Phillip Leroy Senger “PL” (1944 - 2025)

Philip L. Senger, known to many of his friends and colleagues simply as “PL,” brought science to life in a way that few could. He was a reproductive physiologist, a teacher, a friend, and a man who believed that curiosity was meant to be shared. His work bridged the laboratory, the classroom, and industry, always with the conviction that good science should make the world more understandable and a little more fun. Philip L. Senger passed away peacefully on June 14, 2025, in Bend, Oregon.

Phil earned his bachelor’s degree in zoology from North Carolina State University in 1966, followed by a master’s in reproductive physiology and a doctorate from Virginia Polytechnic Institute and State University. His graduate studies on bovine sperm and oocyte biology reflected a fascination with the fine details of science that stayed with him throughout his career and life. He served in the United States Army from 1971 to 1972, working in the Pathology Division of the U.S. Army Medical Research and Nutrition Laboratory at Fitzsimons Hospital in Denver, Colorado. That experience deepened both his discipline and his respect for applied science, qualities that followed him into every stage of his academic career. A proud North Carolinian at heart, Phil never lost his enthusiasm for college basketball and remained a loyal fan of the NC State Wolfpack, following their triumphs and heartbreaks with the same analytical eye he brought to his scientific endeavors.

After completing his doctorate Phil joined Washington State University in 1974 as an assistant professor of Animal Science. He spent most of his career at WSU, except for several years at Pennsylvania State University, before returning to Pullman where he became professor, a mentor to numerous students and colleagues, and eventually Professor Emeritus. While at Washington State University, Phil’s love for teaching and creativity found a unique and valuable outlet as he founded Current Conceptions, Inc. to produce textbooks, interactive learning materials, and multimedia modules that brought a clarity to physiology in the textbook and on the screen. This was always Phil’s goal, to provide students with an accessible framework for learning the complex intricacies of physiology in a clear and engaging way.

He believed knowledge was only useful if it could be shared clearly, and nowhere is that more evident than in his book, *Pathways to Pregnancy and Parturition*. What began as an attempt to make reproductive physiology more understandable to his students became one of the most widely used textbooks in animal science and reproductive biology. By combining his love for teaching with an interest in technology, Phil created materials with clear explanations and vivid illustrations that have guided thousands of students. Phil treated the process like a craft, equal parts scholarship and design, and his work changed how countless students came to understand the biology of reproduction. Phil continued his teaching, networking across the world, and mentoring as an Affiliate Professor at Auburn University for many years after his retirement from WSU.

Phil received many honors for his teaching, including the Sahlin Faculty Excellence Award in Instruction at Washington State University and the American Society of Animal Science

Distinguished Teacher Award. But the awards mattered less to him than the moments when a student's eyes lit up with understanding. His classroom was a place of laughter as much as learning, filled with humor, curiosity, and an occasional spontaneous story that somehow always circled back to physiology.

Colleagues and former students often describe Phil as a teacher whose influence stayed with them for decades. David Grieger, who encountered Phil as a graduate student at Washington State University, remembered the moment he knew he was in the presence of a master teacher. "He drew a simple graph on the white board of the cow estrous cycle using a red marker for estradiol and a blue marker for progesterone," Grieger recalled. "I never understood the cycle better than at that moment." More than thirty years later, Grieger still uses that same graph in his own classroom, a small but powerful example of how Phil's teaching continues to ripple through the field. Grieger often described him as "one of the best educators I've ever experienced in front of a classroom," someone who cared deeply about students and used a bit of "tough love" to push them toward excellence.

Former students also remember the humor, energy, and practical spirit Phil brought to training the next generation of reproductive biologists. Janine Brown recalled being part of what the lab jokingly called "Senger's Semen Demons," a group of students who worked together collecting samples, sharpening their scientific skills, learning new techniques, and sharing plenty of laughter along the way. She remembered one tense moment working with a bull when Phil quickly pulled her out of harm's way, an incident they joked about for years afterward. Brown also remembered the many small reminders of Phil's philosophy about progress and perseverance. When students felt overwhelmed, he would simply say, "Keep your ducks in a row," advice reinforced by a row of small carved wooden ducks that sat on his office bookshelf. Brown noted that Phil's enthusiasm for reproductive biology was contagious and that his teaching style made difficult concepts memorable. One demonstration using a balloon to explain anatomical structure, she said, stayed with her for more than forty years.

Andy Schmidt remembered Phil as someone whose presence filled a room the moment he walked in. He delivered lectures with the kind of energy that made students feel both welcomed and immediately on their toes. As a mentor, Andy remembers Phil's clever quotes, quick wit, and enthusiasm to train the next generation of teachers. Phil took that responsibility seriously and treated his TAs as valued partners in the classroom, often thanking them for their long hours with what Andy remembers as Phil's legendary cooking.

Phil's research always carried the stamp of practicality. He studied sperm motility, oocyte structure, and insemination techniques not just for the sake of science but to help dairy and beef producers improve fertility in their herds. He worked closely with the National Association of Animal Breeders, Select Sires, and many other partners to refine tools and training programs. He was equally comfortable talking statistics at a scientific meeting or heat detection at a kitchen table on a dairy farm.

He was a long-time member of the Society for the Study of Reproduction, the American Dairy Science Association, and the American Society of Animal Science, and in 2014 he was named an Honorary Member of the American College of Theriogenologists. Through these associations

he mentored countless young scientists and helped strengthen the connections between research and real-world application.

Outside of science, Phil was a storyteller, a traveler, with a passion for family, woodworking, traveling, and a lifelong student of the natural world. He loved the outdoors and the company of good friends. He was generous with his time and his laughter, and he never missed a chance to remind others that learning should always be joyful. Phil's influence can be seen in the students who became teachers, the producers who improved their herds, and the colleagues who caught his contagious enthusiasm for asking "why." His life was dedicated to the idea that knowledge, when shared with purpose and a good sense of humor, can change lives.

He leaves behind family, friends, and a community of scientists and producers who will long remember his wisdom, his infectious personality, and the sparkle in his eye when a new idea took hold.