

Clinical Academic Research Partnerships: Case Studies

Round 1

Dr James Dodd MB CHB FRCP PhD

Consultant Senior Lecturer Respiratory Medicine, University of Bristol & Southmead Hospital Bristol

Host Research Organisation: University of Bristol

Project Title: An integrated epidemiological approach to understanding the relationship between lung health and multi-morbidity

“Surround yourself by an expert team, research is most rewarding and effective as a collaborative effort. “Not all clinical academics have to follow the same path, take advantage of opportunities that come your way”

Twitter: [@theotherdodd](https://twitter.com/theotherdodd)

Website: [Airways Disease Research, Bristol](#), [James Dodd, Bristol](#)

Career to Date

Graduated: 2001

PhD: 2012

I trained in general and respiratory medicine in south west England, a couple of years into my respiratory specialist training I spent 3 years out of programme at St George's University of London completing a PhD on brain pathology and cognitive dysfunction in Chronic Obstructive Pulmonary Disease (COPD). This started my interest in lung health and multimorbidity.

I was able to gain experience as a successful academic author, budget holder and research supervisor. I returned to clinical training in 2012 working 50:50 as an NIHR Academic Clinical Lecturer at the University of Bristol. I particularly enjoy interdisciplinary collaboration, with experience of working with engineers to develop new methods for lung function assessment and Wellcome trust Life of Breath team of philosophers, artists, historians and anthropologists.

The opportunity to join wonderful colleagues as an NHS consultant at the North Bristol Lung Centre came in 2015. I was appointed as a full-time clinician, leading the severe asthma & COPD services. I was proud of the output and impact of this work; but keen to build on links that I had made with MRC Integrated Epidemiology Unit and Avon Longitudinal Study of Parents and Children (ALSPAC). CARP was the ideal catalyst to get my research trajectory back on track, bringing together expertise in the latest epidemiological methods and clinical expertise to address significant global health priorities around lung health and multi-morbidity.

Why I applied for a CARP Award

It seemed like the perfect fit for me as a full time NHS clinician looking to build collaborations and take a supported and protected step back into research. The focus on partnership with an established research group to build a mutually beneficial collaboration was just what I was looking for. It was helpful that the scheme insists that not only research time is protected but that there was a route back to my full-time clinical post at the end of the scheme if needed.

Words of Wisdom for those applying to the scheme

- Start discussions with clinical colleagues and academic partners early
- Learn from examples of previous successful applications
- Think about the training element and added value you bring to the collaboration
- Embrace interdisciplinary working.
- Spend time thinking about and focusing on research questions that you find interesting and are going to make a real difference

Biggest Challenges

- Job planning
- Back filing of clinical role, in my case this was an external locum and a subsequent permanent appointment

Impact of COVID-19

As a frontline specialty in respiratory medicine, I joined my clinical academic colleagues in returning to full time NHS work during the COVID-19 pandemic, this involved planning and leading the acute response to managing people requiring admission with severe COVID-19 disease. I have now returned to my clinical academic role but may be called upon to support clinical services for any potential second wave.

My research background served us well during the intense period of preparation and planning, helping us to negotiate and synthesise the rapidly evolving evidence and data coming from China and Europe. I was also in a position to help lead our Trusts research efforts as local PI for the NIHR urgent public health priority RECOVERY-RS study and as co applicant on a number of studies including a local biomarker study and on proposals to the UKRI rapid COVID-19 call; one working with chemists and engineers on aerosol measurements associated with respiratory interventions and the other looking at digital online support interventions for vulnerable patients with chronic breathlessness.

Next Steps

I was very fortunate to be appointed to a permanent clinical lectureship with my partner research organisation soon after being awarded my CARP. The support of the MRC CARP was instrumental in achieving this. I am looking forward to combining my rewarding clinical work in complex airways disease with the opportunity to build a research group and leading the respiratory theme with my colleagues in the academic respiratory unit and partners at the MRC integrative epidemiology unit and ALSPAC birth cohort.

Round 2

Dr Claire Higham MBBS, FRCP, DPhil

Consultant Endocrinologist, Christie Hospital NHS Foundation Trust

Host Research Organisation: The University of Manchester

Project Title: Bone Toxicity following Pelvic Radiotherapy: understanding, predicting and preventing radiotherapy related insufficiency fractures

“Be persistent, remain curious, listen to your patients to generate research questions and rejoice in the success of others”

Twitter: [@cehigham](#) and [@EndoLWBC](#)

Career to Date

DPhil: 1996-1999

Clinical Research Fellow: 2005-2008

I undertook my laboratory-based DPhil in 1996, immediately after completion of my pre-clinical training and BA in Physiology at Oxford. I had worked in the laboratory of Dr Anne Cook and Professor John Morris as part of my undergraduate degree and as a Wellcome supported summer studentship. The DPhil followed on directly from this work looking at the role of Islet Amyloid Polypeptide in Type 2 Diabetes. It was supported by the British Diabetic Association.

In 1999, I submitted my DPhil and returned to complete my clinical training at the Royal Free/UCH. It was intense and I was very grateful that my DPhil supervisor had insisted that the thesis was submitted before I went back to my clinical training. During this time, I successfully defended my thesis and publications, but I had neither the time, or the understanding of research career pathways, to pursue my research.

After qualifying as a clinical doctor in 2002, I completed my initial junior doctor training in London, but wanted to return home up North and moved to Manchester in 2004. By that time, I was convinced that I wanted to combine research and clinical practice and so pursued a clinical research fellow post with Professor Peter Trainer at the Christie Hospital. He is a global expert in pituitary disease, particularly Acromegaly and Cushing's. I was a research fellow for 3 years in between my junior doctor training and returning to complete my clinical training as an Endocrine/Diabetes/General Internal Medicine Specialty Registrar.

These 3 years of research were completely different to my time in the laboratory. I was in charge of developing protocols and running multi-centre, investigator led clinical trials in Acromegaly; looking particularly at the use of pegvisomant as a GH receptor antagonist. This research period was supported by an independent investigator grant from Pfizer. I learned an immense amount, but there was no grant funding to continue the work. I returned again to clinical training, completing my CCT in 2012.

Since 2012 I have been an Endocrine consultant at the Christie; I was allocated 1PA for research from the Trust, although this was difficult to protect. My clinical role at the Christie is mainly focused on the long-term effects of cancer treatment and metabolic bone disease. Developing these services raised fascinating questions with regards to the mechanisms underlying radiotherapy toxicities to endocrine organs and the clinical dilemmas faced when managing these. The Christie is very research active and I made some excellent collaborations with the oncologists to develop these themes, particularly around radiotherapy induced insufficiency fractures. This work was mainly completed in my spare time, and we were disappointed to narrowly miss out on RFPB funding on a couple of occasions. but persistence, excellent colleague interactions and support from the Trust and University of Manchester/Manchester Cancer Research Centre led to the successful CARP application.

Why I applied for a CARP Award

I have always wanted to pursue a clinical academic career and have thoroughly enjoyed all my research time to date. Despite working with excellent colleagues and being successful in research findings and publications, I never seemed to be in the right place or the right time to properly step onto the clinical academic research ladder. At the time of applying to the CARP scheme I had the perfect conditions to make this a success, with a stable consultant post, very supportive colleagues and a project and research questions that had been bubbling for the last 5 years, but without the time/money to develop them. CARP was the perfect scheme for me to take a robust and sustainable step back onto that ladder.

Words of Wisdom for those applying to the scheme

Even though I didn't do this, I would say start thinking about the project early! Do not underestimate how much time this will take and how much input from others is needed.

Identify your research partner and interact with your Trust as soon as possible. All these are critical to attaining a CARP award, it's not just about you, you need their support. When considering your research partner be open-minded and look widely in your institution for the best fit.

Don't be scared to ask people for help and particularly to critically assess your ideas and research along the way. One of the best interactions I had was a brief chat with a Professor of Radiation Oncology who directly asked me "what is your hypothesis?", "how can you prove it?", and "what are your work packages that will answer these questions?". I was quite a long way into the application at this point, but turned it round based on our brief insightful discussion and the application was much improved as a result. Find the person who can do that for you.

As I had limited time to complete the application, I decided right at the beginning to do absolutely all I could to complete a submission (which did include some very long days/nights) but also that I would use the opportunity to patiently accept all the challenges that arose (and there were many), be grateful to everyone who was supporting me and create friendly, positive collaborations rather than getting frustrated and disappointed. I managed to maintain this for the most part and it made the process enjoyable.

Biggest Challenges

Completing the application has been the biggest challenge. I feel very fortunate that the Trust and Research Partner were very supportive from the start. There was some anxiety about getting the consultant replacement in time for the start date of the CARP award but again all that came together, and they started work two weeks after my award started so there were no issues getting the time.

Impact of COVID-19

In the initial phases of COVID-19 the consultant who was covering the 4PAs of my clinical work was pulled full time to cover the COVID response at the Christie, it was therefore necessary for me to cover the Endocrine clinic work at the Trust; to maintain safety and clinical activity for our Endocrine patients; thus, limiting any research time. I did make some progress with the ethical submission during this time. In June 2020, I made the very difficult decision to suspend the CARP project for 6 months as recruitment was supposed to start and we felt that this was not safe for patients and that the infrastructure to support the study was not available. I am remaining positive that we will be able

to progress to recruitment at that point. My local Trust, the University and the funders have all been very supportive during this time.

Next Steps

I would very much like to progress onto an Intermediate Research Fellowship and develop a research team in the field of Living With and Beyond Cancer, particularly focusing on radiotherapy related toxicity to bone and pituitary. The time, space and opportunities from the CARP scheme have already allowed me since October 2019 to explore local, national and international collaborations in this field, and I have 3 other grant applications in progress in this area.