

# ACHIEVING EXCELLENCE IN RADIOGRAPHY EDUCATION AND RESEARCH



**UNIVERSITY OF SUFFOLK**

Friday 25 November 2022 | 09:30 – 16:30

# PROGRAMME



**09:30** Registration and refreshments  
**10:00** Welcome and introduction: Dr Ruth Strudwick, AHP Lead, University of Suffolk

**KEYNOTES:**  
APPRENTICESHIPS

Chair: Dr Ruth Strudwick



## DEMELZA GREEN

Degree Apprenticeships Workplace Learning Lead, University of Exeter

**10:05** | Pre-registration apprenticeships – where are we now?



## JENNIFER LITTLE

Imaging Education Lead, University Hospitals of North Midlands NHS Trust

**10:25** | Supporting radiography degree apprentices: practice educators' perspectives



## KATHRYN WILLIAMSON

Professional Officer for Education And Accreditation, SoR | CoR

**10:40** | The new education & career framework

**11:00** Break: Refreshments, poster viewing and networking

**WORKSHOP:**  
ARTIFICIAL  
INTELLIGENCE

Chair: Dr Ruth Strudwick



## DR CHRISTINA MALAMATENIOU

Director of Postgraduate Programme, City, University of London

**12:00** | Artificial intelligence for radiography practice: key topics and principles

**13:00** Lunch: Poster viewing and networking

**CURRENT ISSUES  
IN RADIOGRAPHY  
EDUCATION**

Chair: Demelza Green



**PROFESSOR RICARDO KHINE**

Head of the School of Health and Social Care Professions,  
Buckinghamshire New University

**14:00** | What makes a good practice educator?



**SUE JOHNSON**

Professional Officer for Clinical Imaging, SoR | CoR

**14:20** | Support and assistant workforce education and training:  
English apprenticeships and devolved nation approaches



**PROFESSOR MARY LOVEGROVE OBE**

Director, Allied Health Solutions

**14:40** | Driving innovation in pre-registration practice-based  
learning

**15:00** Break: Refreshments, poster viewing and networking



**MARY MAKINDE**

Senior Lecturer in Forensic Investigation and Strategic Lead:  
Closing our Gap, Canterbury Christ Church University

**15:30** | Working as partners in learning: bridging the gap to  
leadership



**PROFESSOR MARK MCENTEE**

Head of the Discipline of Medical Imaging and Radiation Therapy,  
University College Cork

**15:50** | Burnout in educators



**PROFESSOR HEIDI PROBST**

Director of the Health Research Institute and Professor of  
Radiotherapy and Oncology, Sheffield Hallam University

**16:10** | Developing a positive research culture

# SESSION ABSTRACTS

DEMELZA  
GREEN

Pre-registration apprenticeships - where are we now?  
10:05 - 10:25

In March 2020 the first degree apprenticeship in Diagnostic Radiography was launched by the University of Exeter, in partnership with NHS Imaging / Radiology Departments across England. This presentation will reflect upon the experiences of the Programme Leadership Team from programme inception through to delivery.

Programme inception will include a discussion of the drivers behind the need to broaden and increase access to the profession through the degree apprenticeship i.e. work based learning route. The presentation will then outline how programme design was approached in order to truly reflect the nature of degree apprenticeship education, and to be compliant with the relevant funding rules, whilst also meeting Professional Regulatory requirements. The importance of understanding that degree apprentices are being paid to learn, rather than being paid to work, will be emphasised and how this needs to be factored into programme design will be discussed as well as the similarities and differences between this route and the 'conventional' undergraduate route into radiography. Finally there will be a discussion of lessons learned as the programme began, and continues to be, delivered. This will include the need for education both for the wider profession about the nature of degree apprenticeship education.

JENNIFER  
LITTLE

Supporting radiography degree apprentices - practice educators' perspectives  
10:25 - 10:40

The diagnostic radiography workforce is currently a shortage profession with high vacancy rates nationally and facing difficulties in recruitment and retention. Diagnostic Radiography Degree Apprenticeships provide an opportunity for departments to grow their workforce by developing their own staff. In March 2020, the University Hospitals of North Midlands enrolled 3 apprentices onto the first cohort of Diagnostic Radiography Degree Apprenticeships at Exeter University.

The course was new to the university, the departments and the students. This presented many challenges. The Practice Educator was tasked with the need to increase placement capacity to accommodate the new trainees without reducing the numbers of students training via traditional routes. One of the first and biggest challenges faced was integrating both methods of training into the department and ensuring staff did not perceive the apprenticeship as a second class degree. More of the training was to be provided in the clinical setting with remote learning which required careful planning and access to external online platforms. The apprentices' well-being was a huge consideration as they had less contact time with the university and they had the added pressure of working while they were studying; the pastoral care role of the practice educator was crucial to managing this. Many lessons were learned during the first year of the apprenticeships and it was crucial that the HEIs, the practice educators and the students all fed back and communicated regularly to respond rapidly to any issues. Diagnostic Radiography Degree Apprenticeships have enriched our workforce and provided many opportunities to develop staff who would otherwise have been unable to join the profession.

The College of Radiographers (CoR) Education and Career Framework (ECF) (fourth edition) provides guidance for the education and career development of the radiography profession. Since the first edition of the ECF was produced in 2005, there have been many policy, technological and service delivery changes across imaging and radiotherapy services, as well as within radiography education and research settings. These changes have required the professional practice of the radiography workforce to evolve. As we consider how the workforce has developed, the fourth edition of the ECF reflects the changing knowledge, skills and attributes of the profession at each level of practice. It aims to be visionary, reflecting the future trajectory of a range of careers and roles in radiography, aligned to service and individual needs.

In this session Kathryn Williamson Professional Officer for Education and Accreditation at the College of Radiographers will provide an overview of the revised ECF, looking at key content, explaining how this edition may be used to develop the radiography workforce and how the College's individual accreditation schemes and programme approvals align with this national framework.

Artificial intelligence is being increasingly used in medical imaging and radiotherapy as a decision support tools, to optimise operational aspects and workflows. While initially met with caution by healthcare practitioners, it slowly makes its place into clinical practice, facilitated by more rigorous governance and evaluation frameworks.

This presentation will touch upon AI basic principles, key concepts for AI adoption, including enabling person-centred care and ways by which AI can be integrated into the Radiography curriculum. Finally, it will discuss what the potential role of the radiographers would be in a future with AI.

Clinical practice can be a stressful experience for some healthcare students. Practice educators in healthcare settings can have a profound effect on the quality of learning, the overall student experience in clinical practice and attrition. To date little is known of practice educator characteristics that are valued by radiographers and radiography students.

**Aim:** To identify the factors, both positive and negative, that influence clinical experience and learning for radiography and ultrasound students.

**Method:** A qualitative descriptive exploratory design was adopted utilising focus groups(n=5.) The study population comprised of qualified radiography staff in placement sites used by City, University of London and students from the same institution. Full verbatim transcriptions were analysed thematically.

**Results:** Four key themes emerged: 1) favourable / unfavourable traits, 2) learning approaches, 3) barrier / challenges, 4) considerations. Key factors for a positive learning experience included practice educators being approachable, whilst encouraging and empowering students. Practice educators highlighted student motivation as an important aspect of successful placement learning.

**Conclusion:** The study highlighted a number of positive attributes that enhance the student learning experiences whilst on clinical placement. Unhelpful attributes and challenges, such as time and student motivation, were also discussed. The findings will be discussed in more detail and can be used to provide support and guidance to clinical staff looking to provide supportive placements for students.

SUE  
JOHNSON

Support and assistant workforce education and training: English apprenticeships  
and devolved nation approaches

14:20 - 14:40

This session will focus on the education, training and career development opportunities for the support and assistant workforce in diagnostic and therapeutic radiography. Apprenticeship standards for England and education approaches in the devolved nations will be highlighted with reference to the new CoR Education and Career framework and SoR support and assistant workforce guidance documents.

PROFESSOR MARY  
LOVEGROVE OBE

Driving innovation in pre-registration practice-based learning

14:40 - 15:00

HEE has commissioned SoR to deliver a Workforce Reform Programme with a number of different workstreams. Driving innovation in pre-registration practice-based learning falls within HEE's COVID Recovery and Future Workforce domain: placement recovery and expansion. The focus of this work is to:

- i. Possibilities of a standardised clinical assessment working with HEIs and service for DRAD and TRAD
- ii. Explore the wide variation in clinical:academic proportions across pre-registration

MARY  
MAKINDE

Working as partners in learning: bridging the gap to leadership

15:30 - 15:50

This presentation shares our exciting journey in co-creating a virtual placement - Bridging the Gap to Leadership. This placement, a collaborative HEE-funded project between Canterbury Christ Church University and the University of Brighton. The aim is to develop resources for practice educators to enhance their support for Black, Asian, Mixed Heritage and Minoritised Ethnic students in their practice placements. As part of CCCU's Closing our Gap strategy, this placement is aimed at improving learning outcomes for Black, Asian, Mixed Heritage and Minoritised Ethnic students within Health and Social Care placements.

Since January 2021, 29 students from our Allied Health Professional programmes have had a Bridging the Gap to Leadership Placement. Students join at various points across this year, stepping on and stepping off the project, inducting the incoming students, ensuring a coherence to the overall project. There is also flexibility built into the placement to allow students to consider their own specific learning needs and to put their own mark on the project.

The achievements from this placement are wide-ranging - from the development of practical resources, such as podcasts and webinars, to the influence on ideas, through discussions and partnerships with our placement providers and amongst ourselves. There are personal achievements, gaining the skills required to produce such resources and delivering these to an audience. The recognised graduate attributes are continually being developed, most specifically, skills and understanding for leadership.

The sessions objectives include:

- Exploring the importance of collaborative working between students and staff to help enhance the student experience and improve the outcomes of Black, Asian, Mixed Heritage and Minoritised Ethnic students within practice learning
- Building networks that foster a sense of belonging and recognising the importance of allyship

**The aims of this research were to**

- a. assess whether similar levels of emotional exhaustion, burnout, job satisfaction and emotional resilience are present among a cohort of Irish and UK radiography staff.
- b. examine the impact of the pandemic on mental and physical wellbeing

**Results**

The CORE 10 indicate that the pandemic significantly impacted the mental and physical wellbeing of radiographers and that this impact vary with gender. The Burnout survey indicates that burnout is correlated with Depersonalisation ( $r= 0.75$ ) and inversely correlated with job satisfaction ( $r= -0.38$ ), personal achievement ( $r= -0.45$ ) and resilience ( $r=-0.54$ ).

**Discussion**

Findings indicate that focussing on increasing job satisfaction, giving opportunities for personal achievement and personalising work can reduce burnout. Increasing resilience would also help. The pandemic has increased the likelihood of burnout.

This session will cover:

- How do you define a research culture? - using the Royal Society's work on research culture and why it matters.
- Tools to measure research capacity and culture.
- Actions to enhance research culture-including case examples from personal experience.

**Overview**

This session will start with a definition of research culture. The presentation will highlight prominent factors that are deemed important in a positive research culture drawing on themes identified by The Royal Society and Science Europe. Tools from the research literature will be presented for measuring research culture and research capacity. It will be argued that equality, diversity, and inclusivity should be at the heart of local strategies to enhance a positive research culture.

The presentation will conclude with some examples from my own experience to highlight actions that can positively enhance local research cultures within Radiography education departments.

**Objectives**

By the end of the session participants will be able to:

- Identify key themes that are considered to influence research culture.
- Identify practical actions/activities to implement locally and nationally to enhance research culture.
- Reflect on their experiences of research culture within radiography education.

# SPEAKER BIOGRAPHIES

## DR CHRISTINA MALAMATENIOU

Director of Postgraduate Radiography programme  
City, University of London

Christina is the Director of the postgraduate programme of radiography at City, University of London and a Visiting Professor of Radiography at HESAV University in Switzerland. She is a widely published researcher in medical imaging, with more than £3.25 million in research grants in her name as PI and Co-I and an enthusiastic educator. Her area of research revolves around AI adoption and education in radiography, person centred care and supporting the workforce in its recovery after the Covid19 pandemic. Christina is also the chair of the AI advisory group of the SCoR and will be the new Chair of research for the EFRS from April 2023. She is an associate editor with JMIRS. Christina believes in leading from the heart and in the power (and fun) of collaborative work.

## DEMELZA GREEN

Degree Apprenticeships Workplace Learning Lead  
University of Exeter

Demelza qualified from Charterhouse college of Radiography in 1997 and undertook the majority of her clinical career working at Barts and the London NHS trust where she completed a Masters in Computed Tomography. After some time working in Australia, Demelza took the huge step into academia and joined the Medical Imaging team at University of Exeter in 2013 after previously lecturing at Robert Gordon University - Aberdeen and University of Hertfordshire. At Exeter Demelza is the discipline assessment lead and Director of Workplace Learning for the degree apprenticeship in Diagnostic Radiography; which was the first successfully approved in England in 2019. Her key interests lie in Computed Tomography (CT), Technology Enhanced Learning (TEL), curriculum development, assessment and student support and Demelza is currently undertaking a PhD in education with a focus on assessment.

## PROFESSOR HEIDI PROBST

Director of the Health Research Institute and Professor of Radiotherapy and Oncology  
Sheffield Hallam University

Heidi qualified as a Therapeutic Radiographer in 1987 from the London Hospital, Whitechapel (UK), and worked for the NHS for 14 years where her specialist area was pre-treatment imaging. Heidi started her PhD while a clinical radiographer in Leeds, she was awarded a fellowship from the Department of Health to complete her PhD qualifying in 2002. Heidi joined Sheffield Hallam University as a senior lecturer in 2001, was appointed Reader in Radiotherapy in 2013 and Professor of Radiotherapy and Oncology in June 2015. Heidi is currently the Director of the Health Research Institute at Sheffield Hallam University. Heidi is the founder and chair of the Breast Radiotherapy Interest Group (BRIG), a professional group for Therapeutic Radiographers (Radiation Therapists) and dosimetrists specialising in radiotherapy for breast cancer. Heidi is also chief investigator for two radiotherapy breast cancer studies: the SuPPORT 4 All (S4A) study and the Respire project (<https://www.shu.ac.uk/research/in-action/projects/designing-a-bra-for-radiotherapy>, [www.respire.org.uk](http://www.respire.org.uk)). In the S4A project a special support bra has been designed for women to wear during breast irradiation to reduce long term morbidity to the lungs and heart while providing dignity and modesty and empowering patients. The Respire project is a co-design study that has developed patient information for patients and carers on breast/chest wall irradiation and to allow patients to develop their ability to undertake breath hold techniques if this is required for treatment.

Jennifer qualified from the Central Birmingham School of Radiography as a Diagnostic Radiographer in 1983 and began her career at the General Hospital in Birmingham, before moving to Staffordshire and joining the team at the University Hospitals of North Midlands NHS Trust (as it is now known). In 2016, Jennifer took up a post as a Placement Practice Educator/Interventional Radiographer and undertook further study in 'Support for Learning in Practice'; which enabled her to register as a Practice Educator with the Society and College of Radiographers. Jennifer supported a total of 48 student radiographers from 3 different universities; which expanded to 80 student placements from 5 different universities including 9 BSc Diagnostic Radiography Apprentices. She enjoyed the challenge of improving the students' placement experience, providing the pastoral care that meets their complex needs and fostering a learning environment in which they can flourish and grow in confidence and competence. In 2019 Jennifer was nominated and awarded the Society of Radiographers 'Midlands Radiographer of the Year' for her work as a Placement Practice Educator. Jennifer's role has since expanded to Imaging Education Lead with the main focus of developing education and learning for all Imaging staff, Band 2-Band 7 and, providing clear progression pathways. Apprenticeships have been incorporated into their workforce plan and have provided opportunities for many who would otherwise have been unable to progress following traditional routes. This year the UHNM/Keele University partnership was successful in a bid to become an Imaging Academy Hub for the Midlands region which provides new and exciting opportunities in Radiology Education. Jennifer hopes to continue to work as an educator until retirement sharing the passion she has for the profession of Diagnostic Radiography and providing a safe and inclusive learning environment that will inspire the next generation of radiographers to deliver excellence in care with compassion for our patients.

Kathryn is a diagnostic radiographer with 15 years of clinical experience, having worked for both the private sector and NHS. After graduating in 2006 from Ulster University with a First-Class BSc. (Hons) degree, she specialised in mammography practice through the Nottingham International Breast Education Centre in collaboration with Sheffield Hallam University in 2008. Within her mammography role, she was also health promotion radiographer for the Northern Health and Social Care Trust in Northern Ireland, helping to establish the Trust's programme of work in this area. In 2017, she began working in academia as a lecturer in diagnostic radiography and imaging at Ulster University, contributing to the delivery of the undergraduate diagnostic radiography degree programme, interprofessional modules within the School of Health Sciences, and also postgraduate practice education. During her time at Ulster University, she completed her Postgraduate Certificate in Higher Education Practice, her Masters in Higher Education Practice with distinction, and gained Fellowship of the Higher Education Academy, whilst maintaining her clinical skills as a bank radiographer. She joined the SCoR in July 2021 as Professional Officer for Education and Accreditation.

Professor McEntee is Head of the Discipline of Medical Imaging and Radiation Therapy, Chair of Radiography at UCC, and Course Director for the MSCDR and MSCRT. He is one of the world's top Medical Radiation Scientists, recognised through Honorary appointments as a Professor at the Faculty of Health Sciences, at the University of South Denmark, and the University of Sydney. His publications explore patient-centred care as well as novel technologies and techniques that enhance the detection of clinical indicators of disease whilst minimising risk to the patient. His research has been disseminated through major international imaging meetings, including the annual meetings of the Radiological Society of North America, European Congress, UK Radiological Congress, International Society of Optical Engineering and Medical Imaging Perception Society. He is the recipient of 10 highly prestigious awards. In total, he has published over 250 original papers in the highest-ranked radiological journals. He has generated \$1.8m in funding from bodies. He is a Senior Fellow of the Higher Education Academy and a Fellow of the Irish Institute of Radiography and Radiation Therapy. He was Health Sciences Research Supervisor of the Year at the University of Sydney in 2018 and Australian University teacher of the year 2017 and Vice Chancellor's Award for Excellence in Higher Degree Teaching in 2014.

Emeritus Professor Mary Lovegrove OBE, Professor of Education and Development for Allied Health Professions is a diagnostic radiographer by profession and a very experienced education manager for allied health. In 2012, she was awarded an OBE for services to allied health and has extensive international experience. Mary has considerable research experience and has led a number of European, national and local projects associated with workforce improvements and education developments for the allied health workforce. She has a particular interest and expertise in clinical leadership and also in the impact of education and training on the service and the associated benefits for the service user. Mary is a Board member of a number of organisations.

Mary joined Canterbury Christ Church University in 2018 and is a Senior Lecturer on the Forensic Investigation programme and she is the University's Strategic Lead for Closing the attainment gap. As Strategic Lead, Mary works collaboratively with colleagues and students across the university to provide a whole-institutional holistic approach to addressing the disparities in the outcomes and experiences of Black, Asian, Mixed Heritage and Minoritised Ethnic students. Through her work she strives to empower others to be agents of change and to build a learning and working environment enables all to thrive. Mary is involved in the training and development of staff and has implemented strategies, policies and guidance documents to tackle racial inequalities in higher education, promote inclusive practice, improve retention and progression and enhance the lived experiences of Black, Asian, Mixed Heritage and Minoritised Ethnic students. Her work goes beyond the university walls and as such works with external stakeholders to promote inclusive practices within their own professional practice. Mary has worked on several projects with health care and social care professionals to help promote inclusivity and a sense of belonging. Mary is highly committed to people and works with organisations within the private and public sector to promote a culture that celebrates diversity and builds a sense of belong. Mary has helped organisations to make long-lasting transformational changes in leadership, culture and attitudes towards diversity and inclusion. Through her work with organisations in the health care and social care sectors, she has helped them to develop strategies that improve the student placement experience, patient and client experience and relationships within the workplace. Mary is the winner of a number of awards as a result of her commitment to teaching excellence (University Teaching Excellence Award Winner in 2020 and 2022). The University Alliance Award 2022 winner for her work with colleagues and students at Canterbury Christ Church University and the University of Brighton on Bridging the Gap to Leadership project. The Most Outstanding commitment to Equality, Diversity and Inclusion Staff Recognition award winner in 2021.

Ricardo's career spans over 22 years' as a Therapeutic Radiographer, with over 13 years in higher education as a senior academic and time also spent in the United States and Australia. He is currently in a strategic leadership role as Head of School (School of Health and Social Care Professions) at Buckinghamshire New University, where is responsible for a number of allied health programmes, public health and social work provisions. He is passionate about promoting Therapeutic Radiography by representing the profession in activities for the SCoR, European Federation of Radiographer Societies (EFRS) and Health Education England (HEE). He is a Senior Fellow of the Higher Education Academy and a Member of the Academy of Medical Educators. He has authored various publications, undertaken conference presentations at national and international level and a peer reviewer for number of professional journals. He maintains a keen interest in current professional issues through his involvement on the Radiotherapy Advisory Group. He also maintains his role as a registered assessor for the SCoR involved in the accreditation and approval of educational courses and a registered external examiner. He also holds an Honorary Senior Lecturer in Radiotherapy & Oncology at City, University of London. His research interests are in advanced / consultant practice and practice education. In 2017, he was awarded a PhD and his topic focused on the perceived impact of the consultant therapeutic radiographer role in clinical practice. This work has informed his current research on Advanced Clinical Practitioner roles in Therapeutic Radiography.

Ruth is an Associate Professor and the AHP Lead in the School of Health & Sports Sciences at the University of Suffolk. Ruth completed her professional doctorate in 2011 entitled 'An ethnographic study of the culture in a Diagnostic Imaging Department'. She continues to be research active and her funded research focusses on radiography professional practice and education. Ruth teaches on several courses at the University of Suffolk and is interested in interprofessional working, clinical education, values-based practice and work-based culture. Ruth leads the health service users and carers group and is passionate about service user and carer involvement in the curriculum. Ruth's other commitments include being the Chair of the Association of Radiography Educators, the Editor of the Journal 'Imaging and Oncology' an accredited assessor for the Society and College of Radiographers, Committee member of the College of Radiographer's Research Group, an External Examiner for The University of Derby and The University of Exeter, Chair of the East Anglia Regional CAHPR Hub, and reviewer for five international journals. Ruth's main research interests are interprofessional working, clinical education, patient care and work-place culture. Ruth has published extensively, writing journal articles, book chapters and giving conference presentations. Her first book was published in 2021 entitled "The Ethnographic Radiographer". She has undertaken several funded research projects. She is currently working on two further books. Ruth is currently supervising four PhD students.

Sue is a diagnostic radiographer working as a Professional Officer in Clinical Imaging at the Society of Radiographers. She is a member of the Professional and Education team. Sue has over 30 years of experience in many areas, including general radiography, paediatrics, interventional, service improvement, lecturing and service management. Sue leads on several professional topics for the SoR, including medicines, breast imaging, nuclear medicine and support workers including assistant practitioners. Sue works closely at a national level with colleagues from English government agencies and other stakeholders representing the organisation on issues around workforce and service development. Sue also provides support and professional guidance to SoR members from across the workforce at an individual level. Sue is passionate about supporting people to reach their potential. Her own career has exceeded all of her expectations and she is excited by future opportunities for diagnostic radiographers. Sue has a long association with the Society of Radiographers.

