









James Cranley

MA (Oxon), BM, BCh, PhD (Cantab), MRCP

About Me

I am a NIHR Clinical Lecturer in Cardiology based at the University of Cambridge, UK. I am interested in the intersection of cell biology, genomics, and inherited cardiac disease. My clinical subspecialty is electrophysiology and inherited cardiac conditions. My PhD was in Sarah Teichmann's lab at the Sanger Institute where I used single-cell and spatial genomics to create a cell atlas of the human heart.

Training & Employment

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|-------------------|---|---|
| 2025 2024 | NIHR Clinical Lectureship (Cardiology) University of Cambridge <i>Royal Papworth Hospital</i> |  |
| 2024 2021 | Wellcome Trust PhD Training Fellowship Wellcome Sanger Institute <i>"Spatially-resolved multiomic profiling of the human heart in adulthood and development" supervisor: Sarah Teichmann</i> |  |
| 2019 2019 | PG Certificate Medical Education University of Cambridge |  |
| 2018 2015 | NIHR Academic Clinical Fellowship (Cardiology) University of Cambridge <i>Papworth Hospital, Addenbrooke's Hospital</i> |  |
| 2015 2014 | Membership Royal College of Physicians |  |
| 2015 2013 | Foundation Programme North-West Thames Deanery <i>Charing Cross Hospital, Harefield Hospital</i> |  |
| 2013 2007 | Medical School University of Oxford <i>BM BCh (Distinction), Intercalated BSc (1st Class)</i> |  |
| 2007 2002 | Secondary School Eton College <i>Double Maths, Chemistry, Biology, French, Latin, Greek</i> |  |



Personal Details

Born: 1989
Nationality: British
GMC: 744176

Links

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 [Twitter](#)

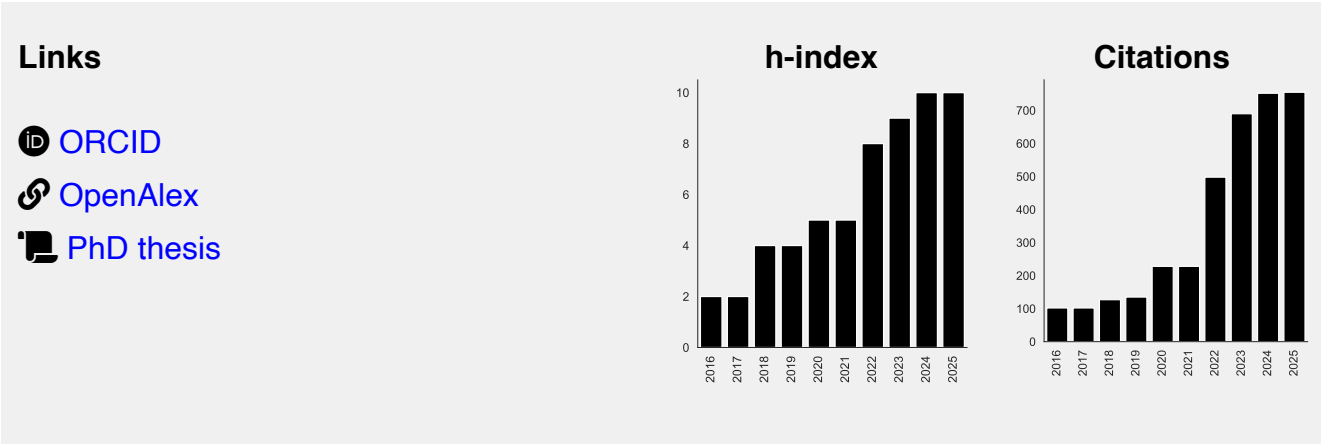
 [github](#)

 [linkedin](#)

 [Website](#)

Last updated 2025-06-26

Publications



An atlas of TF driven gene programs across human cells

Pett, Prete, Pham, ..., Cranley, ..., Nawijn, Teichmann, Meyer

Preprint 2025



Bi-allelic variants in POPDC2 cause an autosomal recessive syndrome presenting with cardiac conduction defects and hypertrophic cardiomyopathy

Nicastro, Vermeer, Postema, ..., Cranley, ..., Verkerk, Bezzina, Lahrouchi

The American Journal of Human Genetics 2025



CellPhoneDB v5: inferring cell–cell communication from single-cell multi-omics data

Troulé, Petryszak, Çakır, Cranley, ..., Teichmann, García-Alonso, Vento-Tormo

Nature Protocols 2025



An organotypic atlas of human vascular cells

Barnett, Cujba, Yang, ..., Cranley, ..., Randi, Nosedà, Teichmann

Nature Medicine 2024



A multi-omic atlas of human embryonic skeletal development

To, Fei, Pett, ..., Cranley, ..., Chédotal, Buckley, Teichmann

Nature 2024



Multidimensional Analysis of the Adult Human Heart in Health and Disease Using Hierarchical Phase-Contrast Tomography

Brunet, Cook, Walsh, Cranley, ..., Ackermann, Dollman, Lee

Radiology 2024



Multimic analysis reveals developmental dynamics of the human heart in health and disease

Cranley, Kanemaru, Bayraktar, Knight-Schrijver, ..., Tyser, Sinha, Teichmann

Preprint 2024



High-resolution atlas of the developing human heart and the great vessels

Bayraktar, Cranley, Kanemaru, Knight-Schrijver, ..., Gambardella, Teichmann, Sinha

Preprint 2024



Spatially resolved multiomics of human cardiac niches

Kanemaru, **Cranley**, Muraro, Miranda, ..., Chowdhury, Nosedá, Teichmann

Nature 2023 [↗](#)



A single-cell comparison of adult and fetal human epicardium defines the age-associated changes in epicardial activity

Knight-Schrijver, Davaapil, Bayraktar, ..., **Cranley**, ..., Teichmann, Gambardella, Sinha

Nature Cardiovascular Research 2022 [↗](#)



Single-cell transcriptomics for the assessment of cardiac disease

Miranda, Janbandhu, Maatz, ..., **Cranley**, ..., Schneider, Harvey, Nosedá

Nature Reviews Cardiology 2022 [↗](#)



Pathogenic variants damage cell composition and single cell transcription in cardiomyopathies

Reichart, Lindberg, Maatz, ..., **Cranley**, ..., Seidman, Hübner, Seidman

Science 2022 [↗](#)



Impact of COVID-19 pandemic on cardiac rhythm management services: Views from the United Kingdom.

Ding, **Cranley**, Begley, Rao, Snowdon, Mellor, Gupta

Heart rhythm O2 2022 [↗](#)



Identifying predictive risk factors for permanent pacemaker implantation up to 30 days post-TAVI

Li, Christodoulidou, **Cranley**, Ara, ..., Davies, Densem, Martin

European Heart Journal 2021 [↗](#)



Multi-ancestry GWAS of the electrocardiographic PR interval identifies 202 loci underlying cardiac conduction.

Ντάλλα, Weng, Cartwright, ..., **Cranley**, ..., London, Olesen, Roden

Nature communications 2020 [↗](#)



Pulsed Levosimendan in advanced heart failure due to congenital heart disease: a case series.

Cranley, Hardiman, Freeman

European heart journal. Case reports 2020 [↗](#)



Clinical outcomes of bioresorbable vascular scaffolds implanted with routine versus selective optical coherence tomography guidance: results from a single-centre experience.

Floré, Brown, Giblett, Liou, **Cranley**, Hoole, West

EuroIntervention : journal of EuroPCR in collaboration with the Working Group on Interventional Cardiology of the European Society of Cardiology 2019 [↗](#)



Catastrophic antiphospholipid syndrome causing ST-segment elevation myocardial infarction with non-obstructive coronary arteries.

Cranley, Krishnan, Tweed, Duehmke

BMJ case reports 2019 [↗](#)



Regulatory and occupational considerations in cardiology

Cranley, Bhagra

Medicine 2018 [↗](#)

Ventricular pro-arrhythmic phenotype, arrhythmic substrate, ageing and mitochondrial dysfunction in peroxisome proliferator activated receptor- γ coactivator-1 β deficient (Pgc-1 β ^{-/-}) murine hearts.

Ahmad, Valli, Chadda, **Cranley**, Jeevaratnam, Huang
Mechanisms of ageing and development 2018 [↗](#)

A New Approach to an Old Problem: One Brave Idea.

Cranley, MacRae

Circulation research 2018 [↗](#)

TCT-405 Optical coherence tomography-guided optimal bioresorbable vascular scaffold implantation informs subsequent implantation without intravascular imaging: further evidence for a 'learning curve'?

Floré, Brown, **Cranley**, Giblett, Hoole, West

Journal of the American College of Cardiology 2016 [↗](#)

HEMODYNAMIC LESION SIGNIFICANCE IS ASSOCIATED WITH HIGH PLAQUE BURDEN BUT NOT WITH VULNERABLE PLAQUE COMPOSITION

Brown, Krishnan, Giblett, **Cranley**, Bennett, West, Hoole

Journal of the American College of Cardiology 2016 [↗](#)

Long-term follow-up of patients undergoing free tissue transfer to the lower limb following trauma

Gill, Bruce, Ponsford, **Cranley**, Goodacre

European Journal of Plastic Surgery 2013 [↗](#)

The cardiac sympathetic co-transmitter galanin reduces acetylcholine release and vagal bradycardia: implications for neural control of cardiac excitability.

Herring, **Cranley**, Lokale, Li, ..., Parsons, Habecker, Paterson

Journal of molecular and cellular cardiology 2011 [↗](#)

Galanin reduces cardiac vagal acetylcholine release and bradycardia via a GalR1, protein kinase C dependent pathway

Herring, **Cranley**, Lokale, Habecker, Paterson

The FASEB Journal 2010 [↗](#)

Presentations

Risk stratification in Brugada Syndrome: a case presentation

British Cardiac Society | Manchester, UK | Jun 2025

The Devil is in the Detail: nodofascicular VT

British Heart Rhythm Society | Edinburgh, UK | May 2025

What you're missing matters: integrating short and long-read sc RNAseq

Oxford Nanopore Symposium | Oxford, UK | Feb 2024

Spatial Transcriptomics in Human Cell Atlasing

SpatialBiology 2023 | Online | Sep 2023

A spatially-resolved multiomic cell atlas reveals gene regulatory networks underlying cell specification in the developing human

European Society of Cardiology Congress | Amsterdam, NL | Aug 2023

A spatially-resolved multiomic atlas of human cardiac development

HCA General Meeting | Toronto, CA | Jul 2023

The adult and developing heart, one cell at a time

The Royal Society | London, UK | Apr 2023

The Hopes and Fears Lab (Public Engagement event)

Cambridge Alumni Festival | Cambridge, UK | Sep 2022

Single-cell atlasing of the heart

BHF Symposium | Online | Jun 2022

A novel variant causing JLNS, but not LQT1

Heart Rhythm Congress | Birmingham, UK | Oct 2019

Localised effusive-constrictive pericarditis - a late complication of PCI

British Society of Cardiac Imaging | Cambridge, UK | May 2019

Appendicitis in women of child-bearing age: the diagnostic process in a busy London teaching hospital

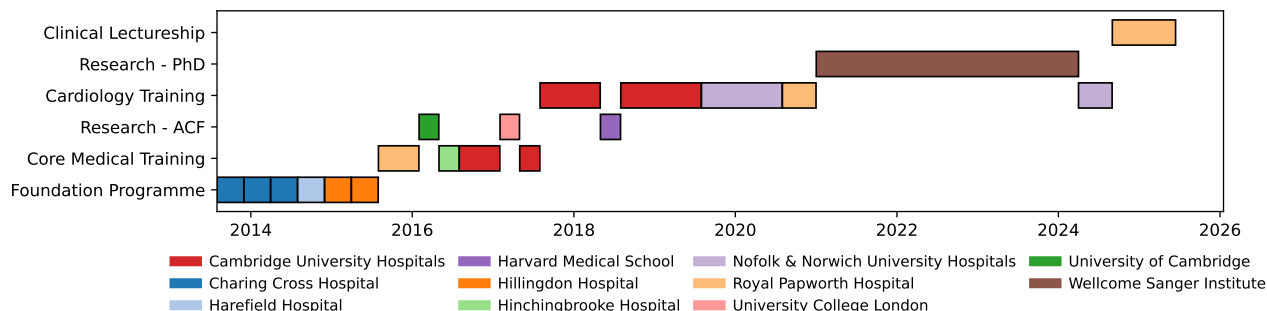
Association of Surgeons of Great Britain and Northern Ireland (ASGBI) | Glasgow, UK | Jun 2014

Risk factors for haematoma development post cardiac catheterisation

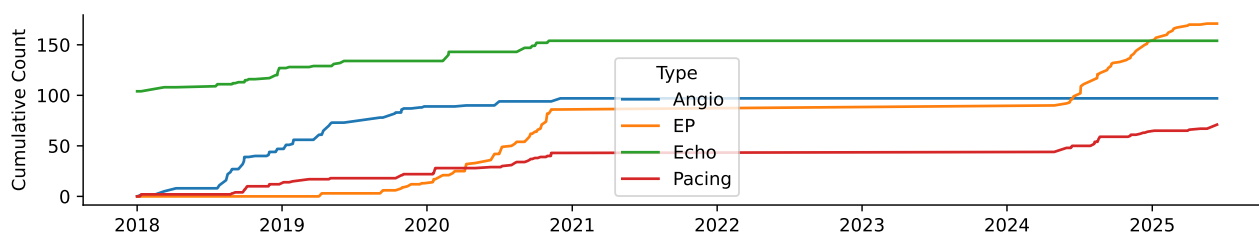
Society for Cardiovascular Interventions and Angiography (SCAI) | San Diego, USA | May 2014

Clinical Training

Posts



Procedures



Management, Leadership and Responsibilities

| | | |
|----------|---|---|
| Jun 2025 | Adult Life Support (ALS) instructor | |
| | <i>Adult Life Support teaching.</i> | |
| Jan 2019 | | Resuscitation Council UK |
| Jun 2025 | Registrar rota coordinator | |
| | <i>Construction of termly rota. Managing weekly rota. Consultant liason.</i> | |
| Feb 2025 | | Royal Papworth Hospital |
| Jun 2025 | Fellowship of the Medical Director's Office | |
| | <i>Introduction to governance. Contributed to hospital management meetings.</i> | |
| Sep 2024 | | Royal Papworth Hospital |
| Mar 2025 | BJCA representative to the BHRS | |
| | <i>Represented BJCA interest at BHRS committee meetings.</i> | |
| Jan 2022 | | British Junior Cardiologist Association |
| Jan 2018 | Trainee Representative for East of England (Digital & Training Days) | |
| | <i>Organised and advertised trainign days.</i> | |
| Jan 2017 | | East of England Deanery |

Qualifications and Courses

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| Oct 2024 | Clinical Research, Education and Leadership module University of Cambridge |
| Apr 2021 | Core and Further Biostatistics Wellcome Sanger Institute |
| May 2019 | Cardiac MRI Level 1 King's College Hospital |
| Apr 2019 | Echo level 1 British Society of Echo |
| Oct 2018 | ALS Instructor Resuscitation Council UK |
| Sep 2016 | FICE echo Reading Hospital |
| Jun 2016 | Pacemaker programming and interrogation Imperial College |
| Feb 2016 | MRCP PACES Royal College of Physicians (London) |
| Mar 2015 | MRCP Part 2 Royal College of Physicians (London) |
| Sep 2014 | MRCP Part 1 Royal College of Physicians (London) |

Teaching

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|----------|---|-------------------------------------|
| Nov 2025 | Core Cardiology | |
| | <i>Course Director. Cardiology course for general medics.</i> | |
| Nov 2025 | | Royal Papworth Hospital |
| Jun 2025 | Adult Life Support (ALS) instructor | |
| | <i>Adult Life Support teaching.</i> | |
| Jan 2019 | | Resuscitation Council UK |
| Dec 2020 | Cardiology Webinars | |
| | <i>Organised and recorded a series of educational webinars for cardiology trainees, now hosted at BJCA.tv</i> | |
| May 2020 | | East of England Deanery |
| Jan 2017 | Undergraduate Physiology Supervisions | |
| | <i>I taught an undergraduate group Physiology (HOM)</i> | |
| Jan 2016 | | Gonville & Caius College, Cambridge |
| Jan 2015 | Harefield Medical Student Teaching Programme | |
| | <i>Organised a fortnightly schedule for rotating medical students.</i> | |
| Jan 2014 | | Harefield Hospital |