



unlocking the potential of ultrasound

# Overview

*“Our vision is to harness the power of the new generation of AI algorithms to make ultrasound simpler to use and easier to learn, by providing guidance and support to medical professionals whilst they are scanning. We are currently focused on the field of obstetrics and will expand into other specialities, as our technology becomes established.*

*With millions of health conscious people around the world, our technology could one day enable consumers to scan themselves at home, through AI enabled hardware and diagnostic apps on their cell phones. It’s a future that could transform the potential of ultrasound for everyone.”*



*Prof Alison Noble OBE, FREng, FRS  
Technikos Professor of Biomedical Engineering,  
University of Oxford  
Senior Scientific Advisor  
Intelligent Ultrasound Group plc*

- Aim to unlock the use of ultrasound by **all medical professionals**
- Intelligent Ultrasound’s range of **AI software** and **simulation tools**
- By **exploiting the use of AI** in ultrasound image analysis
  - AI Image diagnosis market estimated to be worth \$3bn by 2026
- **First CE marked AI software operating in a clinical setting**
  - With three AI products in development
  - Based on the work of Prof Alison Noble OBR, FRS Uni of Oxford
- Long term goal of using AI to **enable the unskilled to scan**
- Builds on established ultrasound simulation business
  - 700+ systems sold into over 400 leading global medical institutions
  - Between £5.3-5.4m revenue (2018)

# Our Team

*“Newly qualified sonographers, or those in training, may find ScanNav Audit particularly helpful, giving confidence and enhancing skills to attain excellent imaging techniques. This AI software could also potentially automate the required auditing for obstetric scanning and demonstrate quality and competency for every sonographer in a busy clinical setting.*

*This new way of assessing images looks very interesting and could have great potential.”*

*Katy Cook, Lead Sonographer  
St George’s Hospital Fetal Medicine Department*

*“I am excited to be involved in this pilot. We expect ScanNav will boost the confidence of trainees and the newly qualified as they learn but also provide assurance to the whole team that their image quality is of the standard expected in this department. I am looking forward to increased clinical capacity without loss of vital audit data & reduced image storage on the digital archive system”*

*Pam Norbury, Lead Sonographer  
RUH Bath*



*Riccardo Pigliucci*

Appointed **Chairman** in 2012. He has more than 30 years’ experience of guiding private and publicly listed high technology companies. Former President, COO, and Board Member of The Perkin Elmer Corporation, CEO of Life Sciences International plc and CEO of Discovery Partners International.



*Stuart Gall*

Appointed **CEO** in 2014. Joint founder and exec director of Fusion IP plc, before its purchase by IP Group plc for £103m in 2014. Stuart has over 25 years’ experience in both small company start-ups and public companies



*Nicholas Sleep*

Appointed **CTO** in 2012, Nick runs MedaPhor’s Clinical AI Division. He is a software engineer by background, but has also run companies in areas as diverse as stem cell therapeutics and biofuels. Previous companies include The Technology Partnership, The Automation Partnership, Procognia and Magnecell.



*Prof Alison Noble*

Appointed **Senior Scientific Advisor** to the Clinical AI Division in 2016, Prof Alison Noble OBE, is a Fellow of the Royal Society, Technikos Professor of Biomedical Engineering at the University of Oxford and recognised as one of the world’s leading authorities of ultrasound image analysis using AI



*Wilson Jennings*

Appointed **FD** in 2014. Qualified with Deloitte Haskins & Sells in 1984, Wilson has experience of setting up US and European operations from his time as Finance Director of Isis Research plc and spent 14 years as FD and latterly CEO of AIM listed 21st Century Technology plc.



*Ian Whittaker*

Appointed **COO** in 2016, Ian runs MedaPhor’s Simulation Division. He previously held senior roles at Hewlett Packard in the UK and a number of blue chip US technology companies. From 2010 he was CEO of Inventive Medical, prior to its purchase by MedaPhor in 2016.

Ultrasound is one of the **safest**, **fastest** and **cheapest** diagnostic tools in medicine

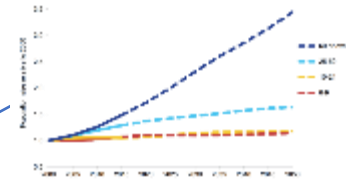


Cost and size of ultrasound hardware is **declining rapidly**

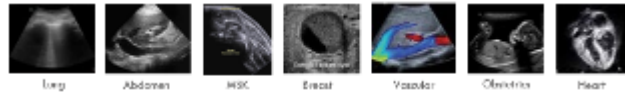


And an **aging** population is causing **clinician demand** to **outstrip supply**

**20%**  
shortfall between clinical demand and supply\*

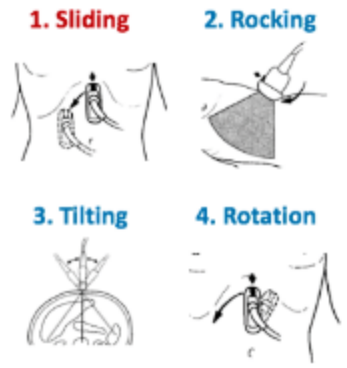


**\$3bn**  
**AI**  
**IMAGE ANALYSIS**  
**MARKET\***



Performance and use in medicine is **growing rapidly**

But it remains a **hard skill** to both **learn** and practice



\*Source: Accenture

# SIMULATION DIVISION

SCANTRAINER



HEARTWORKS



BODYWORKS|Eve



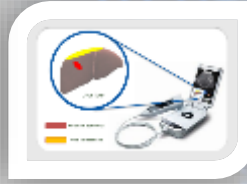
SCANNAV | Audit



SCANNAV | Auto Capture



ANATOMYGUIDE



SCANNAV | Ass'st



NEEDLEGUIDE

# CLINICAL AI DIVISION

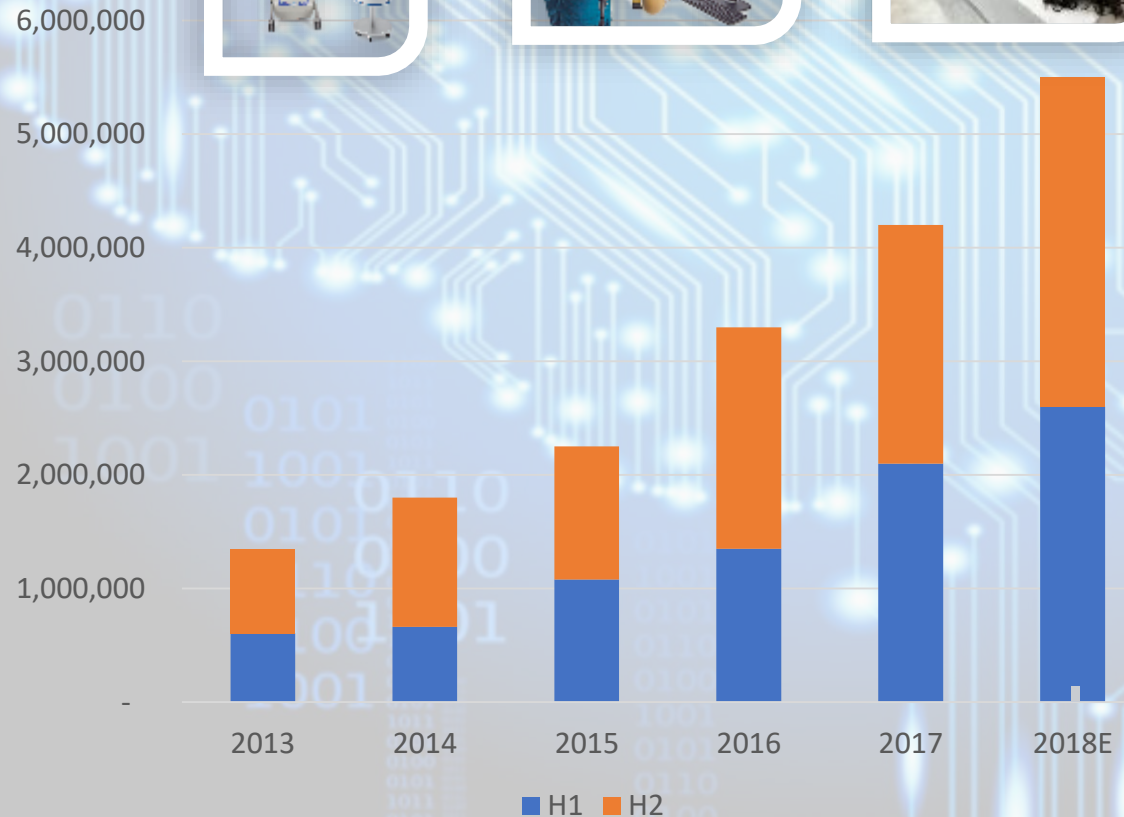
# HOW CAN WE UNLOCK THIS POTENTIAL?

## PRE-CLINICAL TRAINING

- *Train more professionals using simulation*
- *Continuing professional development and up-skilling of ultrasound practitioners*
- *Accreditation and certification of healthcare professionals*

## SIMULATION DIVISION

2014-18 revenue (£)



## CLINICAL AI DIVISION

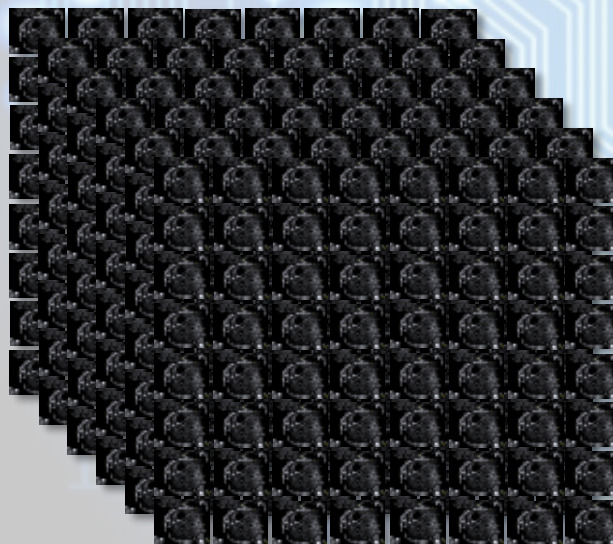
HOW CAN WE UNLOCK THIS  
POTENTIAL?

- *Enabling current professionals  
to scan faster*

- *Enabling more professionals  
to scan*

- *Enabling the unskilled  
to scan*

World leading  
AI research



Library of over 1 million  
curated ultrasound images

Over ten years supporting  
doctors to use ultrasound





AI for ultrasound professionals

ScanNav is a pre-market product in development

Key anatomical structures mapped

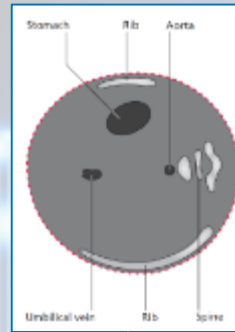
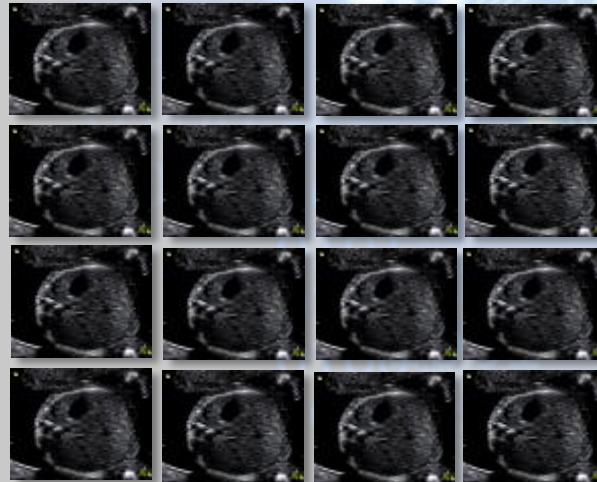
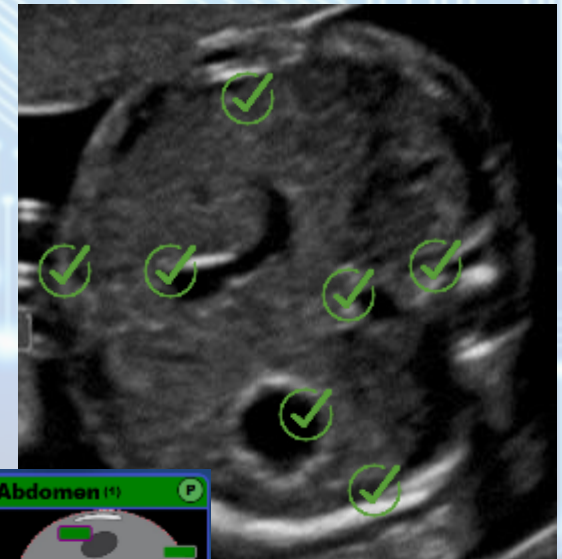


Image recognition algorithm taught on 350,000 graded and assessed images



Live image assessed in real-time

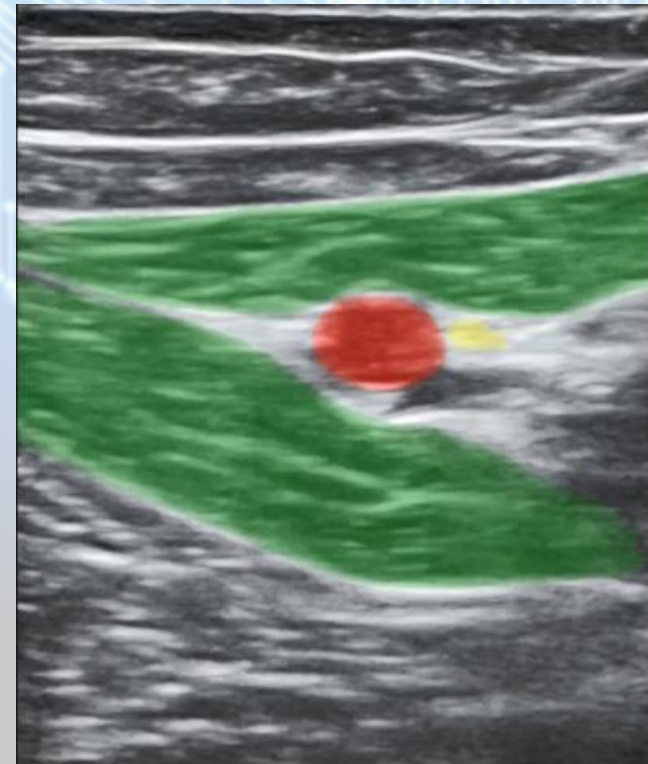


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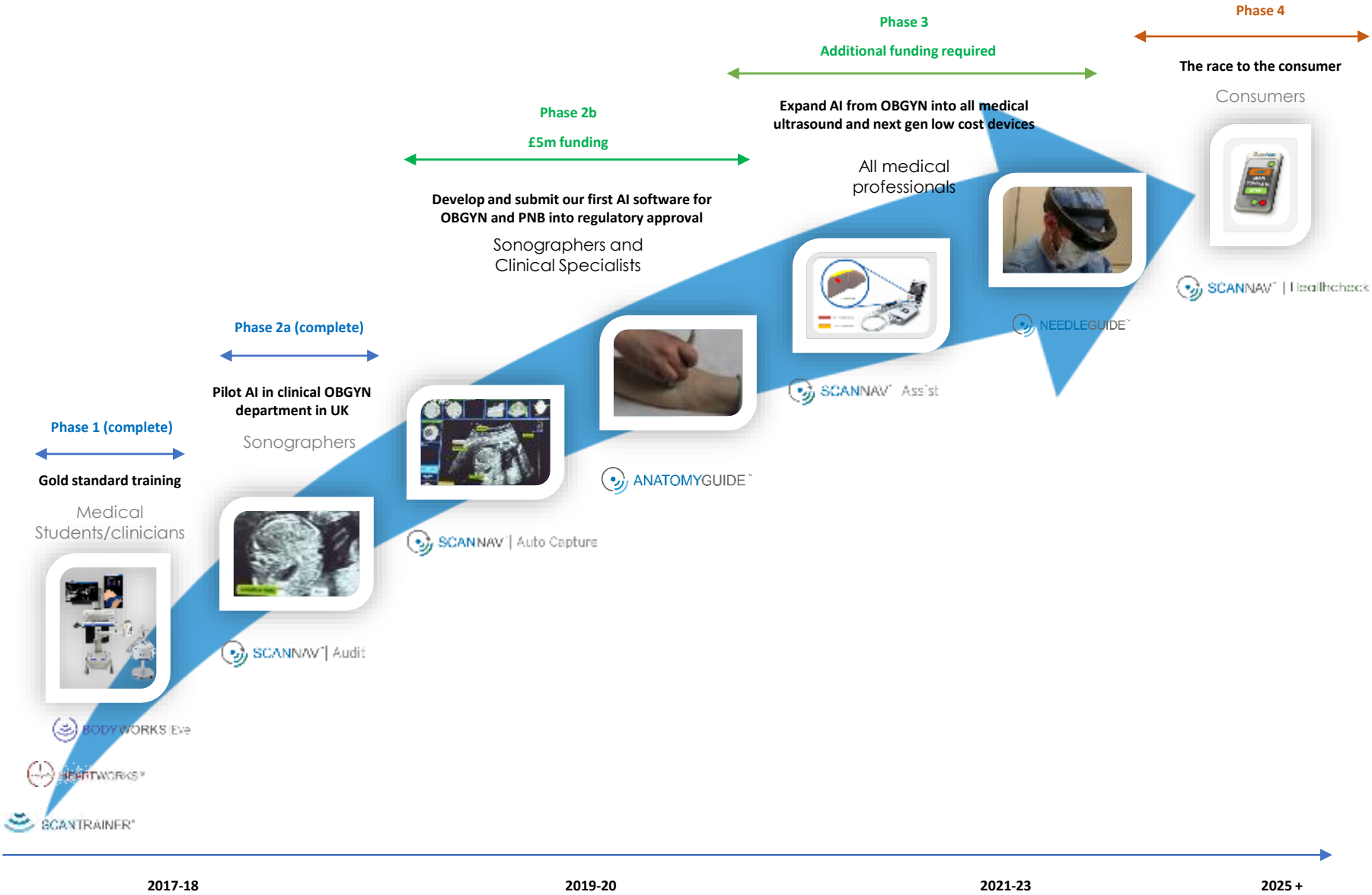
Supporting  
ultrasound guided  
needling using AI



*AntomyGuide is a pre-market product in development*



**INTELLIGENT  
ULTRASOUND<sup>®</sup>**  
for smarter scanning





INTELLIGENT  
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*for smarter scanning*

AIM: MED



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