

Steady State Imaging, LLC

227 Colfax Avenue N., Suite 250
Minneapolis, MN 55405
www3.gehealthcare.com/en



Fast Facts

Founders:	Lenore Everson, Michael Garwood, Douglas van Winkle
Date Founded:	2005
Date Acquired:	April 2011
Acquiring Company:	GE Healthcare
Employees:	5
Headquarters:	Minneapolis, MN
Revenue:	N/A
University:	University of Minnesota
Federal Funding Agency:	National Institutes of Health
Initial Research Funding:	\$9.8M

Steady State Imaging was a privately held research and development company focused on the advancement of magnetic resonance imaging (MRI) technologies, that was acquired by GE Healthcare in 2011. SSI's business strategy was dedicated to commercialization of SWIFT (Sweep Imaging with Fourier Transformation) technology and related intellectual property.

SWIFT is a new way of creating magnetic resonance images, with the advantage of visualizing tissues that were previously invisible to MRI, such as cortical bone and teeth, and doing so quietly, which makes it especially suitable for use with children. SWIFT works by capturing signals from the tissue before they decay away, including even the fastest-decaying signals. In standard MRI, delivery of the radio frequency-modulated (FM) pulse, turning on of the magnetic field, and signal detection are done in sequence. But in SWIFT they are done simultaneously; this removes the time lag time between excitation and detection and allows no chance for signal decay.

The Story Behind the Company

The technology that spawned Steady State Imaging was developed in connection with National Institutes of Health (NIH) grants focused on the creation of a novel MRI pulse sequence and reconstruction algorithm to image "hard" tissues (bone, cartilage) in the body. Professor Michael Garwood and his team at the University of Minnesota's Center for Magnetic Resonance Research (CMMR) were convinced that a new technique could be developed to simultaneously expand the reach of MRI imaging, and reduce the reliance on "older" technology that exposes patients to ionizing radiation (X-rays).

The resulting discovery, SWIFT, is particularly adept at imaging hard tissues and other tissues (lung) historically difficult to image via MRI. The technology delivers the additional benefit of rendering an MRI machine nearly silent, which is especially valuable for pediatric MRI imaging.

The discovery of the SWIFT technology was funded by competitively awarded NIH Biomedical Technology Research Resources awards--\$3M in 1998 and \$6.8M in 2003.