

Dr Christopher P. Hebbes

MBChB BSc MMedSci (Medical Education) PhD FRCA FFICM

<http://chrishebbes.github.io>



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Joint anaesthetist and intensivist with experience and a track record in medical education, clinical research and data science and developing expertise in point of care echocardiography and ultrasound. I have furthered my academic experience by undertaking additional study to gain an intercalated BSc in opioid pharmacology, MMedSci in Medical Education and am currently working towards a PhD in cardiovascular sciences. These additional skills in project management and delivery, data sciences and informatics have been invaluable in managing and delivering clinical projects, audit and quality improvement.

I have a wide range of experience across clinical specialties, and particularly enjoy the challenges of acute care, emergency and vascular anaesthesia.

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Personal details

Name:	Christopher Paul Hebbes
Nationality:	British
General Medical Council Number:	6143836
Royal College of Anaesthetists CRN:	687496
CCT and on the specialist registers for Anaesthesia and Intensive Care Medicine (January 31 st 2020)	

Career aims and personal statement

A consultant anaesthetist and intensivist with a thread of research and teaching running through my specialty training, I am keen to combine my clinical interests with my passion for data driven clinical outcomes and excellence in teaching, support and supervision.

Having successfully combined teaching and research posts with clinical training, I thrive on challenge and diversity. My complementary skills in project and data management and informatics have enabled me to lead on a local Clinical Research Network portfolio study, quality improvement and to work with colleagues for patient benefit.

I have taught at undergraduate and postgraduate level, in a range of settings, have designed and delivered an FRCA teaching course, and currently am faculty on the national Care of the Critically Ill Surgical Patient course. I look forward to continuing to deliver education, and embrace simulation, and to develop learners' self-awareness through focus on nontechnical skills and team training.

I bring a broad range of clinical experience, with particular interest in anaesthesia for emergency, vascular and general surgery cases, which complements my interest in general intensive care. My skills and qualifications in focused echocardiography and perioperative medicine complement both anaesthesia and intensive care.

Education

Postgraduate

PhD (Cardiovascular Sciences), University of Leicester	2021
Fellowship of the Faculty of Intensive Care Medicine	2017
Fellowship of the Royal College of Anaesthetists	2013
MMedSci (Medical Education), University of Nottingham, Distinction	2011

Undergraduate

MBChB with Honours, University of Leicester	2000-2006
BSc with Honours, University of Leicester (Opioid Pharmacology)	2004

Prizes and Awards

- East Midlands School of Anaesthesia Poster prize – Second prize (December 2019) (Cappuccini audit of trainee supervision for ACSA accreditation)
- Instructor potential for Advanced Life Support (2018)
- Ernest Leech Award, Royal College of Anaesthetists (2016)
- East Midlands School of Anaesthesia Poster prize – First prize (September 2017)
- Trent South Anaesthetic Trainee Scientific Meeting - Poster prize (October 2013)
- Use of Early Warning Scores in the Emergency Department, Northampton General Hospital - Second Prize (December 2010)
- Highest achieving FY2: ATLS, Leicester 2007 (Overall performance in written MCQ and practical examination)
- Distinction (Overall medical course), 2006 (Overall performance in both Phase 1 and Finals examinations)
- Leicester Medical society Electives bursary and presentation, 2005 (Grant awarded)
- Distinction – Phase 1 Preclinical, 2005 (Examination performance)
- Distinction – Grade “Excellent” in both Special Study modules (Examination performance)
- Arthur Watts Prize for clinical method, 2004 (Examination performance in Clinical Methods course)
- Health Research Foundation Bursary for Intercalating medical students 2003 (Competitively awarded financial support for BSc)
- Pfizer prize for immunology, 2002 (Dissertation and presentation prize “Arthritis and the gut”)
- Tressidder prize for dissection nominee, 2002 (Dissection prize nominee)

Professional Memberships and Affiliations

Intensive Care Society

Association of Anaesthetists

Anaesthetic Research Society

Association for the Study of Medical Education

Clinical experience

Intensive Care Medicine

I have undertaken a varied program of training in both district general and university teaching hospitals. This has enabled me to engage with design and delivery of multiprofessional teaching, attending and contributing to management meetings, and intensive care multidisciplinary team meetings.

I am passionate about general intensive care, the delivery of evidence based exceptional care for a broad range of emergency and elective patients in collaboration with colleagues from other specialties and disciplines.

I have a particular interest in the use of ultrasound for diagnosis in critical care and the use of computers and information science for critical appraisal, ordering guidelines and information and data analysis.

Christopher P. Hebbes – Curriculum Vitae

My experience across tertiary centres has exposed me to effective multidisciplinary interventions on the intensive care, including full engagement with rehabilitation, early mobilisation, tailored nutrition and the use of post ICU clinics. I look forward to using this experience to improve patient outcomes.

My clinical experience has included (the numbers below refer to WTE experience)

- August 2020-present Substantive consultant in anaesthesia and intensive care medicine managing a busy acute 22 bedded general Intensive Care unit at the Leicester Royal Infirmary
- February 2020 – August 2020 Locum consultant in anaesthesia and intensive care
- 12 months advanced, dedicated intensive care medicine training
 - 3 months in a neurocritical care and major trauma centre (Queen's Medical Centre)
 - 9 months in tertiary general ICUs (Leicester Royal Infirmary and Nottingham City Hospital)
- 6 months dedicated intensive training at Intermediate / Step 2 level (Glenfield Hospital and Leicester Royal Infirmary)
- 6 months complementary specialty training (6 months anaesthesia, 6 months emergency medicine on a busy acute admissions unit)
- 6 months dedicated intensive care training at Basic / Step 1 level (Leicester Royal Infirmary)
- Covering Intensive care admissions and referrals, or supervising junior intensive care trainees within major teaching hospitals, and district general environments as a senior registrar in anaesthesia (Leicester Royal Infirmary, Royal Derby Hospital, Pilgrim Hospital, Queens' Medical Centre)
- 2-week paediatric intensive care secondment (Leicester Royal Infirmary and Glenfield Hospital), including transfer/retrieval of the unwell neonate
- Focused intensive care echocardiography (>50 examinations), registered FICE mentor
- Experience of all major competencies of the ICM curriculum, bronchoscopy, thoracostomy, percutaneous tracheostomy, central venous and arterial catheterisation.
- Experience of non-resident on-calls, managing admissions to a mixed general intensive care unit (Nottingham City Hospital)

Anaesthesia

My interests in anaesthesia complement my interests in intensive care medicine. I further my ultrasound skills in anaesthesia, for regional techniques, vascular access and for dynamic patient assessment. I enjoy and have sought out additional experience of vascular and major general surgery, where I have developed my interest in ultrasound and focused echocardiography. I have a developing interest in bariatric surgery, and have written and research educational papers and a book chapter describing the challenges of pharmacology at extremes of weight.

I am committed to the evolution of Point of Care Ultrasound in critical care, and have completed Focused Intensive Care Echocardiography training, am a FICE mentor, and use these skills regularly and teach on the local FICM accredited FICE course. I intend to extend these skills to CUSIC, a future standard of ultrasound which will be a requirement for trainees in intensive care medicine, delivered by accredited units. I have completed a course, and am undertaking supervised practice to gain full accreditation and mentorship.

Christopher P. Hebbes – Curriculum Vitae

Management of the high risk general surgical emergency patient is a particular interest, and I am a faculty member for the national cross-specialty Care of the Critically Ill Surgical Patient (CCrISP) course, which I help to deliver locally.

My clinical experience has included

- August 2020-present Substantive consultant in anaesthesia and intensive care medicine managing a busy acute 22 bedded general Intensive Care unit at the Leicester Royal Infirmary
- February 2020- August 2020 locum consultant in anaesthesia and intensive care, with a flexible anaesthetic commitment across a broad range of specialties at the Leicester Royal Infirmary
- Completion of optional higher modules in higher vascular, maxillo-facial and general (gynaecological and urological) anaesthesia
- General anaesthesia (>2500 cases)
- Cardiothoracic anaesthesia (>50 cases)
- Vascular (>100 cases)
- Significant TIVA experience

Qualifications and Training

- Advanced Life Support (2018)
- Faculty for locally delivered Focussed Intensive Care Echocardiography (FICE) course (2018)
- Focused Intensive Care Echocardiography (FICE) mentor (2016)

Career summary

Current Employment

August 2020-present: Consultant anaesthetist in anaesthesia and intensive care medicine, University Hospitals of Leicester NHS Trust

January 2015-present: Clinical Lecturer in Anaesthesia and Intensive Care, Department of Cardiovascular Sciences, University of Leicester

Previous Employment

February 2020-August 2020: Locum consultant anaesthetist in anaesthesia and intensive care medicine, University Hospitals of Leicester NHS Trust

August 2019-January 2020: ST7 Anaesthetist (0.5 FTE, 3 months FTE), University Hospitals of Leicester NHS Trust

ST7 (0.5 FTW) – Anaesthesia
February 2019 – August 2019

General Duties, Northampton General Hospital NHS Trust

ST7 (0.5 FTE) - Anaesthesia
August 2018-February 2019
February 2018-July 2018

General Duties, University Hospitals of Leicester NHS Trust
General Duties, Nottingham University Hospitals NHS Trust

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November 2017-February 2018

General Duties, Leicester Royal Infirmary

August 2017-October 2017

Cardiothoracic anaesthesia, Glenfield Hospital

ST6 (0.5 FTE) – Advanced Intensive Care Medicine

August 2016-July 2017

Advanced Intensive Care Medicine, Leicester Royal Infirmary

August 2015-July 2016

Advanced Intensive Care Medicine, Nottingham University

Hospitals NHS Trust

ST5 - Anaesthesia

August 2014-January 2015

General Duties, Pilgrim Hospital, Boston

February 2015-July 2015 (0.5 FTE)

Cardiothoracic anaesthesia, Glenfield Hospital

Intensive Care Medicine, Leicester Royal Infirmary

ST4 - Anaesthesia

August 2013-July 2014

General Duties, Royal Derby Hospital

ST3 - Anaesthesia

August 2012-July 2013:

General Duties, Leicester Royal Infirmary

Obstetric anaesthesia, Leicester Royal Infirmary

Cardiothoracic anaesthesia, Glenfield Hospital

CT2 - Anaesthesia

August 2011-July 2012:

General Duties / Obstetric anaesthesia, Northampton General

Hospital

Academic CT2 Acute Care Common Stem and Honorary Education Fellow (all posts 6 months FTE)

November 2010-July 2011

Acute Medicine, Leicester Royal Infirmary

February 2010-October 2010

Emergency Medicine, Northampton General Hospital

Academic CT1 Acute Care Common Stem and Honorary Education Fellow (all posts 6 months FTE)

May 2009-January 2010

Intensive Care Medicine, Leicester Royal Infirmary (Basic)

August 2008-April 2009

Anaesthesia, Leicester Royal Infirmary

Academic Foundation Year 2 within East Midlands Deanery

August 2007 - July 2008:

Emergency Medicine, Leicester Royal Infirmary

Honorary Clinical Demonstrator, University of Leicester

Foundation Year 1 within East Midlands Deanery

August 2006 - November 2006

General Surgery (colorectal), Leicester General Hospital

December 2006 – March 2007

Anaesthesia and Intensive Care, Leicester General Hospital

April 2007 – July 2007

General Medicine, Elderly Care, Lincoln County Hospital

Additional Roles

- Principal Investigator, ICU-ROX trial, Leicester Royal Infirmary
- LRI ITU Rota coordinator, February 2020-present

- East Midlands Group of Anaesthetists in Training (EMGAT), Chair (2018-2019), Secretary (2015-2018)
 - Honorary Clinical Lecturer, University of Leicester (2015-present)
 - Personal Tutor, University of Leicester (2008-2014)
 - Honorary Education Fellow, University of Leicester (2008-2010)
 - Honorary Clinical Demonstrator, University of Leicester (2008)
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Teaching and Medical Education

I am passionate about teaching medical and allied professionals at every level in small group, lecture and simulation-based settings. Throughout my training I have contributed to teaching delivery, and latterly to the design and development of teaching sessions and courses. I hold an MMedSci (Medical Education), during which I developed an interest in supporting struggling students and mentoring (I am a qualified Egan mentor). My major interests in medical education are in simulation and technology enhanced learning (TEL), which I developed and utilised in various projects, which have been presented locally and nationally. Latterly, I have a developing interest in in-situ simulation and contributed to the delivery of a novel transfer simulation, used to train and assess intensive care trainees to undertake intrahospital transfers of critically unwell patients.

I occupied formal education posts as a clinical demonstrator, academic fellow in acute care common stem, and latterly a clinical lecturer. As a clinical demonstrator, I taught at undergraduate level in practical, small group, and lecture settings, and also designed, developed and implemented a clinical skills physiology series of practical sessions, the echocardiogram, and spirometry. I was a personal tutor for 8 years and had the privilege of supporting and supervising two groups of medical students through to graduation.

In addition to my experience of in-theatre and critical care teaching, I am faculty for our local Focussed Intensive Care Echocardiography (FICE) course, for which I am a FICM accredited mentor. I am also a Royal College of Surgeons accredited faculty to deliver the Care of the Critically Ill Surgical Patient (CCrISP) course locally.

I have a longer-term interest in Free Open Access Medical Education (FOAMED), the use of quality controlled, peer reviewed open access resources, in order to improve access to education, particularly in resource poor settings. Such resources can also be used to improve patient access to information, and to improve experience.

Experience

- Invited faculty Care of the Critically Ill Patient Course – CCrISP (2018-present)
- Invited faculty Leicester focused intensive care echocardiography FICE course (2018)
- Development and delivery of University of Leicester national Primary FRCA course (2015-2017)
This course ran for many years and attracted candidates nationally. Latterly, we adopted the use of video for feedback and practice of viva techniques, and the use of electronic resources for candidates. In addition to educational design and delivery, I worked with a team of other clinicians and administrators to manage and develop this successful course.

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- Delivery of transfer in-situ simulation and task based training CPD days as part of Nottingham Adult Intensive Care Unit curriculum for core and intermediate trainees (2015)
- Invited lecturer University of Leicester Pain management MSc course (2015)
- Invited lecturer Mechanism of action and clinical use of opioids special study module for undergraduate medical students (2015)
- Design and delivery of “bringing basic science to life” sessions for medical students (2008)
These sessions were delivered to medical students, including the principles of electrocardiography, and spirometry, modelled on traditional physiology practical sessions. These were designed, delivered, evaluated and presented nationally
- University of Leicester Medical School personal tutor (2008-2015)
- Consultations Skills Foundation Course Tutor (2008-2011)
Experience of teaching and supervising 3rd year medical students learning clinical history and examination skills.
- Transforming Interprofessional Groups through Educational Resources (2008)
(TIGER - <http://tiger.library.dmu.ac.uk/>)
The project allowed me to develop an understanding of the principles of Open Educational Resources (OERs) for use in multiprofessional education, including a governance and curation framework, in addition to the technical skills (programming hypertext markup language, use of cascading style sheets and responsive web design).
- Design and development of eTivities – online communities for students’ learning for the undergraduate perioperative care attachment (2008)

Qualifications and Training

- NHETSim HEEM Programme Core C1/C3, and Supplemental S9/S10 (2019)
- UCL Clinical Supervision Massive Open Online Course (2018)
- Care of the Critically Ill Surgical Patient Faculty Course (2018)
- University Hospitals of Leicester NHS trust Simulation Faculty Course (2016)
- MMedSci, University of Nottingham (2011)
 - Specific modules in Technology Enhanced Learning, Simulation, Assessment
- Teaching Improvement Program System (TIPS) course (2008)
- Beyond Distance Learning Alliance, University of Leicester – Carpe Diem course for structured eLearning development (2008)

Research

I have had additional time and training in research and have had the opportunity to learn about and use a variety of qualitative and quantitative methodologies, laboratory and clinical research. My training has included a formal research methods courses, and in-house research and statistics training gained through my intercalated BSc (in opioid pharmacology), MMedSci, and PhD.

I have completed a PhD using basic science methods to investigate the release of the peptide nociceptin from immune cells in sepsis. I gained a variety of technical lab skills during the implementation phase of this project, which latterly won funding from the Royal College of Anaesthetists Ernest Leech Fund, and gained portfolio sponsorship. As a translational project, this gave me a bridge to clinical research, and the skills to manage a research project from inception, necessary regulatory approvals through to implementation, in

Christopher P. Hebbes – Curriculum Vitae

addition to my mandatory research training, ICH-GCP and Consent. The timespan of this project bridged major changes to the Health Research Agency (HRA) and GDPR regulations, which I successfully negotiated. The outputs from this research are currently in press, and have been presented at the British Journal of Anaesthesia Research Forum.

As an active researcher, I have aided on other clinical trials, including local Clinical Research Network adopted studies, such as the national iHype trial investigating adverse outcomes associated with intraoperative hypotension for which I advised colleagues locally, and collected, screened and input data.

Experience

- Does the release profile of nociceptin differ in septic patients and healthy individuals? (2015-2019)
I was awarded the Royal College of Anaesthetists Ernest Leech grant in order to complete this work, which was adopted by the East Midlands Critical Care Research Network, attracting funding and support for the University Hospitals of Leicester NHS trust. Setting up and running this observational clinical study gave me experience of the NHS research environment, legislation and regulatory controls required. This work has been presented orally at the British Journal of Anaesthesia Research Forum.
- Midlands (East) Research by Critical Care and Anaesthetic Trainees (MERCAT) – iHype (2017)
I contributed to the Intraoperative Hypotension in Elders (iHype) study, collecting and inputting primary data, and providing advice to the local lead trainees.
- Who operates (and supervises), when? (2015)
In collaboration with colleagues, I undertook a secondary analysis of local data (from the National Emergency Laparotomy network) to audit the seniority of support for emergency laparotomy out of hours
- Characterising the pharmacological profile of a novel tripeptide library (2004)
This laboratory project taught me basic science techniques to measure receptor binding and activity, with the associated analytical and data management skills. These have been a firm foundation for subsequent more clinical studies and an interest in translational research.

Qualifications and Training

- Birmingham Clinical Trials Unit Research Methods Course (2018)
- International Committee for Harmonisation – Good Clinical Practice (2018)
- Royal College of Anaesthetists Research Methodology Workshop, London, (2015)
- MMedSci (Medical Education), University of Nottingham (2011)
- Best Evidence in Medical Education research course (2008)
- BSc (Opioid Pharmacology) (2004)

Management and Leadership

My management experience has grown with my role in trainee representation. As representative, secretary and chair of the East Midlands Group of Anaesthetists in Training (EMGAT), this has given me broad, transferrable managerial skills; chairing and hosting meetings, managing a group and presenting to a group. I led the design and development of the EMGAT website (www.emgat.org.uk), and in this role have

contributed to a number of projects, including a bid for funding to support multidisciplinary education from Health Education England's Curriculum underspend.

The role of chair has given me the opportunity to input to boards from the East Midlands School of Anaesthesia, Training Committee, and iTAPS. Within these organisations, current projects that I have contributed to include the development of a quality and improvement fellowship, improvement of induction for trainees, and the development of the school of anaesthesia's online communication and training platform (based on Microsoft Office 365 and SharePoint).

I have led a number of high profile events, the Virtual Learning Environment Development Day, and co-led the East Midlands School of Anaesthesia Summer Meeting with another trainee. Both of these large events included working with teams from the school of anaesthesia, Health Education East Midlands and external suppliers, hotels, venues and audio-visual suppliers. These projects were delivered to time and received favourable feedback.

In experience of clinical management, my advanced ITU year gave me experience of both day-to-day clinical (and non-clinical) management of an intensive care unit, working with bed managers, other clinicians, units and the wider network in order to ensure patient safety and flow. I also gained experience of the broader view, longer term management and governance issues, including business cases and project management. As part of this, I researched and co-authored a guideline for the management of seizures in Critical Care within the Nottingham City Critical Care Department. I regularly attended and continued to unit meetings, morbidity and mortality and governance.

Experience

- Chair (2018-2019), and Secretary (2015-2018) of East Midlands Group of Anaesthetists in Training (EMGAT)
- Seizures on critical care guideline (Nottingham University Hospitals NHS Trust) (2015)
- VLE Development Day, East Midlands School of Anaesthesia, Nottingham (2013)

Qualifications and Training

- East Midlands Management and Leadership sessions 9-12 (2016-2018)
- Keele Management and Leadership course (2017)
- Warwick leadership and management Level 2 (2013)
- Edward Jenner course module 1 (2013)

Quality Improvement, Service Development and Audit

Throughout my training, I have had the opportunity to contribute and lead quality improvement in both anaesthesia and intensive care.

During my time at Nottingham City Hospital, I researched and wrote a guideline for the management of seizures in critical care and Nottingham City Hospital, interfacing with the hospital guideline for non-critical care areas. This was part of a project to manage risk associated with the previous protocol, and to unify

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management across clinical areas. This topic required a true multidisciplinary approach, with pharmacy, nursing staff and clinicians from neurology, the emergency department and intensive care. This guideline was subsequently approved and implemented. The drivers for this project included a requirement for a standardised approach across the organisation, a move to a simple regime, with a single dose and less clinical risk, and an improved side-effect profile, with negligible cost impact. The development of newer drugs and improved clinical experience since the previous guideline enabled this change to occur.

I am currently undertaking an enabling project to determine the incidence of hyperoxia in the intensive care unit. This was in response to the OXYGEN-ICU trial, demonstrating increased harm where patients are exposed to high concentrations of Oxygen. This project has demonstrated a significant incidence of hyperoxia on intensive care locally, and I am currently planning the next phase to encourage daily review and target setting for Oxygenation, proactive, protocol driven monitoring by bedside staff and education, with a reaudit following this. The work is a part of a larger project to standardise and optimise ventilation within critical care – particularly pertinent where doctors without a critical background may rotate through on secondment from other specialties or as part of the acute care common stem.

During my time at the Royal Derby Hospital I completed a quality improvement project to improve the patient experience for daycase procedures, with a “quick win” focusing on hydration. This used process mapping and patient follows in order to highlight areas for intervention to reduce preoperative dehydration, latterly implementing improved communication of list orders after the morning team briefing, explicit drinking instructions on patient letters, and empowering staff to ask the theatre teams about list orders.

Other local audits that I have completed throughout my training include audit (and reaudit) of trainee workload out of hours with a focus on patient safety and time to see critically ill patients, an audit of daily care bundle implementation on the intensive care unit and a reaudit of ventilator care bundles. My experiences of these projects have exposed me to the breadth of quality improvement activities, from initial conception, and data gathering, through to the (challenges associated with) implementation and change management, evaluation and presentation.

Summary of audit and quality improvement experience

Cappuccini audit – improving supervision of non-consultant anaesthetists, University Hospitals of Leicester NHS Trust (2019-present)

- Cross-site baseline audit as part of ACSA accreditation project
- Managed data collection, analysis and ongoing quality improvement work
- Presented locally (2nd prize, East Midlands School of Anaesthesia winter meeting)
- Committed to leading and preparing standard for ACSA accreditation

Management of Oxygen on the Intensive Care Unit, Leicester Royal Infirmary (2017-present)

- Developed audit to evaluate target setting and titration of Oxygenation on a mixed general intensive care unit
- Managed data collection and analysis
- Presented locally and nationally
- Input into process to develop local unit consensus default targets for management of ventilated patients and nurse education package

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Trainee experience and workload audit, Leicester Royal Infirmary (2016)

- Reaudit, completing the loop from previous work
- Demonstrated significant time spent away from ICU, led to changes to the 2nd on call system to encourage help and support for junior grades

Nottingham University Hospitals Better Together Collaboration (2015-2016)

- Multidisciplinary project to improve measurement of weight on intensive care
- Input from nursing staff, dietitians, trainees and consultants
- Initial work demonstrated significant inaccuracies in estimated weight versus measured weight (for example if used for ventilation or drug dosing)
- Documentation of weights varied across charts (actual, ideal, estimated)
- Standardised to actual body weight across charts

Management of Sedation at Glenfield Intensive Care Unit (2014)

- Audit of Richmond Agitation Sedation Score (RASS) recording and optimisation
- Demonstrated significant over-sedation
- New policy reflects analgesic based sedation, a use of short acting agents and daily sedation holds

Obstetric follow up and documentation of regional anaesthetic procedures. Northampton General Hospital (2012)

EWS: Use of Early Warning Scores in the Emergency Department, Northampton General Hospital (2010)

Training: Audit of the experience of anaesthetic novice trainees in airway management skills and RSI (2009)

Sepsis: Management in the Emergency Department, Leicester Royal Infirmary (2007-2008)

An airway resource to teach undergraduates about airway management (2007-2008)

Departmental notes audit. Accident and Emergency Department, Northampton General Hospital (2007)

National NHSLA Casenote audit, Lincoln County Hospital (2007)

Training and Qualifications

Quality, Service Improvement and Redesign (QSIR) course (2019)

NHS Quality and Safety Improvement (2018)

Presentations

Hebbes CP, **Guinness F, Assaf, R.** Cappuccini audit: An audit of supervision. East Midlands School of Anaesthesia Winter Meeting 2019 (poster)

Hebbes CP, Pharmacokinetics at extremes of weight. Royal College of Anaesthetists Updates day. Bristol, 2019

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Hebbes CP, Perry R, Sloane N, Wilkinson A, Keeshan A. Hyperoxia on Intensive care, Too much of a good thing? Intensive Care Society State of the Art meeting, London, 2018 (poster)

Hebbes CP, What has research ever done for me? MERCAT study day, Derby, 2018 (oral)

Hebbes CP, Leighton R. Meeting the needs of trainees through online communication and collaboration tools. Royal College of Anaesthetist College tutor meeting, Leeds, 2018 (poster)

Hebbes CP, Support for Educational Supervisors, audit results. East Midlands School of Anaesthesia Winter Scientific Meeting 2014

Hebbes CP, Moodle: beyond the basics. Virtual Learning Environment workshop (East Midlands LETB VLE Development Day, 2013)

Malanjum, L. **Hebbes, CP**. Annemaneni R. Simulation-based training for critical care nurses in a cardiac intensive care unit: the development of non-technical skills in critical care (European Society of Intensive Care Medicine, 2013)

Hebbes CP, Mentoring: An old head on new shoulders, London Deanery Coaching and Mentoring Conference 2012

Hebbes CP. Student detection of errors in examinations. (Oral presentation, ASME, Edinburgh, 2011)

Hebbes CP. To Err is Human. (Oral presentation, Ottawa Medical Education meeting, Miami, 2010)

Giri P, **Hebbes CP**, Nicholson S, Sadler J, Williams G. Reaudit of protective lung ventilator strategies within UHL. (Oral presentation, Audit meeting, 2009)

Hebbes CP. Leighton R, Kumar N. The 5-step e-learning model to complement face-to-face teaching of clinical undergraduate medical students (Poster Presentation, eLearning in Health conference, Warwick, 2009)

Hebbes CP. Leighton R, Kumar N, Wright R. Evaluating e-learning to teach undergraduate airway management (Poster Presentation, ASME, Leicester, 2008)

Hebbes CP. Loryman B. Re-audit of the management of sepsis in the Emergency Department, Leicester 2008

Hebbes CP. Pharmacological characterisation of a novel series of peptides acting at opioid receptors. Anaesthetic Research Society, London, 2008 (Poster presentation)

MacDougall E, **Hebbes CP**. Kutty S, Manuel C, Al-Jayyousi R. Leicester Northamptonshire and Rutland Academic showcase, Leicester, 2007 - Designing a teaching program to benefit medical students and junior doctors. (Poster presentation)

Hebbes, CP. Identification and characterisation of small molecule peptoid opioid receptor ligands. Health Foundation Intercalated BSc seminars, London, 2004 (Oral Presentation)

Hebbes, CP. Receptor binding studies on novel ligands for the delta and mu opioid receptors. International Student Congress of the Medical Sciences, Gronigen, Holland, 2004 (Poster publication with abstract)

Hebbes, CP. No pain, no gain? Examining new analgesics. St Cyres Comprehensive School, Biomedical Sciences Day, Cardiff, 2004 (Oral presentation)

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Continuing Professional Development

Courses and training

- Core Ultrasound in Intensive Care (CUSIC), Glenfield, Leicester 2019
- Resuscitation Council (RCUK) Advanced Life Support Provider (2018) (instructor potential)

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- Care of the Critically Ill Surgical Patient Faculty Course (2018)
- Resuscitation Council (RCUK) European Paediatric Advanced Life Support Provider (2017)
- University Hospitals of Leicester NHS Trust Simulation Faculty Workshop (2016)
- National Organ Donation Simulation Course (2016)
- National Deceased Organ Donation Course, Nottingham (2016)
- Advanced Communication Course, Nottingham (2016)
- Coroners' Mock Inquest Course (2016)
- Derby Ultrasound in Critical Care (DUCC), Derby, (2015)
- Royal College of Anaesthetists Research Methodology Workshop, London, (2015)
- Getting the most from your confocal microscopy, York (2015)
- Obstetric Anaesthesia Skills and Drills, Boston (2014)
- 10th Upper Limb Regional Anaesthesia Course, Derby (2013)
- One Lung Simulation Day, Leicester (2012)
- Mentoring in Healthcare meeting, London, (2011)
- Pre Hospital Trauma and Life Support (PHTLS), London (2012)
- Advanced Trauma and Life Support, Coventry, (2012)

Meetings attended

- East Midlands School of Anaesthesia, Winter Scientific Meeting (2019)
- East Midlands School of Anaesthesia, Winter Scientific Meeting (2018)
- Intensive Care Society State of the Art meeting (2018)
- Midlands East Research by Critical Care and Anaesthetic Trainees (MERCAT) study day (2018)
- 5th East Midlands Critical Care and Peri-Operative Medicine Conference (2018)
- East Midlands School of Anaesthesia Summer meeting (2018)
- Group of Anaesthetists in Training Annual Meeting, Cardiff (2017)
- Anaesthetic Research Society Meeting, London (2017)
- Critical Care Research Day, Nottingham (2017)
- Intensive Care Society State of the Art meeting, London (2016)
- Anaesthetic Research Society Meeting, Glasgow (2016)
- East Midlands School of Anaesthesia Summer meeting, Leicester (2016)
- Group of Anaesthetists in Training Annual Meeting, Nottingham (2016)
- East Midlands School of Anaesthesia, Winter Scientific Meeting (2014)
- Trent South Anaesthetic Trainee Scientific Meeting, Leicester (2013)
- Association for the Study of Medical Education ASM, Edinburgh (2011)
- Coaching in Medicine and Leadership, Harvard, USA (2011)
- Annual Research Day Midlands Education Research Group Nottingham (2010)
- Ottawa medical education conference Miami (2010)
- East Midlands Deanery Four Day Mentoring Course, Leicester (2009)

Additional skills and experience

Information technology and information management is a key interest for me; an enabler for my projects in technology enhanced learning, simulation, and my research. I completed Computer Sciences training to A-

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Level, and use these skills in desktop publishing (Microsoft Office, Inkscape, Irfandraw, GIMP), programming (HTML, BASIC, Pascal, CSS), statistics (SPSS, GraphPad Prism), image and video manipulation (ImageJ, FIJI, Shotcut). I have undertaken a number of projects requiring me to use additional skills, such as the use of Microsoft SharePoint, Stream, PHP, PowerShell and R.

Although complementary to my career aspirations, these are core, key skills and will become increasingly important in order to access and critically appraise online sources, and to manage electronic patient record systems. Information literacy, search optimisation, and latterly the use of “big data” and statistical analyses will become increasingly key to personalised medicine.

These projects have given me a track record of delivering work to a deadline and offering support and advice to others.

Experience

- Design and development of EMGAT website (<http://www.emgat.org.uk>) (2018)
- Migration of learning materials and East Midlands School of Anaesthesia materials from Moodle to Office 365 (2017-2018)
- Migration of learning materials to East Midlands Deanery Moodle (2015)

Personal interests

Medicine is a major part of my life; however my other passions are the outdoors, cooking and exercise. A keen runner and mountain biker throughout my medical training I have completed several half-marathons, and completed the Virgin Money London Marathon in 2019, raising money for the Stroke Association.

I’m often found in the Peak district, Cannock chase, or around Leicestershire with friends, my partner and our dog, Oscar, whom we rescued and trained 5 years ago.

Living in Aylestone, I am an active member of the Friends of Aylestone Hall gardens, a local group established to maintain the local environment and fund-raise for local charities through events within the gardens and engagement with the local ward committee.

My last guilty pleasure is food – often to be found in the kitchen baking, frequently for colleagues, and friends (and several times over the years for the [in]famous cake Friday).

A (very) occasional guitarist, and (even less frequently) pianist.

Publications

- **Hebbes CP** The immunomodulatory effects of nociceptin – development and validation of a biosensor assay. [Doctoral thesis] 2021
- **Hebbes CP**, Lambert, DG. Chapter 1: General principles of pharmacology. In: Thompson JP, Moppett I. Smith & Aitkenhead's Textbook of Anaesthesia. Elsevier, 2019
- **Hebbes CP**, Thompson JP. Pharmacokinetics of anaesthetic drugs at extremes of weight. *BJA Education*. 2018; 18: 364-70 (<https://doi.org/10.1016/j.bjae.2018.09.001>)
- **Hebbes CP**, Thompson JP. Chapter 9: Drug Compartments and Body Systems In: Bouch C, Cousins J. Core Topics in Anaesthesia and Perioperative Care of the Morbidly Obese Surgical Patient. Cambridge University Press, 2018 (<https://doi.org/10.1017/9781316681053.010>)
- **Hebbes CP**. Pharmacological modulation of cardiac function and blood vessel calibre. *Anaesthesia & Intensive Care Medicine*. 2018;**12**:648-55 (<https://doi.org/10.1016/j.mpaic.2018.09.003>)
- **Hebbes CP**, Thompson JP. Drugs acting on the heart: anti-arrhythmics. *Anaesthesia & Intensive Care Medicine*. 2018;**19**:370-4 (<https://doi.org/10.1016/j.mpaic.2018.04.009>)
- **Hebbes CP**. Non-opioid analgesics. *Anaesthesia & Intensive Care Medicine*. 2016;**17**:469-72 (<https://doi.org/10.1016/j.mpaic.2016.06.013>)
- **Hebbes CP**. Pharmacological modulation of cardiac function and blood vessel calibre. *Anaesthesia & Intensive Care Medicine*. 2016;**17**:48-54 (<http://dx.doi.org/10.1016/j.mpaic.2015.10.009>)
- **Hebbes CP**, Thompson JP. Drugs acting on the heart: anti-arrhythmics. *Anaesthesia & Intensive Care Medicine*. 2015;**16**:232-6 (<http://dx.doi.org/10.1016/j.mpaic.2015.02.009>)
- Brookes ZL, Stedman EN, Brown NJ, **Hebbes CP**, Guerrini R, Calo G, *et al*. The nociceptin/orphanin FQ receptor antagonist UFP-101 reduces microvascular inflammation to lipopolysaccharide in vivo. *PloS one*. 2013;**8**:e74943 (<http://dx.doi.org/10.1371/journal.pone.0074943>)
- **Hebbes CP**, Lambert D. Non-opioid analgesics. *Anaesthesia & Intensive Care Medicine*. 2013;**14**:510-3 (<http://dx.doi.org/10.1016/j.mpaic.2013.08.011>)
- **Hebbes CP**, Lambert D. Non-opioid analgesics. *Anaesthesia & Intensive Care Medicine*. 2011;**12**:69-72 (<http://dx.doi.org/10.1016/j.mpaic.2010.10.022>)
- **Hebbes CP**, Lambert D. Non-opioid analgesic drugs. *Anaesthesia & Intensive Care Medicine*. 2008;**9**:79-83 (<http://dx.doi.org/10.1016/j.mpaic.2007.11.012>)
- Garcea G, Gouda M, **Hebbes CP**, Ong SL, Neal CP, Dennison AR, *et al*. Predictors of severity and survival in acute pancreatitis: validation of the efficacy of early warning scores. *Pancreas*. 2008;**37**:54-61 (<http://dx.doi.org/10.1097/MPA.0b013e3181771451>)
- Spagnolo B, Carrà G, Fantin M, Fischetti C, **Hebbes CP**, McDonald J, *et al*. Pharmacological characterization of the nociceptin/orphanin FQ receptor antagonist SB-612111 [(–)-cis-1-methyl-7-[[4-(2, 6-dichlorophenyl) piperidin-1-yl] methyl]-6, 7, 8, 9-tetrahydro-5H-benzocyclohepten-5-ol]: in vitro studies. *Journal of Pharmacology and Experimental Therapeutics*. 2007;**321**:961-7 (<http://dx.doi.org/10.1124/jpet.106.116764>)
- Trapella C, Guerrini R, Piccagli L, Spagnolo B, Rubini S, Fanton G, **Hebbes CP**, *et al*. Identification of an achiral analogue of J-113397 as potent nociceptin/orphanin FQ receptor antagonist. *Bioorganic & medicinal chemistry*. 2006 ;**14**:692-704 (<http://dx.doi.org/10.1016/j.bmc.2005.08.049>)
- Vergura R, Valenti E, **Hebbes CP**, Gavioli EC, Spagnolo B, McDonald J, *et al*. Dmt-Tic-NH-CH₂-Bid (UFP-502), a potent DOP receptor agonist: in vitro and in vivo studies. *Peptides*. 2006;**27**:3322-30 (<http://dx.doi.org/10.1016/j.peptides.2006.07.015>)
- Carrà G, Rizzi A, Guerrini R, Barnes TA, McDonald J, **Hebbes CP**, Mela F, Kenigs VA, Marzola G, Rizzi D, Gavioli E. [(pF) Phe⁴, Arg¹⁴, Lys¹⁵] N/OFQ-NH₂ (UFP-102), a highly potent and selective agonist

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of the nociceptin/orphanin FQ receptor. Journal of Pharmacology and Experimental Therapeutics.
2005;**312**:1114-23 (<http://dx.doi.org/10.1124/jpet.104.077339>)