

Sorina Popescu 1969-2022

Sorina was born on March 4th, 1969 in Brasov, Romania to Elisabeta and Lazar Cristea. She was a student athlete and excelled in school from an early age, working as a pharmacist before moving to the capital city of Bucharest for university studies. She earned her Master's degree in Biology at the University of Bucharest, where she later became Junior Faculty in the Plant Biology Department. She started her doctoral program there, studying oomycetes unique to the Danube Delta. While in college, she met her husband, George Popescu, a physics and engineering student. Together, they weathered the Romanian Revolution of 1989 and the chaos of post-Communist Romania, participating in meetings and marches for liberty and a free society. Their daughter Medeea was born in 1995, and shortly afterward the family emigrated to the United States. Sorina attended graduate school at Rutgers University in New Jersey on a Waksman Institute fellowship and a Biotechnology Center research grant, earning her doctorate in Plant Molecular Biology in 2003. She excelled in graduate school despite the demands of raising a child, learning a new language, and adjusting to life in a very different country. The family next moved to Connecticut when Sorina started a postdoctoral position at Yale University, where she led a flagship NSF program on plant protein microarrays. At Yale, Sorina and George began a scientific collaboration that would last until her death, combining their respective skills into a program of rigorous, innovative, and creative research. She published two widely cited studies on calcium signaling and MAPK signaling networks in plants using her protein microarray chips, ATproteinchip. Her son, Nicholas, was born during this time in 2005.

On the basis of her outstanding postdoctoral research contributions, Sorina was appointed to a faculty position at Cornell University in the Boyce Thompson Institute for Plant Science, and the family moved to Ithaca, New York for several years as she started her lab. While in Ithaca, Sorina and her family enjoyed hiking and cross-country skiing together. She advised four postdocs and two graduate students, all of whom went on to successful research careers. While at BTI she co-led two NSF projects on plant signaling networks and plant disease resistance, while expanding her plant proteomics research focus. She discovered that plant thimet oligopetidases are salicylic acid-binding modulators of plant immune

responses, identified new pathways associated with tomato resistance to *Pseudomonas syringae*, and investigated the role of integrin-like kinases in plant stress.

After 7 years at Cornell, Sorina and George moved to Mississippi State University, where Sorina further developed her research and teaching. She mentored eight graduate students and advised many undergraduate and graduate students while teaching a General Biochemistry course and creating a graduate Cellular Signaling course and an online Plant Biochemistry and Molecular Biology course. Here she led two NSF projects in plant proteomics and redox signaling and started new research directions in plant-pathogen interaction and microbial communities. She led the creation of a NIH COBRE proposal that would develop a Center for Biomedical Research Excellence in Systems and Synthetic Biology at Mississippi State University. She was a frequent NSF and USDA panelist, grant reviewer for national and international agencies, editor for the research journals *Molecular and Cellular Proteomics, MPMI*, and *Current Plant Biology*, reviewer for numerous journals including Nature Plants, PNAS, and Plant Cell, and organizer and invited speaker at dozens of plant research conferences and workshops.

Outside of the lab, Sorina loved walking and biking at the Noxubee Wildlife Refuge, watching Nick's soccer games and tennis matches, spending holidays on the Gulf Coast at the beach, and spending time in the kitchen of the family's peaceful rural home.

Despite a three-year struggle with breast cancer and many rounds of radiation, chemotherapy, and immunotherapy, Sorina never gave up on herself, her ability to heal, or her ability to meaningfully contribute to the field of plant biology. She continued to run her lab, teach classes and mentor her students until her last days. She was passionate about her work, and touched the lives of so many people. She was lucky enough to visit her home country one last time, attend her daughter's wedding, and learn of her son's acceptance to Duke while battling the disease. Sorina died on December 19th, 2022 of metastatic breast cancer. She was 53.

Sorina loved her family dearly and traveled back to Romania frequently to be with her parents, sister, and extended family. Her final resting place is the Holy Trinity Church in Schei, Brasov, Romania. She is survived by her sister, Luminita Popescu; her mother, Elizabeta Cristea; her son and daughter, Nicholas and Medeea Popescu; and her husband, George Popescu, in addition to many nieces, nephews, and cousins.