



## Filling Gaps in US Gun Violence Research

### SPH researchers seek to reduce deaths and injuries

When he moved to the U.S. from Iran in 2003, Ali Rowhani-Rahbar was peppered with questions from his new acquaintances about culture shock.

A young medical doctor pursuing his master's in public health, Rowhani-Rahbar would tell them the U.S. was a wonderful place for personal and professional growth, with an exciting multicultural environment and new freedoms. But he was shocked by the extent of gun violence.

"Every day in this country, 90 people die due to firearm injuries and more than 200 people get shot," said Rowhani-Rahbar (PhD Epidemiology 2009), now an assistant professor of Epidemiology at the School of Public Health.

The more he looked at the numbers, the more incredulous he became. Total deaths by guns in the U.S. are about 33,000 a year—rivaling the number of Americans killed by automobiles.

"More Americans have died due to a firearm injury since 1968 than on the battlefields of all the wars in American history," he notes. "The frequency of these shootings has made us a little numb."

These days, Rowhani-Rahbar is one of the small but growing number of researchers examining the nature of gun violence—or, as he prefers to describe it, firearm injuries. (Gun violence connotes mass shootings and gang violence, which are major problems, he says, but doesn't bring to mind suicides, which account for about two-thirds of all gun-related deaths.)

"It was really Sandy Hook that connected me to these research efforts," he says. The massacre at Sandy Hook Elementary School in Newton, CT, in 2012 claimed 27 lives, most of them young children.

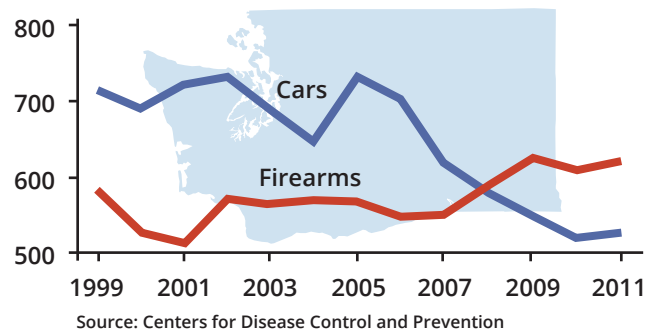
After that shooting, Frederick Rivara (MPH 1980), professor of Pediatrics and adjunct professor of Epidemiology, asked Rowhani-Rahbar if he would take part in a research project on gun violence funded by the Seattle



Ali Rowhani-Rahbar

Photo: Katherine Turner

### Motor vehicle vs. firearm deaths in Washington state



City Council. Rivara was a pioneering gun violence researcher, along with SPH alumnus Arthur Kellerman (MPH Health Services 1985), until the mid-1990s, when Congress essentially eliminated federal funding for gun research.

The city, seeking a new kind of partnership, approached the UW's Harborview Injury and Prevention Research Center, where Rivara and Rowhani-Rahbar are core faculty members.

Using epidemiologic methods, the researchers began to track gun violence as if it were a disease. They looked at hospital and arrest records from across Washington state, identifying nearly 700 trauma patients who had sustained a firearm injury over a two-year period. They found that people who had been shot by a gun and survived were dramatically more likely to be re-injured or killed by a gun—and to commit a future crime.

The study also found that those with a criminal history of arrest were much more likely to commit violent crime than those who were diagnosed with a mental illness.

Now researchers want to know how to protect those who have been shot from harming themselves or others in the future. "The next obvious step would be to do an intervention," Rowhani-Rahbar says.

With a new, \$275,000 grant from the City of Seattle, researchers plan to conduct a three-year randomized trial for gunshot victims at Harborview Medical Center. Half of the patients would receive usual care, which includes

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social-work support and a list of community services.

The other half would get a three-part intervention:

- “Motivational interviewing,” a technique involving conversations with patients to understand the intentions behind their actions. The idea is to motivate them to change their behavior.
- “Extended community outreach,” linking patients with services such as substance abuse or mental health treatment, education and employment opportunities, and housing. A menu of options is tailored to the person’s needs. For six months, patients will be assigned a case manager who will stay in frequent contact.
- A multidisciplinary team of “stakeholders”—those in charge of various community services—who will meet to discuss each case to see if they can provide further support.

“When they get out of the hospital, it might be very hard for them to navigate life after a traumatic event such as getting shot,” Rowhani-Rahbar says. “We understand things like retaliation. It’s a critical transition time.”

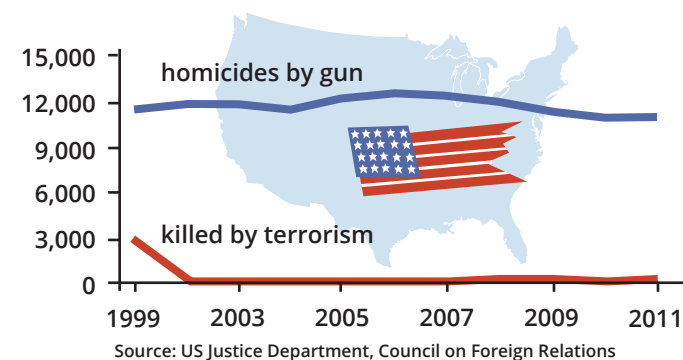
Patients would be followed for a year to see if they get injured again, die, or commit a crime. Mental health status, employment, and other outcomes would be recorded. Researchers hope to enroll about 200 patients over a two-year period.

Similar programs are run by the National Network of Hospital-based Violence Intervention programs in certain hospitals. “What we need is evidence that it works,” Rowhani-Rahbar says.

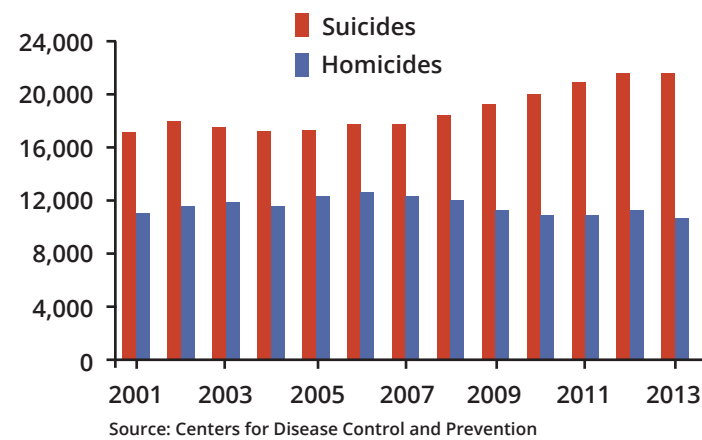
Because of the lack of funding, many questions about gun violence have gone unanswered.

“From the public health perspective, we need to collect data,” Rowhani-Rahbar says. “Data can tell us the magnitude or size of the problem, as well as the pattern of the problem, and that’s how you make policy decisions,

## Gun vs. Terrorism Deaths in the US



## Most US Firearm Deaths are Suicides, Not Homicides



with informed choice. That’s exactly what we’ve done for car collisions. We’ve made great progress. Same for smoking and tobacco. These are examples of success and triumph for public health. Here, we can do the same.”

Two graduate students in Epidemiology—Vivian Lyons and Anton Quist—have been researching the kinds of data sets available about firearm injuries. Another student, Brianna Mills, took part in the study tracking Washington state gun victims and is conducting her dissertation on this topic.

“We need the ability to conduct gun research but Congress still refuses to fund the CDC’s efforts to conduct such research,” Frederick Rivara said.

In addition to research, Rowhani-Rahbar, Rivara, and Mary D. Fan, a professor of law who’s pursuing a PhD in epidemiology, are writing a book tentatively titled, “*Guns in the Family*.”

“The book challenges the romanticized ideal of having guns in the home in defense of family,” Fan says. “It’s about the safety regulations that communities seeking to reduce firearms-related injuries and death can adopt without running afoul of the increasingly muscular Second Amendment.”

Rivara says research shows that keeping a gun in the home increases the risk of violent death from homicide or suicide.

SPH researchers are also focusing on the effectiveness of interventions designed to provide safe firearms storage.

“For those who do own guns, what can we do to make sure that we are adhering to the highest level of safety?” Rowhani-Rahbar asks. “How can we promote safe gun storage? We do have evidence that loaded and unlocked

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guns increase the risk for suicide among teens.”

He stresses research is not about taking guns away from people, but about saving lives.

Rowhani-Rahbar cites the legendary epidemiologist William Foege, who helped devise the strategy to wipe out smallpox. Foege always tells people to “work on important things,” Rowhani-Rahbar notes. “Firearm injuries are a really important public health problem in our country. And we need money to research it. To me, if it could save one life, that’s a huge accomplishment.”

*A new Gun Responsibility and Injury Prevention Research Fund has been established by a generous donor to support Rowhani-Rahbar’s research. To contribute, contact sphadv@uw.edu.*

## Making an Impact

### Calculating Healthy Years Remaining If You Are Over 65

Want to know how many healthy years you have left if you are 65 or older? SPH researchers have created an online calculator to help you figure it out. Their online Healthy Life Calculator is based on data from the Cardiovascular Health Study at UW, which collected health info from almost 6,000 participants for 20 years beginning in 1990. Said lead researcher Paula Diehr, emeritus professor in Biostatistics and Health Services, “We put a lot of effort into making this calculator useful for the general population of seniors. We hope it will be widely used and will help them plan for their futures.” The calculator can be found at <http://healthylifecalculator.org>.

## New Chair Victoria Holt’s Vision for Epidemiology



Photo: Jeff Hodson

When Victoria Holt worked as an emergency room pediatric nurse, she kept seeing the same asthmatic kids coming in over and over. “I was curious about how that could actually be prevented rather than just treated,” says Holt, who decided to pursue further training in public health.

She became part of the first class of master’s degree students in the new SPH Maternal and Child Health program and went on to earn a PhD in Epidemiology (1990). She then immediately joined the SPH faculty.

In October, after 30 years with the department, Holt was named chair. She says she seeks to sustain the high quality of teaching and research in a challenging grant environment while pursuing new avenues: expanded undergraduate offerings, more distance learning and online courses, and more course offerings in epidemiology for public health practice.

She also brings experience as a mental health specialist at Harborview Medical Center, which gave her insight into intimate partner violence—which later became a focus of her research at SPH—and the experience of being a first-generation college student, earning a degree in psychology from the UW.

## Director Named at Northwest Center for Public Health Practice



Photo: Stephen Brashear

Betty Bekemeier, a veteran public health nurse and long-time researcher, was named director of the Northwest Center for Public Health Practice in November. She oversees the center’s activities, including research, community engagement, and capacity building in the six-state region of Alaska, Idaho, Montana, Oregon, Washington, and Wyoming.

Bekemeier is an associate professor in the Department of Health Services and has a primary appointment in the School of Nursing’s Department of Psychosocial and Community Health. She earned her PhD in nursing from the UW, and her MSN and MPH at Johns Hopkins University.

“I’m thrilled to be taking on this important leadership opportunity,” Bekemeier says. “It’s a wonderful fit with my experience and commitment to strengthen the capacity and reach of our prevention systems.”

## SPH ARCS Fellows

The Achievement Rewards for College Scientists (ARCS) program was launched half a century ago to help the country's brightest students pursue careers in science and engineering. Fellowships are worth \$17,500 over three years. Ten SPH students from Biostatistics (Bio), Epidemiology (Epi), and Environmental & Occupational Health Sciences (EOHS) are current ARCS Scholars.

First-year fellows: **Tyler Bonnett**, Bio; **Rachel Shaffer**, EOHS  
 Second-year fellows: **Miriam Calkins**, EOHS; **Natalie Gasca**, Bio; **Kelsey Grinde**, Bio; **Tsegallassie Workalehmanu**, Epi/GO-MAP

Third-year fellows: **Sylvia Badon**, Epi; **Jacqueline Garrick**, EOHS; **Anna Plantinga**, Bio; **Connie Tzou**, EOHS

## ARCS Fellow Miriam Calkins: Researching Heat-Related Hazards

The climate is changing and so is the workforce. PhD student Miriam Calkins, in the Department of Environmental and Occupational Health Sciences, seeks to better understand the connections between the two. "We know that extreme heat is anticipated to increase in duration and frequency," says Calkins (MS 2012, Exposure Sciences). "Extreme heat can affect not only health and chronic diseases, it can also increase death and rates of injury."

Meanwhile, the economy is seeing more temporary workers and contractors. Calkins plans to spend the summer researching heat-related hazards faced by rooftop construction workers who have no access to shade and limited access to water.

Being an ARCS fellow has been a huge financial benefit, she says. "It's very difficult to meet the standard of living in the Seattle area. It provides me a better work-life balance." A second benefit is the networking through the Seattle chapter of the ARCS Foundation.

Calkins enjoys paddle-boarding, dancing, running half-marathons, and spending time with her dog. A graduate of Evergreen State College, she co-founded the Olympia Free Clinic for uninsured patients, which opened in 2011.

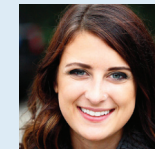
Photo: Jose Carmona



Miriam Calkins testing urine for evidence of dehydration in workers

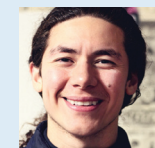
## Double Eagle Endowed II Scholarship\*

The SPH Double Eagle Endowed II Scholarships support undergraduate students in public health who are committed to ensuring healthier communities in our region and abroad. Each student receives funding that can be used for tuition, travel, books, fees, and other educational needs.



Cassi Flint cried tears of excitement when she learned she had received a Double Eagle Endowed II Scholarship. "All the stress of scrambling to make rent each month while devoting proper time and energy to my coursework melted away in that minute," said Cassi, a senior majoring in Public Health. "I am grateful beyond words for this award."

The scholarship came at a critical time for her. Cassi started an internship in December with Seattle-based PATH (working with its Global Communications and Engagement team) and is beginning her public health capstone project. "Thanks to the financial cushion this scholarship provides," she says, "I can now fully invest myself in these projects, which in turn will allow me to learn more from the experiences." Cassi has also covered public health for the UW's student paper, *The Daily*. She hopes to combine her passion for writing and women's health issues by working in health communications.



Eduardo Flores, a senior in Public Health, immigrated to the U.S. as a small child. He hopes to give back to his community by helping immigrant populations access basic health resources. "This scholarship is a blessing," he says. "It will help me prepare, gather the needed supplies, and focus on what I need to do."

Eduardo is thinking about minoring in diversity, which would take an extra quarter. After graduation, he hopes to find an internship that leads to a job. He's also considering earning a master's degree in public health "that will propel me closer to my dreams."

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\* Made possible by generous donations from friends of SPH. If you are interested in learning more about supporting our students, please contact Megan Ingram, at [mkingram@uw.edu](mailto:mkingram@uw.edu) or 206-616-7197.

## SPH Diversity Committee Wins 2016 MLK Award

For efforts around faculty hiring and retention, training for program directors, and workshops on undoing racism, the SPH Diversity Committee has been awarded the 2016 Martin Luther King, Jr Community Service Award by UW Health Sciences. Co-Chairs India Ornelas and Laura Martinez accepted the award on behalf of the committee at an MLK celebration January 13.

The awards to each Health Sciences school honor Dr. King's commitment to addressing community needs, development of programs to improve the human condition, and significant efforts to protect and empower all individuals.

The Diversity Committee's top priorities are recruiting and retaining diverse faculty, staff, and students; creating an inclusive climate at the School; and strengthening diversity within the curricula. Its efforts help ensure that we are training the diverse workforce needed to address urgent public health issues, especially for communities of color.



Photo: Katherine Turner

Diversity Committee co-chairs Laura Martinez (left) and India Ornelas accepted the community service award on behalf of the committee



Photo: Tom Paulson, Humansphere.org

## Dr. William Foege Will Be 2016 SPH Graduation Speaker

SPH is honored to welcome physician, epidemiologist, mentor, teacher, and humanitarian William Foege as its graduation speaker on June 8. Dr. Foege is a true titan of public health. He was instrumental in the successful campaign to eradicate smallpox from the world. He has played key roles in global health at the Bill & Melinda Gates Foundation, the Carter Center in Atlanta founded by former President Jimmy Carter and Rosalynn Carter, the Centers for Disease Control and Prevention, the Task Force for Global Health, and Emory University. It is estimated that his work has saved the lives of 122 million people and counting.

In 2012, Dr. Foege received the Presidential Medal of Freedom, the highest U.S. civilian honor, for his many accomplishments in improving the health of people around the world and for inspiring the next generation of public health leaders. That same year Georgia Institute of Technology awarded him its Ivan Allen Jr Prize for Social Courage.

Said King Holmes, founding chair of the Department of Global Health, when he heard about Dr. Foege's Medal of Freedom award, "Far beyond the eradication of smallpox, he has been a mentor and inspiration for everyone in the field. And he has been responsible for the emergence of the field of global health."

Dr. Foege received his MD from the University of Washington and his MPH from Harvard University.

# Donors

## New Funds for SPH Undergraduates

Dean Howard Frumkin, WA State Opportunity Scholarship winner Brian Cedeno, and Assistant Dean Sara Mackenzie

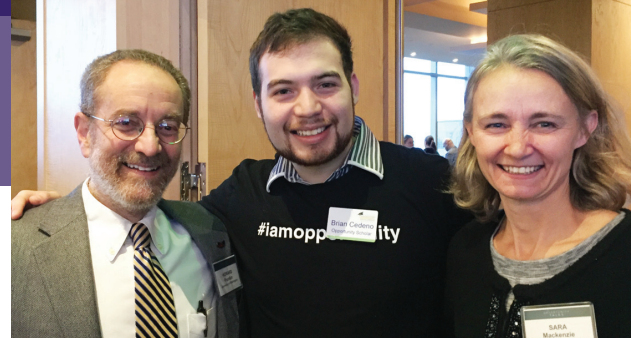


Photo: Courtesy of Howard Frumkin

Undergrads in the School are now eligible for Washington State Opportunity Scholarships of up to \$7,500 a year. Students majoring in public health, environmental health, or health informatics were not previously eligible for the grants because they weren't considered STEM students. Student advisers Susan Inman and Trina Sterry were among those who convinced the agency to change its criteria. Now, about 30 SPH undergrads receive funding through the program. "We are preparing a group of under-represented, low-income students to be able to move into health-related careers after they graduate," Inman said.

## Save the Date! Spring PRISM Event: Health Disparities

Join us at 6 pm Thursday, May 12, 2016, in the UW Husky Union Building (HUB) for a lively interactive evening on "Why Zip Codes Matter: Health Disparities in Seattle," followed by small group discussions with the attendees.

The three presenters are India Ornelas and Peggy Hannon from Health Services, and Noah Seixas from Environmental and Occupational Health Sciences.

This is the second PRISM event and follows up on the fall theme of "Creating Healthy Communities." Please RSVP to [sphadv@uw.edu](mailto:sphadv@uw.edu) or 206-543-4047.

## An Endowment Honoring A Distinguished Health Care Leader



Bill Dowling

Led by Jeff Lehman (MHA 1974), president of Dialysis Consulting Group in Seattle, a committee of alumni from the Master of Health Administration (MHA) program is raising endowment funds in honor of health care leader and UW Health Services Emeritus Professor William "Bill" Dowling. This endowment, with the initial leadership gift from Lehman, will provide support for faculty in the MHA program.

Dowling served as chair of the Department of Health Services from 1994–2008 and is former director of the MHA Program. From 1981 to 1994, he was vice president for Planning and Development at Providence Health System. "Bill has been a mentor to me since the day I met him and was instrumental in establishing one of the premier health care management programs in the country," Lehman says.

Although retired, Dowling continues to teach and contribute his time to the MHA program. He is a driving force in the health care industry, passionately interested in the changing world of health care and its systems. The endowment fund in his name will create a lasting legacy for future generations of students.

If you are interested in contributing to this endowment in honor of Bill Dowling, please contact Libby Singer at [ersinger@uw.edu](mailto:ersinger@uw.edu) or 206-221-6343.

current or future student in need. You can support future generations of public health leaders, thinkers, and doers by structuring a planned gift, such as a charitable bequest, gift annuity, remainder trust, or gift of life insurance. Now is the perfect time to transform lives and communities through education. For more information about donating to SPH, please contact Megan Ingram at [mkingram@uw.edu](mailto:mkingram@uw.edu) or 206-616-7197.

## Public Health Education: Paying It Forward Through Planned Giving

As champions of health for all people in all communities, we know what it means to "pay it forward." School of Public Health education and training have opened pathways and collaborations, developed students' critical skills, deepened their knowledge, and launched them on a journey to transform communities. SPH students could not have succeeded without the support of our donors.

Consider providing that same opportunity for a

# Alumni

## Rogelio Riojas Is SPH 2016 Distinguished Alumnus



Photo: Jeff Hodson

Work in a community health clinic during his junior year at UW convinced Rogelio Riojas that he could create more impact as a public health professional than as a lawyer. Instead of entering law school, he completed the Master in Health Administration program in 1977 and a year later founded Sea Mar Community Health Centers to serve diverse communities, especially Latinos.

Those centers have now expanded to 11 Washington counties and provide quality, comprehensive health, human, and housing services, including not only affordable health care but also employment training, scholarships, senior assistance, youth internship programs, and more. He currently serves as their president and CEO.

In recognition of his demonstrated record of distinguished service and achievement in public health, Mr. Riojas has been named the SPH 2016 Distinguished Alumnus, the highest award given by the School. He is a leader in the field of public health, a dedicated community advocate, and an inspiring example of the impact of SPH alumni.

"The award is a big honor, especially since it is given for my work in communities that need help. I am very proud to receive it," said Mr. Riojas.

The son of migrant farmworkers, Mr. Riojas was one of the first in his family to finish high school and attend college. As an undergrad at UW, he was a leader among Latino student activists. He was involved in campaigns both on campus and in the community, including fundraising for the United Farm Workers, El Centro de la Raza, and a successful effort to bring public health services to Othello, WA.

Of the MHA program, he said, "It is one of the best in the country. It really prepares individuals to develop and administer community organizations. Its classes and hospital internships enabled me to start Sea Mar from scratch."

In 2012, Mr. Riojas was honored with UW's Charles E. Odegaard Award for his diversity work. In 2013, Governor Jay Inslee appointed Mr. Riojas to the UW Board of Regents.

Mr. Riojas will talk about his life and work in a lecture, "From Migrant Work to Community Activist—The Impact of a Public Health Education," on **Wed, April 27, at 7:30 pm in Kane Hall, Room 210**. Please visit [sph.washington.edu/alumni/daa](http://sph.washington.edu/alumni/daa) to register.

## Alumni Updates

**Laura Bautista**, BS 2015, Public Health Major, is a family resource coordinator at Moses Lake Community Health Center, which provides care to migrants and workers.

**Archana Shrestha**, PhD 2015, Epidemiology, is a postdoctoral fellow at the Harvard T.H. Chan School of Public Health. She is working on a worksite-based diabetes and cardiovascular disease prevention program in India.

**Kyle Durrant**, BA 2014, Public Health Major, is now a project associate at NYU Langone Medical Center in New York City.

**Meheret Endshaw**, MPH 2012, Global Health, received the Global Cancer Fellowship under the ASPPH/CDC Public Health Fellowship Program. She will be based in Atlanta.

**Sara Ivey**, BS 2010, Public Health Major, graduates this year from Portland State University with dual master's degrees in Public Health and Urban and Regional Planning.

**Andrew Levack**, MPH 2005, Global Health and Health

Services, is senior program officer at the St. David's Foundation, addressing the social determinants of health in Austin and Central Texas.

**Nicole Willis**, MPH 2004, Health Services (COPHP), has been accepted into the national Informatics Training in Place Program (I-TIPP) fellowship. She will work on informatics strategies at the Whatcom County (WA) Health Department, where she is an epidemiologist.

**Theresa Lango Stack**, MS 1997, Environmental and Occupational Health Sciences, is an assistant professor with MT Tech of the University of Montana in the department of Safety, Health and Industrial Hygiene. She just published the book, *Occupational Ergonomics: A Practical Approach*.

**Reginald Finger**, MPH 1983, Epidemiology, teaches epidemiology and biostatistics in Indiana Wesleyan University's MPH program.

**Joseph Scherger**, MPH 1978, Health Services, is vice president of Primary Care at Eisenhower Medical Center at Annenberg Center for Health Sciences in California.

*We want to hear what our alumni are doing!*

*Please send your news and updates to [sphalum@uw.edu](mailto:sphalum@uw.edu).*



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## In Memoriam

### Norman E. Breslow, Key Figure in Public Health

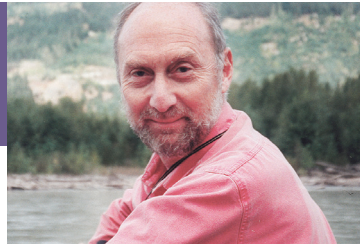


Photo: Courtesy of Breslow Family

The public health community at the University of Washington and around the world was saddened by the loss of Norman E. Breslow on Dec. 9, 2015. Dr. Breslow, 74, died in Seattle after a long illness.

During his nearly 50-year career at the UW as a scholar, mentor, and scientist, he helped build the modern field of biostatistics, which is the basic science of learning from biomedical data. He played a significant role in enhancing the quality and rigor of biomedical research and public health. For 40 years, he provided leadership in childhood oncology as well, especially with the National Wilms Tumor Study,

Said current UW Biostatistics Chair Patrick Heagerty, “For all of us in Seattle, Norm was a giant, and one who defined the ideals that characterize a scholar and mentor.”

For many academic leaders, Dr. Breslow defined the ideal biostatistician by living a deep commitment to advancing the field, nurturing the careers of trainees and colleagues around the world, and advancing science to improve public health. From 1983–1993, he chaired the Department of Biostatistics.

Dr. Breslow loved hiking and mountain climbing. At Reed College, he switched his major from forestry to math when he realized he could spend more time outdoors by studying math under a tree than in a lab.

He earned his PhD in statistics at Stanford University. A dedicated Francophile, he spent part of each year at his second home in France and evenings in Seattle watching the nightly French news.

Late last year, Dr. Breslow and his wife Gayle generously established an endowed professorship in the Department of Biostatistics. The family requests that any memorial contributions go to the Norman Breslow Endowed Professorship in Biostatistics at the University of Washington. Please contact Megan Ingram at [mkingram@uw.edu](mailto:mkingram@uw.edu) or 206-616-7197 if you wish to learn more.

## Making an Impact

### Development of New Infant Feeding Cup

SPH alumna Christy McKinney (PhD 2006, Epidemiology) spearheaded the development of a new feeding cup (pictured below) for preterm newborns and infants with cleft palates, who commonly have breastfeeding difficulties.

Working with Seattle Children’s Hospital Craniofacial Center and PATH, McKinney (now with UW Oral Health Sciences) developed a low-cost cup with a tiny reservoir that allows infants to feed at their own pace.

The Neonatal Intuitive Feeding Technology, or NIFTY™ cup, recently received a Saving Lives at Birth Grand Challenge award to conduct validation tests and develop a business strategy.

Photo: Courtesy of PATH

