INTELLIGENT ULTRASOUND®
for smarter scanning

Real-time support from the classroom to the clinic

Making ultrasound more accessible to all medical professionals.

Unlocking Ultrasound

Founded out of industry-leading research from three world-class universities – the University of Oxford, Cardiff University and University College London, our vision is to harness the power of a new generation of AI algorithms to make ultrasound easier to learn and simpler to use by providing ‘classroom to clinic’ training, guidance and real-time support to medical professionals. To date over 1,000 systems have been installed in over 500 medical institutions around the world.

Ultrasound Simulation

World-class, high-fidelity ultrasound simulation technologies to make ultrasound simpler to use, and easier to learn.

Artificial Intelligence

Our clinical-AI products harness the power of AI to improve the accuracy and standardization of ultrasound procedures in clinical practice.

eLearning

Created with experts in their field to support continuous education and improvement within ultrasound and healthcare.

Clinical Partnerships

We work with leading medical manufacturers and institutions to further advancements within medical practice and education.

INTELLIGENT ULTRASOUND®
for smarter scanning

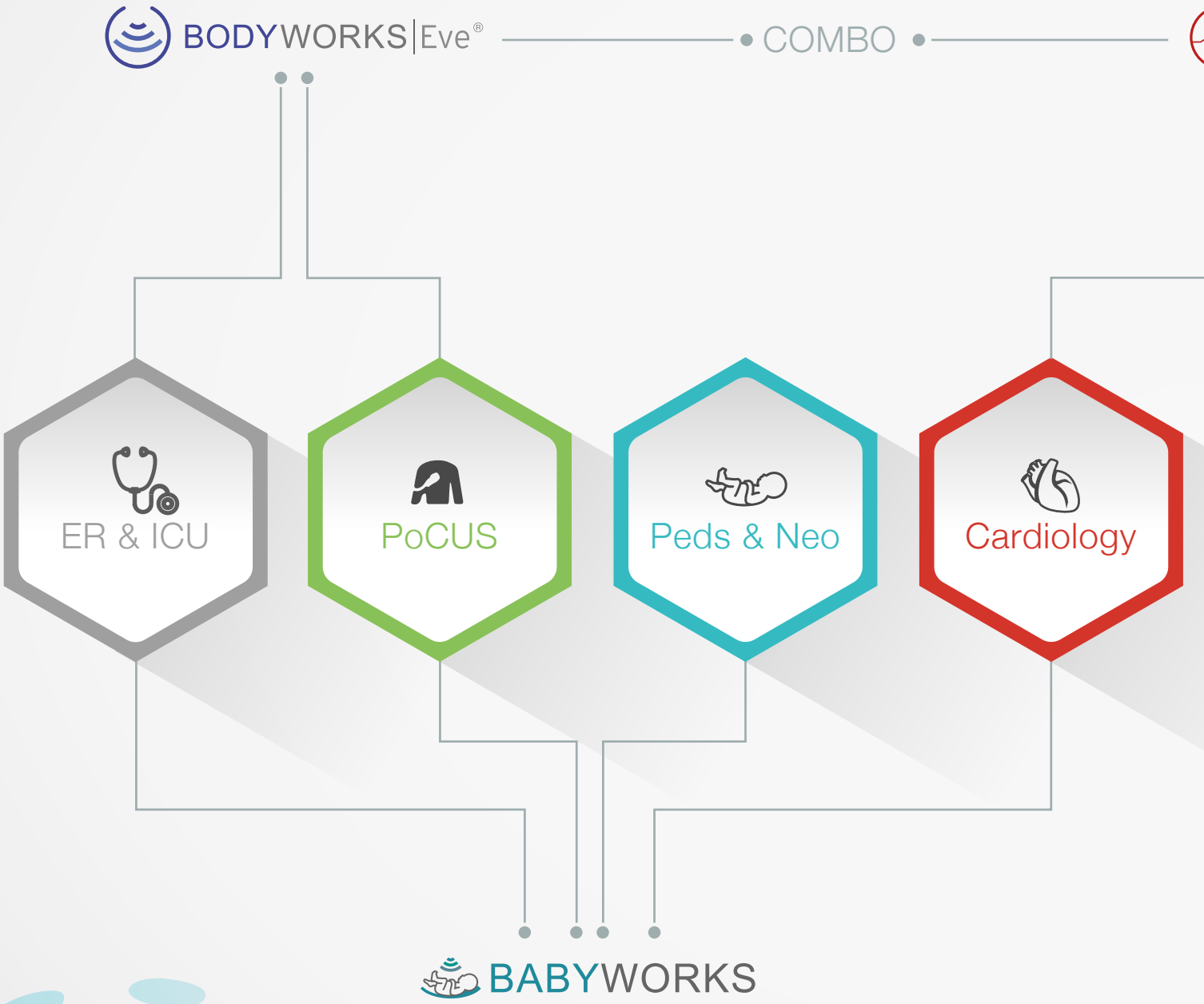
Contents

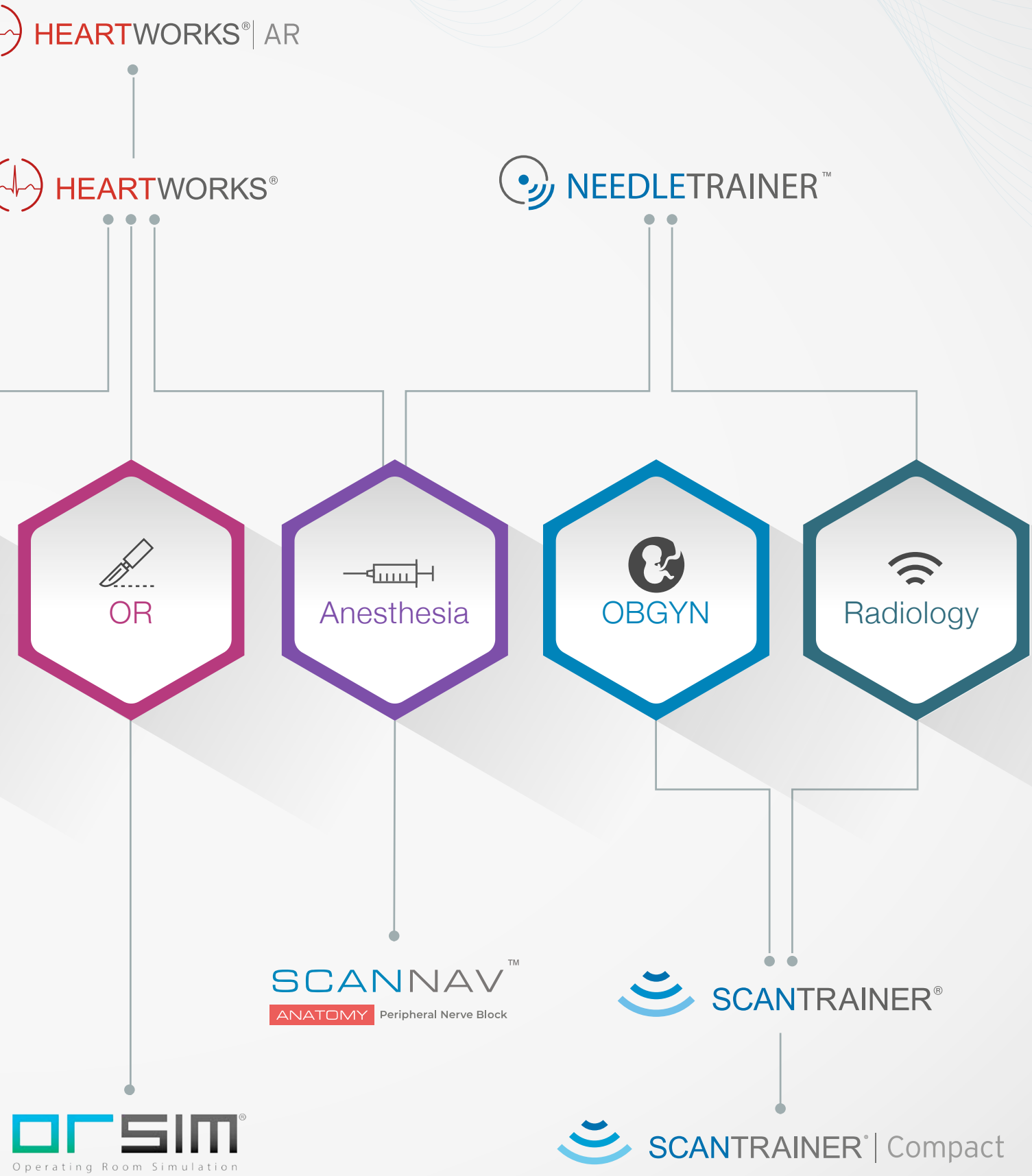
Get in touch today:

hello@intelligentultrasound.com
intelligentultrasound.com

Product Matrix

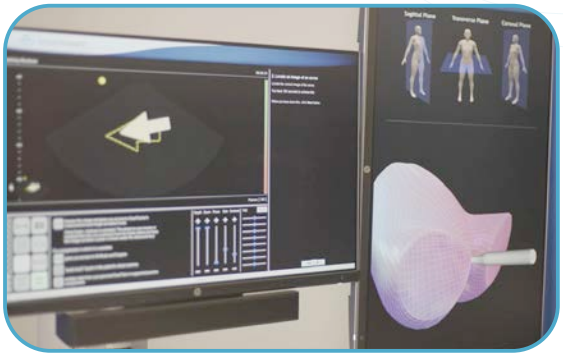
Discover our complete learning pathway making ultrasound easier to learn and simpler to use for all medical professionals.




HEARTWORKS® | AR
HEARTWORKS®
NEEDLETRAINER™
OR
Anesthesia
OBGYN
Radiology
SCANNAV™
ANATOMY Peripheral Nerve Block
SCANTRAINER®
ORSIM®
Operating Room Simulation
SCANTRAINER® | Compact

SCANTRAINER®

Simulation in Transvaginal (TV) and Transabdominal (TA) Ultrasound



With structured curriculum-based teaching, real patient scans and haptic feedback, ScanTrainer gives real-time assisted guidance and facilitates assessment through measurement of key performance metrics - all in one comprehensive system.

From the basic probe manipulation to diagnostic skills assessment, the curriculum-based program helps students develop hand-eye coordination, pattern recognition, 3D - 2D spatial awareness, anatomy and pathology recognition; providing full anatomy real patient scans, concurrent with all planes probe movement.

Book A Demo

“Since implementing ScanTrainer into our programs, not a single student has failed the transvaginal obstetrics and gynecology module.”

Naomi Brown.
Senior Lecturer and Ultrasound Course Lead, University of the West of England

SCANTRAINER® | Compact

Comprehensive Teaching

Curriculum-based teaching from basic probe manipulation in both TA and TV modalities, through to complex pathology recognition, Doppler, fetal lie and placenta localisation.

Supported Learning

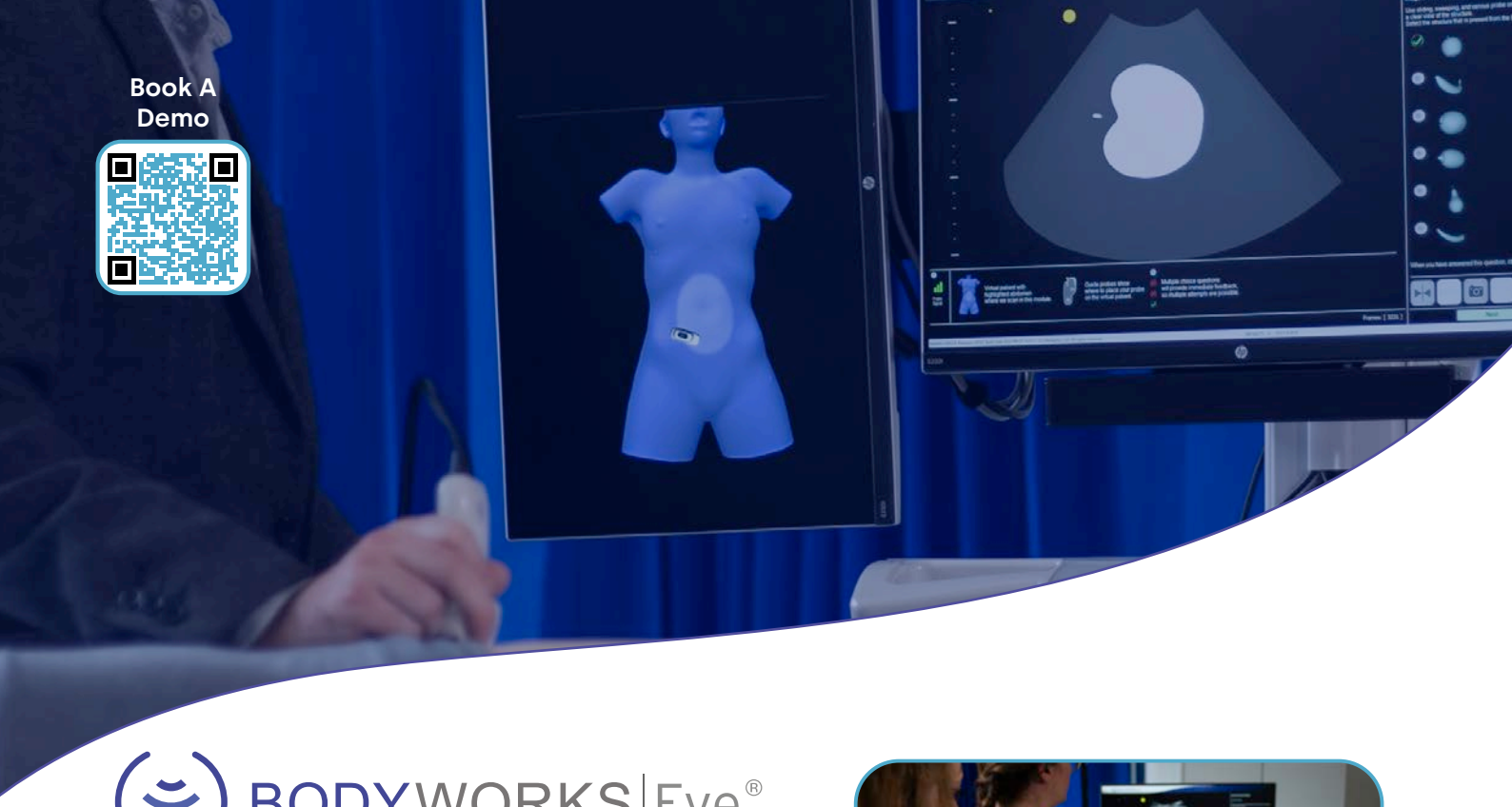
Built-in ScanTutor replicates learning with an expert for self-directed learning, but can be switched off for tutor-led sessions.

Realistic Scanning

Sophisticated haptic feedback, paired with fifteen virtual patients and real ultrasound scans, provide a realistic scanning experience without the need for multiple manikins.

Trackable and Flexible

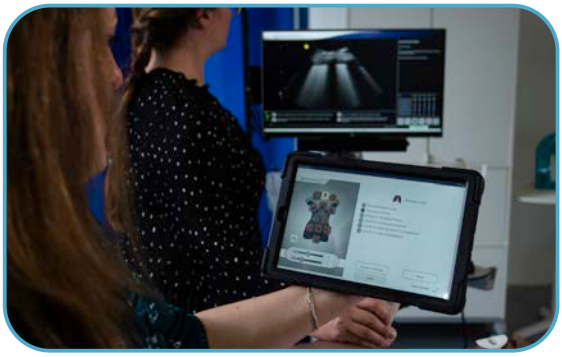
The LMS allows you to keep track of trainees progress, create customized learning programs and even upload patient cases, putting you in full control.



Book A Demo

BODYWORKS | Eve®

Interactive Point-of-Care Ultrasound (PoCUS) Scenario Training



BodyWorks Eve is an ultra-realistic manikin with over 100 cases using real patient scans, and over 10,000 pathology variations across cardiac, lung, transabdominal and pelvic ultrasound.

Run realistic scenarios controlled by the tablet. Easily change the pathology, patient's heart and/or respiratory rate and the severity of the pathology instantly to test assessment and decision-making skills.

High Fidelity

Accurate, palpable, anatomical landmarks and ultrasound data covering from the clavicle to the pelvis means you can scan Eve as you would a patient.

Principle Skills

Learn the fundamental probe movements, hand-eye coordination and ultrasound terminology, through simple lessons on the system and companion eLearn course.

Flexible Teaching

True-to-life ergonomics, active scenarios and customizable patient cases mean learning can be tailored to your curriculum.

Complete Solution

Combine BodyWorks with the Heartworks simulator for a complete PoCUS and Echocardiography solution.

REAL PATIENT SCANS

Over 120 real patient cases

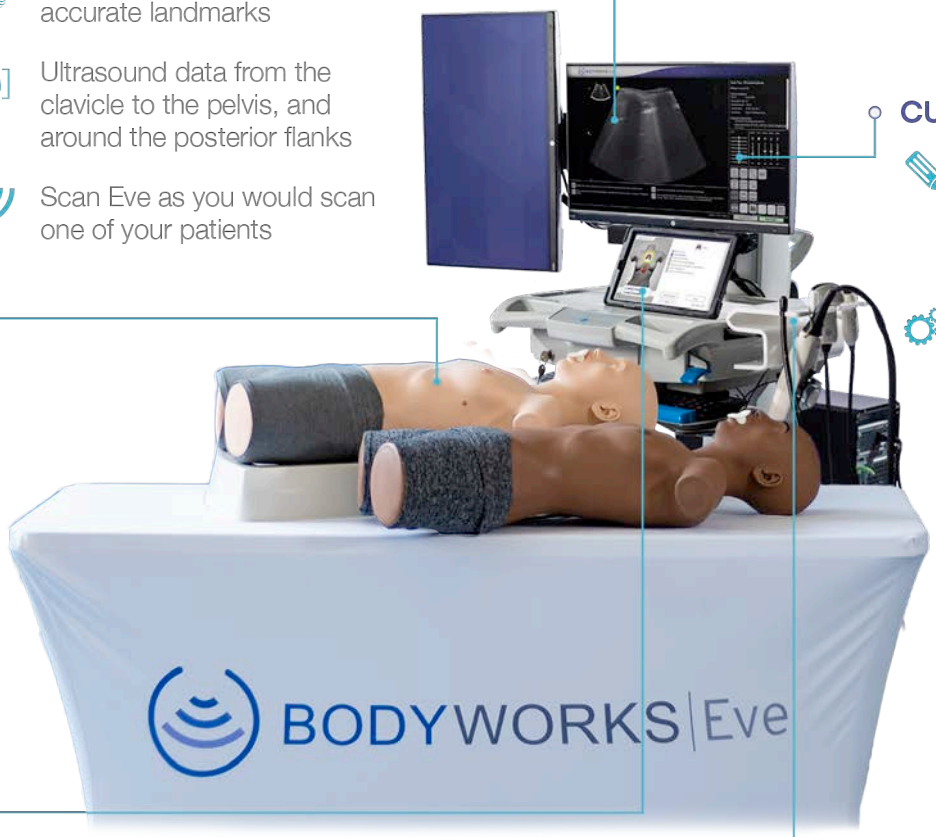
Over 10,000 pathology variations across cardiac, lung, transabdominal and pelvic ultrasound

TRUE-TO-LIFE SCANNING

Ultra-realistic manikin with accurate landmarks

Ultrasound data from the clavicle to the pelvis, and around the posterior flanks

Scan Eve as you would scan one of your patients



CUSTOMISABLE

Create bespoke patient cases from any pathology with tailored clinical information

Selection of 2 manikins according to facility choice

FLEXIBLE SCENARIO TRAINING

Instructor Tablet enables the tutor to run scenarios 'on the fly'

Test assessment and decision-making skills

Easily change the patient's pathology, condition and level of severity

CART-BASED SYSTEM

Manoeuvrable, adjustable cart with accompanying manikin

Designed to mimic true-to-life ergonomics

"We are confident that integrating BodyWorks Eve into our programs will enable us to deliver the best possible educational outcomes for our learners."

Dr. Brian Kaufman,
Professor of Anesthesiology, Medicine, Neurology and Neurosurgery at NYU Grossman School of Medicine

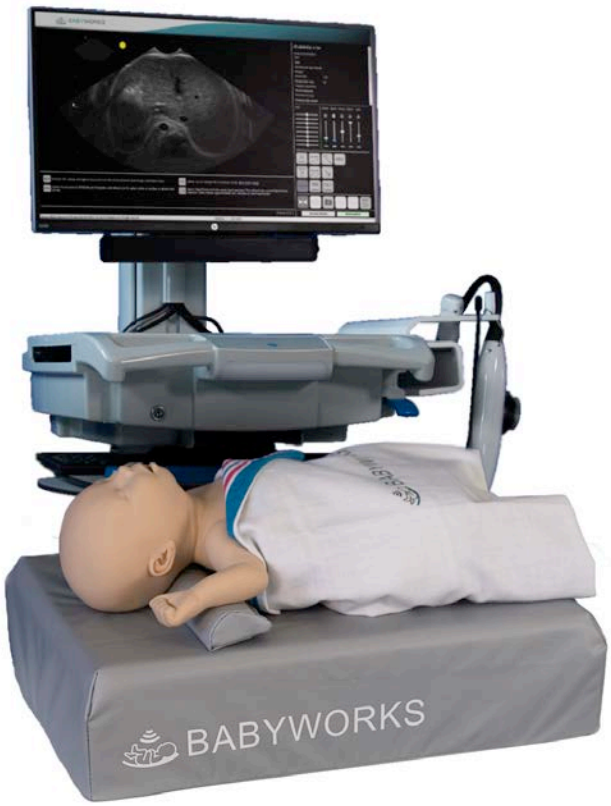
BABYWORKS

Pediatric and Neonatal PoCUS and Echocardiography Training

BabyWorks Sam is an ultra-realistic baby manikin offering a safe and effective training tool for pediatric and neonatal ultrasound, with real patient scans. Accurate, palpable, anatomical landmarks and ultrasound data covering from the clavicle to the pelvis, and 3 cranial windows, mean you can scan as you would a real baby.

Run realistic scenario training using the instructor tablet. Easily change the pathology, heart and/or respiratory rate and the severity of the pathology instantly to test assessment and decision-making skills.

Integrating the high fidelity of the HeartWorks cardiac simulation, Babyworks offers risk-free training for Transthoracic (TTE) and Transesophageal (TEE) Echocardiography and cardiac anatomy in pediatric and neonatal care.



NEW! Even more learning opportunities
The latest BabyWorks content includes additions across cardiac, cranial, gastric and line placement, ensuring BabyWorks is the most comprehensive system in bedside ultrasound for infants covering the head, heart, lungs, abdomen, and bladder in one comprehensive life-like simulator for pediatric and neonatal ultrasound.

"This gives us the chance to train our residents on how to recognize these pathologies that they may not see otherwise at all during their training"

Dr. Jared T. Marx
Emergency department ultrasound director and fellowship director for advanced emergency medicine ultrasound at the University of Nebraska Medical Center (UNMC)

Book A Demo

Incredible Realism

Accurate, palpable anatomical landmarks and real patient cases offer an incredibly realistic scanning experience.

Safe and Effective

Teach tricky or invasive procedures like TEE and lung ultrasound for pediatric and neonatal patients, in a risk-free, calm environment, without time constraints.

Point-of-Care Ultrasound

Real patient cases and over 5,000 pathology variations covering the brain, heart, lungs, abdomen and bladder.

Echocardiography

Comprehensive TTE and true-to-life TEE with controls for ante and retroflexion, lateral flexion and omniplane rotation.

Active Scenarios

Instantly change the pathology, severity, heart and/or respiratory rate using the tablet, to test assessment and decision-making skills.

Expert Care

Developed in collaboration with global pediatric and neonatal experts, including those at Great Ormond Street Hospital, London.

HEARTWORKS®

REALISTIC DOPPLER

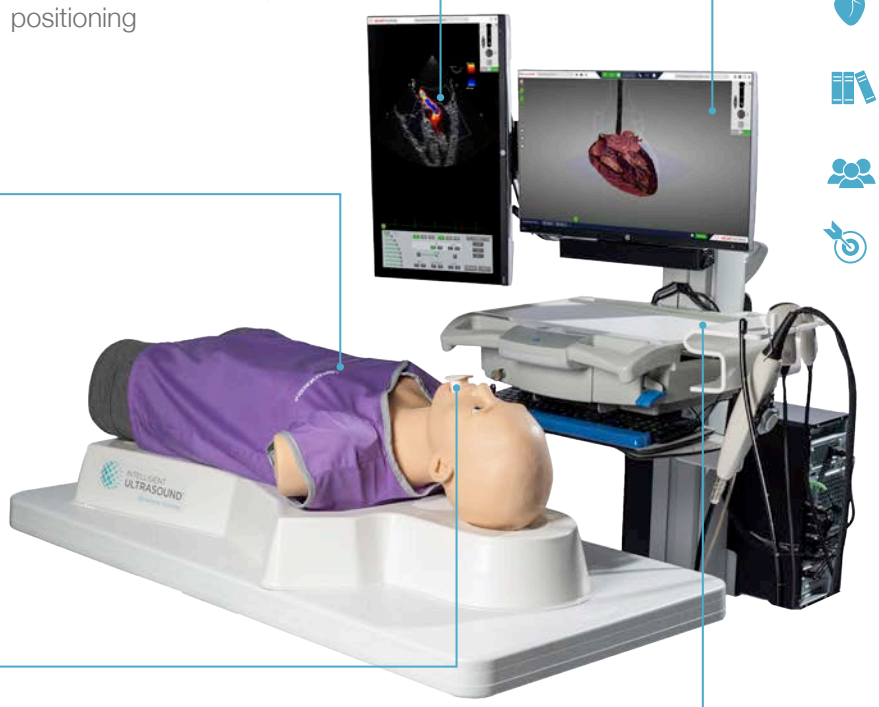
- Colour, pulsed wave and continuous wave doppler in all regions of all patient cases
- M-Mode, Biplane, and measurements & calculations package with reporting functionality

TRANSTHORACIC ECHOCARDIOGRAPHY (TTE)

- Comprehensive TTE scanning using the TTE probe
- Accurate, palpable anatomical landmarks to aid TTE probe positioning

CADIAC ANATOMY & PATHOLOGY

- Interactive 3D heart with over 135 intra-cardiac structures labelled
- Integrated and comprehensive anatomy textbook
- 30 heart and lung pathology cases
- Gold standard TTE & TEE imaging planes



TRANSESOPHAGEAL ECHOCARDIOGRAPHY (TEE)

- True-to-life TEE examinations using the TEE probe
- Controls for ante and retroflexion, lateral flexion and, omniplane rotation

CART-BASED SYSTEM

- Manoeuvrable, adjustable cart with accompanying manikin table
- Designed to mimic true-to-life ergonomics

"HeartWorks is an essential addition to any unit offering an ultrasound and echocardiography service, or trying to teach such skills."

Dr Craig Morris,
Consultant Intensivist and Anesthetist, Royal Derby Hospital, UK.
Emeritus Professor of Cardiac Morphology, Institute of Child Health

Book A Demo

Comprehensive Education in Cardiac Anatomy and Echocardiography

Developed by leading clinicians in cardiac anesthesiology; HeartWorks® is recognized globally as the leading simulation system for education in cardiac anatomy and echocardiography, with 30 interactive pathology cases.

Fully explore and understand anatomy as it relates to the ultrasound images. For every case there is an anatomically accurate and fully interactive 3D heart which can be rotated, sliced in any direction, have any of the 135 intracardiac structures highlighted and explored in 3D echocardiography.

Interactive 3D Heart

The highly accurate 3D heart can be rotated, sliced in any direction, or have any of the 135 intracardiac structures removed or highlighted.

2D & 3D Echocardiography

Explore ‘gold-standard’ TTE and TEE imaging views, 3D echocardiography, and slice through any part of the heart, across all pathologies and heart models.

Doppler and M-mode

Colour, pulsed wave and continuous wave Doppler in all cases. As well as M-Mode, Biplane and, a measurements and calculations package.

Complete Solution

Combine HeartWorks with the BodyWorks simulator for a complete PoCUS and Echocardiography solution.

HEARTWORKS® | AR

Interactive 3D Heart

Featuring highly accurate HeartWorks 3D heart, which can be highlighted, rotated and sliced in any direction.

Echocardiography

HeartWorks® AR provides the gold-standard imaging views for 20 TTE and 28 TEE imaging planes.

Augmented Reality

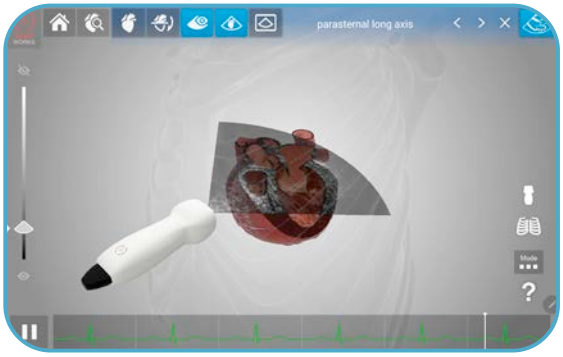
Position the heart within your surroundings, hold it in your hand and turn it around or choose the standard on-screen viewing mode.

Versatile and Portable

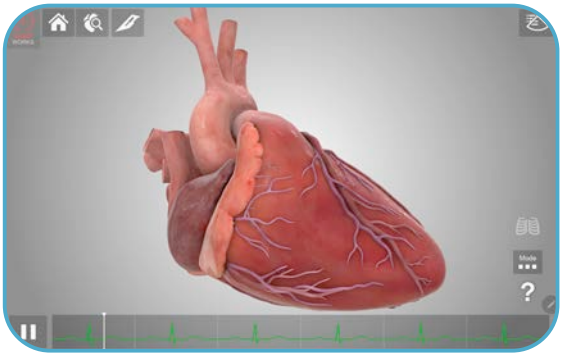
HeartWorks® AR provides the versatility to learn, teach or share echocardiography and cardiac anatomy anywhere.

Learn Cardiac Anatomy and Echocardiography Anywhere

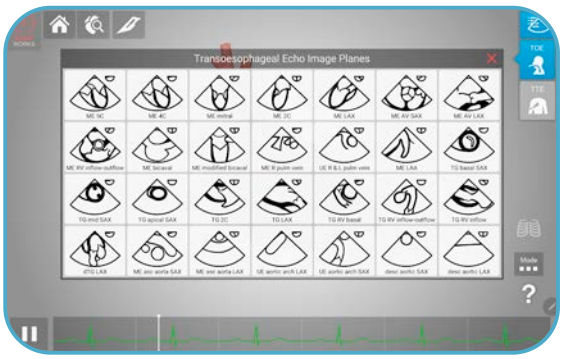
An educational tool that's versatile, easy to use and portable. Become immersed in the HeartWorks® anatomically correct, 3D heart on a portable tablet. Hold the heart in your hands, turn it around and look deep inside for an unparalleled understanding of structures and ultrasound views.



Help patients understand their condition and treatment. The portability of HeartWorks® AR provides a convenient tool to explain heart structure and function to patients and other clinicians. Clearly illustrate anatomic relationships whilst in the operating room or echocardiography laboratory.



With HeartWorks® AR learning can take place anywhere at any time. Providing versatility of learning whether self-directed exploration of cardiac anatomy, one to one tutor-led training sessions, or demonstrating anatomy and imaging principles to groups.



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SCANNAV ANATOMY
ESP Region
Erector Spinae Muscles
TP
Choose appropriate TP for block
TOO LATERAL
Erector Spinae Muscles
Rib
Pleura
Pleura
Lung Tissue
Book A Demo

SCANNAV™

ANATOMY Peripheral Nerve Block

Real-time AI-Assistance for Regional Anesthesia

ScanNav™ Anatomy Peripheral Nerve Block (PNB) uses next-generation AI algorithms to highlight anatomical structures relevant to regional anesthesia during a live ultrasound scan. Developed with leading experts in anesthesiology, ScanNav Anatomy PNB is a licensed medical device for use in a clinical environment.

Comprehensive

ScanNav Anatomy PNB supports anatomy highlighting for 10 vital regions relevant to ultrasound guided regional anesthesia, including all seven 'Plan A' blocks [Turbitt et al., 2020].

Support

Probe placement tutorial videos support confidence in achieving the right view and in delivering an effective block.

Customizable

Adjust the intensity of colored highlighting according to your preference. View the unmodified and highlighted images side-by-side to gain an increased understanding of the sono-anatomy.

Versatile

Compatible with general purpose ultrasound machines without interfering with the original scan images. The user is fully in control of their workflow.

Clinically Validated

ScanNav Anatomy Peripheral Nerve Block (PNB) is a licensed medical device in the UK, Europe and the USA.

CE 1912

FDA DEN220024

Classroom-to-Clinic

Our classroom-to-clinic package* includes the NeedleTrainer simulation device, specifically designed to practise needle-probe orientation and anatomy-interpretation skills safely before moving onto patients with ScanNav Anatomy PNB.

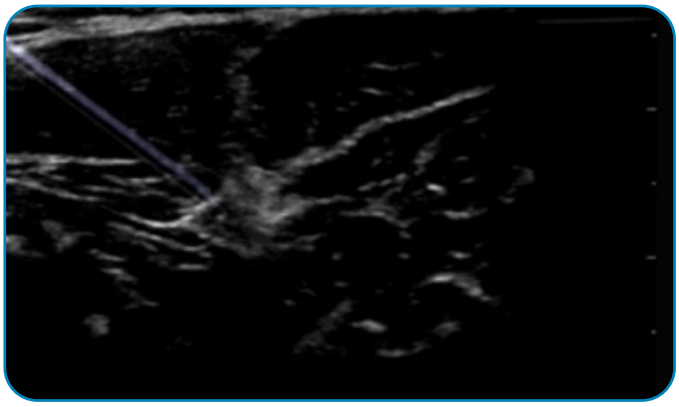
Content and features shown may not be applicable to all jurisdictions. Please contact your local representative for accurate information.

*The classroom to clinic package includes NeedleTrainer plus with PNB procedure mode, and ScanNav Anatomy PNB.

NEEDLETRAINER™

Realistic, safe & effective training in ultrasound-guided needling

The first of its kind, NeedleTrainer™ uses a retractable needle and virtual image overlays to simulate needling non-invasively on a live participant, using an authentic live ultrasound scan. This enables trainees to develop hand-eye coordination, optimum positioning, and accuracy in ultrasound-guided interventional procedures in a realistic clinical environment with minimal risk.



Safe & Effective

NeedleTrainer™ uses a retractable needle and virtual image overlays to simulate needling non-invasively on a live participant in a safe but realistic clinical environment.

Complete Solution

The new generation of NeedleTrainer™ incorporates the wireless GE Healthcare Vscan™ Air handheld ultrasound to provide a comprehensive education system for image acquisition and needling co-ordination skills. Additional compatibility with select SonoSite machines also available.

True-to-Life

Simulate needling non-invasively on a live participant. Augmented reality overlays the simulated needle onto the live ultrasound feed, allowing a highly realistic scanning experience.

Quantitative Metrics

Needle visualization measurements aid proficiency and competence assessment in needle probe co-ordination skills.

Flexible and Versatile

Customize the echogenicity and gauge of the virtual needle, according to the procedure and specialty requirements.

Adaptive Learning

Extend learning to include image interpretation along with needle-probe coordination, with the full classroom-to-clinic learning package*, specifically designed for regional anesthesia.

*The classroom to clinic package includes NeedleTrainer plus with PNB procedure mode, and ScanNav Anatomy PNB. See page 16 for information on clinical approvals of ScanNav Anatomy PNB.

Book A
Demo

Authorized reseller of

ORSIM®

Operating Room Simulation

Safe Training Solution

Develop skills and dexterity using a fully functional bronchoscope, in a realistic, virtual, safe environment.

Realistic Graphics

High definition virtual modeling of a range of anatomy and pathology scenarios.

Comprehensive Training

Realistic virtual bronchoscopy simulation provides rapid exposure to multiple scenarios before clinical application.

Quantifiable Metrics

Metrics for objective scoring and performance are provided through session recording to aid learning and training evaluation.

Book A Demo

Hands-on, Safe, Flexible Bronchoscopy Trainer

The ORSIM Bronchoscopy Simulator enables part task training and promotes skill development and dexterity with a functional replica bronchoscope as well as providing an economical and safe solution to training.

High definition virtual modeling of a range of anatomy and pathology scenarios facilitates bronchoscope dexterity as well as building experience and knowledge.

The ORSIM also includes metrics for objective scoring and performance evaluation. Instant feed-back is provided through session recording to aid learning and training evaluation.

"The ORSIM® is a remarkable training program which can be used by many different practitioners to learn the art of flexible bronchoscopy."

Carin A. Hagberg, M.D.,
Joseph C. Gabel Professor and Chair, Medical School Department of Anesthesiology, UTHealth;
Past President and Executive Director of The Society for Airway Management

INTELLIGENT ULTRASOUND®
IU Academy

Distance Learning *for* smarter scanning

The expectation to maintain quality outcomes and build confidence in healthcare is higher than ever. Our courses are created with experts in their field to provide high quality eLearning to support continuous education and improvement within ultrasound and healthcare.

OUR COURSES

- Introduction to TEE
- Introduction to TTE
- TTE for the Sonographer
- PoCUS for the Healthcare Professional

FLEXIBLE PACKAGES TO MEET YOUR NEEDS

In addition to purchasing individual courses online, IU Academy courses are available in a range of packages for organizations including multi-license and simulator-inclusive packages.

Get in touch to request an IU Academy brochure and discuss your options:

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SCAN ME