



## MedaPhor's ScanTrainer wins MediWales 2010 Innovation Award

MedaPhor is pleased to announce that it has won the MediWales 2010 Innovation Award.

The MediWales Awards celebrate the successes and advances of life science companies and the NHS in Wales and the Innovation Award is awarded to a company that has developed an innovative technology that has produced a major improvement in business performance, end user benefit or patient benefit.

MedaPhor won the award for its unique ultrasound simulator ScanTrainer. The patent pending simulator provides a realistic, touch-enabled training experience, allowing sonography trainees to literally "feel" what they see on the computer screen in order to gain real life scanning experience, in a more cost-effective way.

The curriculum based training modules enable the trainees to develop the complex mix of cognitive skills and eye-hand movement coordination, without the need for an ultrasound machine, a patient, or direct supervision by an expert. Trainees have the freedom to learn by trial and error at their own pace, and gain unlimited opportunities to practice, prior to exposure to patients – ensuring greater competency when training with patients begins and significantly reducing the amount of direct supervision required.

ScanTrainer's first system went on sale in the UK in June this year. Its gynecological ultrasound training module replicates the experience of examining a female pelvis, and teaches the core ultrasound examination skills, without the need for a patient to 'learn' on.

A range of ScanTrainer systems, with associated pathologies and learning modules will be launched next year, including a Transabdominal system for teaching obstetric, general, and Accident & Emergency based medical examinations.

Stuart Gall, CEO of MedaPhor said

*"We are delighted to win the MediWales Innovation Award. This has been a tremendous year for MedaPhor and we look forward to continuing the success of ScanTrainer in 2011, as we launch new systems and modules in the UK and around the world."*

*(picture below available)*



*Left to right Stephen Minger (GE), Stuart Gall, Nazar Amso (both MedaPhor) and Chris Price-Jones ( BIC Innovation)*



## **Contact**

Stuart Gall    CEO                            02920756534

Nazar Amso    Chairman                            02920756534

## **About MedaPhor**

MedaPhor, spun out of Cardiff University in 2004, and based in the Medicentre, Heath Campus has developed and launched the world's most advanced ultrasound training simulator, ScanTrainer.

Ultrasound scanning is a highly skilled technique. Conventional training is costly in terms of both time and money and is fraught with many challenges such as the unavailability of qualified trainers, training opportunities and the ever increasing conflict between service delivery and training. Several approaches are currently available, including short training courses with no qualification and structured university postgraduate study schemes leading to a postgraduate qualifications. In response to this problem, Nazar Amso, a Senior Lecturer at the School of Medicine, with nearly 20 years experience in ultrasound training and education founded MedaPhor. Supported by Cardiff University, Fusion IP, Finance Wales, Cardiff Capital, the Welsh Assembly Government and a number of Cardiff-based entrepreneurs and clinicians, the company has spent six years developing novel ultrasound training solutions that bridge the gap between lengthy conventional ultrasound training and the need to develop ultrasound skills to a high standard in a relatively short time.

ScanTrainer enables a level of competency to be attained before ultrasound skills were put into practice in a clinical environment and provides safe, effective and realistic learning experience, with the ultimate goal of enhancing patient safety. It offers a real-time adaptive virtual environment and dramatically accelerates skills acquisition. The large variety of clinical scenarios incorporated in the simulator ensures that the learner develops the relevant skills without awaiting "chance" clinical encounters. In the future the simulator will also provide a mechanism for assessment of competency, a prerequisite for continual assessment of skills and revalidation.

ScanTrainer's unique ultrasound training software provides simultaneous ultrasound scan and virtual anatomy images for the ultrasound learning modules. A replica ultrasound probe attached to a SensAble haptic device enables the trainee to navigate around a virtual patient's anatomy. As the probe is moved, the display shows the progress of the beam in the patient's anatomy, side by side with corresponding ultrasound images accompanied by a real-time physical feedback of probe manipulation as experienced during contact with a patient. The immersive virtual environment allows trainees to develop their manual dexterity and eye-hand coordination skills in a logical and systematic approach that mimics a real life scan.

The learning management system is novel in ultrasound training. It enables the user to review his/her performance through detailed feedback on each task within an assignment, thus requiring minimal supervision from an expert trainer. Successful completion results in a correct report, while incorrect completion results in an error message instructing the student on how to improve performance. Many of the simulator's software features are novel and patent applications are pending.