



operating
theatre
live.



BOOK AN EXCLUSIVE EVENT

2022-2023

NATIONAL SCHOOL TOUR

AS SEEN ON

BBC

SUPPLIER TO

NHS

CLAIRE NICHOLLS

CLAIRE@ITAEGROUP.CO.UK

WWW.OPERATINGTHEATRELIVE.CO.UK

THE EVENT

Students gown up & scrub in as they step into the shoes of a surgeon in our real operating theatre. Aspiring medical students will journey inside the human body like never before. Host an Operating Theatre Live on our UK wide tour where you and your students will work with award winning human anatomist Sam Piri & his team of clinicians to undertake the systematic dissection of real specimens and attempt real surgery. Operating Theatre Live is an award winning experience founded in 2011 and has propelled hundreds of thousands of students into careers in healthcare and medicine.

THE 2022-23 EVENT

Time of accident. 10.38pm

A male patient named Carl Reed aged 28 has been involved in a serious road traffic collision. Riding his motorbike he's involved in a suspected hit and run. He currently has a GCS score of 3. Paramedic's on scene arrived within the golden hour and undertook their initial patient assessment within the platinum 13 minutes. Carl has been blue lighted to accident & emergency with a series of injuries.

In this five hour immersive live event your students will systematically work through the organ structures in our recreated operating theatres, in a race against time they will follow the clinical journey in an attempt to save the patient's life working with real organs and tissues. A gripping, front row seat into the world of medicine.



**"Incredible &
compelling"**

BBC

Session 1

Patient handover and briefing

The first session will involve a patient handover, your students will receive information about the specifics of the patients injuries and strategies surrounding the interventions required to maximise the chances of survival.

Key skills:

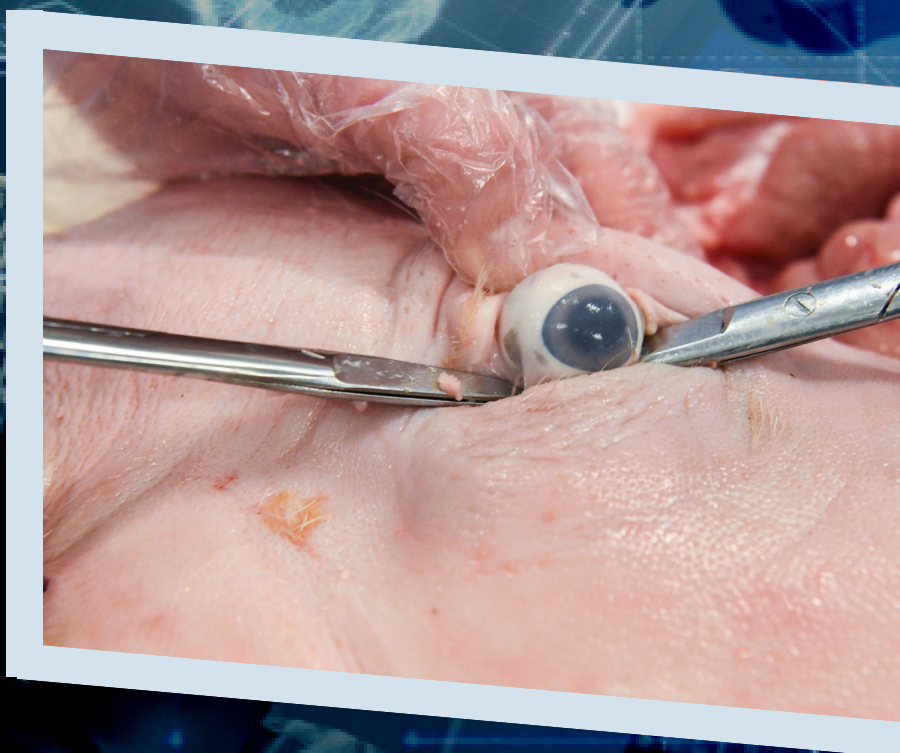
Communication, data analysis, problem solving, cause & effect, action & consequence, scenarios for medical interviews

Learning outcomes & curriculum links:

Cells, tissues, organs and systems

Data analysis

Interpreting graphs



"We book Operating Theatre Live to enhance our A Level future medics programme"

M Rutland, Queen Mary College
Basingstoke

Session 2

Anaesthetics, intubation and theatre prep

Once briefed your students will begin prepping the patient for theatre, observing aseptic technique they will learn the importance of working in a sterile environment and how microorganisms cause harm, they will work with real propofol anaesthetics and make solutions for IV administration. Students will then calculate dosage based on patient mass before using cannulas to administer their drug dose. After administering propofol they will intubate a real larynx using intubation tubes ready for surgery. Intubate a real trachea!

Key skills:

Converting between units, manual dexterity, lab skills, pillars of medicine and medical ethics

Learning outcomes & curriculum links:

Mass and volume, Compounds, mixtures & elements, Molecular structure, Cell structure, Action potentials and myelin sheath, Ventilation & respiration, Pathogens.

SOME OF THE INSTITUTIONS WE SUPPORT



**UWE
Bristol**

University
of the
West of
England



UNIVERSITY OF
LEICESTER

THE UNIVERSITY OF
WARWICK



University of
BRISTOL



UNIVERSITY OF
PORTSMOUTH



Newcastle
University

MANCHESTER
1824

The University of Manchester

Session 3

Airway, ventilation & pneumothorax

Once intubated your students will move on to conduct an airway dissection of the trachea, they will learn the anatomy of the airway, lungs and surrounding pleural membranes. They will see the diaphragm and intercostal muscles as well as the anatomy of the thoracic cage. Working with our clinical team they will see how the patients pneumothorax is repaired to restore adequate ventilation.

Dissect and inflate a real set of lungs!

Key skills:

Observation, cause & effect, team working, interpreting graphs & problem solving

Learning outcomes & curriculum links:

Gas exchange & diffusion, Oxygen dissociation curve, Specialised cells, red blood cell structure, Bronchial tree and airway anatomy, Effects of smoking



Session 4

The heart & circulation

Once the patients airway and breathing is stable your students will turn their attention to the heart and circulation. Carl's scans show a significant abdominal bleed. Investigations begin with assessing the stability of the blood vasculature, a real heart in-situ surrounded by the great blood vessels. To address falling blood pressure they will undertake blood and plasma transfusions learning how this is done to manage trauma patients. Students will conduct a dissection of the heart and aorta as well as understand the ECG. In this session they will also examine and dissect a real digestive system as they wrestle with falling homeostatic vitals. Students will work to prevent the patients abdominal bleed and see the stomach, intestine, liver, gall bladder & pancreas. Dissect a real heart, aorta and digestive system!

Key skills:

Decision making medical ethics, abstract thinking, team working & problem solving

Learning outcomes & curriculum links:

Arteries & veins, Structure of the heart, Electrical conductivity of the heart (ECG), The digestive system anatomy, Liver & pancreas function, Enzymes, digestion and bile function



"The dissections are just something we can't recreate in the classroom"

UCL Academy London

Session 5

The brain and head injuries

With a GCS score of 3 brain injury is likely, Carl has a number of cranial fractures which need urgent attention as a CT-scan shows a bleed to the brain. Students will dissect a real head, brain and spinal cord to see the major structures of the brainstem, cerebrum, cerebellum, cranial meninges, vasculature and spinal cord. Learn how hematomas develop and how they are treated in surgery.

Key skills:

Working with data, working under pressure, problem solving & interpreting graphs

Learning outcomes & curriculum links:

Structure and function of the brain (lobes), Somatic & autonomic nervous system, The neuron as a specialised cell, The myelin sheath, Neuron membrane ion flow (action potentials), Brain stem, cerebellum & cerebrum

Session 6

Fractures and other exposure

In this final session of surgery we delve into orthopaedics and the world of bones and fractures. Carl has a number of fractures to the his skeleton with X-ray showing serious femoral fracture. Students will learn the anatomy of bone growth and how fractures are treated clinically. Observe the musculature and tendons as you dissect a real limb section.

Key skills:

Situational judgement & interpreting imaging

Learning outcomes & curriculum links:

Bone and muscle function, Ligaments & tendons, Biomechanics

Online learning with **MEDIC
PLAYER** 

When booking an Operating Theatre Live experience all students receive 12 months access to MEDICPLAYER our online medical TV streaming service to continue learning, we frequently release science, maths, UCAT, UCAS and application advice content aimed at GCSE, A Level, T Level & Higher's students.

INCLUDED WITH ALL BOOKED EVENTS

