

Memorial Resolution

John P. Finley (1956 - 2023)

Department of Physics and Astronomy Purdue University

Former Department Head and Professor John P. Finley passed away on July 16, 2023, after a lengthy battle with cancer, at the age of 66.

John was born in Philadelphia, PA, to the late John and Angelina (Russo) Finley. John was raised in Glenolden PA attending Philadelphia Archdiocese Parochial Schools graduating from Cardinal O'Hara High School in 1974.

A 1984 graduate of West Chester University, John obtained his B.S. in Physics then went on to receive a Ph.D. in Astrophysics from the University of Wisconsin-Madison in 1990.

Married in 1985, he is survived by his wife, Mary (Whitenite) Finley, formerly of West Chester PA, and his two beloved cats, Smokey and Ripley.

John was a Professor of Physics and Astronomy at Purdue University. He served as Department Head from 2015 – 2021, and Associate Head from 2002 – 2006.

He taught classes in Physics and Astronomy and was highly respected by his students and colleagues. He was the advisor to several Ph.D. students who continued on to work in academe and industry.

He was a member of various professional organizations such as the American Association of Physics Teachers; American Physical Society (APS); and American Astronomical Society (AAS).

He refereed major journals and was a proposal referee for Department of Energy, National Science Foundation and NASA.

His research interests at Purdue were X-ray and gamma ray studies of compact objects. The evolution of galactic supernova remnants and their connection to cosmic rays, The nature of

dark matter and the development of ground-based gamma-ray astronomy. He was a member of the VERITAS (Very Energetic Radiation Imaging Telescope Array System) collaboration of international astronomers and astrophysicists. He was also a member of the Mu2e collaboration which consisted of an international group of physicists created by Fermilab and the Department of Energy.

John had many interests; he was an avid golfer, enjoyed cycling, playing his guitar and was a big fan of Philadelphia's sports teams particularly the Eagles football team and the Phillies baseball team.

He was a member of the Unitarian Universalist Church of Tippecanoe County and volunteered for various church activities and was a member of the Wabash River Cycle Club.



MEMORIAL RESOLUTION

William (Bill) Pak (1932 - 2023) Department of Biological Sciences

With the passing of William (Bill) Pak, biology has lost one of its true pioneers.

Pak was born in 1932 in Suwon, Korea. At the time of the outbreak of World War II, his father was studying at Dubuque University in Iowa, and the family was reunited after the war in Hawaii. After attending high school there, he went to Boston University for his undergrad degree. While working on his graduate degree at Cornell University, he met Marion Whitehouse, who he married in 1958.

After receiving his PhD, he went on to become an instructor and later an assistant professor of physics at Stevens Institute of Technology in Hoboken, New Jersey. Three years later, he accepted a postdoctoral appointment at the University of Chicago.

Wooed to Purdue with a job offer of assistant professorship, Pak joined the faculty roster in 1965 and moved his wife Marion and children Bill Jr. and Dotti to West Lafayette.

Pak had a vital impact on the College of Science at Purdue and the Department of Biological Sciences in particular, training 23 doctoral students in his time here and 37 postdoc associates.

In the mid-1960s, following the spectacular success of genetic dissection in unravelling fundamental pathways of "DNA makes RNA makes Protein," researchers were eager to explore new territory in neurobiology, particularly focusing on neural mechanisms of behavior, physiology, and development. Recognizing the success of geneticists using Drosophila as a model for genetics, they asked: "What will be the neurobiologist's Drosophila?" To which Pak, along with Seymour Benzer at Caltech (a Purdue Physics graduate and Departmental alum), and Martin Heisenberg at the University of Wurzburg, replied: "Drosophila!" This marked the beginning of an extraordinary endeavor.

A notable milestone in this pursuit was the 1969 Nature publication of "Nonphototactic mutants in a study of vision of Drosophila" by Pak, Grossfield, and White. Pak focused on the mechanisms of phototransduction. His dedication was handsomely rewarded with original, significant insights from his own lab, as well as the guidance he provided to students, post-docs, and visiting scholars, many of whom pursued independent programs in Drosophila vision research.

The highlights of Bill's legacy are too numerous to recount, but they were acknowledged by the Association for Research in Vision and Ophthalmology, the principal US vision research society, in awarding Bill the prestigious 1995 Friedenwald Award Lecture in 1995, recognizing lifetime achievement in the field.

Pak was honored in 1982 with Purdue's prestigious Herbert Newby McCoy Award for Research, and in 1987 with his appointment as the Paul F. Oreffice Distinguished Professor of Biological Sciences.

Among the many sparks emanating from Bill's lab, one collaboration with visiting scholar Baruch Minke and graduate student Chun-Fang Wu investigated a mutant with an unusual retinal response to light: Instead of a sustained response to light, the mutant response decayed rapidly. The study identified the transient receptor potential gene, which subsequently became the founding member of the sprawling TRP family of sensory membrane proteins. The importance of this discovery was recognized with the 2021 Nobel Prize in Physiology or Medicine, awarded to David Julius for his work on temperature-sensing TRPV1 channels.

In what may be Pak's final paper, titled "The light-activated TRP channel: the founding member of the TRP channel superfamily" published in October 2022 in the Journal of Neurogenetics, he and Baruch Minke reflect on this remarkable story and its profound impact on the field of neurobiology and sensory research.

Bill Pak's contributions to science and his mentorship of future researchers will be remembered and celebrated as part of his enduring legacy in biology.



Memorial Resolution Jorge H. Rodriguez (1958-2023) Department of Physics and Astronomy

Jorge Hernan Rodriguez Paula was born in the city of Riobamba, Ecuador on November 17th, 1958 and passed away in Lafayette, IN, USA on May 12th, 2023 at the age of 64.

He studied in the San Gabriel Jesuit College showing an early talent for Mathematics and Physics. In his last year of High School he moved to Wisconsin where he finished his studies and then to the University of Syracuse where he obtained a Bachelor's degree in Physics in 1982.

In 1984 he started a Laboratory in Ecuador's Atomic Energy Commission, thus becoming the head of the Secondary Standards Radiation Dosimetry Lab. In 1985, he travel to Vienna as Scientific Adviser of the Ecuadorian Diplomatic Delegation to the International Atomic Energy Agency (IAEA). He later decided to return to the United States to continue his studies at the prestigious University of Illinois at Urbana-Champaign where he obtained a M.S. degree in 1992 and a Ph.D. in 1995. After postdocs in Berkeley and LNBL he became a faculty member at Purdue in 2001.

In 2004 he was awarded an NSF Career Award to understand the electronic structure and magnetic properties of certain proteins with important biological functions. In 2008 he visited China as an invited professor of the Institute of Physics of the Chinese Academy of Sciences.

Even after receiving cancer treatment that left him in poor health condition he kept working on his research that, in the last years was supported by DTRA to study the resistance of certain bacteria to Ionizing & UV Radiation. He also studied the coronavirus during and after the pandemic.

He was very attached to his family, his four siblings and his mother Luzmila Paula-Moreno. Unfortunately, his father passed away when Jorge was just one and a half years old.

He enjoyed classical music, played the piano and practiced ballroom dancing participating in competitions.

In 2018 he was diagnosed with cancer that progressively made his life more difficult. In his latest year, when things became at times unbearable, he found stoic strength in his deep catholic faith and his work. His only regret was that he was not going to be able to visit his family home again.

After passing, his mortal remains were transported by his sisters Cecilia and Lilian back to Quito, Ecuador where he was buried on May 26th, 2023. May he rest in peace and may his legacy be to inspire every young scientist in the world with strength in the face of adversity.