that our increased support will enable the College to attract and retain the strongest students and assist those same students in attaining a level of academic and professional preparation from which Oklahoma communities might benefit for decades to come.”

In 2013, the Hudsons established the Hudson Family Endowed Scholarship to provide financial assistance to students in the College preparing for careers in public health. Two years later, they announced a gift of \$1 million to establish the Hudson Fellows in Public Health program and the annual Hudson Fellows Symposium. An additional \$1 million gift was made in 2017 to increase the number of available fellowships. The 2018 leadership gift again expands the Hudson Fellows program, helping to ease the financial burden on scholars as they work to further their education and answer critical questions underpinning public health.



Dean Gary Raskob addresses the crowd at the start of the Hudson Fellows Symposium and Naming event.

“The Hudsons have shown their continued, steadfast commitment to education and to the power of public health to positively impact lives,” Dean Gary Raskob said. “This is a transformational gift for the College of Public Health. It helps ensure we can continue to attract and educate the best students who will lead innovative public health research, and who will find new solutions to the health problems impacting our health, the world in which we live, and the lives of millions. We are humbled, grateful and inspired by this gift.”

Dr. Jason Sanders, Senior Vice President and Provost of the OU Health Sciences Center and Vice Chair of OU Medicine, said the Hudsons’ generous support underlines the importance of constantly striving to grow research and to enhance support for bright, young scholars in an effort to improve public health.

“Public health is essential for longer, healthier lives in Oklahoma and across the globe. The Hudsons are inspiring public health leaders, supporting our students and researchers through their generous investments, and setting a national standard. We are honored that they have advanced the College of Public Health to a prominent role and elevated the OU Health Sciences Center in the process,” Sanders said. ◀



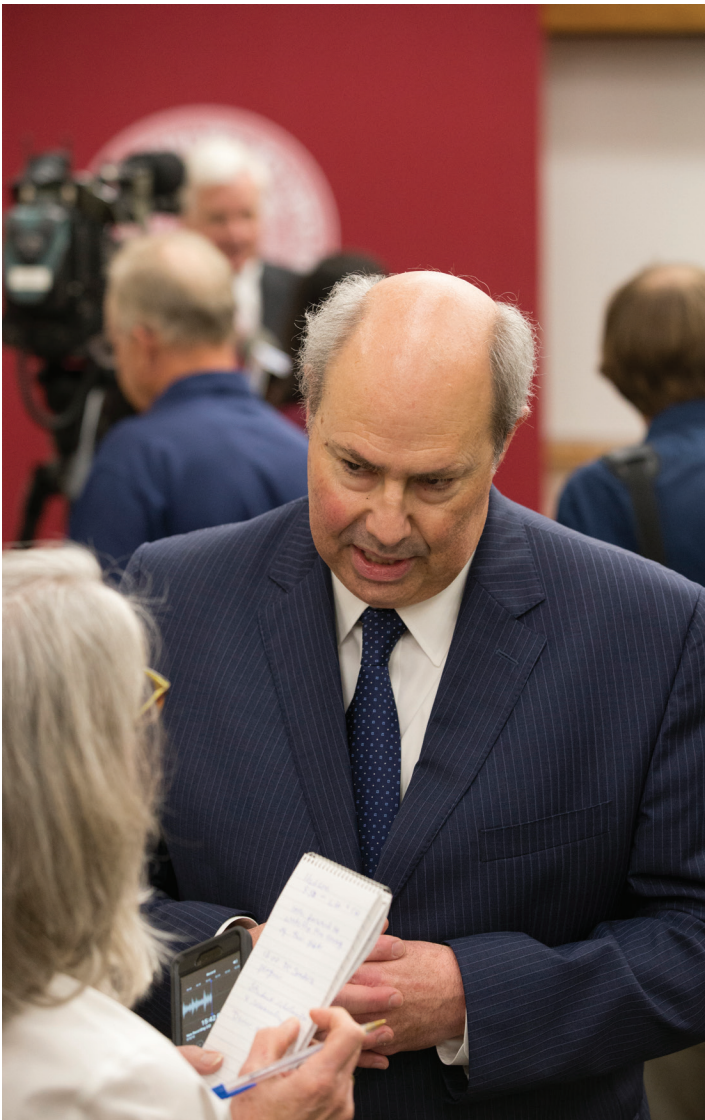
Dr. Leslie Hudson discusses the importance of public health in remarks about their multi-million dollar gift to the College.

# About the Hudsons



**Dr. Leslie and Mr. Clifford Hudson** have been part of the OU family since the 1970s. Dr. Leslie Hudson completed her undergraduate degree in physical therapy in 1977, followed by a master's degree in public health and doctorate in epidemiology at the OU Health Sciences Center in 1990. She joined the College of Public Health faculty, specializing in biostatistics and epidemiology. In service to the University, Dr. Hudson serves on the College of Public Health Advisory Board and is a past member of the Presidential Professorship selection committee and the advisory board of the OU Breast Health Institute. In 2017, she was awarded the Regents Alumni Award.

Clifford Hudson attended the University of Oklahoma on Phi Beta Kappa and President's Leadership scholarships, earning a bachelor's degree in history in 1977. He received his law degree from Georgetown University and currently is the chief executive officer and chairman of the board of Sonic Corp., an Oklahoma City-based restaurant franchisor. Hudson has been involved with the University in numerous capacities. He has served on the Board of Visitors of the College of Arts and Sciences and the K20 Center. Hudson currently serves on the Board of Trustees of the University of Oklahoma Foundation where he chairs the Investment Committee. In addition to receiving a Regents Alumni Award, he was awarded the University's highest honor, the honorary doctorate in humane letters in 2011.



Dean Gary Raskob, Ph.D., is interviewed by a reporter for The Oklahoman.



Dr. Jason Sanders, senior vice president and provost of the OU Health Sciences Center presents a plaque to the Hudsons in appreciation for their gift.

# Fellowships Foster the Future

The Hudson Fellows in Public Health program, now in its 4th year, awards fellowships to gifted graduate students who are training at the highest levels of their disciplines at the OU Hudson College of Public Health.

These doctoral students are the scientists of the future, researching the critical, mainly upstream, causes of poor health in a population. These critical public health issues include tobacco use prevention, reducing the incidence of obesity, and targeting environmental, social and economic determinants of health.

“The work of these scholars will lead to the development of better public health for people and communities,” said Dean Gary Raskob.



The 2018-2019 Hudson Fellows are (from left) Kathleen “Kae” Aithinne, June Dao, Wei-Jen Chen, Ngoc Quyen Duong and Kaitlin McGrew



## The five current Hudson Fellows are:

### Kathleen “Kae” Aithinne

Kathleen “Kae” Aithinne is a doctoral student in the Department of Occupational and Environmental Health. With parents in the military, Aithinne moved about every four years. Although she was born at Yakota Air Force Base in Japan, she considers herself an Oklahoma native because she has lived here the

longest. Her research interests center on bacteria or viruses that can be suspended in liquids or aerosolized. She hopes to uncover new information that will lead to better ways to reduce infection or re-infection. Aithinne said the Hudson fellowship helps ease the financial burden of her continued education for her

and her family. She plans to have a career working in biosafety and environmental microbiology as a Certified Industrial Hygienist at a national laboratory before returning to academia to teach and mentor future occupational safety and health industry professionals.

### Wei-Jen Chen

Wei-Jen Chen is a doctoral student in the Department of Biostatistics and Epidemiology. A native of Taiwan, Chen saw his love for public health ignite as an undergraduate student when a professor challenged students to apply their textbook

learning to research. Chen said the experience changed his thinking about public health. He realized public health can improve the promotion of good health as well as disease prevention and reduce the burden of disease on the health

care system. Chen said the Hudson fellowship has been instrumental in helping him achieve his goals to help expand knowledge and enhance the field of epidemiology for future generations.

### June Dao

June Dao is a doctoral student in epidemiology. The Vietnam native combines a love for both numbers and biology in her doctoral work at the OU College of Public Health.

With a strong interest in cancer prevention, she currently is involved in research that aims to better understand the effect of environmental exposures on cancer. Dao said the

Hudson fellowship provides her with a great opportunity to focus on her education and to get the research experience necessary for her future as an epidemiologist.

### Ngoc Quyen Duong

Ngoc Quyen Duong is a doctoral student in biostatistics. Born in Vietnam, she grew up in Minnesota where she first conquered English as a second language, then quickly learned she

also had a knack for numbers. Duong’s research involves developing models to predict infants at risk for severe bleeding in the brain. Currently, there are no effective methods

of prevention. Her work aims to better predict at-risk infants utilizing measures taken from special near-infrared headbands.

### Kaitlin McGrew

Born in Oklahoma City, Kaitlin McGrew is a doctoral student in epidemiology. McGrew’s interest in public health research stems from her work as a nursing assistant at a children’s rehabilitation and long-term care center. She noticed a lot of big-picture problems in her

community that were contributing to the development of preventable health issues. Seeking to make a larger impact on public health in Oklahoma, McGrew’s research focuses on quantifying health disparities and decreasing the burden of stigmatized illnesses such as Hepa-

titis C virus and substance-use disorders. After earning her doctorate, she plans to build a career that combines teaching and mentoring students with research aimed at improving health and quality of life for underserved populations.

# The ABCs of Tobacco Use and Cancer



**W**hat if unraveling the mystery surrounding increased tobacco use and lung cancer rates in American Indians boiled down to something as simple as studying your ABCs?

OU Hudson College of Public Health alumna Dana Mowls Carroll, Ph.D., M.P.H. believes that's exactly what it may take. However, the ABC's she is studying are a bit more complicated. For Mowls Carroll, A stands for the addictive properties of tobacco based upon how fast a person's body metabolizes nicotine. B is for biology as she measures specific biological markers of tobacco exposure; and C is for the cancer-causing processes within the body that may lead to a greater risk for lung cancer in American Indian smokers.

"Smoking is highest among American Indians relative to other racial and ethnic groups in the United States, especially among American Indians in both southern plains states like Oklahoma and northern plains states like Minnesota," Mowls Carroll said.

Mowls Carroll first developed an interest in the genetic factors contributing to health and disease while pursuing a degree in molecular genetics. On the advice of a friend who knew of her passion for research, she pursued a master's degree in epidemiology and then jumped eagerly into research work as a graduate assistant with the Biostatistics and Epidemiology Research Design and Analysis Center at the College under the supervision of Dr. Laura Beebe.

Mowls Carroll was one of the College's inaugural Hudson Fellows. That fellowship along with a National Institute of Drug Abuse grant provided the financial fuel for Mowls Carroll to begin her own research into nicotine metabolism in American Indian tobacco users.

Today, the interest ignited at OU continues to resonate in her work as a post-doctoral fellow in Tobacco Research Programs at the University of Minnesota where she works to better understand why American Indians smoke more and also carry a very high rate of lung cancer incidence.

"I am collecting biological samples, mainly urine and saliva, to measure certain biological markers of tobacco exposure," she explained. "Biomarkers of exposure account for individual differences in smoking intensity, carcinogen uptake and metabolism. These factors, in turn, affect a smoker's susceptibility to the cancer-causing effects of cigarette smoke."

Mowls Carroll also is examining changes in DNA that can be readily measured in cells from the mouth, which ultimately can result in genetic changes in a smoker's lungs that block normal cell growth control mechanisms.

"We know that social, cultural, historical, environmental and regulatory factors all contribute to tobacco use, including poverty, lack of access to health care, social norms and tobacco industry marketing. However, biological factors arising from our genetic makeup or DNA also influences tobacco use," she said.

One biological factor of particular interest to Mowls Carroll is nicotine metabolism or the speed at which nicotine, the addictive drug in cigarettes, is cleared from the body. Nicotine metabolism is highly variable from one smoker to the next.

"It has been shown that smokers who metabolize nicotine more quickly consume more cigarettes, have higher lev-

els of harmful chemicals in their body and have a more difficult time quitting than those who metabolize nicotine slowly. Interestingly, it has also been shown that faster metabolizers of nicotine have better success quitting on non-nicotine medications for smoking cessation; whereas the nicotine patch is recommended for slower metabolizers of nicotine. However, very few studies have ever looked at nicotine metabolism and its impact on smoking cessation in American Indians," she explained.

Mowls Carroll hopes her work will lead to a better understanding of the causes of tobacco-related disparities, ways to reduce those disparities and new insights for both smoking and cancer prevention strategies. Although her work focuses on American Indian populations, she believes her findings will ultimately help contribute to the reduction of tobacco-related disease and death in the United States and the world.

The dream of making a difference drives Mowls Carroll in her work dai-

ly, but she says her success as a public health scientist is firmly rooted in the education and research opportunities she was provided at the OU Hudson College of Public Health as one of the first two Hudson Fellows.

"When I was new to the doctoral program, I was shy and not fully confident that I would ever be able to formulate my own research questions, apply for grants or provide expertise on a research team – all of which are second nature to scientists," she said. "But working alongside my wonderful mentor, Dr. Laura Beebe, and in the supportive learning environment of the Department of Biostatistics and Epidemiology, I developed the leadership skills, subject matter knowledge and the confidence that would result not only in my ability to develop research protocols and to write grants, but also in my ability to conduct research that could have a significant public health impact." ◀

## Serving the Underserved



**Jennifer Green Moore, Ph.D., M.P.H.**, the other inaugural Hudson Fellow at the Hudson College of Public Health, currently serves as administrative director and local health officer of the Riley County Health Department in Manhattan, Kansas.

Her interest in improving the public health of young people as well as narrowing the gap in health disparities began in her senior year as an undergraduate student. At the time, she volunteered with a local non-profit organization, working with youth in under-resourced neighborhoods, encouraging children in the area to come to the park to play games and get exercise. She began to notice high levels of obesity, smoking, malnourishment, accidental injuries and unplanned pregnancy and

realized it would take more than backyard clubs to diminish health disparities. So, she first earned her master's degree in public health and then decided to pursue her doctorate.

As a doctoral candidate at OU, Green Moore focused on adolescent health and health disparities, specifically teen and unplanned pregnancy prevention. As a research assistant working on the *Power Through Choices Project*, she helped evaluate the effectiveness of pregnancy prevention programs available to at-risk youth.

She credits the College and the Hudson fellowship with helping her land a position that aligns with her ultimate goal of improving the health of underserved and at-risk populations.

# The Business of the Public's Health

Creating a culture of health is not only imperative for individuals and communities, it also is essential in the world of business.

That was one of the core messages shared by Dr. Howard Koh as the featured speaker for the 2018 Hudson Fellows Symposium. Koh is the Harvey V. Fineberg Professor of the Practice of Public Health Leadership at the Harvard T.H. Chan School of Public Health and the Harvard Kennedy School. He also served as the 14th Assistant Secretary for Health for the U.S. Department of Health and Human Services under the Obama administration.

“Every business impacts health, whether they realize it or not. Every business impacts the health of their employees. They impact the health of consumers with the products they make. They impact and are connected to their community in many ways, and they have some impact on the environment,” Koh said.

These are what Koh refers to as the four pillars that form the foundation for what he terms a culture of health, where values of well-being are encouraged in how we live, labor, learn, play and pray.

“Part of our initiative and part of our goal is to build better bridges between business and health; to have businesses realize that the work they are doing, which is often very important for the economy, is also important for health,” he explained.

Koh said there is no doubt that the history of business and health is a checkered one. One only need to look at news reports to see almost daily reports about how actions by businesses have led to unfortunate health outcomes. He mentioned tobacco as a major example of that.

“We’ve seen how tobacco has caused so much preventable death and suffering. We’re hearing about global obesity and how we need healthier food and beverage products, for example,” Koh said. “And

there are too many examples of environmental hazards and even products manufactured that should have a better impact on health. So, there are far too many examples of how businesses have not been open and transparent, and how they have not promoted the public health.”

The old status quo is no longer acceptable to many in an era where people expect greater transparency and accountability.

ESG stands for Environmental, Social and Governance measures, which ultimately measure outcomes for all stakeholders and not just shareholders. For far too long, Koh said promoting public health focused on the health sector alone.

“We’ve relied on doctors, nurses and healthcare professionals; and that’s fine. I am a physician myself and I’ve cared for patients for over 30 years, so I know how



Koh pointed to millennials, in particular, noting that they are willing to pay more for sustainable products.

“CEO’s also have a lot invested because their trust levels worldwide have dropped in dramatic fashion and every CEO wants to have a good reputation and to have products of which they are proud. In the last 20 years, there’s been a great push for businesses to report on more than just traditional financial outcomes, but also to report on non-financial outcomes or what I call ESG measures.”

important that is. But I think the future of public health is to promote a culture of health where we realize that everything is interconnected. Everything is interdependent,” he remarked.

“As Robert Frost said we all “have promises to keep” and when we see communities where everyone realizes that we need each other and have to work with one another, where business and health work closely together for the common good, then we can make our society healthier for the next generation.” ◀



# The Dawn of a New

This year marked yet another important milestone for the College as it officially takes a new name — the OU Hudson College of Public Health at the University of Oklahoma.

As one of the longest standing colleges of public health in the nation, first earning accreditation in 1969 and continuously maintaining it since, the College builds on a history of innovation and excellence.

“The leaders in Oklahoma were visionary in establishing an independent college that brings together the core disciplines of public health - epidemiology, biostatistics, health administration and policy, the social behavioral sciences, and occupational and environmental health. Having all of these together in one college allows for the interchange of ideas and multidisciplinary interaction that leads to innovation and creativity in ideas, programs and research as we

## Department of Health Administration and Policy

OU is proud to be home to the only nationally-accredited Master of Health Administration program in Oklahoma, offering both the Master of Health Administration and the Master of Public Health degrees as well as two dual degrees, the JD-MHA and the JD-MPH, and the new MBA-Certificate in Healthcare Administration. The Department's goal is to prepare graduates to become exemplary leaders in hospitals, health care systems and public health organizations. To that end, its programs focus on creating competencies that allow for the successful understand-



ing and evaluation of the overall healthcare system in this nation, and of key aspects of that system, including communication, executive leadership, ethical decision making, critical thinking, quantitative analysis, patient outcome improvement, and professionalism. The Department boasts a 100 percent graduate placement rate.

### Recent highlights include:

- The Department earned CAHME reaccreditation for seven years.
- Christina Bennett, J.D., assistant professor, co-authored an article in the *Journal of Health Administration Education* entitled ‘Weaving the threat of implicit bias through health administration curricula to overcome gender disparities in the workforce.’ She also published several other articles in scholarly journals.
- Dale Bratzler, D.O., M.P.H., chaired the Technical Expert Panel of the 2018 National Impact Assessment of the Centers for Medicare and Medicaid Services Quality Measures Report.
- Faculty, staff and students assisted with planning of the Annual Healthcare Executives Summit, which brought together regional healthcare executives.

## Department of Biostatistics and Epidemiology

The Department of Biostatistics and Epidemiology offers Master of Public Health, Master of Science and Doctor of Philosophy degrees, the Department's programs are designed to prepare students for careers in health agencies and medi-



cal institutions; as consultants, especially in the biomedical fields; for independent biostatistical and epidemiological research; and for academic careers in schools of public health and medicine. Using our expertise in research design, data collection and analysis, we aim to improve the understanding of disease processes and related risk factors. Faculty members direct and support a large number of research projects, covering a wide array of clinical, translational and public health practice topics. They also provide opportunities for graduate assistantships, allowing students to gain real-world experience in project management, research and evaluation, project design, data collection and management, data analysis, and scientific writing.

### Recent highlights include:

- Aaron Wendelboe, Ph.D., received the Williams Companies Foundation Presidential Professorship, recognizing faculty members for excellence as teachers and mentors, as well as in all of their professional activities.
- College Alumna Jessica Reese, Ph.D., published in the *New England Journal of Medicine* key findings from her doctoral dissertation related to platelet count changes during pregnancy.
- Amanda Janitz, Ph.D., and Sydney Martinez, Ph.D., are Principal Investigators on capacity-building and pilot projects as components of the National Institute of General Medical Sciences-funded Cherokee Nation Native American Research Center for Health grant. The project focuses on addressing major health needs and understanding cancer incidence and its causes.

# ew Era of Excellence

work to tackle critical issues of public health,” said Dean Gary Ras-kob, Ph.D.

The College is ranked number 6 in the Top 10 Colleges of Public Health nationwide by *College Magazine*; and the education of tomorrow’s public health professionals and scientists is at the heart of our mission. We constantly strive to advance and elevate public health education, recently expanding these efforts to the OU Norman cam-

pus with the OU Board of Regents approval of a new bachelor’s degree in Public Health. The undergraduate program is a joint venture of the College and the OU College of Arts and Sciences.

Each department also has earned distinction and forms a cornerstone of the overall strength within the OU Hudson College of Public Health.

## Department of Occupational and Environmental Health

The environment encompasses not only the air we breathe, the water we drink, and plants and animals used for food, but also shelter, modes of transportation and all of the other products and byproducts of technology, including pollutants and waste materials. Understanding the human response to the environment as well as the response of the environment to the activities of humans is at the heart of the mission of the Department of Occupational and Environmental Health. The Department has developed flexible and diversified programs of graduate study, including the Master of Science degree in Industrial Hygiene and Environmental Health Sci-



ences; the Master of Public Health degree in Environmental Health and Occupational Health; and the Doctor of Philosophy Degree, an advanced, research-oriented degree program requiring in-depth study of

and research in a specialty area with the broad field of occupational and environmental health. Graduates are in high demand by employers in industry, government, health care and other sectors.

### Recent highlights include:

- Laboratory space was newly renovated, expanded and enhanced, providing for additional research opportunities within the Department.
- Assistant Professors Jun Wang, Ph.D., and Evan Floyd, Ph.D., achieved national board certification as Certified Industrial Hygienists, expanding the Department’s CIH-certified full-time faculty. Floyd also was recognized with the College’s Faculty Teaching Award, and Wang received the College’s Public Health Student Association Teaching Award, as well as the American Industrial Hygiene Association Golden Seed Award for outstanding mentoring.
- Occupational and Environmental Health doctoral candidate Marcio Bezerra, received the Best Student Poster Award for his session at the AIHA’s national conference and was awarded one of 50 national AIHA scholarships.

## Department of Health Promotion Sciences

Reducing health risks in individuals, families, social networks, organizations, and communities is the goal of health promotion. This is accomplished at the Department of Health Promotion



Sciences through the application of social and behavioral sciences, educational strategies and techniques and epidemiological methods. The Department strives to provide the knowledge and skills needed to succeed as public health professionals within local, state, national and tribal organizations. Dedicated faculty members work to expand the knowledge base of students in the areas of chronic diseases, communicable diseases, health promotion and disease prevention, exercise, nutrition, tobacco use, preventable injury, and more.

### Recent highlights include:

- The Department’s Oklahoma Public Health Training Center received a one-year Presbyterian Health Foundation seed grant to develop a diabetes training program for community health workers.
- Grant funding was renewed for the tenth consecutive year continuing participation in the Health and Human Services Region 6 Public Health Training Center.
- The Department received a multi-year state contract funding a project headed by Professor & Chair Thomas Teasdale, Dr.P.H., utilizing CMS funds to provide training and skills to front-line staff at 120 Oklahoma nursing homes.

# Thank you

Dr. Leslie Hudson and Mr. Clifford Hudson  
for investing in the future of public health.

Your generosity inspires us daily  
as we work to advance the science of  
promoting health, and preventing disease,  
disability, and premature death.

It is with great pride that we carry  
our mission forward into

**A NEW ERA OF EXCELLENCE!**



HUDSON  
COLLEGE of PUBLIC HEALTH

The UNIVERSITY of OKLAHOMA HEALTH SCIENCES CENTER

*Promoting healthier tomorrows through education and research today*

- Oklahoma's ONLY Accredited College of Public Health
- One of only 60 accredited schools of public health in the U.S.A.
- Alumni in every state, Washington, D.C., and in 27 countries worldwide
- One in 10 are international students
- 29 Scholarships awarded in 2018 with more than \$660,000 in graduate student stipends
- Ranked number 6 in Top 10 Colleges of Public Health nationwide by *College Magazine*

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# Honoring Public Health

## 2018-2019 Scholarship Recipients

**W**ith the cost of education increasing, the Hudson College of Public Health realizes the importance of financially assisting the newest generation of scholars as they work to achieve their goals. In 2003, the College awarded three scholarships totaling \$3,000. In 2018, the College is proud to have awarded 29 named scholarships totaling

more than \$75,000. The Claudia Griffith Scholarship is the newest of these.

This year's recipients include scholars interested in a variety of public health issues from hospital-acquired infection to occupational exposures potentially impacting health, from health inequities to disease prevention efforts, and more.



### Azimi Family Scholarship



**Kathleen "Kae" Aithinne**

Kae Aithinne, a Hudson Fellow in Public Health, is a second-year Occupational and Environmental Health doctoral student with a passion for prevention of hospital-acquired diseases. Aithinne's research aims to utilize the translational model to substantially reduce cases of hospital-acquired infection resulting from environmental surface contamination. She will be sitting for the general exam this fall and starting her research in spring 2019.

"I am grateful to receive the Azimi Family Scholarship and want to thank Dr. Azimi for his involvement in the Occupational and Environmental Health community and for his passion for environmental health," Aithinne said.

### Edward N. Brandt, Jr. Scholarships



**Patricia Pius**

Patricia Pius is in her second year of medical school at the OU College of Medicine. She completed her undergraduate education in radiation therapy at McMaster University, Canada. After graduating, she moved to Oklahoma and worked as a radiation therapist at St. Anthony Hospital. During her time in radiation therapy, she observed the healthcare disparities that exist in Oklahoma. However, Pius also saw hope in the positive impact physicians can have upon their patients and families. That motivated her to want to become a doctor too, with a specific interest in the care and treatment of patients fighting cancer. She hopes to be able to use her

medical education to serve those in need of healthcare in Oklahoma.

"I want to make healthcare more accessible for all," Pius said.



**Miranda Smith**

Miranda Smith is a second-year medical student at the OU College of Medicine as well as a Master of Public Health student in the Department of Health Promotion Sciences at the OU Hudson College of Public Health. Through her work at free clinics in Oklahoma City as well as through her study abroad program in Costa Rica and Nicaragua, Smith witnessed the many barriers that exist for individuals pursuing health care. She plans to pursue a career in primary care medicine while building sustainable health programs that work to

support healthy behaviors and ensure access to adequate healthcare for all.

“This scholarship means a lot as I go through school and learn about ways to promote health for my future patients,” she said.

### **Dale W. Bratzler Scholarship**



#### **Bennett Pickar**

Bennett Pickar is a student in the dual Master of Business Administration and Master of Health Administration program at the University of Oklahoma.

He currently works full-time for OU Medicine Inc. as a manager for the Performance Management & Innovation department. Outside of work and school, he enjoys spending time outdoors with his wife and two dogs.

“I’d like to thank Dr. Bratzler for the scholarship and for his support of all of the students in the program,” said Pickar.

### **Burns-Schaiff Scholarship**



#### **Angel Giron Lopez**

Angel Giron Lopez graduated with a bachelor’s degree in chemical biosciences from the University of Oklahoma. He is now a second-year Master of Public Health student in epidemiology and is honored to receive the Burns-Schaiff Scholarship in Public Health.

Currently, Lopez is a graduate research assistant working on a project titled “Developing and Testing a Diabetes Training to Improve the Health of Oklahomans through an Effective Community Health Worker Workforce.” He plans to do a practicum involving Hispanic youth and the use of electronic cigarettes.

“When I am not at the College, I am writing the MCAT exam,” Lopez said, adding that he is extremely grateful for the financial support provided by the scholarship as he works toward his ultimate goal of a career in medicine.

### **Calvey Family Scholarship**



#### **Munim Deen**

Munim Deen, an epidemiology doctoral student, aspires to build a successful career that combines health care administration, teaching and research. His work on West Nile virus

clusters has been awarded in multiple symposia. Deen’s published topics include cancer epidemiology and rural pharmaceutical availability. Currently, Deen is a graduate research assistant on Oklahoma-Area Tribal Epidemiology Center projects. He also has developed nationally-available online public health training courses at the Oklahoma Public Health Training Center.

“I want to thank the Calvey family for supporting not only me but for their support of education in public health overall,” Deen said.

### **Ronald L. Coleman Scholarship**



#### **Taylor Reeves**

Taylor Reeves graduated from Southeastern Oklahoma State University with a bachelor’s degree in chemistry and a dual minor in math and biology. Reeves currently is a

second-year student seeking a master’s degree in industrial hygiene and environmental science. In the summer prior to the start of his second year, he worked as an intern for Texas Instruments. Reeves plans to pursue a career in the environmental health field and hopes to someday give back to the Choctaw Nation of Oklahoma.

“I am proud to accept the Ronald L. Coleman Scholarship and represent the ideals for which it stands. I want to especially thank the Coleman family for supporting the College, our Department and for helping me complete my degree so that I may join the workforce,” Reeves said.

### **ConocoPhillips Occupational and Environmental Health Endowed Scholarships**



#### **Marcio Bezerra**

Marcio Bezerra is a doctoral candidate in the Department of Occupational and Environmental Health. Born and raised in the city of Rio de Janeiro, Brazil, Bezerra graduated

with distinction from the Brazilian Army Military Academy with a bachelor’s degree in military science – artillery in 1993. He went on to earn degrees in physical education (2001) and theology (2013) as well. Bezerra currently is studying metal exposures from metal fabrication processes as well as ways to prevent health problems in exposed workers. When he retires from the army af-

ter 23 years, he hopes to pursue a career as a professor and researcher.

“I want to thank the College, ConocoPhillips and the Department of Occupational and Environmental Health for their support of my academic endeavors,” said Bezerra.



#### **Sara Greenlee**

Sara Greenlee, a master’s degree student in the Department of Occupational and Environmental Health, is keenly interested in the health of workers. She spent an entire

summer interning at an ExxonMobil chemical plant and refinery in Louisiana. Upon graduation, she hopes to build a successful career in occupational and environmental health, and to continue to work to help keep workers safe.

“I’d like to thank ConocoPhillips and the College. Occupational and environmental health are so important. It is great to have so much support,” said Greenlee.

### **COPH Advisory Board Scholarship**



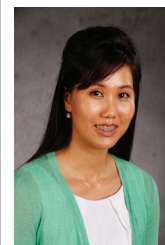
#### **Madison Trost**

Madison “Madi” Trost is a second-year Master of Public Health student, with a focus on Health Administration and Policy. She works as the project coordinator

for the Step-Up for Dementia Care program in the Department of Health Promotion Sciences. Trost also is involved on the OU Health Sciences Center campus, serving as a Leadership Health Sciences Center Student Advisor and as president of the OU Hudson College of Public Health Student Association. She aspires to become a hospital administrator and to create more positive patient experiences.

“I want to thank the Advisory Board for the scholarship and also for all of the time they give in support of the College,” Trost said.

### **Roy B. Deal, Jr. Scholarship**



#### **Ngoc Quyen Duong**

Quyen Duong is a doctoral candidate studying biostatistics. She grew up in Minnesota where she received a bachelor’s degree in mathematics at St. Olaf College and a

master's degree in statistics at St. Cloud State University. Duong's dissertation focuses on deriving analytical solutions to the adjusted kernel density estimate using the gamma distribution for the conjugate prior. In simpler terms, she is evaluating biostatistical data in hopes of improving the screening of infants to determine those at greatest risk for severe bleeding in the brain.

"I want to thank all of the scholarship donors for their generous support of us and of the College," Duong said.

### **David J. Falcone Memorial Scholarship**



#### **Anja DuToit**

Anja DuToit is a Juris Doctor and Master of Public Health student in the Department of Health Administration and Policy. She has worked for the Oklahoma Health

Care Authority and for the United Nations' Committee for the Elimination of Racial Discrimination. For her practicum, DuToit spent the summer working with the Evelyn Frank Legal Resources Program in New York City. There, she advised low-income and disabled New Yorkers in areas such as managed long-term care, administrative appeals, Medicaid and Medicare program eligibility, and estate planning. She plans to graduate in December 2018 and looks forward to beginning her career.

"I look forward to the challenges ahead of me upon graduation and to the opportunity to push policy forward aimed at improving health," DuToit said.

### **Rosetta Fisher Student Scholarships (COPH Alumni Association)**



#### **Lindsay Denson**

Lindsay Denson, a doctoral student, first obtained her bachelor's degree in diagnostic medical sonography followed by a master's degree in epidemiology. She currently

works as an epidemiologist for the Oklahoma Birth Defects Registry at the Oklahoma State Department of Health, where she enjoys the opportunity to combine her skills in both epidemiology and obstetrical sonography. Her role with the Registry has provided tremendous opportunity for personal and

professional growth. Denson represented Oklahoma at the CDC's Zika Pregnancy and Birth Defects Task Force meeting in 2017, and presented a poster at the 2018 National Birth Defect Prevention Network conference. Her goal is to continue to focus on improving the lives of women and children in Oklahoma through education and research.

"I am grateful for the scholarship and for the support of the College, its faculty and my mentor Dr. Dee Terrell. I look forward to the day when I will be one of the alumni supporting scholarships at the College and to be on the other end of the giving equation," Denson said.



#### **Shannon Yero**

Shannon Yero is a dual degree candidate who will graduate in May 2019 with a Juris Doctor and Master of Health Administration. After graduating and taking the bar exam,

Yero plans to pursue a career in health law as in-house counsel for a hospital. She currently works at the Veterans Affairs Medical Center in Oklahoma City as a legal and administrative intern. In this role, Yero helped create a business plan for the hospital's new geriatric psychiatry unit and participated in a Healthcare Failure Mode and Effect Analysis for the unit. She enjoys serving veterans and working in a hospital setting.

"As everyone knows, education can be expensive. I am grateful for this scholarship. It is much appreciated to have the financial support that helps keep the educational loan balances lower," Yero said.

### **James N. George Scholarship in Biostatistics and Epidemiology**



#### **Miguel DeMarzo**

After earning a bachelor's degree in chemistry from Southern Nazarene University, Miguel DeMarzo is now a second-year Master of Public Health student in epidemiology. Since enter-

ing the program, he has worked as a graduate research assistant for Dr. Laura Beebe on various tobacco cessation projects. DeMarzo hopes to enter the medical field as a physician and apply his knowledge from public health and epidemiology in a clinical setting. In his spare time, he likes to volunteer at a local clinic in Oklahoma City and to stay active.

"I would like to express my thanks to the College, my advisor, Dr. George, the Rizvi family for their generosity in creating this scholarship and to all who support public health and the mission of this College," De Marzo said.

### **Edmund H. Gleason Scholarship**



#### **Kaitlin McGrew**

Kaitlin McGrew is a doctoral candidate in epidemiology and a Hudson Fellow in Public Health. Her dissertation research involves a Bayesian approach to estimate the prevalence of injection

drug use using administrative databases. McGrew's ultimate career goal is to conduct research that guides the development of public health interventions to prevent and reduce harm from substance use disorders. She has served as a teaching assistant, secretary of the Biostatistics and Epidemiology Student Association and vice president of the OU Health Sciences Center Running Club.

"I am grateful to be the recipient of the Edmund H. Gleason Family Scholarship and would like to thank all of the donors for their support of our education," McGrew said.

### **Claudia Griffith Memorial Scholarship**



#### **Brittany Karfonta**

Brittany Karfonta is the recipient of the inaugural Claudia Griffith Memorial Scholarship, a scholarship created through the generosity of friends of legislator Claudia Griffith, who passed away suddenly in

2018. The scholarship honors Griffith's legacy and her commitment to both the state and to public health. Karfonta is a second-year Master of Public Health student with a concentration in biostatistics. She graduated with a bachelor's degree in zoology from the University of Oklahoma and managed a research laboratory for several years after graduation. Karfonta currently works as a Clinical Research Coordinator at the OU Health Sciences Center, collaborating with healthcare professionals to promote health and life science research in Oklahoma. Upon earning her master's degree, she plans to work as a biostatistician assisting with the design and implementation of human clinical trials.

"Claudia Griffith was an inspirational woman and I am looking forward to following in her footsteps," Karfonta said.

## E. Scott, Susie, Regan and Shannon Henley Family Endowed Scholarship



### Tabitha Foraker

Tabitha Foraker is a first-year Master of Health Administration student. She graduated with a bachelor's degree in both biology and psychology from the University of Oklahoma. Upon earning her master's degree, Foraker hopes to go on to medical school. Her ultimate goal is to use her talents to better the lives of others by improving healthcare quality and accessibility in developing countries working for an organization like UNICEF.

"I want to thank the College of Public Health for believing in me. To the Henley family, thank you for this scholarship. These scholarships make a huge difference for people who are trying to afford advancing their education," Foraker said.

## Hudson Family Scholarship



### Ross Ogden

Jimmy "Ross" Ogden, now a second-year Master of Public Health student in epidemiology, received a bachelor's degree in biology with minors in chemistry and Spanish from the University of Oklahoma. Ogden is involved in genetics research and works as a graduate research assistant at the OU Health Sciences Center as part of the Tribal Youth Suicide Prevention program. Ogden and his team aim to reduce the prevalence of suicides in Native American communities. With a strong passion for people and medicine, Ogden plans to attend medical school next fall and eventually practice medicine in rural Oklahoma.

"I would like to say, 'Thank you,' to the Hudson family for their generous donation to my education. Thank you to all of the donors. We learn a lot from our professors but we also learn from our peers, rubbing off on each other, and making each other stronger, better," Ogden said.

## Brent Hurd Scholarship



### Taylor Hayes

Taylor Hayes graduated from Texas Christian University in May 2017 and is now a second-year Master of Health Administration student at the OU Hudson College of Public Health. This summer, she interned at the University of Texas Southwestern's Moncrief Cancer Institute in Fort Worth. There, she worked under the Assistant Director of Operations, assisting in a variety of projects, including data analysis on a new screening program for the psychology department. Hayes plans to graduate in 2019 and will be applying to post-graduate fellowships.

"I am thankful for all of the donors and to the College for working so hard to make all of these scholarships available to students like me," Hayes said.

## Johnson Family Scholarship



### Jacob Bartels

Jacob Bartels is a doctoral candidate in the Department of Occupational and Environmental Health. He is focusing his attention on his research, which includes the application of an innovative chemical assay to assess the oxidative potential of various industrial aerosol exposures in the occupational environment. He plans to use his research and educational experience to increase his practical knowledge in an industrial field. Ultimately, he aims to one day become a professor, helping educate and mentor students to achieve their own academic, career and public health goals.

"I would very much like to thank Dr. and Mrs. David Johnson, and their family for their generous support of my goals as a student, researcher and public health professional," Bartels said.

## Robert W. Ketner Scholarship



### Sophia Chen

Sophia Chen earned her medical degree from China Medical University in 2011. After graduating, she came to the United

States to further her education, completing her master's degree in biostatistics in 2016. Chen is now working toward earning her doctoral degree in biostatistics. Her career goal is to lead public health studies and to collaborate with interdisciplinary investigators in medical research.

"I am very honored to receive this scholarship. Thank you to the College for offering me a place to study and for giving me a place to make my dreams come true," Chen said.

## Elisa T. Lee Scholarship



### Allshine Chen

Allshine Chen is a fourth-year doctoral candidate in the Department of Biostatistics and Epidemiology. With a great interest in statistical genetics, Chen will focus his dissertation on developing new methodology in the rapidly growing field of biostatistics. His position as a senior data analyst at the Oklahoma Medical Research Foundation facilitates progress toward this goal. Chen also is part of a start-up company called Bayesic Technologies. The company aims to develop user-friendly statistical software.

"I would like to thank the College for providing such a great environment for students to grow, to thank the donors for their financial support, and to thank the faculty and our mentors for their tremendous guidance and support," Chen said.

## Dan J. Macer Scholarships



### Cassandra Camp

Cassandra Camp is an enrolled member of the Seminole Nation of Oklahoma and a descendant of the Muscogee Nation. She earned a Master of Public Health degree in health promotion sciences from the College of Public Health in 2015. Currently, Camp is in her second year as a Health Promotion Sciences doctoral candidate. She said she chose the field because she is passionate about the health and well-being of indigenous people. Camp said she believes we must first address the root causes of health disparities and issues related to health equity through policy change before health and

well-being can be achieved, especially by underserved populations.

“It is a great honor and blessing to receive this scholarship which honors Dan Macer’s legacy. I hope to be able to accomplish even a fraction of what he did in his life and career,” Camp said.



### Lance Ford

Lance Ford is a first-year doctoral student in biostatistics. During his time at the OU Health Sciences Center, Ford has worked in the Research Design and Analysis Center, contributing to research projects in the departments of Neurology, Rehabilitation Sciences and Geriatric Medicine, as well as at the Stephenson Cancer Center. He also has helped co-author three manuscripts over the past year that have been accepted for publication.

“I am very grateful for this scholarship, for the College and its faculty for all of the support they have given to me,” Ford said.



### Johnson Truong

Johnson Truong is a native of Tulsa and a second-year master’s degree student in the Department of Health Administration and Policy. In addition to his studies, Truong serves as the patient resources and volunteer coordinator for the Stephenson Cancer Center. In his role at the Cancer Center, he has the opportunity to impact and engage with patients and volunteers daily. In the near future, Truong hopes to work in a project or quality management role.

“I am honored and grateful for this scholarship. As human beings, we are here to sup-

port one another and without the support of the donors, as well as family and friends, I would not be here today,” Truong said.

### OU Giving Day Scholarship



### Valarie Carter

Valarie Carter is a trained chef, culinary educator and food writer, as well as a stylist, wife, mom, sister and daughter of a farm family. Carter chose to pursue a degree in public health after joining the Culinary Medicine Project at OU Tulsa. The project aims to teach healthcare students and community members culinary skills and about the essential links between food and health. Currently, Carter serves as Vice President of the Tulsa Farmers’ Market.

“I would like to thank the College and all of the donors who made it possible to continue to pursue my goals. Thank you especially for allowing me to re-enter the world of higher education as a very non-traditional student,” Carter said.

### Diane E. Riggert Scholarship



### Ashton Glover Gatewood

Ashton Gatewood is in her third year as a Master of Public Health student in the Department of Health Administration and Policy. Before working toward her public health goals, Gatewood achieved a bachelor’s degree in Cell and Molecular Biology, a bachelor’s degree in Nursing, and a bachelor’s degree in Spanish from Oklahoma City University. With the help of the OU Health Sciences Center and the Native American Research Centers, she launched a career in healthcare that now

spans a decade. While working toward her master’s degree, Gatewood also currently serves as the Director of Public Health and Interim-Director of Health Promotion Disease Prevention with the Oklahoma City Indian Clinic.

“I would especially like to thank my support system and the University of Oklahoma for its investment in students,” Gatewood said.

### J.C. Watts Family Health and Wellness Scholarship



### Azka Khawaja

Azka Khawaja is a second-year Master of Public Health student in the Department of Health Administration and Policy. Khawaja has a strong international background that allows her to bring a unique perspective to the hospital administration world. Striving to empower communities to reduce inequalities, she volunteered in Honduras for three consecutive years with a public health brigade. In Honduras, she assisted in changing lives with clean water and in-home sanitation projects as well as to increase access to healthcare through her work with a free clinic there. Currently, Khawaja is interning at the Stephenson Cancer Center and spearheading projects to improve efficiency and quality within clinics. After graduation, she plans to begin a postgraduate fellowship to broaden and enhance her training through an array of administrative rotations and leadership empowerment opportunities.

“J.C. Watts’ accomplishments are incredible. I hope that I can do half of what he has done for vulnerable populations,” Khawaja said.

# Build a Legacy

To learn more about how to become a part of the OU Hudson College of Public Health’s scholarship program, contact Kyndall Wahkinney, our director of Alumni Affairs and Development at [kyndall-wahkinney@ouhsc.edu](mailto:kyndall-wahkinney@ouhsc.edu)



# More Than a Numbers Game

“*The purpose of computing is insight, not numbers.*”

The quote is by Richard Hamming, a renowned mathematician whose life's work impacted computer engineering and telecommunications, but the message resonates in the life of OU Hudson College of Public Health researcher Julie Stoner, Ph.D.

Stoner, chair of the Department of Biostatistics and Epidemiology and Presidential Professor, knows the answers to many of the public health problems we face today are often hidden in a labyrinth of scientific data. Her research aims to cut through the mathematical maze to shed new light on long-standing issues impacting health, especially in the area of cardiovascular disease and prevention.

“My research focuses on the application of biostatistical methods to better understand protective factors and risk factors associated with cardiovascular disease and approaches to improve health outcomes among patients with cardiovascular disease,” she explained.

Growing up in a rural Kansas community, Stoner realized early on that she enjoyed and excelled in mathematics, computing and quantitative sciences.

“I was drawn to biostatistics because it allows me to utilize my math skills to investigate biomedical and public health questions,” she said. “Biostatistics is an essential tool for identifying trends and patterns in data and observations that we make while also accounting for variability and uncertainty in the data.”

Her talents are proving a valuable asset to the College in its work to advance public health, to the OU Health Sciences Center as a whole, and to the nation through her work for the National Institutes of Health. Stoner has served as primary biostatistical investigator and Principal Investigator on a number of NIH-funded research projects and clinical trials. She knows the value of research that crosses

disciplines, drawing on the strengths and expertise of others, thereby enhancing results through collaboration.

“Team-based and interdisciplinary research is essential to tackling challenging biomedical and public health problems. Different perspectives and skill sets are needed to understand the scope of health problems, to identify targets for improvement, and to develop treatments or prevention programs that result in better health outcomes,” she said.

As a biostatistician, Stoner is involved in a number of research projects where her role is to make multidisciplinary connections, collaborating with fellow researchers to refine specific aims into measurable and testable questions of interest, and to develop valid interpretation of study results.

Stoner currently directs biostatistics, epidemiology and research design for the Oklahoma Shared Clinical and Translational Resources. Funded by a grant from the National Institute of General Medical Sciences of the NIH, it forges partnerships among multiple institutions, physicians and American Indian tribes throughout Oklahoma, especially rural areas.

While some may find their eyes glazing over when they look at long lists of numbers, Stoner's eyes light up. She knows her work is important.

“The OS-CTR's mission is to serve as a catalyst for

clinical research which improves health for underserved and underrepresented populations living in rural areas, to improve health outcomes for these individuals, and to provide resources to launch new independent research careers in IDeA states. Those are states that historically have received low levels of NIH funding,” she explained. “We recently received funding for another five years for this program.”

*Continued on page 26*



# Infectious Disease Super Sleuth

Just as firefighters run to a fire while others run away, public health researchers like Aaron Wendelboe, Ph.D., head straight toward the source of infection while others steer clear. He's a public health detective, a science sleuth hunting for clues that can prevent or halt illness.

"I specialize in disease surveillance, which has roots in infectious disease like tracking how serious each influenza season is. I have applied these methods to chronic diseases, including venous thromboembolism," said Wendelboe, who also is interested in incorporating the latest technology to make disease surveillance more efficient.



The path to epidemiology for Wendelboe actually started when an interest in microbiology took a detour.

"My undergraduate degree was microbiology, but I struggled because I always had so many questions. I tended to put the cart before the horse, wanting to know how things were working," he said. "I was drawn to epidemiology because I felt like we could see the whole picture and push for answers to those questions about how and why – how can I make sense of the data."

Words like anthrax, Ebola and salmonella can sound a bit scary for most, but for Wendelboe they trigger questions he feels compelled to

answer. What is the source of a pathogen? Where is it spreading and how? What measures can be employed to stop it? The Ebola outbreak of 2014 is just one example. As the world grappled with the most widespread outbreak of Ebola in history, Wendelboe set to work as a fellow working with Dr. James Regens in the OU Center for Intelligence and National Security.

"Our goal was to figure out how to use public data to improve national security in the wake of the Ebola outbreak," he explained. "Even though Oklahoma had no cases of Ebola, it still cost us a lot of money to prepare. We knew we would have people returning to the

"The problem is chicks can carry salmonella. From a public health perspective, we are trying to prevent these chicks from having salmonella, especially those being sold as pets. The industry has worked to implement things like vaccination, cleaning systems and more to keep hatcheries free from contamination. Yet every year, salmonella is found," he said.

So as part of the Epidemic Intelligence Service of the Centers for Disease Control and Prevention, Wendelboe took his research to the field, visiting hatcheries to discover where those salmonella prevention efforts were breaking down. With chicken droppings and feathers everywhere, he readily admits the work was not always pretty, but it is essential to protect the public health.

As a researcher and associate professor in the College's Department of Biostatistics and Epidemiology, Wendelboe currently conducts surveillance for venous thromboembolism or VTE in Oklahoma County. The goal is to estimate the incidence of a first episode of these dangerous blood clots, as well as recurrent and fatal VTE.

He also is working to better understand factors associated with increased incidence of *Clostridium difficile* in health care settings.

*C. difficile* is a bacterium that can cause severe, even life-threatening, intestinal symptoms. About a half million people in the United States get sick from *C. difficile* and the infections are becoming more frequent, severe and difficult to treat.

Wendelboe is especially proud of an NIH-funded project that teams him with biostatisticians and computer programmers to develop a more user-friendly software to analyze complex data.

"This is an example of teaming up with multidisciplinary experts and translating our research to impact more people," Wendelboe said. "At the OU Hudson College of Public Health, I am proud to work with a team of smart, hardworking individuals. We work well together, trust and respect each other and aim to bring our best to both conduct research and train students to improve the public's health." ◀



state from West Africa and we needed to figure out how to handle that. If we had a case, how would we protect health care workers? There are other critical questions too like to what extent do you limit someone's freedom? These are all very challenging issues."

Wendelboe knows the risk of an outbreak can sometimes hide in a seemingly innocent source. An example of that is the sale of chicks at Easter.

# Understanding Childhood Cancer

**M**ore than 10,000 new cases of cancer will be diagnosed in children from birth to 14 years of age this year alone, according to the National Cancer Institute. Almost 1200 children will die. In fact, though death rates have declined significantly over the past 40 years, cancer remains the leading cause of death from disease among children.

The statistics are sobering. Caring for children with cancer was even more so for Amanda Janitz, Ph.D., assistant professor and researcher at the Hudson College of Public Health.

“While working as a nurse on a childhood cancer hospital unit, I found myself trying to understand why children got cancer and I began to develop an interest in research,” Janitz said.

That interest led her to OU to pursue a Master of Public Health degree in epidemiology.

“After earning the MPH degree, I took a position at Phoenix Children’s Hospital as a research nurse. There I coordinated early drug development trials in children with cancer,” she said.

While Janitz found the work incredibly rewarding, she still yearned for answers to that haunting question – why do some children get cancer? She wanted answers and knew research would be the best way to get them.

“Although childhood cancer is rare, it is the leading cause of disease-related mortality among children in the U.S. Understanding the epidemiology of childhood cancer through studies focused on both environmental and genetic factors can help clini-



cians better understand cancer for both prevention purposes and to help improve care of children with cancer,” she said.

So the Oklahoma native decided to return to her home state and to the OU Hudson College of Public Health. As a doctoral candidate, Janitz’s dissertation work evaluated factors related to childhood cancer epidemiology, including congenital anomalies and exposure to air pollution. It also provided the opportunity to work with researchers across the nation.

After earning her doctorate in epidemiology, Janitz accepted a faculty appointment with the College and, perhaps most importantly, funding to further her research goals.

“I received funding from Oklahoma Shared Clinical and Translational Resources to conduct a pilot study evaluating the relationship between air pollution and congenital anomalies. My research is currently funded through a career development program of the National Institute on Minority Health and Health Disparities. The goal of that project is to study environmental factors and health disparities related to childhood cancer,” she said.

As with so many others in research, Janitz knows collaboration is critical, especially when studying rare diseases. She is collaborating with the Children’s Oncology Group and researchers at both Baylor University and the University of Minnesota to develop research projects related to childhood cancer epidemiology. She is also working with the Michigan Department of Health and Human Services and Emory University on the environmental factors and childhood

cancer study, where she will explore the relationship between persistent organic pollutants and childhood acute myeloid leukemia.

“I am also working with the Cherokee Nation on a project aimed at increasing the analytical capacity of the tribe to utilize the Cherokee Nation Cancer Registry for community-based research and, ultimately, to reduce health disparities,” she added.

When not busy with research, Janitz and her husband, Mark, are keeping up with their five-year-old daughter, who just started kindergarten.

She is grateful for the education she received at the College of Public Health and to the mentors who helped guide her career in research.

“I really enjoyed the experiences I had as a student and am excited to continue working with the faculty and staff now as a faculty member. Our College and the Department of Biostatistics and Epidemiology have been supportive of early career researchers. I am grateful to have had unique opportunities to pursue my research interests here,” she said. ◀



# Averting Assaults on Health by Air

**H**is car bears the tag, “Dr. Gator” and he’s living up to his nickname, sinking his teeth deep into research at the OU Hudson College of Public Health that translates into real-world changes in occupational and environmental health.

Jun Wang, Ph.D., PE, CIH, CSP, resides within a research landscape that focuses on the air around us, especially in work environments. He is currently studying exposures to aerosols and toxins in the air we breathe, looking for ways to control those exposures to reduce or eliminate associated diseases.

“The environment is a predominant factor affecting everyone’s health,” Wang explained. “People can choose not to smoke or to eat healthily, but they have less control over the air they breathe on an individual level. That is why studying, predicting and controlling or avoiding certain environmental exposure is fundamental to solving many public health issues, including cardiovascular diseases, diabetes, cancers and more.”

Born in China, Wang grew up near the capital city of Beijing, a city with a population almost five times that of the state of Oklahoma. He moved to the United States ten years ago to pursue his “American dream” of becoming a researcher.

“People often speculate about the impact of air pollution as it relates to health, acidic precipitation, climate change and more, but I really want to learn more about the sources of air pollution as they relate to our health. This is like a public health approach to solve air pollution, focusing on prevention rather than cure. Such understanding can help countries around the globe to have a better future. After all, we are not only protecting the environment, we are protect-

ing ourselves,” Dr. Wang said.

Workplace exposures are of keen interest to Dr. Wang because it is in the workplace where there can often be huge disparities in environmental exposure and health wellness.

“I have witnessed a lot of poor workplace hygiene practices, not only in developing countries like China and Mexico, but also in some places in the United States. Poor work conditions are typically accompanied by low wages, less access to health care and poverty, which are all important public health issues,” he said. “Without proper controls and regulation of labor conditions, we are essentially sacrificing people’s health to maximize profits. This is not a sustainable way for society to move forward.”

Currently, Dr. Wang is conducting studies on two types of air pollutants: metal fumes generated in processes such as welding and cutting, and plastic aerosols emitted from 3-D printing.

“Both of these are very important since most of these aerosols are very tiny in size and therefore can potentially pose greater adverse effects,” he said.

Dr. Wang uses novel chemical-based methods to assess the oxidative potential of these aerosols, collaborating with researchers from Oklahoma State University, University of Texas, and University of Illinois Urbana-Champaign. Oxidative potential is a toxicological measure that



relates to aerosol size, surface and chemical composition. It is an important predictor of oxidative stress, an imbalance that can lead to tissue and DNA damage. Recently, Dr. Wang and his team acquired new cutting-edge instruments to further enhance their ability to quantify both the physical and chemical properties of aerosols. He is also conducting collaborative research with the National Institute for Occupational Safety and Health to study nitrous oxide emission and exposure in nitrogen-enriched work environments.

*Continued on page 26*

Continued from page 25



Dr. Wang's research is as much a part of what drives him as his background as an engineer.

"As faculty in a major university, we cheer for publications and grants. As a hardcore engineer, though, my happiest moments come when my research findings actually translate into practice," he said. "I developed a new type of welding technique that can greatly reduce workers' exposure to nano-sized metallic aerosols and carcinogenic hexavalent chromium. That technology's effectiveness has been demonstrated in various military

settings, including naval shipyards and army vehicle disassembling lines, among others."

Recently, Wang and his doctoral student Marcio Bezerra invented a new type of respirator to help better protect workers from inhaling toxic metal particles.

"My great belief is that without practical application, any research diminishes in value, regardless of how many manuscripts a researcher publishes or how many grant dollars a professor secures," he remarked.

Dr. Wang fully intends to continue to do all of those: to secure grants, publish and move discoveries from the lab to the world.

"The OU Hudson College of Public Health is an elite program with a complete picture of core areas of public health. It is easy to find people at the College who share common research goals, but with different expertise. I think the most fun of doing research comes from collaborating with others, learning from others, and sharing with others," he said.

His love of engineering is evident throughout his professional life, and it also spills over into his personal life. Dr. Wang met his wife, a fellow environmental engineer, while in college almost two decades ago. She is now a senior engineer at the Oklahoma Department of Environmental Quality. The couple has two daughters, with whom he enjoys spending as much time as possible.

When he is not researching or inventing or spending time with family, Dr. Wang is pursuing his not-so-secret passion for all things Nintendo.

"I am a diehard Nintendo fan and have been since I was a child. I guess this makes me a particularly popular professor among students who share that same love," Wang said. ◀

Continued from page 22

Stoner has little time to revel in such success. Her plate remains full as a researcher, collaborator and mentor.

"I believe it is important to focus on the career development of young researchers and so I also direct research training programs that focus on developing these early-stage investigators, with a particular interest in minority health, cardiovascular disease and cancer research," she added.

Stoner is Principal Investigator for the Strong Heart Study Coordinating Center and the Oklahoma Field Site. The Strong

Heart Study, funded by the National Heart, Lung, and Blood Institute, is the largest cardiovascular epidemiologic cohort study among American Indians and now in its thirtieth year of follow-up.

She also is lead biostatistician of the Evaluation Core for the Healthy Hearts for Oklahoma project, funded by the agency for Healthcare Research and Quality.

"The project investigates the impact of a practice quality improvement intervention among over 250 primary care practices in Oklahoma on adherence to cardiovascular

disease prevention measures, including aspirin for high-risk patients, blood pressure control, cholesterol management and smoking cessation," Stoner explained.

When she is not crunching numbers or perusing data to uncover new findings or trends, she is busy keeping up with a different set of numbers – 23 years of marriage to husband Marc, as well as the growing list of accomplishments for her twin sons, Jack and Ethan, now in their freshman year at OU, and her daughter Kate, a junior at Edmond North High School. ◀

# Marrying Passion with Purpose



*It's the interest and passion I have for our students, a hope of health and wellness for our communities, and a strongly embedded work ethic that helps in my daily activities...*

For Shelley Genzer, the opportunity to be part of the team at the OU Hudson College of Public Health sounded like a recipe for a perfect marriage of interests. It paired her longstanding interest in nutrition, the life sciences and public health with another passion – education.

“It’s the interest and passion I have for our students, a hope of health and wellness for our communities, and a strongly embedded work ethic that helps in my daily activities,” Genzer explained. “I believe an education opens doors and provides more and better options for those who choose that path. If I can play a role in helping make that happen, no matter how small, then that’s a plus in my book.”

Genzer works in the Office of Student Services and Academic Affairs at the College where she oversees information manage-

ment of the integrative practices for three degree programs, serves as administrator for the campus learning management system at the College, and manages its course evaluations, among other duties. In the past, she has also assisted the dean and served as a distance education coordinator.

“By far the most enjoyable part of my staff role is assisting our students and doing my part to exceed expectations in the mission, goal and vision of the University and College,” Genzer said.

For Genzer, the day-to-day human interactions are important, but it is the enthusiasm, growth and strength of character she sees in students at the college that she finds most rewarding.

“It is energizing and satisfying to watch our students work toward their educational goals in public health and become contributing, effective public health professionals in our lo-

cal, national and global communities,” she explained.

Born in Texas, Genzer’s family moved to Oklahoma City in the 1970s, leaving a large family behind. She moved back to Texas for a while, but then returned to Oklahoma to be close to her father when his health declined.

When she is not working at the College, you will likely find Genzer spending time with family, enjoying the outdoors or reading. She considers herself a lifelong learner with a new personal educational goal of earning her own master’s degree.

Genzer said it is exciting to work in an environment where the focus is always on protecting and improving public health, and where she feels her work is making a difference for the students as well as for the communities in which we live. ◀

## OU Hudson College of Public Health

## CORE VALUES

### EXCELLENCE

We strive to achieve excellence in all of its endeavors.

### INTEGRITY

We adhere to the highest standards of honesty, objectivity, transparency, fairness and ethical conduct at all times.

### PUBLIC SERVICE

We exist to serve the citizens of Oklahoma and the United States through efforts to protect and improve

their health, and to contribute to international efforts to improve the health of other nations.

### HEALTH EQUITY

We advocate the principle that all individuals have a right to the opportunity for a healthy life. The college is committed to reducing and eliminating health disparities among populations.

### RESPONSIBILITY

We strive to make the most effective use of all resources it receives, to

use responsibly all state, federal and private funding, and to leverage its resources into additional resources for the college, university and state of Oklahoma.

### PARTNERSHIP

We are committed to fostering collegial, productive partnerships with all stakeholders who share the vision of protecting and improving the public’s health.

# WELLNESS NOW

The mission of the Wellness Now Coalition is to improve the health of Oklahoma City and County through community partnerships that create policies, systems, and environments that make living well easier. The Southern Oaks Learning and Wellness Campus, newly opened in 2018, will help us to further grow a community that supports and enables all people to be healthy and well.



Join us at: [wellnessnowokc.org](http://wellnessnowokc.org)  
Facebook: @wellnessnowokc

## Public Health Approach to Criminal Justice Reform

Together, OKC is driving criminal justice reform and providing data driven, community integrated care models for our nation. OCCHD and their partners have submitted a grant to Bloomberg Philanthropies for funding of a project that will divert low risk/high need offenders away from incarceration through data interoperability and Community Health Workers (CHWs).

Engagement with the Local Public Health System



Healthy Population



Increased Productivity



Economic Success



Bloomberg Philanthropies



Leading novel approaches to link high-risk communities to needed and available resources.