

**nanoPRwire**  
**Press Releases**

[About](#)  
[Search Engines](#)  
[Free Publicity](#)  
[PR Writing Tips](#)  
[RSS Feed](#)  
[Order Now!](#)

**nanoPRwire**
**Press Releases**


## GE Global Research, Beth Israel Deaconess Medical Center Receive \$6.5 Million NCI Grant To Revolutionize Cancer Surgery

BUSINESS WIRE - October 06, 2005 12:07 PM US Eastern Timezone

*GE and Beth Israel Deaconess to Engage in Five-Year Bioengineering Research Partnership to Develop Ways to Enhance Surgical Imaging of Tumors During Surgery.*

NISKAYUNA, N.Y. & BOSTON--(BUSINESS WIRE)--GE Global Research, the centralized research organization of General Electric (NYSE: GE), and the Frangioni Laboratory at the Beth Israel Deaconess Medical Center (BIDMC) today announced receipt of a \$6.5 million grant from The Cancer Imaging Program of the National Cancer Institute (NCI), National Institutes of Health (NIH), to engage in a five-year industrial/academic research collaboration to enhance the imaging of cancerous tumors during surgery.

New breakthroughs in surgical imaging would enable doctors to more clearly identify the location and extent of a tumor during an operation and could ultimately lead to lower cancer recurrence rates in patients, thus improving the quality of care across surgical hospitals. The Frangioni Laboratory has developed an intraoperative imaging system that permits the surgeon to see diseases, such as cancer, using safe, sensitive, but invisible, near-infrared fluorescent light. GE Global Research will leverage its expertise in medical imaging system design and signal processing to increase the sensitivity of the system and to make it compatible with endoscopy and laparoscopy. This will enable deeper visualization into tissue and enable less invasive forms of surgery, decreasing risk and recovery time for patients.

"The biggest question patients and loved ones ask following cancer surgery is: 'Did you get it all?'" Steve Lomnes, Program Leader for Biomedical Optics, GE Global Research, said. "Through this collaborative research partnership with Beth Israel Deaconess Medical Center, we have an extraordinary opportunity to revolutionize cancer surgery and provide surgeons with the kind of real-time imaging and information they need and give patients the best possible prognosis for a future that is cancer-free. We're very excited about this research partnership and appreciate the NCI's support."

"This highly innovative technology will help surgeons identify and remove all of the tumor during operations," said Marc Zeidel, MD, chief of medicine at BIDMC. "By seeing where the tumor is and isn't during surgery, the surgeon can get all the tumor while limiting the amount of resection that the patient must recover from. The cancer imaging laboratory defines excellence in translational research by taking what we have learned about cancer biology and using it to develop new ways to see cancers during surgery, in real time."

"We're very excited about this research partnership and the opportunity it will provide to further extend the benefits of imaging technology and analysis into the operating room. We greatly appreciate the NCI's support in this effort," said Herb Kressel, chief of radiology at BIDMC.

An initial design of a prototype imaging system for open surgeries is expected to be complete by the end of the first year of the project. The ultimate goal of the research partnership is to have a fully functional and completed surgical imaging system ready for the clinical stage in five years.

Immediate cancer surgery applications of this enhanced optical imaging system would include: image-guided sentinel lymph node mapping, image-guided cancer resection with real-time assessment of surgical margins, and intraoperative detection of occult metastases in the surgical field.

### About GE Global Research

GE Global Research is one of the world's most diversified industrial research organizations, providing innovative technology for all of GE's businesses. Global Research has been the cornerstone of GE technology for more than 100 years, and is now focused on developing breakthrough innovations in areas such as molecular medicine, energy conversion, nanotechnology, advanced propulsion and security technologies. GE Global Research is headquartered in Niskayuna, New York and has facilities in Bangalore, India, Shanghai, China, and Munich, Germany. Visit GE Global Research at [www.research.ge.com](http://www.research.ge.com).

### About Beth Israel Deaconess Medical Center

Beth Israel Deaconess Medical Center is a patient care, teaching, and research affiliate of Harvard Medical School, and ranks third in National Institutes of Health funding among independent hospitals nationwide. BIDMC is clinically affiliated with the Joslin Diabetes Center and is a research partner of Dana-Farber/Harvard Cancer Care Center. BIDMC is the official hospital of the Boston Red Sox. For more information, visit [www.bidmc.harvard.edu](http://www.bidmc.harvard.edu).

[nanoPRwire™ press releases...](#)