



**UNIVERSITY OF  
CAMBRIDGE**

Institute of Continuing Education

**Postgraduate Certificate in Clinical Research, Education and  
Leadership**

**2018 – 2019**

**Course Code: 1819PPBCM1**

**COURSE GUIDE**

**University of Cambridge Institute of Continuing Education, Madingley Hall,  
Cambridge, CB23 8AQ Tel 01223 746222 [www.ice.cam.ac.uk](http://www.ice.cam.ac.uk)**

Welcome to the **Postgraduate Certificate in Clinical Medicine**, a University of Cambridge award offered by the Institute of Continuing Education (ICE), designed collaboratively with the University of Cambridge Health Partners, the Academic Health Sciences Centre in conjunction with the School of Clinical Medicine. The Postgraduate Certificate is taught and awarded at FHEQ level 7 (i.e. at Master's level) and attracts 60 credits at level M. The award is completed in one academic year. For further information about academic credit please see our website, <http://www.ice.cam.ac.uk/studying-with-us/information-for-students>.

The Postgraduate Certificate comprises three modules providing a total of approximately 90 contact hours with additional between-module reflection, study and assignment work. A virtual learning environment (VLE) will support students' learning throughout the programme. The three modules are:

- Clinical Research
- Clinical Education
- Clinical Leadership

The Postgraduate Certificate in Clinical Medicine is designed to be flexible and accessible to healthcare professional and complement employment within a clinical environment. The aim of the programme is to:

- Create an international cohort of consultants, GPs and dentists able to pursue and develop their roles in a rapidly-changing and challenging environment of clinical medicine
- Develop the confidence within this cohort to lead service improvement for safe and high quality patient care, with the required knowledge, skills and capability to have a positive personal impact on the work of others in their clinical team and wider service
- Develop clinicians with an understanding of teaching, professional development and assessment in the field of clinical medicine
- Develop clinicians with an understanding of research methodologies and ethical considerations relevant to clinical medicine
- Encourage participants to develop as reflective practitioners with the emotional intelligence, resilience and astuteness required to be effective clinical leaders
- Encourage a commitment to intellectual challenge and evidence-based clinical practice informed by the latest conceptual and theoretical knowledge of medical education, research methods, ethics and clinical leadership and governance

You will acquire through the programme a grounding in each of these areas, and the syllabuses for each of the modules are included in this document. The reading list and resources are available once accepted onto the programme and within the VLE.

## Teaching staff

### Course Director

**Dr Ronan O'Leary:** Consultant in neurosciences and trauma intensive care medicine at Addenbrooke's Hospital.

### Tutors

**Dr Nicola Jones:** Consultant and Clinical Lead for Critical Care at Papworth NHS Foundation Trust, Cambridge

**Dr Silvia Karcheva:** Consultant Anaesthetist and Educational Supervisor at Addenbrooke's Hospital, Cambridge

**Dr Pamela Todd:** Consultant Dermatologist and Deputy Director of PGME at Addenbrooke's Hospital, Cambridge

**Dr Juliet Usher-Smith:** Clinical Senior Research Associate and Associate General Practitioner, Cambridge

**Ms Jessica Watts:** Leadership Development Associate, Cambridge University Health Partners, Judge Business School, University of Cambridge

**Dr Thomas O'Connor:** Senior Dentist, Cambridge Community Dental Services and Honorary Dental Surgeon, Addenbrooke's Hospital, Cambridge

#### **Administrative staff**

**Academic Programme Manager:** Sue Brignell, Institute of Continuing Education, University of Cambridge, Madingley Hall, Madingley, Cambridge CB23 8AQ, 01223 760862, [sab67@cam.ac.uk](mailto:sab67@cam.ac.uk)

**Programme Administrator:** Liz Webb, Institute of Continuing Education, University of Cambridge, Madingley Hall, Madingley, Cambridge CB23 8AQ, 01223 746408 [liz.webb@ice.cam.ac.uk](mailto:liz.webb@ice.cam.ac.uk)

#### **Venue**

Madingley Hall is the University of Cambridge's campus dedicated to continuing education for adults. The magnificent Hall was built in the sixteenth century and acquired by the University in 1948. The Hall has been used by the Institute of Continuing Education as a venue since 1975.

You will be taught in one of 14 classrooms at Madingley Hall and, occasionally, at other venues. Classrooms are arranged and equipped to encourage effective small group learning and peer interaction. Technology-enhanced learning, including lecture capture where appropriate, is used in many classes and wi-fi is available throughout the site. We also provide a range of social learning spaces which you can make use of before, or after, your class. Seven acres of superb gardens and grounds designed by Capability Brown provide space to think, reflect and relax. We offer a range of catering including formal dining, sandwiches and snacks, and a full-service bar. If you are travelling a long distance you may wish to book accommodation in one of the Hall's 62 en suite bedrooms.

The Hall is situated three miles west of Cambridge with easy access from the M11 and the A14. There is ample free on-site car parking. Central London and Stansted Airport can be reached in under an hour by train from Cambridge railway station. Taxis from the railway station to Madingley Hall typically take around 20-25 minutes. Full directions are given on our website at: <http://www.ice.cam.ac.uk/about-us/how-find-us>

#### **Contact details of ICE**

Institute of Continuing Education  
University of Cambridge  
Madingley Hall  
Madingley  
Cambridge  
CB23 8AQ  
T: 01223 746222

**Website:** [www.ice.cam.ac.uk](http://www.ice.cam.ac.uk)

**Email:** [pg-awards@ice.cam.ac.uk](mailto:pg-awards@ice.cam.ac.uk)

**POSTGRADUATE CERTIFICATE  
MODULE 1 – CLINICAL RESEARCH  
Syllabus  
Michaelmas Term 2018**

<b>Start date</b>	4 September	<b>End date</b>	20 December
<b>Teaching dates</b>	10-13 September 27 November	<b>Time</b>	9am-6pm
<b>Venue</b> Madingley Hall, Madingley, Cambridge CB23 8AQ			
<b>Tutor(s)</b>	Dr Juliet Usher-Smith	<b>No of meetings / classes</b>	5 days

**Aims**

To allow students to participate effectively in clinical research and to provide students with a framework to develop research ideas into publishable studies.

Provide students with the knowledge to understand the importance of research activity in the future of clinical care within healthcare systems and tertiary health care institutions.

To provide students with insight into study design, funding and management, and understanding of the regulatory environment in which research is conducted.

Contribute to continuing professional development of healthcare professionals by providing knowledge of research and academic career pathways.

**Content**

There are eight themes within the research module:

**Theme 1:** Understanding the role of research in clinical practice and the role of clinicians in conducting research, and the elements of good clinical practice;

**Theme 2:** Understanding research methodologies;

**Theme 3:** Effective review of the literature;

**Theme 4:** Statistics, data analysis and data presentation;

**Theme 5:** The clinical study design process and ethical approval;

**Theme 6:** Funding applications and grant writing skills;

**Theme 7:** Publication, peer review and paper-writing;

**Theme 8:** Research career pathways.

In addition a Good Clinical Practice Course is completed electronically.

**Presentation of the unit**

**Pre-course Preparation:** Completion of pre-course reading material and example project proposals, ethics submissions, and grant applications. Complete personal profile within VLE discussion forum.

**Day One:** Introduction to the programme; the role of research, the relationship between research, clinical practice, service improvement and education. Developing a research question (Themes 1 and 8). Effective review of the literature (Theme 3).

**Day Two:** Research methods (Theme 2).

**Day Three:** Introduction to research ethics, Good Clinical Practice and regulation (Theme 5). Publication, peer review and paper-writing (Theme 7).

**Day Four:** Statistics for clinical researchers (Theme 4). Funding applications and grant writing skills (Theme 6). Assignment preparation and planning.

**Day Five:** Publication and dissemination (Theme 7).

### **Learning outcomes**

By the end of the module students will be able to:

Describe the importance of research within the clinical environment;

Understand the inter-dependence between research, clinical practice, healthcare education, and quality improvement;

Develop an idea from the initial concept to a publishable study;

Understand the funding and regulatory structures for healthcare research;

Be able to plan a career as an academic clinician scientist, or research-active clinician.

## **ASSESSMENT**

### **Formative assessment**

Students will receive formative assessment throughout the course by use of reflective logs, peer feedback, and tutor discussion.

### **Summative assessment**

Summative assessment will be conducted using a written assignment (2500 - 3000 words) in the form of a theoretical research project proposal in an area of clinical practice relevant to the student's own speciality or interest.

**Closing date for the submission of assignments:**

**12:00 UTC/GMT\* 4 January 2019**

\*Co-ordinated Universal Time/Greenwich Time

### **Resources and Background Reading Materials**

Health Education England guidance on Clinical academic careers:

<https://www.hee.nhs.uk/our-work/developing-our-workforce/clinical-academic-careers>

Guidance on academic training in Intensive Care Medicine. The Faculty of Intensive Care Medicine:

<http://www.ficm.ac.uk/sites/default/files/Academic%20Training%20in%20Intensive%20Care%20Medicine%20v%201.0%20Jan%202013.pdf>

Supporting Academic General Practice:

<https://sapc.ac.uk/article/supporting-academic-general-practice>

British Society for Oral and Dental Research:

<http://www.bsodr.org.uk>

NIHR Clinical Trials Toolkit:

<http://www.ct-toolkit.ac.uk>

Core Outcome Measures in Effectiveness Trials (COMET) Initiative.:

<http://www.comet-initiative.org>

Enhancing the Quality and Transparency of Health Research (EQUATOR network):

<http://www.equator-network.org>

The Health Research Authority:

<http://www.hra.nhs.uk/>

Good Clinical Practice:

<http://ichgcp.net/>

**POSTGRADUATE CERTIFICATE  
MODULE 2 – CLINICAL EDUCATION  
Syllabus  
Lent Term 2019**

<b>Start date</b>	15 January	<b>End date</b>	17 April
<b>Teaching dates</b>	21-24 January 7 February	<b>Time</b>	9am-6pm
<b>Venue</b> Madingley Hall, Madingley, Cambridge CB23 8AQ			
<b>Tutor(s)</b>	Dr Pamela Todd Dr Sylvia Karcheva	<b>No of meetings / classes</b>	5 days

**Aims**

Ensure students develop advanced skills and motivation for teaching.

Allow students to contribute to continuing development of healthcare professionals by stimulating inter-professional education.

Develop students as teachers and prepare them for the high standards of revalidation and appraising of the educational aspect of their work.

**Content**

There are eight themes within the research module:

**Theme 1:** Introduction to small group teaching;

**Theme 2:** Becoming an effective clinical supervisor;

**Theme 3:** Principles of assessment and appraisal;

**Theme 4:** Technology enhanced learning (TEL) Part I: eLearning;

**Theme 5:** Technology enhanced learning (TEL) Part II: Simulation;

**Theme 6:** Teaching practical clinical skills;

**Theme 7:** Trainees in difficulty;

**Theme 8:** Educational research.

**Presentation of the unit**

**Pre-course Preparation:** Establishing a VLE personal profile, completion of pre-session background reading, homework and reflective log.

**Day 1:** Meeting the faculty and setting objectives. Large group vs. small group teaching (Theme 1). *In situ* training and teaching a practical skill (Theme 6).

**Day 2:** Principles of assessment. Feedback and Evaluation. Principles of appraisal (Theme 3). Roles and responsibilities of educational and clinical supervisors (Theme 2). E-portfolio and ARCP. Trainees in difficulty (Theme 7).

**Day 3:** Technology enhanced learning: e-Learning, e-Hospital, simulation (Themes 4 & 5). Designing a training programme. Educational research. Quality assurance and evaluation of training (Theme 8).

**Day 4:** Round up session. Students' teaching episodes (5 minute presentation).

**Day 5:** Workshop on students' assignments (reflection on the work during the course and guidance on the final assignment).

## Learning outcomes

By the end of the module students will have developed the skills to:

- Understand the principles of teaching and learning based on the evidence and theories of adult learning;
- Deliver teaching tailored to appropriate working environments;
- Understand the relationship between teaching, learning and assessment;
- Understand the relationship between knowledge, skills and attitudes;
- Manage groups and enable group interaction;
- Engage students at different stages and abilities and develop an awareness of student's stage of self-direction;
- Set objectives and match learner's and teacher's expectations and encourage active self-directed learning;
- Understand the features of real and virtual learning environment;
- Develop technology-enhanced learning (TEL) and create educational programmes.

## ASSESSMENT

### Formative assessment

Formative assessment is delivered throughout the course and includes the pre-course preparation, a reflective process following each session, and the short teaching episode during the round-up session. Students will also be formatively assessed on their active participation during class sessions and workshops.

### Summative assessment

Students will submit three assignments: reflection on a teaching episode (750 - 1000 words), an example of a training programme, an e-learning module or a simulation scenario (750 - 1000 words or the equivalent), and an essay on a topic of the taught programme (1000 - 1,500 words). The three assignments should total 3,000 words or the equivalent.

### Closing date for the submission of assignments:

**12:00 UTC/GMT\* 29 March 2019**

\*Co-ordinated Universal Time/Greenwich Time

### Resources and Background Reading Materials

The materials for pre-class preparation, including the reading between class sessions, will be posted to the VLE prior to the sessions.

Academy of Medical Educators (2014) Professional standards for medical educators:

[http://www.medicaleducators.org/write/MediaManager/AOME\\_Professional\\_Standards\\_2014.pdf](http://www.medicaleducators.org/write/MediaManager/AOME_Professional_Standards_2014.pdf)

GMC (2015) Outcomes for students (Tomorrow's Doctors) available at:

[www.gmcuk.org/undergrad\\_outcomes](http://www.gmcuk.org/undergrad_outcomes)

Bleakley A, Bligh J. and Browne J (2011) *Medical Education for the future*. Springer: London.(2011)

Cook V, Daly C and Newman M (2012) *Work-based learning in clinical settings. Insights from socio-cultural perspectives*. London: Radcliffe

Dornan T., Mann K., Scherpbier A and Spencer J. (2011) *Medical Education. Theory and practice*. Churchill Livingstone: London.

Benner, P (1984) *From novice to expert: Excellence and power in clinical nursing practice*. Menlo Park: Addison-Wesley 13-34.

Bradbury H, Frost N, Kilminster S and Zukas M (2010) *Beyond Reflective Practice. New approaches to professional lifelong learning*. London: Routledge.

**POSTGRADUATE CERTIFICATE  
MODULE 3 - CLINICAL LEADERSHIP  
Syllabus  
Easter Term 2017**

<b>Start date</b>	7 April	<b>End date</b>	27 July 2018
<b>Teaching dates</b>	15-18 April 6 June	<b>Time</b>	9am-6pm
<b>Masterclasses</b>	tbc		6-8pm
<b>Venue</b> Madingley Hall, Madingley, Cambridge CB23 8AQ			
<b>Tutor(s)</b>	Ms Jessica Watts Dr Nicola Jones	<b>No of meetings / classes</b>	5 days

**Aims**

To develop students as healthcare leaders with the required knowledge, skills and capability to have a positive personal impact on the work of others in their clinical team and wider service.

To contribute to the development of emotional intelligence, resilience and political astuteness required to be an effective healthcare leader in a rapidly changing and challenging environment.

To develop students who are committed to safe and high-quality patient care.

To develop students who are confident in leading for improvement and leading across a wider system of healthcare.

**Content**

There are eight themes within the Clinical Leadership Module:

**Theme 1:** Clinical Leadership in the NHS;

**Theme 2:** Self-awareness and personal leadership qualities;

**Theme 3:** Project/change management theories and practice;

**Theme 4:** The impact of effective leadership within the clinical arena and how to enhance leadership. Leadership resilience strategies;

**Theme 5:** Teams: An evidence-based approach to people management and developing high-performing teams;

**Theme 6:** Rescuing failing teams, managing difficult behaviour;

**Theme 7:** Leading for improvement, strategic development, business planning and marketing;

**Theme 8:** Presenting projects, change management, organisational theory. Change within large organisations – the NHS, learning from other industries.

**Presentation of the unit**

**Pre-course Preparation:** Completion of pre-course reading, completion of service improvement project initiation document, completion of personal profile via on-line discussion forum.

**Day One:** Introduction to the programme; leadership in the NHS, Purpose, People Processes: Clinical Leadership and Management

“When Information and Governance disconnect” (Themes 1, 4).

**Day Two:** Self-awareness and personal leadership qualities; Financial Flows and Leveraging Improvement (Themes 2, 4, ).



**Day Three:** Leading for improvement – review of projects and key leadership challenges facing the NHS (Themes 3, 4 and 7).

**Day Four** Operations Management and Module Review (Theme 8)

**Day Five:** Healthcare Simulation and Service Improvement Project review. (All Themes)

### **Learning outcomes**

By the end of the module students will have:

An increased understanding of leadership concepts;

Developed their leadership impact;

An increased understanding of the concepts of resilience and be able to enhance their resilience strategies;

An increased knowledge of the NHS environment and leadership challenges presented by this;

Gained project management methodology skills through the design and delivery of a service improvement project;

Explored a range of leadership perspectives;

Understand the impact of culture and organisational context on their personal leadership style and the team leadership task;

Acquired a framework for understanding and responding to “difficult behaviour”;

Practised and refined their leadership skills;

Participated in a leadership case scenario related to a healthcare system issue;

An understanding of the evidence base and best practices for team leadership;

Practiced their presentation and personal leadership impact skills individually and as part of a group;

Explored leadership behaviours that contribute to safe and reliant patient care; improved quality of care and improved outcomes.

## **ASSESSMENT**

### **Formative assessment**

Students will be assessed formatively throughout the module on evidence of regular reflection in their online reflective diary, demonstration of active participation in online discussion, and on their peer review of other students, both as the observer and as the learner, as evidenced in their written reflections.

### **Summative assessment**

A written assignment in the form of a completed business case or service improvement project report of 2,000 words or equivalent (66% of summative assessment).

A written assignment from the leadership simulation workshop of 1,000 words or equivalent (33% of assessment).

**Closing date for the submission of assignments:**  
**Service Improvement Project: 12:00 UTC/GMT\* 31 May 2019**  
**Assignment from the simulation workshop: 21 June 2019**

\*Co-ordinated Universal Time/Greenwich Time

## Resources and Background Reading Materials

- Academy of Royal Colleges & NHS Institute for Innovation and Improvement *Medical Leadership Competency Framework 3<sup>rd</sup> Edition July 2010*.
- NHS Leadership Academy *Healthcare Leadership Model Version 1 2013*.
- Yukl G. *Leadership in organizations* (8<sup>th</sup> edition). Harlow: Pearson Education, 2013.
- Northouse PG. *Introduction to Leadership: Concepts and Practice* (2nd edition). California : Sage Publications, 2012.
- Northouse PG. *Leadership: Theory and Practice* (6th edition). California: Sage Publications, 2012.
- Barr J and Dowding L. *Leadership in Health Care* (2nd edition). London: Sage, 2012.
- Price A and Scowcroft A. *Essential Skills for Influencing in Healthcare: A Guide on How to Influence Others with integrity and Success*. London: Radcliffe Publishing, 2012.
- Swanwick T, McKimm J (eds). *ABC of Clinical Leadership*. Chichester: Wiley-Blackwell, 2011.
- Gillam S. *Leadership and Management for Doctors in Training: A Practical Guide*. London: Radcliffe Publishing, 2011.
- Spurgeon P, Clark J, Ham C. *Medical Leadership: From the Dark Side to Centre Stage*. London: Radcliffe Publishing, 2011.
- Hartley J, Benington J. *Leadership for Healthcare*. Bristol: Policy Press, 2010.

# Postgraduate Certificate in Clinical Research, Education and Leadership

## Teaching dates 2018/19

### Michaelmas 2018

#### Module 1: Clinical Research

Day 1	10 September
Day 2	11 September
Day 3	12 September
Day 4	13 September
Day 5	27 November

### Lent 2019

#### Module 2: Clinical Education

Day 1	21 January
Day 2	22 January
Day 3	23 January
Day 4	24 January
Day 5	7 February

### Easter 2019

#### Module 3: Clinical Leadership

Day 1	15 April
Day 2	16 April
Day 3	17 April
Day 4	18 April
Day 5	6 June
<b>MASTERCLASSES</b>	tbc

*Whilst every effort is made to avoid changes to this programme, published details may be altered without notice at any time. The Institute reserves the right to withdraw or amend any part of this programme without prior notice.*