

# Patricia Doherty

in memoriam



# Outstanding Researcher

- Patricia Doherty, director and senior research scientist at Boston College's Institute for Scientific Research and an internationally recognized leader in space weather and its impact on global navigation systems, passed away unexpectedly on July 14.
- Ms. Doherty joined Boston College and the ISR in 1989 as a Research Scientist. She was named ISR co-director in 2005 and became the director in 2008, leading an internationally recognized research center conducting theoretical and experimental studies of space physics, space chemistry, solar-terrestrial research, space weather, and astrophysical studies. She also was a fellow of the Institute of Navigation (ION) and of the African Geophysical Society.
- Her research interests focused on the ionosphere, space weather, and the Global Positioning Satellite System (GPSS), contributed to more than 80 peer-reviewed scholarly articles. Specific research initiatives during her career included radio wave propagation, focusing on ionospheric effects in satellite-based navigation, including Satellite-Based Augmentation Systems and the Federal Aviation Administration's Wide Area Augmentation System.

# Recognized Scientific Leader and Organizer

- She was a recognized leader among the global community of space science researchers. At the time of her death, she was vice president of the International Union of Radio Science (URSI) and former chair of URSI's Commission G, Ionospheric Radio and Propagation. She was a past president of the Institute of Navigation and current chair of the organization's Satellite Division, the world's premier professional society dedicated to the science of positioning, navigation and timing.
- She also served as the Scientific Secretary to the Scientific Committee on Solar-Terrestrial Physics (SCOSTEP), an interdisciplinary body of the International Council for Science, and was BC's representative to the Universities Space Research Association and a member of the USRA Board of Trustees.
- Pat developed a formal collaboration with the Abdus Salam International Theoretical Center for Physics (ICTP) in Trieste, Italy to hold annual educational workshops on the applications of GNSS technology for space science, providing opportunities focused on students from developing nations.

# Committed to Provide Opportunities and Access in Science to All

- Patricia actively promoted research and education in the science of navigation in developing countries, organizing workshops and conferences around the world. For more than a decade she lent her expertise to the International Space Weather Initiative (ISWI) community, giving presentations, organizing meetings and promoting outreach and capacity-building in non-industrialized nations. Since 2019 she served on the ISWI Secretariat as the Meeting Coordinator and organized and participated in many successful meetings in Asia, Europe, Africa and both North and South America.
- Her true passion was improving diversity and inclusion in the community, especially advocating for and encouraging women in science and engineering. Combined with her collaboration with ICTP, this activity led to a sustained interest in the education and advancement of young professionals in Africa that earned her the endearing and enduring nickname, “Mama Africa”, in the African Geophysics community.

# Exceptional Human Being

- Those who were fortunate enough to work with Pat know that her scientific, organizational and administrative skills were exceeded only by her qualities as a human being. She was generous, patient and caring in her interactions with people and led by character and example. No matter the circumstance, Pat had a smile and kind, encouraging word for everyone. She will be greatly missed by those she left behind, but never forgotten.
- Ms. Doherty is survived by her husband, Charles, her children, Karen M. Stickney and Brian J. Doherty, and many other relatives.
- To learn more about Pat's amazing journey as a pathfinder for women in science in her own words, please read her short autobiographical sketch published here, A. Pellinen-Wannberg and P. H. Doherty, "Women in radio science: Oh the places you will go...", in URSI Radio Science Bulletin, vol. 2018, no. 367, pp. 22-24, Dec. 2018, doi: [10.23919/URSIRSB.2018.8627411](https://doi.org/10.23919/URSIRSB.2018.8627411).



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