INTELLIGENT
ULTRASOUND®
for smarter scanning

Making ultrasound **EASIER** to learn and **SIMPLER** to use

intelligentultrasound.com

Supporting the delivery of Ultrasound Guided Regional Anesthesia

INTELLIGENT ULTRASOUND® *for* smarter scanning

CLASSROOM TO CLINIC

Our classroom-to-clinic package includes NeedleTrainer, designed to enable practitioners to develop sono-anatomy interpretation and needle-probe co-ordination skills in the simulation setting, before moving into the clinical environment to use the ScanNav Anatomy PNB as a concurrent reading tool to interpret the sono-anatomy whilst preparing to deliver UGRA prior to needle insertion.

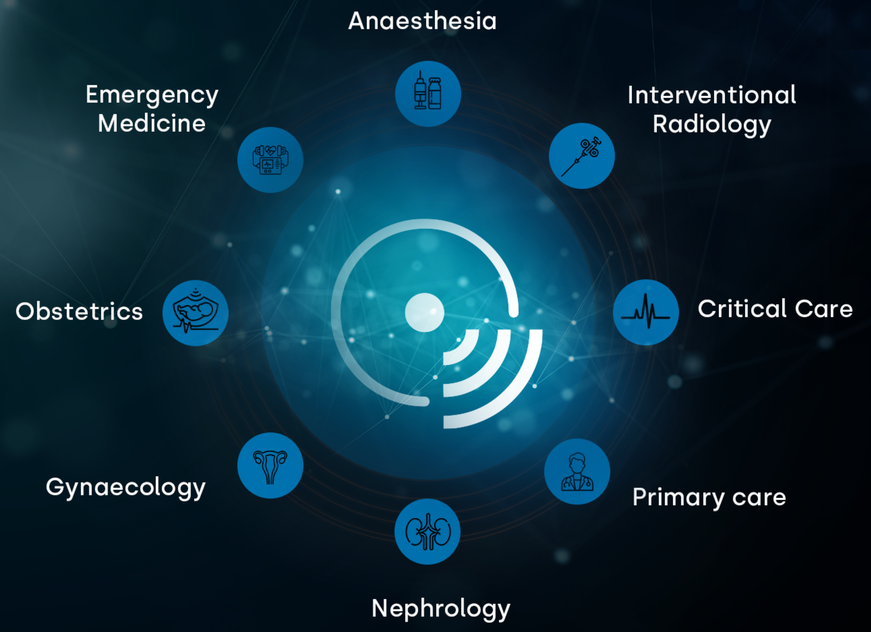
INTELLIGENT ULTRASOUND®

NEEDLETRAINER™

Applicable to any discipline that utilises ultrasound-guided needling, NeedleTrainer allows practitioners to refine their needle-probe co-ordination skills non-invasively by using a virtual image overlay and rectractable needle on a live volunteer with a real-time ultrasound scan.

Developing knowledge, confidence and skills

NeedleTrainer can be used in the simulation setting to develop the skillset of practitioners in:



Competence follows confidence

Teaching with NeedleTrainer has been shown to improve the confidence levels of **90.7%** of delegates when attending ultrasound-guided regional anaesthesia courses.*

NEEDLETRAINER™

*Data on file. Intelligent Ultrasound. 2023

SCANNAV™

ANATOMY Peripheral Nerve Block

ScanNav Anatomy PNB is an AI system that has been developed to help practitioners acquire and interpret optimal ultrasound images when preparing to deliver peripheral nerve blocks.

Developing knowledge, confidence and skills

ScanNav Anatomy PNB supports practitioners who are less experienced in delivering UGRA, or who administer it less frequently, by identifying the key sono-anatomical structures relevant to 9 Plan A/high yield peripheral nerve blocks.

Developing knowledge, confidence and skills

In a published clinical trial, AI-highlighting delivered by ScanNav Anatomy PNB was helpful in identifying specific anatomical structures in **99.7%** of cases and for confirming the correct ultrasound view in **99.3%** of cases*.

*Identifying anatomical structures on ultrasound: assistive artificial intelligence in ultrasound-guided regional anesthesia . James Bowness, Ourania Varsou, Lloyd Turbitt, David Burkett-St Laurent . Clinical Anatomy.2021;34:802–809

SCANNAV™
ANATOMY Peripheral Nerve Block

Enabling confidence with Classroom to Clinic

A recent evaluation of service, in a UK hospital, demonstrated that assistive AI can be used to increase the delivery of UGRA and improve patient access to these techniques. During the evaluation, there was a 40.4% relative increase in the number of peripheral nerve blocks used in trauma cases.[1]

Studies have shown that experts believe it could reduce the risk of block failure and side effects such as nerve injury.[2]

1. Data on file. Intelligent Ultrasound. 2023
2.Assistive artificial intelligence for ultrasound image interpretation in regional anaesthesia: an external validation study. Bowness et al. British Journal of Anaesthesia, July 2022

SCANNAV™
ANATOMY Peripheral Nerve Block

Trainees and Residents in Anesthesiology

Attending Anethesiologist

	Never delivered UGRA	Improved confidence in UGRA	Non-Specialist in RA	RA specialist
What skills need to be developed?	General skills • Ultrasound scanning • Needle probe manipulation Block-specific practice • Probe placement • Acquiring an optimal ultrasound view • Identifying key sono-anatomy • Safe needle insertion	The ability to deliver Plan A peripheral nerve blocks under supervision in line with training requirements progressing to working independently to deliver UGRA	Confidence to deliver blocks that are infrequently delivered in clinical practice	No skill development required for personal practice
IU solution	NEEDLETRAINER™ in the classroom	SCANNAV™ ANATOMY Peripheral Nerve Block in the providing assitstance in clinical	SCANNAV™ ANATOMY Peripheral Nerve Block in the clinical setting supporting clinical	SCANNAV™ ANATOMY Peripheral Nerve Block NEEDLETRAINER™ to support delivery of training in UGRA
How is it achieved?	NT enables simulated practice and development of skills essential to safe delivery of UGRA	PNB training/reference material acts as a reminder of ultrasound probe placement and specific sono-anatomy for Plan A blocks	PNB supports confidence in clinical practice by providing a “digital second opinion” that an appropriate block view has been obtained and key sono-anatomical structures have been identified correctly.	The classroom to clinic package supports delivery of UGRA across an institution by supporting both novice users in developing and maintaining their skills and qualified clinicians who have not specialised in UGRA