ISTU Has Established
The Nadine Barrie Smith Student Award

Prof. Nadine Smith

A few months ago, we sadly lost a valued colleague and friend, Professor Nadine Barrie Smith, at the young age of 48. Nadine was a world-renowned expert in the fields of medical imaging and therapeutic ultrasound. She was a dedicated educator and mentor. This is a significant loss to the field of therapeutic ultrasound, as well as to her students and colleagues.

Engineer, Educator, Mentor

Nadine was committed to ensuring the success of her students, and she took great pride in spending countless hours mentoring them. She and her husband Andrew Webb were active participants in planning high-school engineering projects specifically to encourage women to enter engineering fields. Beyond the classroom, often called upon for advice, Nadine provided encouragement and inspired these future engineers to achieve excellence in their academic careers and personal lives: most students considered Nadine both as a valued mentor and a personal friend.

Therapeutic Ultrasound

Nadine led pioneering research in the use of ultrasound to enhance transdermal glucose monitoring and to mediate transdermal delivery of insulin for diabetes. She demonstrated that glucose monitoring levels are reliable compared to enzyme-based biosensors. In addition, she demonstrated that glucose levels can be controlled with ultrasound enhanced transdermal delivery of insulin.

In other significant research, Nadine developed and tested a transesophageal ultrasound applicator for cardiac ablation to treat atrial fibrillation and developed a system for ablation of prostate cancer. Throughout her research, she applied fundamental engineering principles to solve clinical problems.

Nadine’s textbook on Medical Imaging was published in 2010.
For ISTU, Nadine chaired the student awards committee in 2008.

Aim of the Award

In honor of Nadine’s dedication to students in therapeutic ultrasound, ISTU has established the Nadine Barrie Smith Student Award. The award will annually recognize exemplary student achievements at the ISTU annual meeting. This fund will allow continued recognition of Nadine’s legacy as a mentor, and to encourage others to do the same.

Contributions can be made out to ISTU (Memo: Nadine Barrie Smith) and sent to Diane Eberle, 14750 Sweitzer Lane, Suite 100, Laurel, MD 20707