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.

Get in touch today:
hello@intelligentultrasound.com
intelligentultrasound.com

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Product Matrix

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

“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

Endometriosis Module
Developed in collaboration with specialist sonographers in the field of gynecology and obstetrics, the module comes with 24 endometriosis cases and a companion e-learning package to support sonographers in their learning and identification of the disease. For every sale of the new module, the company will pledge £100 (or local equivalent) to a recognized endometriosis charity in the relevant region.
**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

*Please note that the Basic Skills modules are not available on the system in the United States.*
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)
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.

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.

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.

“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.

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
- 3D 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

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.

“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.
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.

**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 2D 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.
The new tutorial videos have been developed to assist clinicians in positioning the probe correctly to ensure that the correct view is found before administering a nerve block for analgesia or anesthesia – supporting their confidence in achieving the right view and in delivering an effective block.

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*.

**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™ 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.
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 feedback 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
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:

hello@intelligentultrasound.com
intelligentultrasound.com