RSNA 2019
SEE POSSIBILITIES — TOGETHER

Technical Exhibits Focus

RSNA Exhibitors and Radiologists See Possibilities Together

By Michael Hart

New Tool Aids Early Detection

There is no doubt that the field of radiology, and health care in general, have improved through the advances enabled by technological innovation.

Technology — in this case, artificial intelligence (AI) or machine learning (ML) — is striving to streamline many processes to make patient care more efficient and effective. Radiologists are working smarter and faster with more data available to them than ever before, but the availability of massive amounts of data creates a new set of challenges.

Many radiologists will tell you they are pressed for time as workloads continue to grow. While advanced technologies may have liberated them from some tasks, those advances are often offset with increased pressure to handle higher patient and data volumes.

This phenomenon is not limited to radiology, or even to health care.

When Henry Ford reinvented the assembly line in 1913, allowing a car to be assembled in 90 minutes rather than 12 hours, his goal wasn't to give his factory workers an additional 10½ hours of free time. He did it so the same number of people could make more cars in the same time. This is the dilemma many radiologists face today. The perceived mandate is to use the enhanced data available to create more insightful diagnoses and reports — and do so more quickly.

It is likely that the next stage in the evolution of big data for radiology will focus on doing more with less. Specifically, how can advanced data analysis tools be used to reduce the burden on radiologists facing steadily increasing amounts of data? The challenge is to effectively summarize the salient attributes in the data to achieve more efficient diagnoses.

Worrell

"No matter how much data you collect," noted Steve Worrell, CEO of Riverain Technologies, "there are always scenarios where disease manifests itself in a very unusual way."

Consider, for instance, the process of analyzing rare diseases. It can be exceedingly difficult to amass enough data to build reliable analysis models when the disease is not only rare, but highly variable in presentation.

To address this, Riverain has been developing the concept and practice of using synthetic data to supplement acquired clinical data.

"Data is the medium through which we train software what to look for. If I'm solely dependent on data, I have to collect many samples for a very particular and diverse set of circumstances," Worrell said. "Beyond initially training a system, synthetic data can be used to identify weaknesses in the system and then construct data around the scenario. That is, instead of responding to a single instance, we can get at the underlying causes of failure."

Focusing on applications designed primarily with lung disease, Riverain has developed software that can be used to electronically construct three-dimensional nodules and insert them into CT scans in a proscribed, descriptive manner.

"So I can create true positive cases from normal cases with high precision, making a number of samples around various scenarios," Worrell said. He argues that this is what is missing in many AI systems.

"The fact that a vast majority of collected data is used to train the models instead of validating them should be a cause for pause," he added. "Use cases where models were trained on tens of thousands of images, but tested on hundreds, lends itself to a lack of robustness when fielded."
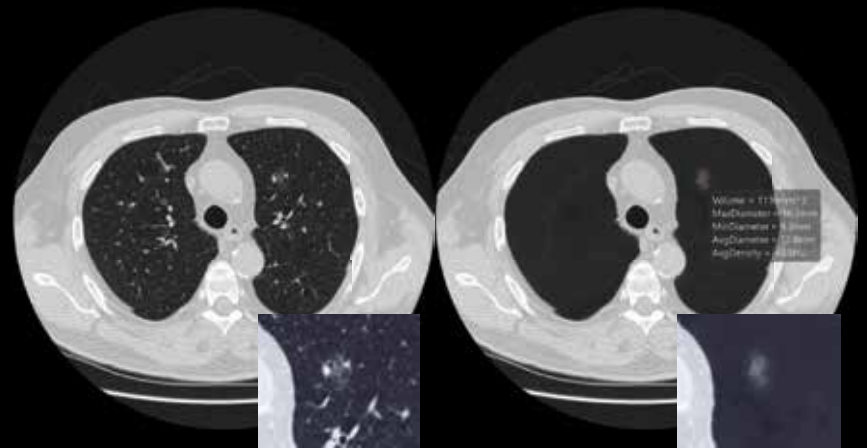
Riverain is one of the first companies to develop an FDA-approved tool that can detect problems earlier and deliver health care more effectively and efficiently through robust models constructed around synthetic data.

"We've translated it from theory to practice," Worrell said. He noted that work provides a foundation on which additional products can be built for different modalities and different parts of the body.

Using AI, radiologists may meet the same challenge Henry Ford met 100 years ago by leaving the tedious tasks to automation and focusing their expertise, enabling better health care for all.

Technical Exhibits At-A-Glance

Technical Exhibits Hours
10 a.m. – 5 p.m.

South Hall A (Booths 1000-5999)
North Hall B (Booths 6000-8599)
AI Showcase, North Building – Level 2
(Booths 10000-11999)

RSNA AI Theater Presentations
North Hall Level 2, Booth 10724
10:30 a.m. – 3:45 p.m.

Future of Radiology Artist Experience
North Hall Level 2, Booth 10745
10 a.m. – 2 p.m.

AI Showcase Hands-on Workshops
North Hall Level 2, Booth 11536
10:30 a.m. – 5 p.m.

3D Printing and Advanced Visualization Theater Presentations
North Hall Level 3, Booth 6563
11 a.m. – 3 p.m.

Innovation Theater Presentations
South Hall Level 3, Booth 4700
10:30 a.m. – 4 p.m.

Vendor Workshops and Corporate Symposiums
See Meeting Program for schedules and RSVP requirements

Dining:

Bistro RSNA
Bistro RSNA
South Hall A and North Hall B
Buffet lunch served 11 a.m. – 2:30 p.m.

Café RSNA
Café RSNA
South Hall A
Casual dining 11 a.m. – 2:30 p.m.

AI Café
AI Showcase, North Building – Level 2
Food carts offering sandwiches, tacos and smoothies

Welcome to RSNA 2019

RSNA is the world's largest medical imaging event where attendees come to meet the leaders shaping tomorrow, see the latest technology breakthroughs and experience the newest advances all in one place. With over 450,000 square feet of exhibition space and more than 700 leading medical technology manufacturers, suppliers and developers, there's more innovation and excitement in our Technical Exhibits Halls than ever before.

Tuesday Presentations on the Industry's Latest Innovations, Research and Discoveries

RSNA AI Theater

North Hall Level 2, Booth 10724

10:30 – 10:50 a.m.

AI-powered Precision Diagnostics - Beyond Expert Level Imaging Biomarkers for Chest and Breast Imaging:
Presented by Lunit

11:00 – 11:20 a.m.

AI in Clinical Cardiac MRI:
Presented by Circle Cardiovascular Imaging

11:30 – 11:50 a.m.

View the Invisible, Know the Unknown - Delivering Intelligent, Efficient and Validated Solutions to the Workflow of Radiology:
Presented by VUNO, Inc.

12:00 – 12:20 p.m.

ScanDiags-AI-driven Decision Support from Musculoskeletal MRI:
Presented by Balzano AI Engineers

12:30 – 12:50 p.m.

How to Successfully and Responsibly Introduce AI in Clinical Practice:
Presented by Quantib BV

1:00 – 1:20 p.m.

Impacting Workflows on Routine MSK X-rays with the Implementation of Machine Learning Algorithms:
Presented by Radiobotics

1:30 – 1:50 p.m.

Driving Revenue in Radiology with AI:
Presented by Blackford

2:00 – 2:20 p.m.

XStream® aiCockpit™-Workflow Orchestration for AI:
Presented by Fovia Ai

2:30 – 3:00 p.m.

How RSNA is Fostering the AI Ecosystem:
Presented by Safwan Halabi, MD

3:00 – 3:45 p.m.

Getting Your Radiology Department and IT Ready for AI and Big Data:
Presented by Paul J. Chang, MD

AI Hands-on Workshops

**AI Showcase
North Hall, Level 2, Booth 11536**
Attendees should bring their own laptops. Reference the Meeting Program for any further requirements or to learn if equipment is being provided.

10:30 – 12:30 p.m.

First-Hand Experience with 4 AI-powered Diagnosis Systems:
Presented by 12 Sigma Technologies

1:00 – 2:30 p.m.

Head-to-Toe Hands-on with AI and Imaging Biomarkers Integrated in PACS. QUIBIM Precision:
Presented by QUIBIM SL

3:30 – 5:00 p.m.

Deep Learning for MRI Interpretation on the Microsoft Azure ML Platform:
Presented by Balzano AI Engineers

3D Printing & Advanced Visualization Theater

North Hall Level 3, Booth 6563

11:00 – 11:20 a.m.

Using HoloLens to Enhance Training Experiences:
Presented by CAE Healthcare

11:30 – 11:50 a.m.

Experimental Applications of Desktop 3DP: Pioneering Research from the Field:
Presented by Formlabs

12:00 – 12:20 p.m.

Next Generation of Advanced Visualization for Surgical Planning and Optimizing Analysis Utilizing Immersive Reality with Haptic Feedback and Air Models:
Presented by ImmersiveTouch, Inc.

12:30 – 12:50 p.m.

Hospital Enterprise-grade Workflow Futures for Patient-centered Radiology:
Presented by GE Healthcare

1:00 – 1:20 p.m.

Medical 3D Printing SW and Service Using Collaboration Platform in Korea:
Presented by Coreline Soft

1:30 – 1:50 p.m.

Using HoloLens to Enhance Training Experiences:
Presented by CAE Healthcare

RSNA 3D Printing Special Interest Group Presentations

2:00 p.m.

ACR RSNA 3D Printing Registry: Ken Wang, MD, PhD

2:15 p.m.

3D Printing in Poland: Jan Witowski, Research Fellow

2:30 p.m.

3D Printing in Breast Imaging: Lumarie Santiago, MD and Elsa Arribas, MD

2:45 p.m.

Molding Techniques for Simulation Models: Sarah Flora, RT

Innovation Theater

South Hall Level 3, Booth 4700

10:30 – 10:50 a.m.

The Benefits of Adopting On-Device, Embedded AI:
Presented by GE Healthcare

11:00 – 11:20 a.m.

MAVIG 2020: Looking to the Future of Radiation Protection:
Presentation by MAVIG GmbH

11:30 – 11:50 a.m.

Clinical AI: Evidence, Use and Lessons Learned:
Presented by Riverain Technologies

2:00 – 2:20 p.m.

AI in Action: The End to End Story, Delivered:
Presented by Nuance

2:30 – 2:50 p.m.

Advances in AI for Personalized Breast Cancer Screening Using Image-based Short-term Risk Assessment:
Presented by iCAD

3:00 – 3:20 p.m.

Meet the PAMA AUC Mandate with Med-Current OrderWise® Clinical Decision Support Mechanism:
Presented by MedCurrent Corporation

3:30 – 3:50 p.m.

Introducing SubtleMR-A case study of how one site uses this AI software to improve throughput, quality, and patient experience:
Presented by Subtle Medical, Inc.

Corporate Symposiums

Please refer to the Meeting Program for further information or for any RSVP requirements.

9:00 – 10:00 a.m.

Provider Panel: An Inside Look at Clinical Experiences with AI:
Presented by IBM Watson Health (Room S105D)

9:00 – 10:30 a.m.

Journey to the Cloud:
Presented by Google Cloud (Room S102AB)

9:00 – 10:30 a.m.

Creating Winning Workflows: Identifying Pain Points and Solutions within Radiology Workflow:
Presented by Philips (Room S101AB)

2:00 – 3:00 p.m.

Advancements in Ultrasound Imaging for MSK and Sports Medicine:
Presented by the Institute for Advanced Medical Education (IAME), educational grant provided by Canon Medical Systems USA, Inc. (Room S101AB)

2:00 – 3:30 p.m.

Efficiency & Risk Management in CT: Smart & Innovative Solutions:
Presented by Bracco Diagnostics, Inc. (Room S105D)

2:00 – 3:30 p.m.

AI: Delivering on the Promise:
Presented by MaxQ AI (Room S102AB)

Vendor Workshops

Please refer to the Meeting Program for further information or for any RSVP requirements.

FUJIFILM Medical Systems U.S.A., Inc.
South Hall, Booth 5147

GE Healthcare
South Hall, Booths 5135, 5140

Hologic, Inc.
South Hall, Booth 5119

Siemens Healthineers
North Hall, Booth 8563

Experience the Breakthrough Technologies and Products Transforming Health Care

AI Showcase
See the Driving Force Behind Ai
Sponsored by

![zebra MEDICAL.VISION]

North Building – Level 2

Attendees looking for the latest in AI solutions should plan to visit the newly expanded RSNA AI Showcase. Located in the North Building, Level 2, the AI Showcase features over 130 companies offering attendees the opportunity to experience AI software and product demonstrations, connect with industry leaders and see the possibilities of AI firsthand. Engage with exhibitors, participate in AI education, hands-on learning, and special engagement areas in this one-stop destination. Or, relax in the comfortable networking lounges.

RSNA AI Theater
Booth 10724

See AI in action with daily industry presentations on all the latest topics in AI, machine learning and deep learning in the RSNA AI Theater. Obtain the knowledge, training and networking opportunities you need to understand the role of AI in medical imaging. RSNA will also hold a series of presentations to highlight its work in AI and ways that members can work with RSNA on AI initiatives.

Stop by the RSNA AI Theater any time to discover our resources and educational opportunities, including the AI Challenge, AI webinar series, Spotlight Courses, AI Community and *Radiology: Artificial Intelligence*. Staff will also be available to answer questions on our RSNA tools that are enabling the practice of the future — RadReport, RadLex, IHE, Image Share and RadElement.

AI Hands-On Workshops
Booth 11536

New this year, industry sponsored AI Hands-on Workshops offer visitors an opportunity to engage with AI exhibitors and interact with their systems in a classroom environment. In 90-minute sessions, exhibitors will offer user training and product instruction. Attendees are encouraged to bring a laptop with keyboard to the workshops and reference the online program for any specific requirements.

RSNA AI Deep Learning Lab
Booth 10342

Now integrated into the AI Showcase, the RSNA AI Deep Learning (DL) Lab features four unique sessions developed by RSNA members focusing on using open-source tools for completing DL tasks. Sessions include an introductory course focusing on the basic concepts of convolution neural networks (CNNs), a data science session designed to do a deeper dive into data preparation and analyses, a session focused on the use of DL methods for image segmentation, and a session describing a recent advance of DL known as Generative Adversarial Networks. Attendees are invited to bring their own devices to begin completing actual tasks in DL. Sessions are repeated Sunday through Thursday.

3D Printing & AV Showcase & Theater

North Hall B, starting at Booth 6563

The newly expanded 3D Printing & AV Showcase and Theater has relocated to North Hall, Level 3, this year to support the widespread interest in 3D printing and mixed reality. This showcase and open-air theater features over 20 exhibitors and offers attendees the opportunity to interact with the latest technological breakthroughs and see different presentations from industry leaders on cutting-edge equipment and solutions. Sunday through Wednesday from 2- 3 pm, the RSNA 3D Printing Special Interest Group (SIG) presents on the latest research and innovations in 3D printing for medical applications. Visit the showcase to explore the companies and products leading the way in 3D printing, 3D software and augmented and virtual reality.

NEW Radiation Safety Zone

North Hall B, starting at Booth 8300

The Radiation Safety Zone is dedicated to the latest advances in radiation safety. Visit this one-stop destination to see safety-related products and services, including shielding, dose management and wearables. Engage directly with companies that can help you create a culture of radiation safety.

NEW Innovation Theater

South Hall A, Booth 4700

Enjoy a front row seat for the industry's latest product launches. The Innovation Theater features 20-minute presentations by exhibitors sharing their innovative products and advances in medical imaging.

Presentations are scheduled from 10:30 a.m. to 12 p.m. and 2 to 4 p.m., Sunday through Wednesday.

Startup Showcase

South Hall A, starting at Booth 2468

RSNA has partnered with MATTER to help discover the startups with the most innovative solutions in medical imaging. See how these companies are helping advance the rapidly changing world of radiology as they demonstrate emerging and inventive ways to improve your practice and enhance patient care. This dedicated area features 20 exhibitors and the latest breakthroughs in this exciting showcase.

NEW RSNA Startup Showcase Spotlight

South Building, Level 1, Room S101AB
Wednesday, Dec. 4, 1 – 2:30 p.m.

Listen as companies from RSNA's Startup Showcase tell their stories and give insights into some of the world's most promising technologies.

First-Time Exhibitor Pavilion

![1ST TIME EXHIBITOR]

South Hall A, starting at Booth 1050

RSNA 2019 is the premier marketplace for the latest products and services in medical imaging. Keep up with the newest exhibitors at the annual meeting and see the latest in radiology from these innovative companies. The First-Time Exhibitor logo identifies other first-time exhibitors throughout the exhibit halls.

IR Zone

South Hall A, starting at Booth 3352

Interventional radiology is at the forefront of innovative medical care. Connect with companies focused on the latest product advancements in image-guided radiology. This dedicated area will make it easier for interventional radiologists to interact with companies offering products specific to their subspecialty.

Recruiters Row

South Hall A, starting at Booth 1029

RSNA 2019 is a great place to expand your job search. Prospective employers will be on hand in Recruiters Row to meet with candidates during the annual meeting. Use the lounge in this area for interviews or one-on-one meetings. Log on to RSNA's Career Connect to search for employers who will be on site and recruiting. Learn more at *RSNA.org/Careers*.

Publishers Row

South Hall A, starting at Booth 1000

Shop for educational publications and professional services from virtually every aspect of medical imaging. Also explore the work of top medical publishers offering the newest radiology education hot off the presses. Stop by the RSNA Publications booth to learn more about RSNA journal-related products and services, and meet the editors behind our world-class journals during Editor Meet and Greets.

> You can also find a list of daily presentations, the exhibitor directory and floor plan online at *Meeting.RSNA.org* and on the 2019 Meeting App.

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North Hall B (Booths 6000–8599)
AI Showcase, North Building—Level 2 (Booths 10000–11999)

Morgan Advanced Materials

BOOTH 3971

3D Printing for Vacuum Applications

Morgan Advanced Materials is now producing 3D components from their Al-300 aluminum oxide formulation. Al-300 is well regarded for its high dielectric strength, mechanical performance and vacuum integrity. Furthermore, Morgan's 3D capability with Al-300 allows them to metallize and join these components using Wesgo braze alloys, allowing a true quick turn from your idea to a final component for rapid prototyping.

Advantis Medical Imaging

BOOTH 11337F

Advanced Neuroimaging in Clinical Practice

Advantis Medical Imaging develops high-end, web-based medical imaging software applications that enable the display, review and processing of medical images. After several years of research in the field of neuroimaging, Advantis Medical Imaging introduced Brainance MD™, a pure browser-based advanced neuroimaging software for the post-processing of brain MR imaging exams. Consisting of state-ot-the-art scientific methodologies, Brainance MD can be used for the visualization and processing of multiple brain MR exams such as DTI, DSC perfusion and fMRI, offering user-friendly processing tools and the proper workflow to achieve a reliable, data-oriented and timely diagnosis. As the company's purpose is to make advanced medical imaging more accessible to the entire healthcare ecosystem, Brainance MD is offered as a Software as a Service (SaaS) on the basis of dynamic subscription plans to several European healthcare organizations. *Brainance MD is FDA pending and is expected to be available in the United States within 2020.*

Aidence

BOOTH 10103

Software to Improve Reporting in Lung Cancer Treatment
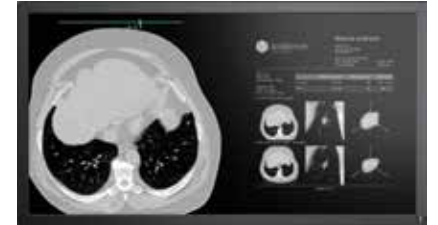
Aidence has developed Veye Chest to aid the early diagnosis of lung cancer on chest CT scans. The software automatically detects and evaluates pulmonary nodules, compares the patient's current scan to prior imaging, and produces a fully automated report for the radiologist. Since receiving CE certification, Veye Chest has been analyzing thousands of scans on a weekly basis, supporting radiologists in clinical practice in several countries across Europe. Aidence helps improve efficiency in radiology departments and accuracy in early lung cancer detection, and contributes to achieving successful and sustainable targeted lung cancer screening programs.

Blackford Analysis

BOOTH 10521

Single Platform to Manage Multiple AI Applications

Blackford provides a single platform to quickly access and manage a curated marketplace of regulatory cleared AI algorithms and imaging applications that add clinical value. Easily integrated into existing workflows, the platform provides actionable information that allows healthcare providers to use imaging information smartly and reduce the cost of care, while improving diagnostic confidence and patient outcomes. Fully integrated with existing systems, Blackford Platform simplifies implementing and managing multiple imaging applications and AI algorithms, and eliminates performance degradation. New applications can easily be added to the image-processing platform, reducing implementation time, costs and long-term maintenance.
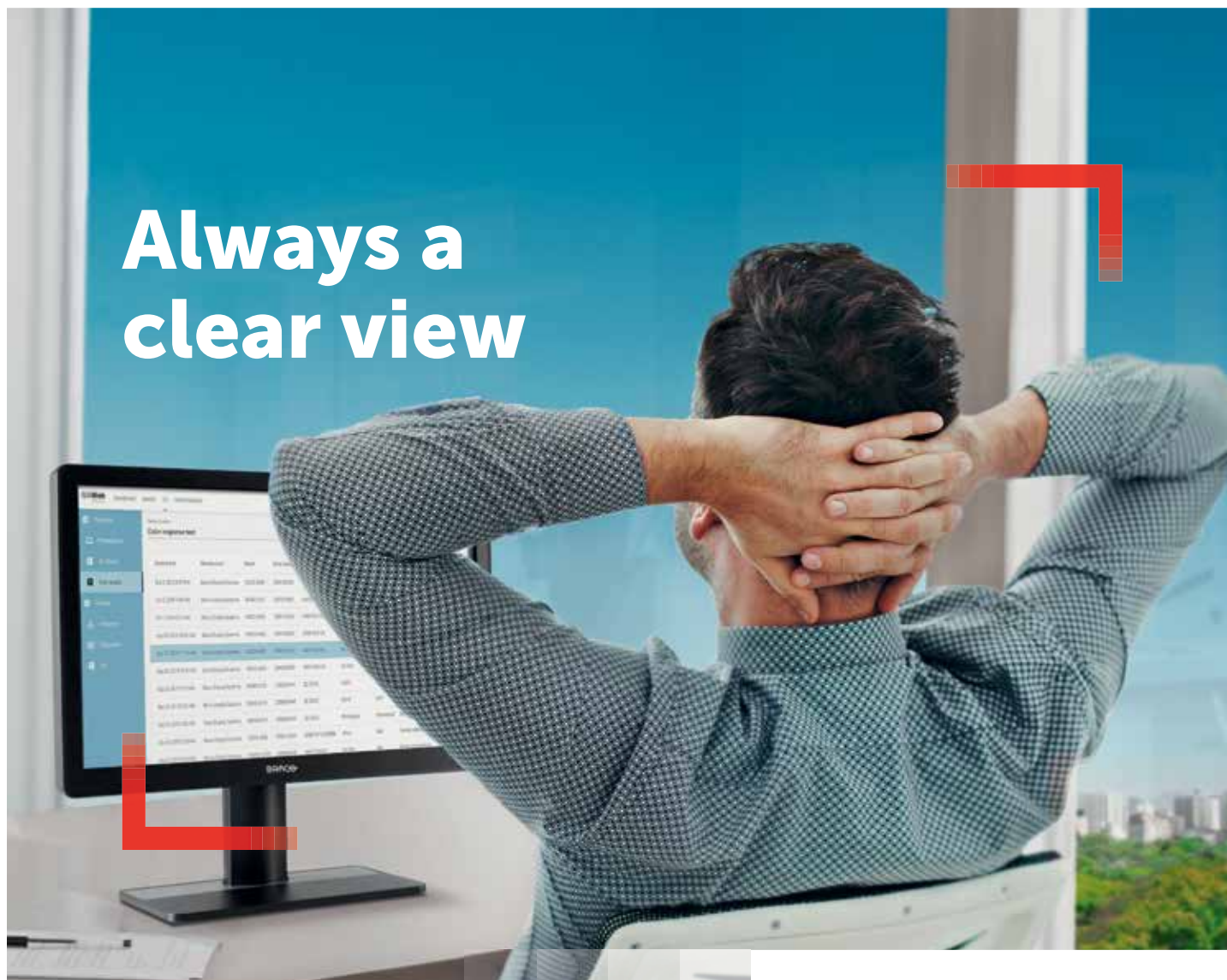
CuraCloud

BOOTH 11119

Custom AI Development Services

CuraCloud collaboratively develops medical AI solutions with healthcare delivery organizations, technology firms and pharma companies to improve diagnostics, care processes and clinical outcomes. Organizations in need of advanced medical AI development capacity can engage Cura-

Cloud's machine learning development services to rapidly augment their internal capabilities to take advantage of their data resources and better serve their patient populations. CuraCloud scientists are experts in developing advanced machine learning algorithms using annotated medical data, including CT, X-ray, MR, ultrasound and clinical reports. CuraCloud's research and development project portfolio includes software for intracranial hemorrhage detection, lung nodule detection and characterization, coronary artery segmentation and stenosis quantification, ultrasound breast cancer classification, chest X-ray disease classification, digital pathology cancer metastasis detection, NLP-based structured clinical reports and other use cases.

Flywheel.io
BOOTH 11618

Biomedical Imaging Research Platform for AI

Flywheel.io provides an imaging AI infrastructure that avoids the current costs and delays caused by imaging IT bottlenecks and manual processes while improving speed-of-discovery and funding opportunities, by delivering imaging research workflows which are collaborative, reproducible, scalable and automated. Flywheel.io automates the capture, conversion and structuring of any data from imaging devices or historical repositories, uses a metadata editor to organize data into a searchable and IRB-compliant project structure, scales analysis and management via reproducible scripts and elastic cloud computing (Google, Azure, AWS) and delivers collaborative access in a secure, regulatory-compliant reproducible scientific workflow. Importantly, existing processes are not disrupted, as Flywheel.io's open APIs and SDKs ensure simplified integration. An integrated library of imaging applications (BIDS, 3DSlicer, etc), optimize interactions with imaging data end-to-end, including conversion, archiving, viewing and sharing. In short, researchers "Do science, not IT" and build imaging AI capabilities.

OneMedNet Corporation
BOOTH 10524

More Than 60 Million Images Curated and Searchable
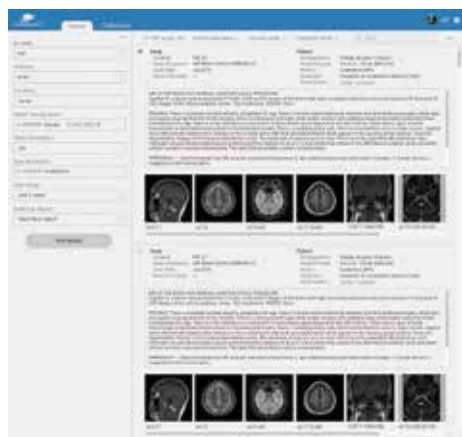
OneMedNet Corporation is empowering data science with clinical imaging. Serving both healthcare providers who are looking to capitalize on one of their largest assets

(image archives) and life science companies who are in desperate need of real-world data, OneMedNet provides a unique end-to-end offering to meet the needs. Already in practical use, the Data Broker solution enables mixed format archives to be quickly de-identified, indexed, searched, and thoroughly curated. Healthcare providers can enable patient care innovation while generating significant revenue at the same time. Hospital anonymity is maintained throughout the unobtrusive and highly secure process. AI/ML, pharmaceutical, clinical research, and device organizations can simply access the data they need when they need it.

QMENTA
BOOTH 10916

AI Cloud-based Platform with Imaging Biomarkers

QMENTA has developed an AI cloud-based platform and state-of-the-art imaging biomarkers to allow experts to forget

about the complexity of medical imaging and focus on interpreting the results. The QMENTA platform is the perfect environment for research, clinical trials and clinical care to aggregate, standardize and quantify both from individual and multi-site medical imaging data and related data in just one click. Innovative, widely used imaging biomarkers are incorporated in the platform to enable experts to measure the efficacy of treatments under trial or research and empower their objective decision making. QMENTA enables institutions around the world to collaborate with each other in one compliant central system, saving them large amounts of time, money, frustrations and errors.
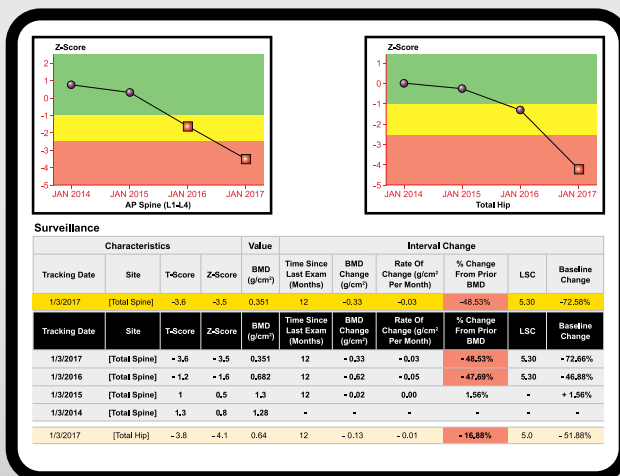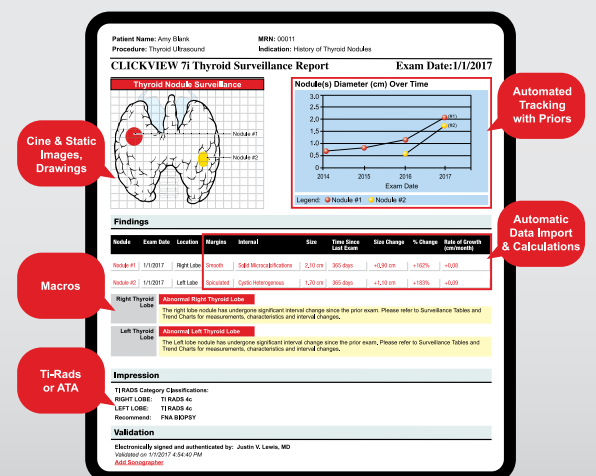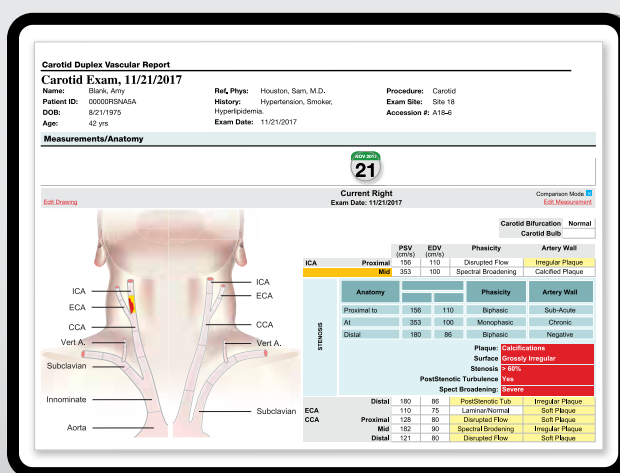
QView Medical Inc

BOOTH 3949

AI Assistance in 3D Breast Ultrasound
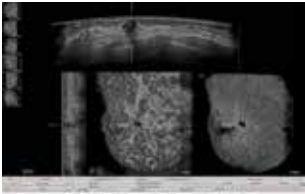
QView Medical's AI QVCAD software system is the first and only FDA PMA-approved software system using artificial intelligence algorithms for breast cancer detection. The QVCAD algorithms are based on a combination of computer vision and AI deep learning technologies. It analyzes 3D volumetric US images and identifies suspicious areas of interest. Its output is presented in two formats: QVCAD Navigator image of each US volume, which is a modified minimum intensity projection combined with an enhancement of the coronal image of the US output in areas where QVCAD has detected possible abnormalities; and QVCAD marks, intended to highlight potentially malignant lesions. This is intended to bring attention to certain areas of interest to further investigate. Five recently published studies demonstrate that using AI QVCAD, 3D volumetric US cases can be read in less time without compromise in diagnostic performance.

Sectra

BOOTH 6113

AI App Store: Highway to AI Adoption

To manage the ever-growing workload as a radiologist in the future, you need access to a variety of AI-based diagnostic applications from different vendors. These smart applications need to be tightly integrated into the existing diagnostic workflow in order to truly increase your efficiency and help you reduce potential medical errors. Also, your system administrators and purchasers should not need to worry about handling integrations or managing the vendors' different payment models. Global leading enterprise imaging vendor Sectra is now forming a vendor-neutral AI marketplace, which can help overcome the various challenges involved in implementing AI in radiology and speed up AI adoption. Sectra's AI vision includes providing a single point of access to a portfolio of seamlessly integrated AI applications ready to be used in an efficient diagnostic setting to help you meet current and future needs.

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AI Showcase, North Building—Level 2 (Booths 10000–11999)

Subtle Medical Inc

BOOTH 10719

AI Software to Boost MR Imaging

Subtle Medical is showcasing SubtleMR™, its image processing software used to enhance MR images by resolution enhancement and denoising. By delivering a significant improvement in the quality of noisy images, SubtleMR enables centers to increase exam throughput and patient comfort. The product's unique application of AI infrastructure helps make MR imaging exams that often rely on limited-capacity hardware more efficient and accessible to patients. The noise-reducing software lowers the potential for motion artifacts and the need for re-scans, challenges for both patients and physicians. Subtle Medical's focus on image acquisition differentiates it from most AI imaging companies that focus on image analysis and diagnosis. Subtle has the only two FDA-cleared AI software solutions for medical imaging enhancement, SubtlePET™ and SubtleMR™.

VUNO Inc.

BOOTH 11132

Accelerated Diagnostic Precision through AI
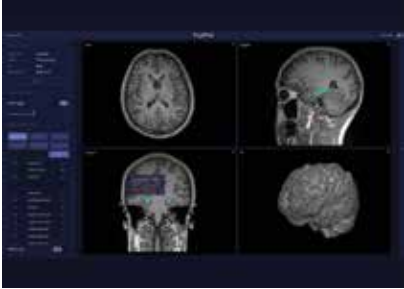
VUNO delivers innovative standalone, cloud-based, and integrated deep learning applications that significantly improve physician's workflow while enhancing patient care. From imaging modalities like X-rays and CT scans to biosignal monitoring systems, VUNO provides a diverse array of services that quantify and analyze data to diagnose diseases. The medical diagnostic support platform, VUNO-Med, is built on top of proprietary AI engine VUNO-Net, which leverages high quality large-scale medical data and enables real-time experience and allows the results of services to be analyzed from anywhere. VUNO's product portfolio is expanding to other therapeutic classes in cardiology, ophthalmology, and infectious diseases. *VUNO Med®–BoneAge is the first AI diagnostic software to receive MFDS (Korean FDA) approval and is CE marked. VUNO Med®–DeepBrain, automatic quantification of neurodegenerative disease, also received MFDS approval. VUNO's other AI-based medical solutions, including VUNO Med®–Chest X-ray, and VUNO Med®–LungCT AI, are expected to receive CE mark and gain FDA approval in 2020.*

Ziosoft

BOOTH 8337

Pioneering AI Advanced Visualization
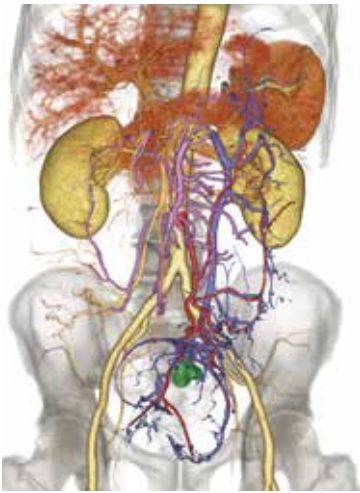
Ziosoft, a pioneer in 3D/4D medical AI visualization, is showcasing its comprehensive suite of advanced visualization and post processing application system on a true vendor-neutral platform at RSNA 2019. The AI platform provides a robust and clinically validated algorithm, which is driven by both a traditional and new era of machine learning, unlocking the potentials of AI for efficient and repeatable outcomes. The flagship Ziostation2 is an economical and scalable multi-departmental solution. A full suite of regulatory cleared 2D, 3D, and 4D analytical tools provides consistent functionality across the enterprise, without compromise. It provides a vendor-neutral advanced visualization platform across multiple imaging modalities. It is also based on architecture that is designed to grow with the future needs of clinicians.

SST Group Inc

BOOTH 8500

DICOM Burner Your IT Department Will Love

The DMC-EZ Enterprise™ network disc publishing solution addresses your IT department's security requirements, giving users the freedom to choose which location in your facility a CD/DVD will be burned. All disc and user activity flows to a single log file which can be accessed by the administrator from anywhere on the network. Since the server is housed in your secure IT department, it allows a level of security not found with other solutions. Each burner location only requires a power outlet and a network drop. The browser-based interface provides on-demand DICOM CD and DVD creation from anywhere on a network. The DMC-EZ Enterprise has numerous best-of-class software features such as study disc encryption, rules-based DICOM routing and option to download to USB flash. DMC-EZ Enterprise also includes an import tool which allows facilities to upload external studies before sending to PACS.

CAE Healthcare

BOOTH 6563F7

Enhanced Training Experience with Augmented Reality

Experience limitless learning with CAE's Simulation Training Solutions powered by the Microsoft Hololens. Freed from its two-dimensional environment inside a monitor, CAE's Vimedix ultrasound, coupled with the Hololens 1, leaps to life, displaying anatomy you can enlarge, turn, rotate or command to return into its manikin body to view how its structures are interrelated, enabling you with speed and accuracy in learning like never before. Come and meet the CAE team to learn more about Vimedix that can be completely customized to your training needs.

Hyland Healthcare

BOOTH 4300, MS 200

Enterprise Imaging Solutions to Realize New Possibilities

Hyland Healthcare offers a full suite of enterprise imaging solutions that empower radiologists to be more productive and collaborative members of the clinical care team. By leveraging the company's Acuo Vendor Neutral Archive (VNA), NilRead universal viewer, ImageNext workflow optimizer and PACSgear image connectivity tools, radiologists can address a variety of challenges and initiatives. The suite redefines PACS by eliminating proprietary archives and PACS migrations with an infrastructure that enables vendor neutrality, consolation and enhanced visibility across all image formats. It provides anytime, anywhere access to images, enhancing image sharing and collaboration with internal and external clinical stakeholders. You can intelligently route, sort and distribute imaging studies based on custom preferences to increase productivity 10 to 20 percent. Point-of-care image integration lets you bridge the DICOM worklist gap that exists between most encounter-based imaging devices and PACS, ensuring complete imaging records and proper reimbursement.

TIMS Medical, A Division of Foresight Imaging

BOOTH 7209

Medical Video Streaming, Recording, Collaboration and Connectivity

TIMS Medical is showcasing several imaging solutions this year. TIMS Consultant®—live, remote medical video and audio collaboration—provides a live video stream, from any modality, to authorized users on desktop, laptop, tablet or smart phones. Built-in multi-party audio chat and telestration facilitates seamless collaboration between participants. TIMS Consultant is an extremely efficient tool for teaching, mentoring, and consulting during any live procedure. TIMS DICOM System®, with more than 4,000 systems worldwide, is a leading solution for recording fluoroscopy modified barium swallow studies. TIMS records at the maximum resolution of the fluoroscope, 30 fps, with synchronized audio. Completed studies can immediately be sent to the SLP office for review, allowing for more studies per day in the room. Edited studies are then archived to PACS/VNA in compressed format, with a storage size 1/10th of that sent from a fluoroscope.

Kheiron Medical Technologies Ltd

BOOTH 10911

Machine Learning System for Mammography

Kheiron Medical Technologies is an applied science company focused on radically improving breast screening so that every woman has a better fighting chance against breast cancer. Their first product, Mia™, combines the latest machine learning techniques with expert clinical insight to directly address the challenges faced by breast radiologists. It is the only solution to have European CE Mark approval as an independent reader of mammograms. Instead of marking images like the old CAD systems, Mia™ can directly support the most important screening decision: Should a woman be called back for further testing or not? Mia™ has been trained and tested on millions of mammography images in extensive CRO-led U.S. and European trials. Khieron is working with many of the world's leading academic institutions on this journey.

PACS

EBM Technologies Inc

BOOTH 3748

Ubiquitous Diagnostic Environment

UDE App is EBM's newest iOS-based mobile feature highlights display solution that's capable of converting an iPad Pro into a standalone viewer, display and server, all in one. UDE App offers many highly anticipated features, including the use of AI, an extendable reporting system, and more. With UDE App, medical imaging data from the PACS server/modality can be directly transmitted to an iPad Pro through DICOM communication for the purposes of displaying and storage. When connected with our in-house designed reporting system, UDE App can instantly turn a set of iPad Pros and a laptop into a fully functional mammography workstation with built-in mammography hanging protocols. The advancement of this versatile application facilitates communication of clinical information and overcomes traditional workstation barriers for the best possible patient care.

QUALITY ASSURANCE/SAFETY CONTROL

Agamon

BOOTH 2468-A8

Automatic Contextualized Follow-up Recommendation Platform

Agamon offers a platform that automatically and accurately detects and extracts contextualized follow-up recommendations for health systems to close communication gaps. Closing this loop ensures better patient care and experience, mitigates liability risk and generates growth opportunities without increasing administrative burden. Agamon's efficient automated solution converts text in imaging reports into structured data and actionable insights. Agamon's core technology is based on AI (NLP and deep learning) and the product seamlessly integrates into existing workflows.

LANDAUER, RaySafe & Fluke Biomedical

BOOTH 8135

Radiation Dose Optimization Products

RaySafe and LANDAUER focus on measuring, monitoring and helping reduce radiation exposure for healthcare professionals. The new RaySafe 452 Radiation Survey Meter is a powerful survey meter that measures ionizing radiation in a wide variety of applications. The RaySafe 452 does not require any corrections or manual settings, letting you focus on radiation protection rather than set-up. It is as versatile as you are. LANDAUER OPTIMIZE is a new, unique radiation dose optimization product and service that automates tasks, solves data problems and helps meet compliance in partnership with expert medical physicists. See the advantages during a live demonstration of products designed to help make radiation safety, quality and compliance easy.

RADIOGRAPHY

Konica Minolta Healthcare Americas, Inc.

BOOTH 2538

Advancements in DR, Enterprise Imaging and Ultrasound

Konica Minolta Healthcare is a world-class provider and market leader of integrated, best-in-class intelligent innovations in imaging technology. Dynamic digital radiography (DDR) is a new imaging modality that captures X-rays to deliver a cineloop that depicts motion and diagrams to help radiologists provide more detailed clinical findings. DDR is not fluoroscopy, it's "X-ray that Moves." The next-generation KDR® Advanced U-Arm System with DDR with advanced image processing is ideal for orthopedic applications. Exa®, an enterprise imaging platform that provides fast access to images from any device while providing workflow productivity, is now available in Canada and Latin America. The SONIMAGE® HS1 Ultrasound System delivers workflow improvements, new MSK imaging capabilities and artificial intelligence-assisted functionality that enables hands-free operation during interventional procedures. Simple Needle Visualization (SNV™) and UltraAdjust™ one-touch image optimization provide exceptional image quality and resolution.

ROBOTICS

XACT Robotics

BOOTH 1650

On Target Robotic Enabled Radiology Solution

XACT Robotics⌧ is advancing the field of radiology, pioneering the first-to-market robotic system integrating image planning and navigation with instrument insertion and steering capabilities, to democratize percutaneous interventional procedures. The XACT technology enables Accurate, Consistent and Efficient (ACE) interventional percutaneous procedures. It is designed to be compatible with various imaging modalities, capable of delivering instruments to a desired target for a wide range of clinical applications and indications. Its small footprint and high mobility features, coupled with its ease of use, enable care providers to treat a broad range of patient care needs in various clinical sites of service.

SOFTWARE/IT SERVICES

Macadamian Technologies

BOOTH 10320

### Accelerated Development of Innovative Imaging Solutions

Building out digital health capabilities is never easy. Navigating complexities such as interoperability, security and integrating a fractured patient experience can draw focus away from the primary objective: Bringing to market innovative ways to improve the delivery of care. Macadamian HealthConnect™ is a digital health Platform as a Service that optimizes the cost and accelerates the development of data-informed medical device and digital therapeutic applications. Paired with their user experience and software product development expertise, it provides the underlying architecture for their clients' applications. For many companies, this means reducing product development challenges and reducing time and money spent associated with interoperability, managing cloud infrastructure and ensuring security and compliance with regulatory requirements. By leveraging Macadamian HealthConnect, clients are able to rapidly develop a POC with calculable ROI savings and deploy a scalable, secure platform built by experts with 15+ years' experience designing and developing solutions for complex healthcare environments.

Radwisp Pte Ltd

BOOTH 2468-A5

Visualization of Pulmonary Air and Blood Flow
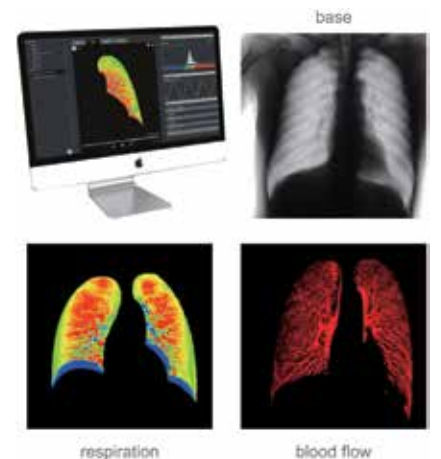
Radwisp is a post-processing software that visualizes respiratory function and pulmonary arterial flow by analyzing a DICOM file obtained from low-dose chest X-ray cine imaging, such as angiography. Radwisp can extract and visualize the tiny changes from the air and blood flow without contrast media by frequency tunability computation. Radwisp has the potential to visualize both pulmonary gas change and blood flow of lung fields in real time. In addition, low radiation exposure and disuse

of contrast media make Radwisp a low-invasive imaging tool. *Radwisp achieved regulatory approval in Japan in 2018 and is working towards FDA approval and CE mark from the European Economic Area.*

Rosenfield
BOOTH 1450
Personal Teaching Files Solution

Rosenfield presents its powerful personal teaching files solution, iCode Lite, that perfectly fits with any radiologist's needs to archive and organize his/her interesting studies. iCode Lite imports studies in DICOM format or Windows formats (JPEG, BMP); then users can classify studies according to ACR classifications (body part & type of disease). iCode Lite has a very powerful search tool that enables users to search the catalogued studies by body part, type of disease, keyword in diagnosis or report. iCode Lite also has a great feature to anonymize burnt demographics of ultrasound images to remove the pain of doing so when using these studies in teaching. Lite has extensive export functions; the user can export studies to power point presentations, videos, multiple images formats and the most important to anonymized DICOM files.

Detection Technology
BOOTH 3249
X-ray Detector Solutions

Detection Technology offers off-the-shelf and customized X-ray detector solutions for medical, security and industrial applications. Their product portfolio ranges from photodiodes to complete detector systems with ASICs, electronics, mechanics and software. Their solutions meet the performance and reliability requirements of the most stringent applications, such as high-end CT systems. Furthermore, the products are built on modular, scalable and easily customizable architectures. Detection Technology knows that tiny details done right make a big difference, and they always pushing the edge of design for a better quality. More than two billion inspections are done daily with our technology, and the number is growing rapidly. Detection Technology is known as a company providing the best-in-class X-ray imaging solutions, service and flexibility for a unique customer experience, always.

Direct Conversion Ajat/XCanter
BOOTH 2973
Photon Counting: A Clinical Reality

Direct Conversion AB develops, designs and produces integrating and photon counting X-ray detectors for imaging in medical and industrial applications. Its unique pixelated hybrid detector technology combines highly sensitive, direct converting CdTe detector material with advanced signal processing in its proprietary electronic circuitry (ASIC) on a small scale at very high precision. Direct Conversion detectors are characterized by their extremely high speed (up to 2000 fps) of operation and their ability to handle clinically relevant X-ray fluxes (up to 109 events/s/mm²). In addition, they provide all necessary corrections for artefact-free imaging. As a result, they produce sharper images and a better signal/noise ratio than conventional detectors. In addition, they enable spectral imaging to better separate different materials. For their application in medical imaging, they promise to deliver better images at lower doses containing more information (tissue separation). Direct Conversion's photon counting X-ray detectors are now integrated into clinical applications.

Solutions for Tomorrow AB
BOOTH 8204
Mobile DR Unit

Solutions for Tomorrow is a new Swedish med-tech company producing groundbreaking products that change the X-ray experience for caregivers and patients

alike. The company's innovative X-ray units are designed around the technologists' workflow and operate on the latest battery technology available, X-tech cell—developed in-house. Solutions' team has, through commitment to a new concept of True X-ray Mobility™, created the next generation of mobile X-ray units, smaller, lighter and more mobile than conventional machines—fully-powered machines that roll into a standard size van like a motorized wheelchair. !M1 unit is a part of a forward-thinking concept where high-end X-ray services can easily be de-centralized, working in parallel with the radiology department. The unit is powered by a Li-ion battery pack, X-tech cell, that is developed in-house and warrantied for 8 years.

Equipment finance expertise to help you grow