



Many Ways to Make a Difference

As a young girl growing up in Romania, **Elena Bradatan** decided early on to follow in the footsteps of her mother, a pediatrician, who in Elena's opinion had a very interesting career. Her grandparents also encouraged her interest in science by giving her a chemistry set one year, which she played with all summer long.

Several years later, Elena began working as a research assistant in the Saint Maria Pediatric Hospital in Iasi, Romania, with the goal of attaining a Ph.D. in medicine at Iasi's Medical University. "While I was doing my oncology internship service, I spent a large part of my internship in pediatrics, and what affected me most were the faces of the suffering children who could not be treated because of the severe side effects of the chemotherapy," she says.

Preventing Side Effects

One of the most devastating effects of many types of chemotherapy is the way in which it destroys white blood cells, which protect against infection. As part of her doctoral thesis, Elena wanted to try to address this problem using certain blood growth factors, which can stimulate the production of blood cells and combat this effect. Making use of the UNESCO-L'Oréal Fellowship she was awarded in 2004, Elena was able to work with researchers in Belgium, at the Saint Luc University Clinic of the Catholic University of Louvain. There she helped to identify the best dose of blood growth factors that could be administered in children receiving chemotherapy. Specifically, she evaluated whether blood growth factor support could be given at half the dose in select patients and still prevent side effects from chemotherapy. "These findings have been taken into consideration by my Romanian colleagues who now use this new dosage with more confidence," Elena says.

Her desire to carry out this research was fueled in part by conditions in her homeland of Romania, where the communist regime ended in 1989, but the infrastructure of health care and health insurance still had not been established. "Obtaining this type of treatment was difficult in my country at the time, and for me, this research was a way to contribute."

Sticking with the Children

After completing her fellowship in Belgium and moving back to Romania, Elena said she found the benefit of the UNESCO-L'Oréal Fellowship to be enormous. Her professional skills had become more honed, and she was able to interview at many of the top institutions in Romania. However, Elena says she also found a health system still in financial and organizational distress and one that could not guarantee proper treatment for sick children with cancer, "to such an extent that it was difficult psychologically for me to continue to work in pediatric oncology." Elena therefore directed her interests to pediatric allergy and immunology and about a year later found a position at the Centre Hospitalier Régional (CHR) de Namur, in Belgium, to accompany her husband, a veterinarian who took a research position in Liege, Belgium. "I think research is extremely interesting but now my work is mainly clinical because I love interacting with people, especially children," she notes.

An Uncommon Will

Throughout her career, Elena says she has been supported by her husband and also her two mentors, Stela Gotia, professor of pediatrics, and Ingrid Miron, chief of the pediatric hematology oncology service at the l'Hôpital Universitaire des Enfants de Iasi Roumanie. "These are two female personalities with remarkable charisma that I especially admire," she says.

"Elena was indeed one of the inspiring interns that we had in the pediatric oncology and hematology ward," says Miron of her former student. "She really had a special way of dealing with sick children and demonstrated both technical and human skills when working here." Miron also points out that Elena does not quit easily and has an uncommon will for surpassing difficulties, and that this has likely helped her build her career.

Elena encourages women interested in a scientific career to stay positive and "hold in their mind an image of their conquest. Although the work is serious and rigorous, more than one might imagine, it offers such joy."



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