

The Faculty of Intensive Care Medicine

ICM Unit Brief

Part 1 Hospital Details

1.1 Hospital name

Glenfield Hospital

1.2 Full address (you **must** include postcode)

Adult Intensive Care Unit
Glenfield Hospital
University Hospitals of Leicester NHS Trust
Leicester
LE3 9QP

1.3 Hospital Telephone number

0300 303 1573

Part 2 ICU Department contact details

2.1 Direct telephone number to Department

0116 258 3154

2.2 Faculty Tutor name

Dr Matt Charlton

2.3 Faculty Tutor Email address

Matthew.charlton@uhl-tr.nhs.uk

Part 3 Unit Structure

3.1 Number of Beds

21 funded / 33 physical

3.2 Number of admissions

~1600 pre-COVID / ~1200 post-COVID

3.3 Percentage of elective vs emergency admissions

Approximately 60% elective, 40% emergency/unplanned

3.4 Overview of case mix within the unit

Current case mix: elective and emergency Cardiothoracic Surgery (regional dissection centre for East Midlands), complex Vascular and Endovascular Surgery, Cardiology, Respiratory Medicine, General/Breast Surgery, General Medicine and respiratory ECMO as one of 6 NHSE commissioned UK ECMO centres.

3.5 Names of Consultants, roles and areas of interest

Name	Role (eg clinical lead,consultant)	Areas of Interest
Professor Sanjay Agrawal	Consultant in Intensive Care and Respiratory Medicine Chair of the Tobacco Special Advisory Group	NHS financial management ILD/Lung Cancer
Dr Chris Allsager	Consultant in Intensive Care Medicine and Cardiothoracic Anaesthesia. Clinical Director/CMG Lead, ITAPS.	Management
Dr Rajani Annamaneni	Consultant in Intensive Care Medicine and Thoracic Anaesthesia. Head of Service (Anaesthetics)	Education, ICU follow-up care
Dr Sameer Hanna-Jumma	Consultant in Intensive Care Medicine and Cardiothoracic Anaesthesia. Clinical Lead for Intensive Care	Management, Education
Dr Susan Dashey	Consultant in ECMO, Intensive Care Medicine and Anaesthesia. Clinical Lead for ACCOTS EM.	Transport, Education, organ donation
Dr Gary Lau	Consultant in Intensive Care Medicine and Cardiothoracic Anaesthesia.	Echocardiography
Dr Richard Porter	Consultant in ECMO and Intensive Care Medicine. ITAPS Quality and Safety Lead	Management, Medical Examiner
Dr Caroline Sampson	Consultant in ECMO, Intensive Care Medicine and Anaesthesia. Deputy ECMO Director	ECMO, ICU follow-up care, undergraduate education
Dr Michael Schupp	Consultant in Intensive Care Medicine and Cardiothoracic Anaesthesia. Equipment Lead	TOE Course Director
Dr Amit Srivastava	Consultant in Intensive Care Medicine and Cardiothoracic Anaesthesia. ICNARC Lead.	Echocardiography
Dr Rakesh Vaja	Consultant in Intensive Care Medicine and Thoracic Anaesthesia.	Management
Dr Justin Williams	Consultant in Intensive Care Medicine and Cardiothoracic Anaesthesia.	Management
Dr Hakeem Yusuff	Consultant in ECMO, Intensive Care Medicine and Cardiothoracic Anaesthesia.	Research

	ITAPS Reconfiguration Lead.	
Dr Adeel Majeed	Consultant in Intensive Care Medicine and Cardiothoracic Anaesthesia. M&M Lead.	ICU follow-up care
Dr Graziella Isgro	Consultant in ECMO and Intensive Care Medicine	Research
Dr Vasileios Zochios	Consultant in ECMO and Intensive Care Medicine	Research, FICM examination preparation, Echocardiography
Dr Cindy Horst	Consultant in Intensive Care Medicine and Anaesthesia	Hepatobiliary anaesthesia, Medical examiner
Dr Matt Charlton	Consultant in ECMO, Intensive Care Medicine and Anaesthesia FICM Tutor	ECMO, Education, Research
Mr Chris Harvey	Consultant in ECMO and Intensive Care Medicine. Director of Adult and Paediatric ECMO.	Paediatric ECMO transport
Mrs Cat Plummer	Advanced Critical Care Practitioner	Simulation, Education, ECMO Specialist
Miss Hannah Conway	Associate Professor of Advanced Clinical Practice. Advanced Critical Care Practitioner.	FUSIC, FAMUS Supervisor, FUSIC Committee Member, BSE Examiner Leicester FUSIC Co-Course Director + Echo Rounds Lead

3.6 Details of research projects being undertaken within the unit

1. RECOVERY trial
2. Voriconazole pharmacokinetics in ECMO patients
3. EUROSHOCK Trial - ECMO for cardiogenic shock post MI
4. CA-COVID - Coagulopathy in COVID patients
5. AspiFlu - Aspergillosis in COVID and Influenza patients
6. REMOTE in Critical Care Study. Real-time educational mentoring of transthoracic echocardiography in critical care

3.7 How is the unit staffed?

Consultant cover:

- 1 in 10 ICU on-call rota plus 1 in 8 ECMO rota providing 'in-house' ECMO cover. Three consultants present until midday, 2 until the evening handover.
- 1 in 8 ECMO transport rota.

Trainee rota:

- Three 'airway' trainee on-call rotas, one 'non-airway' tier for IMT/FY doctors, one ECMO rota.
- Airway rotas are staffed by a combination of ICM trainees (3), cardiac anaesthesia trainees, ECMO fellows (2), transport fellows (2), and MTI trainees (2).
- We have two permanent ACCP colleagues forming part of the trainee rota, with a further 2 trainee ACCP's due to start in early 2022.

Part 4 Training

4.1 Details of training opportunities on the unit

ECMO and Transport: Glenfield is one of six centres in the UK commissioned for the provision of advanced ventilatory support for patients with severe acute respiratory failure (SARF). Along with our colleagues in Aberdeen, Manchester, Papworth, and London we form the UK National ECMO Network. We provide remote advice and assessment of patients referred into the national service, covering an extensive geographical region of England, Wales and Northern Ireland. We run a consultant delivered dedicated ECMO retrieval team, moving patients back to Glenfield using advanced conventional techniques (advanced ventilatory modes, prone transport, mobile iNO) for further assessment, or providing mobile ECMO. There are opportunities for trainees to accompany the team on these transfers, take part in ECMO cannulation, and form an integral part of the wider MDT in managing these highly complex patients on the ICU. We run an internationally recognised ECMO specialist course.

Critical care echocardiography and ultrasound: The department is staffed by consultants and ACCP's who are accredited in both Transthoracic (TTE) and transoesophageal (TOE) echocardiography. We have a number of FUSIC mentors/supervisors, along with BSE accredited examiners for both TTE and TOE, providing ample supervision to complete this training while placed with us. We have an echocardiography simulator, which can be used to learn cardiac anatomy, and both TTE and TOE skills. There are bi-monthly 'echo rounds' for information dissemination and review of interesting cases, along with well-established and highly regarded FUSIC and TOE courses.

Unique attributes of GH AICU: We are a friendly, highly motivated, and forward-thinking department, providing up-to-date evidence-based training. Having had our origins in cardiothoracic surgery, we offer unique opportunities for training in advanced haemodynamic monitoring, utilising multi-modal techniques such as TTE, TOE and PA catheters, to provide targeted inotropic and vasopressor management including phosphodiesterase inhibitors and mechanical support such as IABP and VA-ECMO. Our experience as an ECMO centre provides us with a wealth of knowledge in advanced ventilatory management, providing trainees with exposure to advanced ventilatory modalities, mechanical support, and pulmonary vasodilators.

4.2 Details of departmental teaching days

- Induction day to include essential topics pertinent to GH such as pacemakers, IABP, PAC etc.
- 2 hours bleep free consultant delivered teaching on Friday afternoons plus a journal club by trainees
- Regional ICM study days
- Weekly ICM teaching for IMT and FY delivered by ICM trainees
- Bi-Monthly Echo Rounds

4.3 Details of clinical governance meetings and / or M & M

- Quarterly AICU M&M meetings with a review of our ICNARC data
- Quarterly Thoracic surgical and Vascular surgical M&M meetings
- Monthly Cardiac surgical M&M meetings
- Weekly MDT meetings of long stay (more than 7 days) patients
- Twice weekly microbiology MDT
- Weekly radiology MDT

4.4 Number of trainees on each tier of the rota

Three airway rotas with 1:7 pattern

Each rota includes trainees with different backgrounds such as Anaesthesia, ICM, dual training ICM/Anaesthesia or ICM/Respiratory Medicine, and clinical fellows with an interest in Cardiothoracic Anaesthesia, ICM, Echocardiography or Education

The ratio of trainees in an approved training programme to clinical fellows is approximately 5:2 on each rota.

Anaesthetic trainees and Cardiothoracic fellows spend normal working days in theatre and on call shifts in AICU. Post-op care for all our cardiac surgical patients is provided on the AICU and forms an important component of cardiothoracic anaesthesia.

ECMO rota – 1:4 pattern

The rota includes clinical fellows and ICM trainees with a specialist interest in extracorporeal support.

Non airway rota 1:7 or 1:8 pattern

The rota includes IMT and FY trainees joining ICU to complete their ICM module.

The ratio IMT: FY is approximately 5:3.