Technical Exhibits Focus

Beyond Imaging: The Future of Healthcare Delivery

RSNA Exhibitors Offer Next Generation Solutions

By Michael Hart

"We're at the eye of the storm," said Nancy Koenig, general manager of Merge, an IBM Company, referring to the three major trends she believes are hitting healthcare at exactly the same moment.

The trends she believes will transform healthcare and, with it, diagnostics, are:

- Payment reform,
- More attention to appropriateness of use criteria, and
- A renewed focus on quality and outcomes.

And, although radiology and imaging certainly have changed over the years, these three trends will force a new sense of urgency, she said.

"For years, the focus has been on how we streamline the workflow," Koenig said. "However, efficiency is not sufficient, we need to focus on efficacy – improving productivity all while becoming more effective in the diagnostic process."

This moment in healthcare, Koenig noted, is "ripe for a disruption in technology to deliver what healthcare providers need to achieve today."

Merge Healthcare has been in business for nearly 30 years, and always at the cutting edge of imaging technology. Most recently, its focus has been on cognitive computing, the simulation of human thought processes in a computer model, a self-learning system that uses data mining, pattern recognition and natural language processing to mimic the way the human mind works.

Nancy Koenig

Merge, which became a part of IBM just over a year ago, is one of the founding members of the Watson Health Medical Imaging Collaborative, announced earlier this summer. The company will work with more than 15 health systems, academic medical centers, radiology providers, and imaging technology companies, all with the goal of bringing the power of cognitive insights to imaging.

"Through the Watson Health Medical Imaging Collaborative, we have the privilege of working with some of the biggest and most prestigious healthcare providers in the market, "Koenig said.

Watson Health, and Merge, will work with its collaborative partners to extract data from a wide range of sources that can then be used to train Watson to assist in healthcare environments.

"In Phase one, through the collaborative, we're going to prioritize the most significant challenges we have in healthcare today," Koenig said. "We will focus on heart disease and prolific cancers including breast and lung cancer."

Merge will work with members of the collaborative to find specific solutions that will both improve the diagnostic process and healthcare outcomes of patients with those particular diseases.

"Then in a very traditional way," she said, "we'll engage with the clinicians to help us develop these new-to-the-world workflows."

Merge's role, in conjunction with Watson Health and IBM Research, according to

SHARE YOUR KNOWLEDGE AND BE SEEN

Present at **RSNA 2017:**

- Scientific Presentations
- Applied Science
- Education Exhibits
- Quality Storyboards
- Quantitative Imaging Reading Room

EARN RECOGNITION!

The RSNA Travel Award Program for Students
Up to 430 top-rated abstracts from current RSNA members will earn a $500 travel stipend.

Kuo York Chynn Neuroradiology Research Award
The top scientific paper as selected by the Scientific Program Committee will earn a $3,000 award recognition.

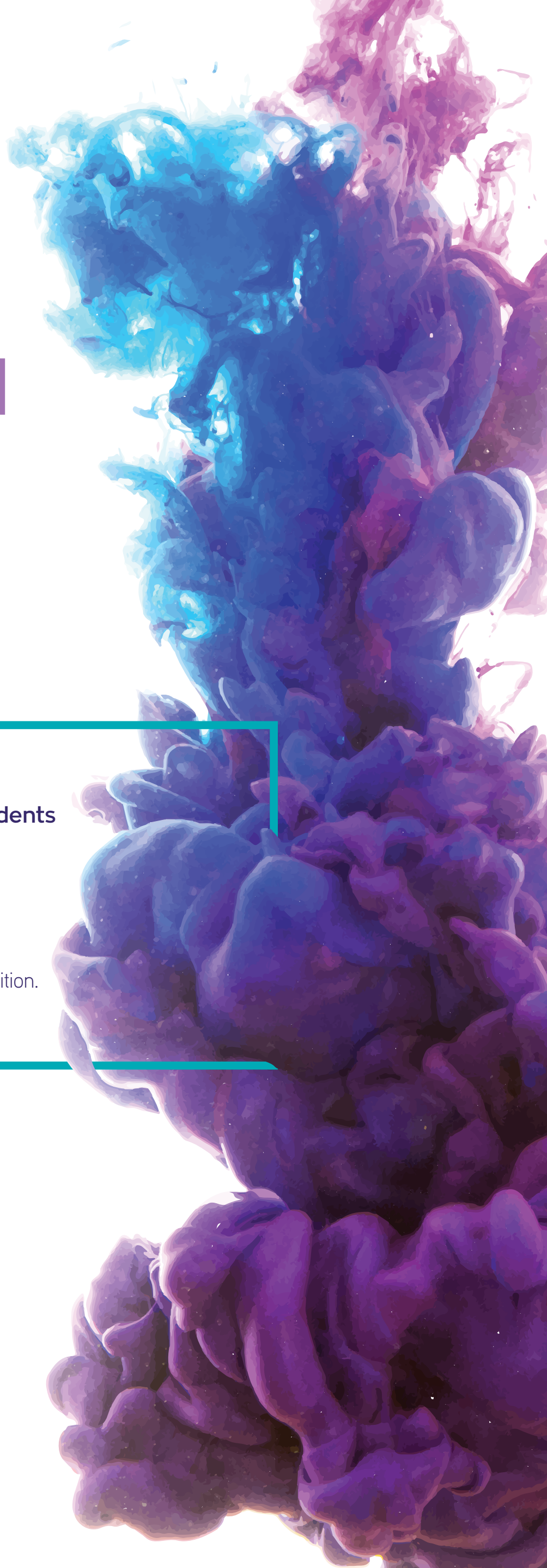Visit **RSNA.org/Abstracts** for complete guidelines.

Submit online
beginning January 2017 at *RSNA.org/Abstracts* through Wednesday, April 12, 2017, NOON Chicago Time.

Questions?
Call 1-877-776-2227 *(within U.S.)* or 1-630-590-7774 *(outside U.S.)*

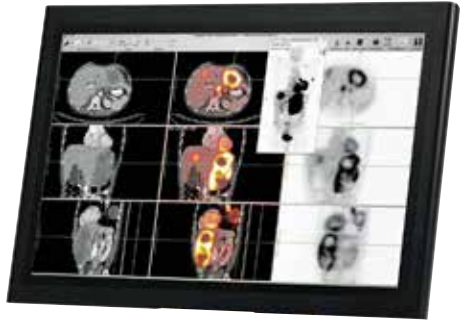*Includes courses in joint sponsorship with the American Association of Physicists in Medicine*

RSNA® 2017
NOVEMBER 26 – DECEMBER 1

DARKROOM EQUIPMENT AND SUPPLIES

WIDE USA Corporation
BOOTH 3911

Medical Imaging Display Monitor

The rise of digital imaging technology has drastically changed the way that patient data is used and distributed within healthcare environments. Medical images, enriched with patient information, are being shared beyond the radiology department, becoming available throughout the enterprise. WIDE's N-Series utilizes the latest research, development and engineering. Improvements include the most advanced TFT LCD technology, and an intelligent 3rd generation DICOM IQ-Sensor®, all wrapped in a newly styled chassis with an ergonomic look and feel. N-Series displays improve all aspects of the radiology reading room experience. Brightness, image quality, DICOM 3.14 calibration, conformance and automation all work together to satisfy the most demanding medical image review requirements.

EDUCATIONAL PRODUCTS AND LITERATURE

CRC Press – Taylor & Francis Group
BOOTH 1304

## Medical and Scientific Educational Journals and Textbooks

CRC Press – Taylor & Francis Group is a global publisher of world-class references, handbooks, journals and textbooks for the medical, scientific and technical communities including academics, professionals and students. Our award-winning CRCnetBASE has our eBook collections. For a complete catalogue of our radiology publications including bestselling and forthcoming titles, or to sign up for our email list to receive exclusive offers, visit our booth today.

ELECTRONIC AND INFORMATION SYSTEMS/SERVICES

Mint Medical
BOOTH 2565A

Diagnostic Image Viewer Software

Mint Medical's software solution combines diagnostic image viewing with a new, computer-assisted approach to standardize a radiologic read. It is an intelligent assistant-system which allows for a context-specific guidance of
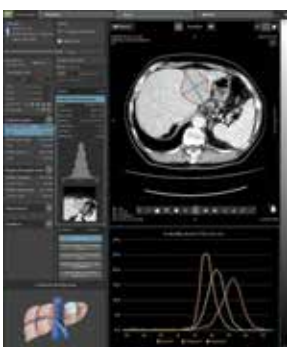
radiologists to increase read efficiency and report quality, and provides them with all relevant patient and disease related information. The result: radiologists are in the center of the treatment process and deliver complete and structured reports. As another consequence, the collected comprehensive structured data can be easily linked with further information, for instance patient genomics. Mint Lesion operates within the scope of screening, staging, and therapy evaluation for oncological radiology.

QView Medical, Inc.
BOOTH 6547

Computer Aided Detection for 3-D Automated Breast Ultrasound
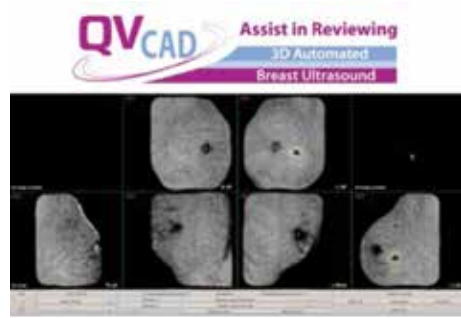
QView Medical has developed a computer-aided detection (CAD)* for 3-D automated breast ultrasound. The company is the same team that developed R2 CAD™ for mammography, CT lung CAD, and U-Systems ABUS. The company is demonstrating its "works-in-progress" QVCAD system for ABUS. The QVCAD system image review gives the radiologist a preliminary overview of the study and highlights abnormal areas that may be further examined. QVCAD is intended to serve as a review and navigation tool, enabling the user to efficiently review the entire 3-D study, focusing on certain areas of interest. It is designed to improve user productivity while preserving the accuracy of the diagnosis. * Investigational device only. Not approved for sale.

DeepRadiology
BOOTH 8503

Autonomous CT Scan Analysis

DeepRadiology is proud to announce the world's first and only system for fully autonomous interpretation of medical images. The report is produced without the need for a radiologist.

The revolutionary system was produced using the latest artificial intelligence techniques, the knowledge contained in every major radiology textbook on the subject, and millions of medical images representing several human lifetimes of radiology experience.

Our development team includes leading experts in radiology and artificial intelligence including the recognized father of deep learning, Yann LeCun.

This device is not yet available for sale in the United States and is currently being reviewed by the US Food and Drug Administration.

Intrasense
BOOTH 6332

Medical Imaging Software

Intrasense designs Myrian®, a software solution allowing advanced visualization and analysis of medical images. Myrian makes decision-making and treatment follow-up easy and reliable. The company equips 800 client sites in more than 30 countries (USA, Europe, Asia). With Myrian, all imaging modalities can be handled: MR, CT-scan, x-ray, nuclear imaging and conventional radiology. Optional modules are available for the analysis and follow-up of specific pathologies, such as tumors. At RSNA 2016, Intrasense will unveil its brand new version of Myrian as well as the latest features of its modules dedicated to breast and prostate MR analysis. We will also introduce Myrian Studio, a brand new innovative solution dedicated to industrial and research teams which allows them to develop new software applications within the Myrian environment. Let's meet: see you at our booth.

Sage Health Management Solutions, Inc.
BOOTH 6351

Clinical Decision Support Solutions

RadWise® imaging clinical decision support (CDS), offered by Sage HMS, has the most robust imaging clinical content (80 to 90 percent coverage) and the most user-friendly interface strategies when compared to research on preferences of ordering providers. RadWise CDS, with a focus on prescriptive analytics, using either EHR integration or a portal, allows providers, especially providers taking risk (e.g. ACO's, MACRA) or payers, such as Medicare, to gain business and clinical intelligence. Using minimized clicks, providers are able to match patient symptoms with evidence and receive a recommendation for imaging. Radiologists are able to efficiently complete patient exams. RadWise has proven to be significantly better (p=.003 to .05) than Prior Authorization. RadWise CDS tracks orders for predictive analytics. Data and feedback are used in pay for performance/MACRA. Visit us in our booth for product information or demonstration. .

Perspectum Diagnostics
BOOTH 6032

MRI Software Analysis Tool
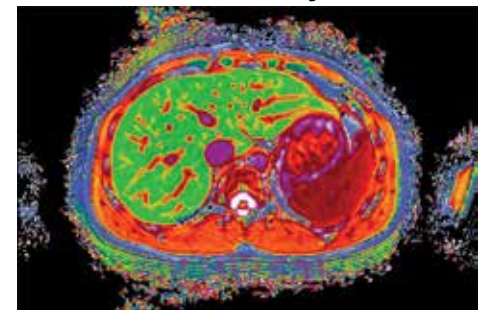
LiverMultiScan, is a fully supported, customisable software analysis tool that uses innovative multiparametric MRI for whole liver assessment, by quickly and accurately measuring liver fat as well as correlates for iron and fibroinflammatory levels. LiverMultiScan works accurately on all patient types including the obese cohort, which are at the highest risk for developing serious liver complications.

LiverMultiScan is available for clinical use in the USA and Europe, and is offered as a Quantitative Analysis Service. Data collected from MRI scans across customer sites are sent securely to Perspectum's dedicated reporting center, analyzed and returned as patient-friendly reports to physicians. Perspectum provides continuous support with regular quality checks and continuous access to its clinical applications team. The Company's research platform, LiverMultiScan Discover, is currently supporting research and clinical trials. It offers additional features such as enhanced image analysis and its proprietary metric, the LIF score.

ELECTRONIC HEALTH RECORDS

Visicache
BOOTH 5147

Mobile ImageViewer App for iPhone and iPad

Pressure on clinicians is unyielding. We need to get more done with less time and higher efficacy. Explaining medical procedures to patients impacts productivity and can be frustrating. It is hard for a patient to understand the physiology; an alternative like 3-D

printing is expensive and time consuming. The MedVizi™ mobile viewer for iPhone and iPad enables fast and effective patient dialogue by reviewing cinematic 3-D reconstructions of the patient's CT scans and MRIs in real time. Rotate, peel, cut away, annotate and distinguish subtle tissue and physiology variations such as tumors or stenosis with color, opacity and lighting. The result is a faster consult with clearer understanding of the upcoming treatment. Download MedVizi from the App Store to explore the difference it could make to your bottom line and to patient satisfaction. Please join us at our booth to learn more.

Full Exhibitor Listing

To see complete company profiles and product information, visit *RSNA.org/ExhibitingCompanies.*

IMAGE MANAGEMENT

Telemis

BOOTH 1406

Medical Imaging/PACS Software

Telemis specializes in the development of medical imaging software and, more specifically, PACS software. The Telemis product line aims to assist hospitals, clinics and private practices to manage digital medical images and to eliminate the need for x-ray film, thereby reducing costs and increasing the quality of the care provided. We have been providing VNA and MACS (Multimedia) solutions for more than 10 years. Specialties for this year include: Our 2017 PACS software integrates optimized mammography and radiotherapy viewers, as well as form and structured report management. Our new web patient portal integrates bi-directional images sending (from GP to hospitals) for an optimized second opinion management.

MAGNETIC RESONANCE

NeoCoil/NeoSoft, LLC

BOOTH 4072

Wireless Audio System for MRI Machines

The Sentinel™ Wireless Audio System by NeoCoil is the industry's first MR-conditional wireless audio system that integrates audio entertainment, the technologist's voice, and AutoVoice commands for optimum patient comfort and communication. To create a more positive patient experience, this system is compatible with most commercial audio players equipped with a 3.5mm output jack. With high field MRI systems up to 3.0T and an NRR rating of 29 decibels (dB), this wireless system dramatically attenuates gradient noise allowing its use without additional earplugs at noise levels up to 128dB. When the over-the-ear headset cannot be used, the system includes a wireless ear bud solution which provides the same 29dB attenuation. Our goal is to integrate the Sentinel™ Wireless Audio System into every scanner's main audio channel, so that the technologist's communication and automatic system commands will be heard through our wireless headphones. Please consult NeoCoil for specific scanner compatibility.

Oxford Instruments Healthcare

BOOTH 6524

CT and MRI Equipment and Maintenance Service

Oxford Instruments Healthcare specializes in providing CT and MRI equipment sales, maintenance service, mobile imaging solutions, and quality parts to healthcare practitioners across North America. Oxford Instruments Healthcare offers the deep savings of a third-party provider and the resources and stability of a billion-dollar manufacturer. With a dedicated team of highly skilled professionals, a unique customer portal and nationwide service, Oxford Instruments Healthcare continues to deliver world-class service and support. Oxford Instruments Healthcare has achieved an unmatched reputation for quality and integrity while providing much-needed cost savings and value to its customers. Visit our booth to see how we can help you.

CryoSRV

BOOTH 3577

Cryogenic Products and Services

CryoSRV is an independent cryogenic parts and service organization focused on providing a high value alternative for re-manufactured parts and innovative service solutions. We aim to work with and educate our customers, providing training and support for all their cryogenic needs. When proper installation procedures are followed, the outcome is a longer mean time between failure and a lower life-time part/service cost for the end user. The relationship we strive for is to be the cryogenic partner for our customers, allowing them to focus on what they do best.

EXPERIENCE EDUCATION BEYOND...
RSNA 2016 VIRTUAL MEETING

| Expanded Content | Extended Access | More Ways to Earn CME |

Register for the RSNA 2016 Virtual Meeting, now featuring **25% more content, extended access**, and 13 **CME-eligible courses on demand!**

November 26 to December 2
Extended access through December 23 at 4 PM CT.

Virtual RSNA 2016

Venture Beyond the Traditional Meeting Experience:
RSNA.org/Virtual

MTG812TD

CryoSRV can handle all your cryogenic related issues and provide a high level of expertise, minimizing system down time and helium loss.

MR Instruments
BOOTH 4035
RF Coils for MRI Systems

The MR Instruments DuoFLEX® Coil Suite offers complete flexibility without compromise. The value of the DuoFLEX Suite's multiple sized MRI coils offer the user the ability to place the right size coil over the anatomy of interest to ensure maximum signal-to-noise for the field of view being imaged. The 10 cm coils allow for high resolution small parts imaging, while the 24 cm coils can be utilized with larger musculoskeletal parts, imaging those hard-to-fit in a rigid coil anatomies. With the unique design of DuoFLEX the user has the ability to connect a 10 cm and a 24 cm coil together for even more flexibility in those difficult to image areas. The versatility and improved signal-to-noise offered by DuoFLEX makes coil placement easy and image quality concerns in those difficult to image areas a thing of the past.

QUALITY ASSURANCE/SAFETY CONTROL AND RADIATION

Acumyn Inc.
BOOTH 8300
Automated CT and MRI Quality Control Software

Acumyn's software platform is a centralized control point to conduct clinic-wide QA compliance tests for CT scanners and MR machines. Be among the first to experience peace of mind in your QA compliance program. Visit us in our booth.

RADIOGRAPHY

Clear Image
BOOTH 6711
Ultrasound and X-ray Protection Equipment

New to Clear Image Devices this year is the Bucky Protector, which is a convenient way to protect your x-ray system's faceplate from incidental damage caused by other equipment and accidents. With an easy application, the Bucky Protector extends the life of your wall bucky faceplate by providing a protective barrier of polycarbonate,
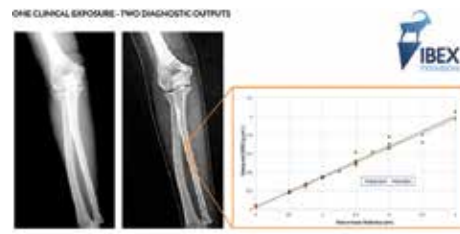
Full Exhibitor Listing
To see complete company profiles and product information, visit *RSNA.org/ExhibitingCompanies.*

Technical Exhibition Booth Key

South Building, Hall A
Booths 1000 – 5999

North Building, Hall B
Booths 6000 – 8599

which is uniquely capable of providing a super-strong, light-weight, easy to clean scratch and dent resistant surface.

IBEX Innovations Ltd.
BOOTH 8206
Detector Technology for Bone Mineral Density Scans

IBEX Innovations announces a new detector technology that enables high-quality bone mineral density information to be collected on a standard DR system. The IBEX MAP technology is a simple physical upgrade to standard flat panel detectors along with an advanced software SDK. It gives standard FPDs the ability to collect high-resolution materials information in a single clinical exposure, whilst still returning a high-quality diagnostic image. This information can be interpreted to provide a measure of bone-health for all patients attending a fracture clinic without the need for a separate DEXA scan. This increases the value of DR systems and provides clinicians with more diagnostic information at the point of the fracture scan, leading to earlier diagnosis and prevention of conditions such as osteoporosis and reducing the incidence of fragility fractures.

JVCKEWOOD Corporation
BOOTH 8310
Medical Imaging Display for Mammography and Tomosynthesis

The CCL550i2 is the first 5M color display that has been cleared by the FDA for the use of digital mammography as well as tomosynthesis. As it is a color display, the CCL550i2 can accommodate ultrasound, CT, MRI and digital mammography images on a single screen. This cost-

effective solution will enhance performance of image workflow to provide a better experience for physicians.

Agfa HealthCare
BOOTH 3336

X-ray Equipment and Image Processing Software

The DR 600 Direct Radiography combines user-friendly design with Agfa Health-Care's MUSICA® image quality to create this high-productivity DR solution. The DR 600 is a family of ceiling-mounted x-ray systems that can be positioned effortlessly with ZEROFORCE ™ movement or with a fully motorized auto-positioning solution. The DR 600 system is ideal for facilities with a high patient load seeking to streamline workflow to increase patient comfort.

With each decade, Agfa HealthCare's MUSICA software has been taking image processing to the next level. Integrated with all of Agfa's DR and CR solutions, "gold-standard" MUSICA image processing software brings multi-scaled image processing to a new level by showing exquisite detail in low noise images allowing technologists to capture consistently high-quality images at the lowest possible dose reasonably achievable. MUSICA now offers chest-enhanced processing for a grid-less workflow. MUSICA is applied automatically without the need for window leveling or reprocessing of images.

Parker Medical
BOOTH 6504

Compact Control Harness for C-Arm Radiographic Equipment

Parker Medical, Inc. (PMI) introduces a small-diameter HV cable/control harness with Improved Profile (IP) high voltage connectors. The assembly satisfies international standards. The harness allows for ease of x-ray tube positioning, extended flex life and sterilization. Results of formative design testing indicate the PMI IP connector is superior to existing types for low-maintenance and high-reliability. Creative downsizing also allows lower pricing. The PMI harness is especially suited for lower cost radiography equipment serving a variety of medical settings to improve public health for all population groups, including those in emerging countries. PMI continues a 30-year history of supplying the imaging industry with a wide range of superior x-ray products.

Esaote
BOOTH 4103

CT/MRI Fusion Imaging System
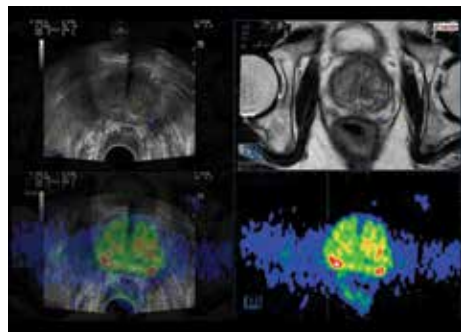
Virtual Navigator is Esaote's revolutionary technology for fusion imaging that allows CT, multiparametric MRI and PET side-by-side with real-time ultrasound. Virtual Navigator provides a real-time, low-cost and radiation-free solution that aims to guide operators in diagnosis, everyday clinical practice, interventional procedures, research and teaching.

Virtual Navigator increases diagnostic confidence in visualizing different datasets with real-time multimodality fusion imaging, planning the best scanning and targeting approach, and guiding the operator during interventional procedures. This system is tailored for urology applications in both transperineal and transrectal approaches with promising results in terms of accuracy and usability. Virtual Navigator can support and guide you during biopsy procedures and laser and radiofrequency ablations with customizable protocols for any kind of needles and sample-biopsy recorder software. Esaote Virtual Navigator offers infinite possibilities for patient monitoring, diagnosis and follow-up and is an excellent solution for interventional radiologists and urologists.

CIVCO Medical Solutions
BOOTH 4529

Ultrasound-guided Needle Equipment

Designed with extensive physician input, the Verza Guidance System from CIVCO Medical Solutions delivers unmatched clinical versatility, improved user experience, and confident outcomes. Verza is the first commercial guide providing five-angle depths to accommodate a wide range of anatomical targets. Verza supports the industry's largest range of interventional devices for precise instrument placement. Verza allows users a flexible insertion point and approach angle for both superficial and deep access in small acoustic windows. The single-use disposable design eliminates possibility of cross-contamination. Verza is compatible with leading ultrasound system transducers. Verza's unique design includes Verza-Link, a direct attach locating feature built into the transducer, offering simplified attachment and optimal performance. The bracket-free design eliminates transducer bulk and allows clinicians to quickly adjust during any ultrasound procedure, ensuring versatile guidance use.

LEAD Technologies
BOOTH 7707

Zero-footprint Medical Viewer
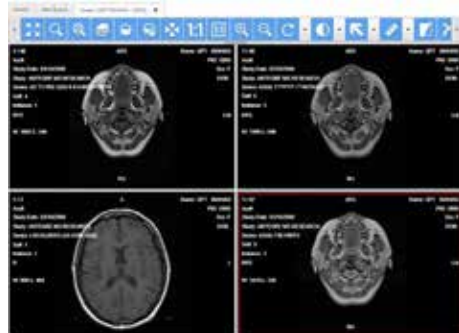
The LEADTOOLS HTML5 Zero-footprint Medical Viewer is an OEM-ready web application that provides a platform-independent solution to display DICOM studies for all medical disciplines and modalities. The fully customizable application is a powerful collection of JavaScript libraries and web services, and is perfect for any developer or integrator who needs a fast, lightweight DICOM viewer solution without sacrificing any features that healthcare professionals demand. Using LEADTOOLS, any department or specialty can view DICOM images in their preferred layout from a local archive or third-party PACS and share studies with a third-party using vendor-neutral DICOM-web and DICOM messaging standards. New features in V19 include DICOM Hanging Protocol support with many preset and easily customizable layouts, MPR navigation, multi-study reference lines and synchronized stacking, sorting, cine, and more. Further enhancements add DICOM structured display, multi-study FOV matching, predefined Window Level, study timeline and display orientation.

Vital
BOOTH 7356

Diagnostic Imaging and Enterprise Informatics Solutions

Vital is your advocate to help deliver enterprise interoperability and improved workflow across vendors, departments and facilities through its Vitrea® Modular Enterprise Imaging solution. This enterprise-wide flexible platform offers a non-disruptive, scalable approach to personalized viewing, image management, workflow and resource planning. Modular Enterprise Imaging allows IDNs to solve a broad set of enterprise imaging challenges without requiring large-scale, disruptive PACS replacement of existing systems. The image management component of the solution, Vitrea Vendor-Neutral Archive, is a second-generation VNA technology that offers advanced workflow capabilities to facilitate the routing, reading and storage of DICOM and non-DICOM images. Vitrea VNA is a highly flexible set of image management software tools that enables control of your image data flow far beyond traditional PACS archiving. Depending on your organization's needs, it can be deployed in either a federated or centralized model.

Learn more at our booth.

EchoPixel, Inc.
BOOTH 3947

3-D Imaging System

True 3D, from EchoPixel, is an advanced visualization solution. True 3D allows professionals to view and interact with patient's clinical images in virtual space, as if they are real physical objects. Reach into open 3-D space to interact with patient-specific anatomy to immediately identify and study anatomical relationships, and dissect clinically significant structures in real-time. These 3-D objects can then be segmented and exported for high-fidelity 3-D printing. The system is DICOM compatible, allowing the enterprise to share image-rich patient data from CT, MRI, rotational angiography and 3-D ultrasound*. EchoPixel's software is revolutionizing how surgeons and interventionists plan and perform surgical medicine. It allows clinicians to more clearly and precisely discern exact anatomical relationships. True 3D is successfully deployed in neurosurgery, neuroradiology, interventional radiology, cardiology, pediatric, and adult cardiology specialties. Early feedback indicates significant benefits to both clinical performance and workflow.

*Currently unavailable in the USA

Beyond Imaging: The Future of Healthcare Delivery

Koenig, is "to be the vehicle by which we bring federally compliant and commercialized solutions to the marketplace."

Among the Merge products and services in the works that will be available at RSNA 2016 will be an assessment of aortic stenosis in patients and another around breast cancer.

These initiatives aim to help radiologists prioritize the images that are most relevant at the point of diagnosis and, at the same time improve the reporting process. They will also use cognitive solutions to ensure that a patient history is placed on the correct healthcare pathway based on her particular symptom and health history.

"It is our intent to help radiologists grapple with the intense pressures they have around reimbursement and quality requirements," Koenig said, "and help streamline and expedite the diagnostic process, leaving them more time for consultation and engagement with referring physicians and patients."

She added, "We are very committed to the imaging space and are staying true to what our core capabilities are."

VISIT THE
RSNA SHOP

Located in RSNA Connections Center

Add quality science and education to your library

Visit *RSNA.org/eLearn* to view online courses, also available on USB

Take home great gifts for family and staff
clothing, accessories, and souvenirs

BE SURE TO PICK UP YOUR COPY OF THE
RSNA Essentials Collection

The collection contains 10 courses featuring 31 speakers, covering:

Breast Imaging, Cardiac Imaging, Chest Imaging, Genitourinary Imaging, Musculoskeletal Imaging, Neuro Imaging, Non-interpretive Skills, Pediatric Imaging, Postoperative Gastrointestinal, Ultrasound

EDU269 TD

RSNA Members: **$175**
RSNA Non-Members: **$250**

Christine B. Chung, MD

2002 Philips Medical Systems/RSNA Research Seed Grant Recipient

2004 GE Healthcare/ RSNA Research Scholar Grant Recipient

The Campaign
for Funding Radiology's Future®

INSPIRE

" *If we succeed early on, we are inspired to achieve and do more. Without the RSNA R&E Foundation as my springboard, I doubt I would have been able to develop into the physician scientist that I am today.* "

Join the Inspire-Innovate-Invest Campaign to help us raise **$17.5 million** to inspire the next generation of radiology leaders.

RSNA.org/Campaign

INSPIRE·INNOVATE·INVEST

RSNA®
R&E
FOUNDATION