## In memoriam: Paul Gunderson, former director, National Farm Medicine Center, Marshfield Clinic Research Institute

Paul Gunderson, Ph.D., former director of the National Farm Medicine Center (1992-96) and Marshfield Clinic Research Institute (1994-2000), died on Dec. 17 while clearing snow at his home in Harvey, N.D. He was 82.

During his years in Marshfield, Gunderson led Farm Medicine to national prominence, beginning with its establishment as one of the first National Institute for Occupational Safety and Health (NIOSH) agricultural research centers. He helped broaden the scope of Farm Medicine's research to include not only farm-related injury and exposure, but also medical illnesses related to farm exposures, particularly in the area of cancer.

Most recently, Gunderson directed the Dakota Precision Ag Center, Devil's Lake, N.D. His career exploring the health impact of human activity in agricultural work settings began in 1976 with research on the respiratory effect of working in poultry barns. He never stopped inquiring.

"I was lucky enough to work with Paul on one of his last Marshfield Clinic Research Institute projects alongside Dr. Sanjay Shukla," said Casper Bendixsen, Ph.D., director, National Farm Medicine Center. "For two years, Sanjay and I were able to collect microbiome samples from local dairies and work with Paul on the possible applications of such rich diverse environments and their impact on human health. Working with Paul was like getting a glimpse into the future. And, personally, it's always nice to have another cowboy hat in the room."

Gunderson was still actively farming, which helped inform his research.

"Paul was a wonderful colleague over the years always willing to engage and fun to chat with," Shukla said. "He always had stories to share. It was great to work with him on a couple CDC (Centers for Disease Control and Prevention)-funded projects where we investigated how occupational exposure from dairy microbiome environment affects dairy worker's health."

Gunderson will be greatly missed, said Risto Rautiainen, Ph.D., director, Central States Center for Agricultural Safety and Health, University of Nebraska Medical Center. "He was one of the framers of our field," Rautiainen said.

Gunderson published more than 100 peer-reviewed articles. Some believe his greatest contribution to the literature was in the area of farmer mental health. He led a <u>study on suicide</u> <u>among farm residents and farm workers</u> during the 1980s that is still cited today. The study found that the suicide rate among male farmers in the Upper Midwest during the 1980s was nearly double the national average for men in some of those years.

Gunderson "retired" in 2000 but soon became as busy as ever. He chaired the International Labor Organization's Expert Panel on Safety and Health in Agriculture, under the sponsorship of the United Nations, that drafted "Safety and Health in Agriculture - A Code of Practice," published in 2011. He chaired scientific review mechanisms for the National Cancer Institute and the CDC that rated

applications for federal funding, and testified before Congress about the need for a national agenda on agricultural occupational health and safety. He served on the Board of Directors of the Agricultural Safety and Health Council of America from 2007 to the present time.

Gunderson received the 1999 Gwen D. Sebold Fellowship for Outstanding Research at Marshfield Clinic Research Institute, and was named the 2006 Stueland Scholar.

In nominating Gunderson for the Sebold award, Douglas Reding, M.D., said: "Dr. Gunderson has used his leadership positions and insight into the future of agriculture to be at the leading edge of research. This research not only affects farm residents, but also the 'business' of agromedicine and potential downstream exposures that occur in the production of food, grain, fiber and clothing. Surely his vision to complete the production agriculture cycle of research to include not only the initial producer, but all individuals related to the processing of agricultural products should position NFMC to be a leading center for decades to come."

Gunderson earned his bachelor's degree from Moorhead State College, Moorhead, Minn.; a master's degree in education from Ball State University, Muncie, Ind.; and a doctorate in education from the University of Minnesota, Minneapolis.

Services are on Thursday, Dec. 22 at 2 p.m. (Central Time) and will be <u>livestreamed from the</u> <u>First Lutheran Church</u> in Harvey, N.D., via both Facebook and YouTube. Scroll down on the church's homepage for links.

A memorial service is planned for this summer, date to be announced.

The Marshfield Clinic Health System extends its deepest condolences to Paul's wife, Harriet, and his entire family.

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