Elisabetta (Betty) Pierazzo 1963-2011

Elisabetta Pierazzo, Senior Scientist at the Planetary Science Institute, died at her home in Tucson, Arizona, on May 15. She was 47.

Betty was an expert in the area of impact modeling throughout the solar system, as well as an expert on the astrobiological and environmental effects of impacts on Earth and Mars. Her work ranged widely, from providing detailed insights into the Chicxulub impact that caused the extinction of the dinosaurs to putting constraints on the thickness of the ice shell of Jupiter’s moon Europa. She was interested in the rise of life and explored the delivery of organics to planets and Europa by comets as well as the creation of subsurface hydrothermal systems by impacts that may have been favorable sites for life on Mars.

She was also an expert on Meteor Crater in Arizona and made several appearances on national and international broadcasts of programs including National Geographic specials, explaining the formation of this well-known structure. Betty was innovative, rigorous and systematic in her approach to science. She recognized the need for benchmarking and validating the different complex numerical codes to model impact and explosion cratering, organizing and leading a community effort to accomplish this major task. In addition to her science, Betty passionately promoted science education and public outreach. She took time away from her successful research career to teach undergraduates at the University of Arizona, she developed interactive websites and impact rock and meteorite kits for classroom use, as well as created professional development workshops for elementary and middle school science teachers.

Betty arrived in the United States in 1989 from Italy and the following year attended graduate school at the Department of Planetary Sciences at the University of Arizona. She handled the difficulties of living in a foreign country by opening her house and her kitchen to others. She received her Ph.D. in 1997.
The quality of her graduate work was recognized by the University of Arizona with the Gerard P. Kuiper Memorial Award. She continued at the University of Arizona as a Research Associate, and in 2002 joined the Planetary Science Institute as a Research Scientist. She was promoted to Senior Scientist in 2007.

Betty was an active member of the planetary community. She served on numerous NASA review panels, was an associate editor of Meteoritics and Planetary Sciences, reviewed papers for numerous scientific journals, served as organizer of workshops and meetings on impact cratering held around the world, and was an organizer of the 2007 Meteoritical Society Meeting held in Tucson, Arizona.

Betty was noted for the intensity with which she approached both life and work. Whether it was in the office, the classroom, on the volleyball court, the soccer field, or dance floor, her enthusiasm and joy in the activity was irresistible. She was cherished by very many people for her staunch friendship and support. She inspired countless people as a colleague, teacher, mentor and friend. Her life was even more brightened with her marriage to Keith Powell in 2007.

Over the past six months, Betty battled a rare form of cancer. She dealt with it aggressively, and never let it overwhelm her. She was always looking towards the future. In the last week of her life, in the midst of chemotherapy, she was grading class papers, working on research papers, writing reviews and preparing education proposals with her colleagues, all the while finding time to spend precious moments with her family and friends. She was ultimately and suddenly struck down by a pulmonary embolism.

Her loss is great to all those who knew her and worked with her. Hers is a great loss to the Planetary Science Institute and to our profession. We are grateful to her husband, Keith, and to her family for the time she did have with us.

[from the obituary [1] posted on the Planetary Science Institute website]