

The UCH Education Centre

The UK's most advanced training facility
for healthcare professionals



University College London Hospitals **NHS**
NHS Foundation Trust

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CHARITY REGISTRATION NO 229771

Clinical simulation theatre

Practising clinical procedures in a pioneering theatre simulation

At The UCH Education Centre, revolutionary theatre simulation technology gives surgical teams – new and experienced alike – the opportunity to practise complex or routine procedures under real pressure, in real-time and in a realistic environment.

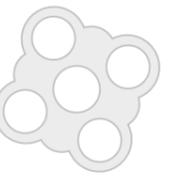
Through a one-way viewing glass, experienced practitioners, or colleagues, observe the work of trainees as they attempt to perform a variety of medical procedures using leading-edge reactive mannequins 'Sim-Men'. Operated by trained technicians out of sight, a prescribed 'script' of timed events (eg, bleed, blood pressure change, cardiac arrest) mirror the real-life risks and challenges faced by clinicians in theatre.

In a perfect mock-up of a UCH hospital operating theatre, accurate to the smallest detail, the simulation technology offers a genuine 'under pressure' experience for clinicians, whose every decision and reaction is recorded by hidden cameras and microphones, and copied onto DVD for subsequent detailed review.

Go one step further and use the latest anatomically accurate, reactive mannequins to follow or recreate a groundbreaking procedure, as a live direct video feed relays the action from a hospital operating theatre as events unfold in real-time.

“ This is particularly useful for teaching complex procedures and groundbreaking work. But for junior trainees, it is also valuable for common procedures – it works for everybody ”

Professor Tony Mundy, 2009



Minimal access surgery/simulation unit

Practise, develop and teach pioneering techniques in a modern, interactive suite

Minimal access surgery (MAS) has become a keystone of advanced practice – offering reduced tissue trauma, less post-operative pain and fewer complications plus all the benefits of accelerated recovery. At The UCH Education Centre, a new high-definition, interactive MAS teaching centre featuring laparoscopic and endoscopic simulation trainers has been designed specifically to facilitate group learning and supervision of MAS procedures.

Our teaching tools comprise the latest simulation technologies, including hands-on 'virtual reality' experiences, 'real scenarios' using reactive mannequins and

a hybrid system that connects human beings with advanced digital implements.

In addition, there are ten individual work stations for dry laboratory training with a camera positioned above each station relaying detailed images of the procedure to the tutor's master station. This allows a physician experienced in MAS to supervise a group of up to ten trainees simultaneously.

An added advantage of this innovative technology is that live (or pre-recorded) MAS procedures can be shown on screen for trainees to follow in real-time at their work station, comparing their work directly with the expert techniques portrayed before them. Everything can be recorded onto DVD, for post-operative examination and discussion.

“ This is a great opportunity to get a handle on minimal access surgery – using tools and instruments that feel and react just as they would via typical entry points

Professor John Kelly, 2009

Advancing clinical skills

Learn, practise and perfect clinical skills

This new teach/review suite enables healthcare professionals of any rank and discipline to learn, practise and perfect the clinical skills required when reviving and monitoring critical patients. This resource also offers opportunities to understand the role of ultrasound in non-invasive clinical exploration, and experience the advantages of modern multi-branch, high-definition microscopy.

The most effective and reliable means of measuring vital signs can be taught relatively easily. The real skill is performing smoothly under pressure, putting anxious or difficult patients at ease quickly and identifying phobias (eg, needles) and other issues before they become significant barriers to treatment or care.

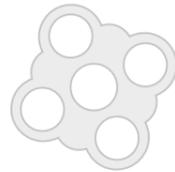
Trainees benefit from a wealth of interactive resuscitation training performed using purpose-designed simulation mannequins, with all decisions and actions recorded by camera/on DVD for subsequent appraisal.

The clinical skills area is also set to become a centre of excellence for investigative radiology, providing the opportunity to use the latest ultrasound technology in non-invasive exploration. With these new techniques starting to form the bedrock of best clinical practice, it offers the chance for surgeons – regardless of experience – to sharpen their skills, and potentially bring the entire department up to speed.

Delegates may also take advantage of our multi-branch microscope to present and discuss histology to several students simultaneously.

“ The Advanced Paediatric Life Support course was really well tailored towards improving my practical skills – it got rid of my nerves and has enabled me to deal with several paediatric emergencies confidently

UCH nurse, 2009 ”



Behavioural training

How would you improve the professional decisions, responses and methods in your department?

Until a major event occurs that stretches hospital resources to breaking point, such as a serious multi-patient emergency, it is impossible to know how any particular group of healthcare professionals will behave under heightened pressure.

The same is true of any stressful situation – it does not need to be a medical emergency; perhaps a regulatory meeting requiring high-level negotiation, or else a particularly difficult patient with severe anxiety preventing a nurse or doctor from working efficiently. If only reactions could be monitored and recorded for people to review and improve upon, following a difficult event.

Part of The UCH Education Centre was designed to generate precisely this type of invaluable feedback. A range of several versatile rooms have been created to resemble, for example, a nursing ward, a paediatric (or other) clinic or GP consulting room – modelled on the UCH in the finest detail. Inside and all around these (including in the corridors), the latest high-tech cameras record people's actions, while fixed microphones pick up every conversation. In addition, the use of leading-edge audio-visual (AV) technology enables after-action review facilitating instant, demonstrative and accurate feedback.

With professional medical actors performing role play, these training facilities are at the forefront, providing genuinely useful and undeniable evidence, on which to base feedback for groups of participants. There is no surer way to prepare or train for those inevitable high-stress moments, whether learning new responses or refining existing reactions.

“ Many of today's improvements in healthcare are on the micro scale – targets, guidelines, benchmarks, protocols, and committees etc – but in fact the real difference in delivering an enhanced patient experience comes when you engage at the macro level. ”

Professor Aidan Halligan,
UCLH Director of Education, 2009



Seminar rooms & Narrative Centre

Our modern, comfortable facilities with high-tech digital functionality suit all clinical discussion and medical education events

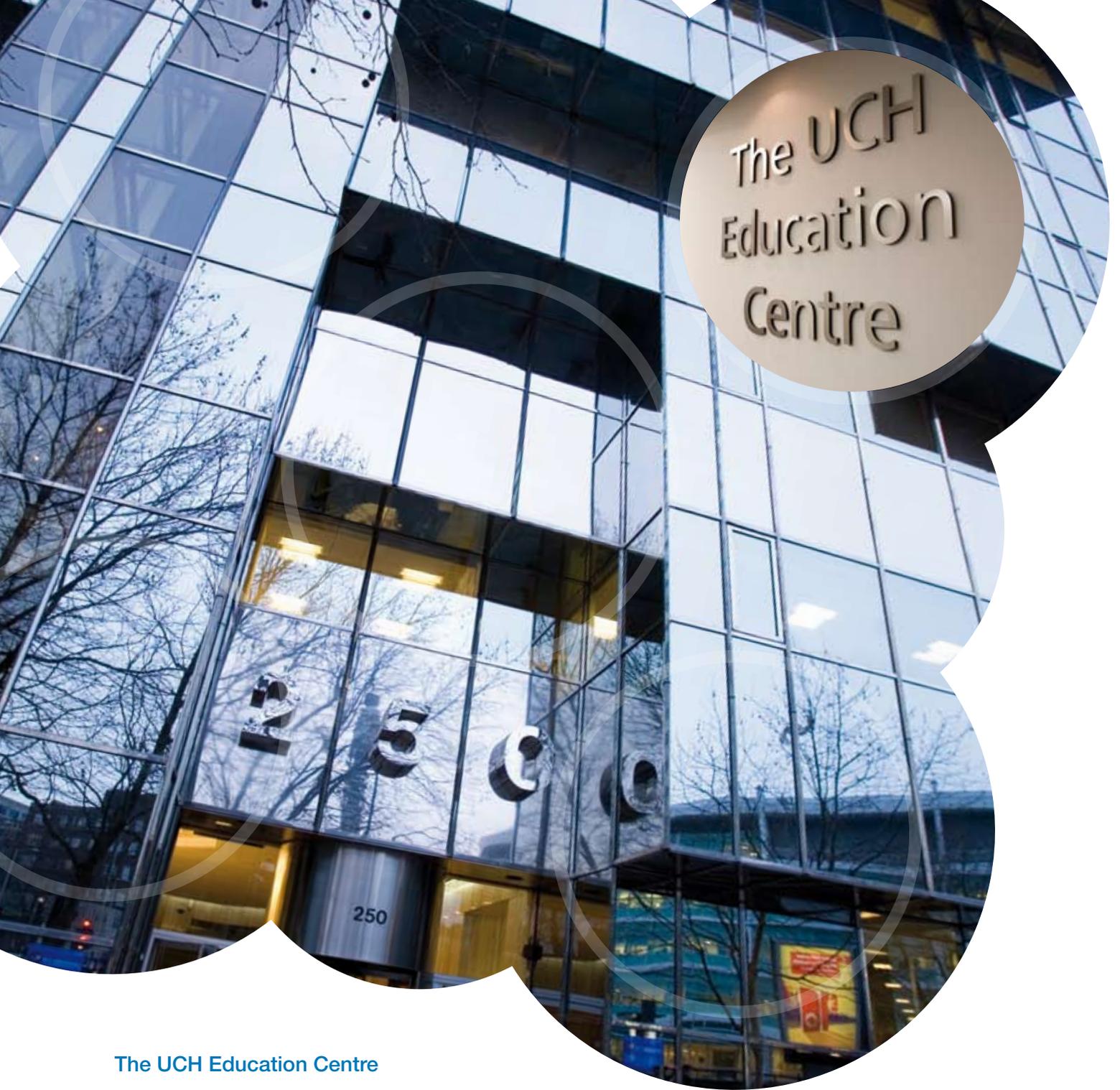
In addition to the unique collection of training tools, The UCH Education Centre caters for all clinical discussion and educational events, with an array of modern, versatile seminar rooms all containing advanced AV equipment. A broad range of catering options suits events of any size.

Medical departments and organisations serving the life sciences industry will find the seminar rooms and Narrative Centre to be a flexible and appropriate option in an educational setting. Our service is focused on making your event successful, efficient and cost-effective.

Experts and students can meet in any one of five adaptable lecture areas, with live images of medical procedures beamed direct into the auditorium. With new touch-screen technology and adaptable displays, the adjoining high-tech Narrative Centre is ideal for project briefings, presentations or reviews.

A 100 inch, touch-sensitive digital display forms the heart of the Narrative Centre open zone. When not in use for educational events, the area provides a thinking and reflection space for staff and students to learn about the centre's courses, designed to inspire and help enhance the patient experience.





The UCH Education Centre

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The UCH Education Centre is located within a short walk of London's mainline Euston railway station, plus the following tube stations: Warren Street (Northern and Victoria lines) and Euston Square (Circle, Hammersmith & City and Metropolitan lines).

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