WIND AT THEIR BACK THE PARTNERSHIP BETWEEN SRI AND GE HEALTHCARE CHARTS A COURSE FOR EXCELLENT WATERS

Dr. Martin Yaffe, a senior scientist at Sunnybrook Research Institute (SRI), invokes a nautical theme in considering the relationship between SRI and GE Healthcare. Each has their strengths, he says. The former is a speedster, celebrated for its maneuverability and alacrity; the latter is a battleship, remarkable for its size and strength. By and large, he says, the combination has enjoyed smooth sailing since setting out on its tandem journey.

The tradition of academia sharing the waters with industry is a long one. At SRI, under research agreements, scientists have access to GE Healthcare's systems—software and hardware—including the right to program. Dr. Graham Wright, a senior scientist at SRI, says the affiliation between the pair is "very close." Sunnybrook Research Institute and the Imaging Research Centre for Cardiac Intervention (IRCCI), a unique-to-Canada facility that opened in November 2006, have a 3-Tesla and two 1.5-Tesla magnetic resonance imaging systems, as well as a flat-panel Innova x-ray system, all from GE and dedicated to research. That the equipment is kept state-of-the-art, Wright, a co-principal investigator (PI) in the IRCCI says, "so we're pretty much always on the leading edge of the platform," is essential. In the absence of such tools, he notes, scientists would simply be solving already solved problems.

GE Healthcare also figured in SRI's participation in the international Digital Mammography Imaging Screening Trial (DMIST). Sunnybrook was the sole Canadian participant in this landmark study that compared digital mammography (DM) with film mammography and found that DM detects more cancers in women who are 50 or younger, premenopausal, or who have dense breasts. Sunnybrook's DM machine was a GE Healthcare unit, funded by federal and provincial government investment.

In his current work in digital tomosynthesis (DT), Yaffe, who is co-PI of the Breast Cancer Research Centre at SRI and Toronto Sunnybrook Regional Cancer Centre (TSRCC), is also working closely with GE. The company supports technical aspects of Yaffe's DT research, including providing the equipment needed to make the simulator that allows scientists to try ideas in the lab. GE has provided Yaffe with the second-in-the-world clinical prototype DT system, a $750,000 unit that can be used with patients, and which will be used in clinical trials soon. Dr. Roberta Jong, director of breast imaging and associate scientist at SRI/TSRCC, will lead the clinical tomosynthesis study.

And venturing into new areas, which IRCCI is—with scientists developing technologies for cardiovascular imaging to improve early detection and treatment for heart conditions—necessitates equipment not available commercially. An alliance with a commercial partner that provides the basic infrastructure and the sea charts needed to be able to go beyond what's available commercially, says Wright, is critical.

"There are things that we're building for them that just don't exist," says Peter Robertson, general manager of GE Healthcare Canada. Moreover, GE provides SRI researchers with protection from obsolescence over a project's term. For GE's part, says Robertson, the Sunnybrook connection is a boon to a company whose pockets have bottoms, after all, in spite of what so many think when considering this massive corporation. As such, he appreciates the judicious and clinically relevant management of GE resources in the hands of SRI, "a global player on the research stage." LP

Anchors aweigh.

The Breast Cancer Research Centre and IRCCI are funded by the Canada Foundation for Innovation, Ontario Innovation Trust, and industry and private sponsorship.

JOHN LORBIECKI, GE HEALTHCARE, AND DR. GRAHAM WRIGHT