A BELOVED FOUNDING MEMBER OF THE UNIVERSITY OF FLORIDA'S COLLEGE OF MEDICINE & CO-INVENTOR OF THE HPS HAS PASSED AWAY

Joachim S. "Nik" Gravenstein, M.D., a longtime University of Florida faculty member who founded the College of Medicine's department of anesthesiology in 1958 and co-invented the Human Patient Simulator, died Friday (Jan. 16, 2009) after an extended illness. He was 83.

"Nik Gravenstein was an exceptionally gifted and compassionate human being," said Michael L. Good, M.D., interim dean of the College of Medicine and a former student of Gravenstein's. "As a physician, he healed many. As a teacher, he helped students of all ages learn. As a mentor, he helped so many of us develop successful, rewarding and meaningful careers and lives. Nik Gravenstein leaves the world in a much better place than how he found it. I am so fortunate to have had the opportunity to know and learn from this great man."

Until recently, Gravenstein, a graduate research professor emeritus of anesthesiology, was on campus by 7 a.m. most mornings to instruct residents on the Human Patient Simulator, a teaching tool he developed more than a decade ago with UF researchers Sem Lampotang, Ph.D., and Good, among others. The computerized mannequin is programmed to simulate real medical problems; it can breathe and die, allowing students to practice tackling medical crises before lives are at stake. UF's Human Patient Simulator is now one of the most widely used medical simulators and is in thousands of institutions worldwide.

The invention of the simulator, known as Stan, was just one of many contributions Gravenstein made to improve patient safety during his more than five decades in medicine, said Jerome Modell, M.D., a former chairman of anesthesiology in the UF College of Medicine.

Gravenstein co-founded the Anesthesia Patient Safety Foundation and studied ways to improve patient safety in anesthesia, writing several books on the subject. Current national efforts in patient safety trace back to the APSF, and from there, to Gravenstein.

"He devoted his life to patient safety," Modell said. "There is no question about that. "When Dr. Gravenstein started the division of anesthesiology in 1958, the unexplained death rate from anesthesia was one in 2,000 patients. Now, it's one

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in 200,000. Nik didn't do it alone but he was the first person to really push it and advocate for safety in anesthesia. I think that is his greatest contribution."

Gravenstein was the first, and only, member of the anesthesiology department when the teaching hospital, now Shands at UF, opened 51 years ago. Technically, he was still a medical student when he was hired, although he was working on his second medical degree. After earning his first medical degree in 1951 in his native Germany, Gravenstein was invited to train at Massachusetts General Hospital in Boston. Once there, he quickly realized there were gaps in his medical education, so he enrolled at Harvard Medical School while he completed his residency and completed clinical and research fellowships.

"German science, which was excellent pre-World War I, and internationally recognized, went downhill," Gravenstein said during an interview in 2005. "Many of the teachers left, others had not returned from (World War II), they had been killed. The education suffered."

During a 2005 interview, Gravenstein recalled his decision to come to UF as being an easy one. It was a sunny February day in Gainesville, and the excitement and idealism surrounding the new medical school was infectious. He stayed at UF until 1969, serving as chief of anesthesiology and then as the first chairman of anesthesiology when it was formally named a department in 1967. During that time, several of his eight children were born at Shands at UF, including Ruprecht, the first baby born at the hospital in 1958.

In 1969, Gravenstein left UF for Case Western Reserve University, where he served as a professor and director of anesthesiology until 1979, when Modell recruited him back to the UF College of Medicine. He had been a fixture at the college since then.

His research with his UF colleagues led to numerous findings and patents, including not only the Human Patient Simulator, but also the Virtual Anesthesia Machine and other devices to help improve anesthesia delivery and patient safety.

Among his many honors, Gravenstein had been named one of the Best Doctors in America, received a Distinguished Achievement Award from the Anesthesia Patient Safety Foundation and earned two Lifetime Achievement Awards from the UF College of Medicine.

He served on the editorial boards of several journals, including the Journal of Clinical Monitoring and the Journal of Anesthesia, and was a diplomate of the

American Board of Anesthesiology.

Gravenstein also was a longtime member of several medical societies, including the American Society of Anesthesiologists, the Association of University Anesthesiologists, the Society for Technology in Anesthesia, the Florida Medical Association and the International Anesthesia Research Society, among others.

"His dedication to patient safety has left the world a better place for his presence," said Kayser Enneking, M.D., chair of anesthesiology. "We will miss him and do our best to live up to the ideals that he embodied in his daily life. It was our great privilege to have known 'The Classic' Gravenstein. He remains an inspiration to us all."

Gravenstein is survived by his wife, Alix; his eight children, Nikolaus Gravenstein, Alix Gravenstein Pastis, Frederike Gravenstein, Dietrich Gravenstein, Stefan Gravenstein, Ruprecht Gravenstein, Constanza Gravenstein Goricki and Katarina Gravenstein Brient; and 16 grandchildren.

Persons who wish to honor the accomplishments and memory of Dr. Gravenstein may do so by making contributions to the I. Heermann Anesthesia Foundation Inc .(EIN 59-3349331). Checks should be made payable to the I. Heermann Anesthesia Foundation Inc. and mailed to P.O. Box 100254, Gainesville, FL 32610-0254.