

MVISION enables imaging with the megavoltage radiation therapy treatment source, to ensure correct patient positioning just before treatment.

CONE BEAM 3D IMAGING AT THE TREATMENT TABLE

The MVISION™ Megavoltage Cone Beam (MVCB) Imaging Package is the latest innovation in the Siemens portfolio of adaptive radiation therapy (ART) solutions. It is a unique volumetric in-line target imaging solution and the natural next step in image-guided radiation therapy (IGRT). Designed to work with Siemens linear accelerators, the system is the first commercial implementation of cone beam technology utilizing a standard radiotherapy treatment beam. MVISION makes it possible for the megavoltage (MV) source used for treatment to also create a 3D image of the patient, enabling clinicians to “see inside” the patient at the most appropriate moment.

Designed to complement a clinic’s oncology workflow, MVISION fully integrates and automates all processes, including acquisition, reconstruction, registration, assessment, patient positioning, and clinical review. With a few simple steps, therapists can calculate 3D offsets, send them to the treatment couch to compensate for daily variations, and safely deliver therapy.

MVISION does not require an independent imaging source for IGRT, thus improving clinical accessibility and patient comfort. This innovation also frees caregivers from performing unnecessary electromechanical maintenance, so they can focus on versatile and efficient patient care.

SIEMENS INTRODUCES TRUEPOINT PET·CT

Siemens Medical Solutions recently set a new molecular imaging milestone with the addition of its TruePoint™ technology to its Biograph™ family of hybrid PET·CT systems. The new TruePoint PET·CT platform opens the door to the largely untapped potential of molecular imaging by adding 33 percent more axial volume coverage to PET·CT scanners.

“Benefits provided by the new TruePoint PET·CT platform are two-fold – the technology increases the axial coverage per bed position to provide whole-body PET·CT protocols, while optimizing workflow by using fewer bed positions and increased speed,” said Michael Reitermann, President, Molecular Imaging Division, Siemens Medical Solutions. “TruePoint PET·CT also provides a new level of system integration for PET·CT technology and software applications that enhance efficiency and improve diagnostic confidence.”

TruePoint PET·CT provides very rich data, both metabolically and anatomically, for the most accurate and confident diagnoses possible. Enlarging the PET field of view, TruePoint PET·CT technology is able to detect 78 percent more photons. This results in more precise and detailed images that enable physicians to quickly pinpoint the tiniest lesions and arteries in detail. Along with enhanced speed, TruePoint offers advanced, clinically proven scatter correction techniques to provide unmatched image quality.

Using fewer bed positions for exams also helps to increase patient comfort and decrease patient movement. In addition, TruePoint PET·CT has the ability to reduce the injected dose to the patient by 50 percent.





LATEST BIOGRAPH SYSTEMS INSTALLED IN USA AND SWEDEN

The Emory Crawford Long Hospital in Atlanta, Georgia, and the Karolinska University Hospital and Institute in Stockholm, Sweden, have become the first two facilities in the world to offer their patients the Biograph™ 64, an advanced imaging system that provides physicians greater speed and precision to help them detect cardiac and other diseases in their earliest forms and provide personalized treatment to patients.

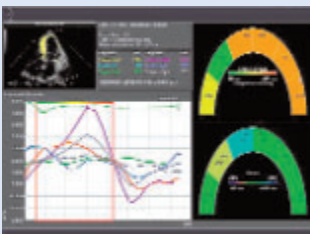
The hybrid PET-CT system will enable physicians to make diagnoses with pinpoint accuracy by providing complete information about the exact location, size, nature, and extent of disease. Its advanced PET technology enables physicians to detect the metabolic changes in patients' organs and tissues that precede physiologic changes, while the integration of 64-slice CT technology places this information in precise anatomical context not previously obtainable without invasive procedures.

"With Biograph 64, we are able to see disease at the molecular level within patients, while providing the rich anatomical detail

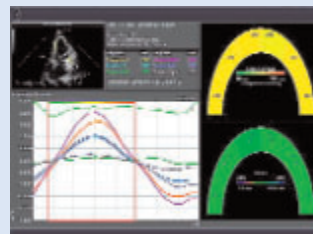
that allows us to contextualize that information to detect, treat, and monitor disease with greater precision," says Professor Stig A. Larsson, Head of Nuclear Medicine at Karolinska University Hospital. "It's that detailed information that enables us to make earlier, more authoritative diagnoses, helping the oncologists in their treatment decisions that are individualized for patients; ultimately achieving better outcomes for our patients."

Physicians also expect the Biograph 64 to provide significant benefits to cardiac patient care, allowing them to obtain anatomical details of the beating heart in exceptionally high resolution, while simultaneously assessing its metabolic activity. Physicians can visualize the coronary artery down to the smallest blood vessels and measure perfusion (blood flow) non invasively. The speed of the system enables CT angiography (CTA) to be completed with only an eight second breath hold for patients.

syngo VECTOR VELOCITY IMAGING GIVES NEW INSIGHTS INTO CARDIOVASCULAR FUNCTION IN ECHOCARDIOGRAPHY



A HEART FAILURE patient with regional dyssynchrony and bi-ventricular pacemaker.



THE SAME PATIENT after resynchronization demonstrating improvement.

syngo® Vector Velocity Imaging™ is a unique 2D application in echocardiography that enables clinicians to easily visualize cardiac contraction and relaxation mechanics using individual vectors to display direction and relative velocity of tissue motion. This new technology gathers information for a variety of applications, including rapid assessment of ventricular synergy in heart failure. Vector Velocity Imaging

bypasses the traditional limitations of Doppler-based quantification and is available for use on all chambers of the heart.

Available only from Siemens, syngo Vector Velocity Imaging works with any ACUSON Sequoia® echocardiography system image, using any transducer, including TEE, vascular, and ACUSON AcuNav® ultrasound catheters.

HANDS-ON WORKSHOP AT THE RSNA



DISCUSSING SHOWCASES in angiography and radiography is one highlight of the Siemens hands-on workshop at this year's RSNA. Participants also learn how to utilize the *syngo* Multi-Modality Workplace.

For the past two years, Siemens Medical Solutions has offered customers an opportunity to learn about its latest applications on multi modality workstations in a classroom environment at the RSNA. At the 2006 meeting, Siemens will continue this trend on each day of the meeting by showing its customers how to utilize the *syngo*® Multi-Modality Workplace as well as showcasing its latest applications in angiography and radiography, computed tomography, magnetic resonance imaging, molecular imaging, and mammography. Each 90-minute session will explore a different application on a specific imaging modality and/or body system, after which there will be time for questions.

Current and new users of the workstation wishing to gain a better understanding of the post-processing applications available are encouraged to attend one of the many workshops. Each workshop session will explore the different modality applications available. The relaxed, informal atmosphere will allow attendees to literally sit at a workstation and follow the instructor step by step as they learn the most popular applications for each modality on the workstation. The hands-on workshop is only one of the many highlights of Siemens broad customer care portfolio called "Life".

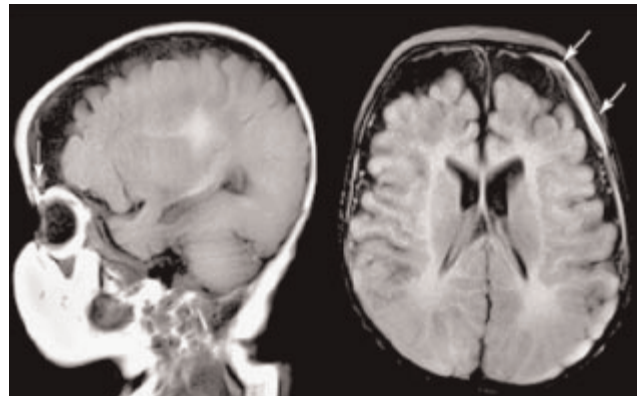
Information concerning class times and dates is available at <http://www.usa.siemens.com/rsnahow>

ADVANCED APPLICATIONS IN MRI

Siemens Medical Solutions recently introduced *syngo*® BLADE™, a Tim® (Total imaging matrix) technology-powered magnetic resonance imaging (MRI) software capable of robust imaging in neurological, abdominal, and orthopedic procedures even in cases of severe movement. *syngo* BLADE motion correction application enables facilities to increase patient throughput and decrease costs. Siemens Tim-powered *syngo* applications, including BLADE, have continually helped to offer the newest innovations in patient care and disease management.

Ideal for pediatric* and difficult-to-manage patients in neurological, abdominal, and orthopedic imaging, *syngo* BLADE is not affected by flow and motion. By continuously acquiring low-resolution images, the application measures and corrects motion, providing clear images. With the BLADE software's low sensitivity to movement, medical professionals can focus on reducing sedation rates in pediatric and anxious patients, increasing time efficiency.

"*syngo* BLADE provides a real-time answer to pediatric and difficult patients by reducing the need for sedation while increasing the ability to acquire high-resolution imaging on the first scan, regardless of circumstances or movement," said



SYNGO BLADE motion correction application facilitates scanning of moving patients.

Nancy Gillen, Vice President, MRI Division, Siemens Medical Solutions. "Siemens Tim-powered *syngo* applications are continually improving healthcare by helping medical professionals detect and diagnose disease states earlier, offering more treatment options, and increasing workflow and efficiency."

*The safety of imaging infants/fetuses has not been established.

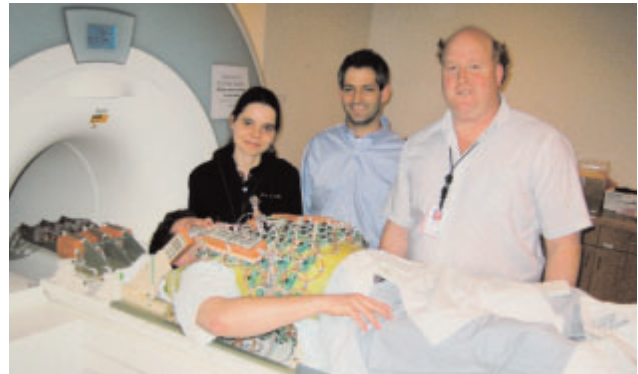
128-CHANNEL MRI PROTOTYPE DEVELOPED

Working in collaboration with Massachusetts General Hospital (MGH), Siemens Medical Solutions has developed a prototype 128-channel magnetic resonance imaging (MRI) system* based on Tim® (Total imaging matrix) technology. Built with Siemens MAGNETOM Trio® with Tim 3 Tesla (3T) MRI system, the prototype is based on the 102 x 32 Tim architecture – 102 coil elements integrated in 32 independent radio frequency (RF) channels – which has been expanded to 128 independent RF channels and coil elements. The principles and potential applications of 128-channel MRI scanning are being evaluated at MGH, with initial findings showing the potential to exceed current standards of image resolution and parallel imaging, with up to a 25-fold increase in speed.

“Labor-intensive medical imaging procedures could become simpler and completed in significantly less time with a 128-channel MRI,” says Lawrence Wald, PhD, Director, Nuclear Magnetic Resonance Core, Martinos Center, MGH. “This development could open new doors in cardiac, brain, and abdominal MRI with the increase in speed and sensitivity.”

The new 128-channel prototype MRI system pairs one coil element with one channel. In addition, a 128-channel coil that makes efficient use of the 128 RF channels has been developed. Proving the capabilities and technological advances

of Siemens MRI and Tim technology, the development and addition of 128 channels within the MAGNETOM Trio required minor changes to the system’s existing architecture.



THE WORLD’S FIRST 128-channel MAGNETOM Trio with Tim with the world’s first 128-channel cardiac coil* installed in MGH, Boston, Massachusetts, USA.

* Work in Progress. The information about this product is preliminary. The product is under development and not commercially available in the United States and its future availability cannot be ensured.



NEW MEMBERS on the Group Board of Siemens Medical Solutions: Siegfried Russwurm, PhD (left), and Tom Miller (right).

MANAGEMENT CHANGES

Hermann Requardt, PhD, Board Member of Siemens Medical Solutions, was appointed member of the Central Management Board of Siemens AG in Munich as of May 1st. In this context, and in line with the broadened portfolio of Siemens Medical Solutions, two new members have joined the Group Board of Siemens Medical Solutions: Siegfried Russwurm, PhD, former President of the Motion Control Systems Division within Siemens Automation and Drives, and Tom Miller, former President of the Health Service Division (HS).