

# Lee Burgum, Chief Cardiac Physiologist, Royal Infirmary of Edinburgh

## First Steps into Research Gateway Award



### Tell us a bit about yourself and your career to date

I began my career as a Student Cardiac Technician at South Cleveland Hospital, Middlesbrough in 1996. I qualified with a BTEC National in Medical Physics and Physiological Measurement in 1998. I chose to specialise in Cardiac Rhythm Management (CRM) and cardiac electrophysiology (EP). I have worked all over the UK and Ireland as a physiologist and spend 9 years working for St Jude Medical in various technical and sales roles, culminating in the post of Regional Sales Manager (EP) for the south of the UK.

I realised that my career was taking me away from the clinical work that I loved, so I returned to the NHS to work at The

John Radcliffe Hospital, Oxford, before relocating to first Cheshire, and finally Edinburgh. During this time, I have achieved certification in cardiac devices from the British Heart Rhythm Society (BHRS).

### What is the focus of your Gateway Award?

I will be involved in the Realistic Computational Electrophysiology Simulations for Targeted Treatment of Atrial Fibrillation (ReCETT-AF) study at the University of Edinburgh, and will be mentored by Dr Steven Williams, British Heart Foundation Senior Lecturer and Honorary Consultant Cardiologist.

The focus of the study is to determine whether there are different causes of atrial fibrillation and will look at both electroanatomical models and MRI scans to determine physiological and structural causes for AF, with a hope to improve outcomes of cardiac ablation or these patients.

I'll be involved in the study between 1<sup>st</sup> February and 31<sup>st</sup> August 2023.

### What motivated to apply for this Gateway Award?

I have been interested in research since the beginning of my career, when the team at South Cleveland Hospital were trying to determine whether primary percutaneous coronary intervention (PCI) or medical therapy provided better outcomes for patients having myocardial infarction (MI). Primary PCI is now the standard of care across the UK for acute MI.

My lack of a degree had always led me to believe that I could never be involved in research, but the desire to be involved was still there. I started a

degree with the Open University in 2021, but still have a long way to go.

When the awards were announced, I was immediately interested, but believed that I would not be accepted due to my lack of a degree. I was persuaded to apply by a Professor I work with and was delighted to be accepted.

**What are you hoping to get out of the award you have received?**

I hope to gain more exposure to data collection and analysis. I have been involved with studies in the past, but only in my normal clinical role.

This study will allow me the opportunity to work on (or be involved in) patient selection, consent, questionnaires, and collation of data.

I will also be attending the Edinburgh Clinical Research Methodology course as part of my funded hours. I hope to also use my time to get to know other people involved in cardiac research and look for potential future research opportunities.

**What difference do you think having this funded support will make to your understanding of research?**

This award allows me funded, protected time to actively engage with a research project, but also has a structured series of objectives that ensure I am receiving a good grounding in all areas of research.

**What do you hope to do in the future and how do you think this Gateway Award will help you achieve this?**

My long-term goal would be to continue working clinically while also spending time on research and possibly teaching.

This award will enable me to develop the necessary skills to allow me to demonstrate my suitability for a future MSc or PhD.

**Any other thoughts?**

I am extremely grateful to the Gateway Awards team for having the belief in me, which I didn't necessarily have. They have turned what I considered a pipe-dream, into a reality.

**For more information please contact:**

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