JAMES CRANLEY

BM BCh, MA, MRCP

I am an **academic cardiology trainee**. My clinical interest lies at the intersect of **inherited cardiac conditions** and **electrophysiology**. I am currently pursuing a PhD fellowship at the Sanger Institute[1] in the lab of Dr Sarah Teichmann[2]. I am using cutting edge **single-cell and spatial transcriptomic** methods to create a next-generation cell atlas of the human heart[3].

View this CV online with links at here

CONTACT

- jc48@sanger.ac.uk
- jamescranley
- james-cranley
- james-cranley.github.io
- james-cranley

EDUCATION

2024 | 2021 — **Sanger Institute (University of Cambridge)**
PhD at Teichmann Lab
Cambridge, UK

2019 — **Cambridge University**
PG Certificate in Medical Education
Cambridge, UK

2018 | 2015 — **Academic Clinical Fellowship in Cardiology**
National Instiute for Health Research (NIHR)
3 month research fellowships in:

- Huang Lab[4], Cambridge Unversity
- MacRae Lab[5], Harvard Unversity
- Munroe Lab[6], Queen Mary University of London

2016 — **Membership of the Royal College of Physicians**
Royal College of Physicians
London, UK

2013 | 2007 — **Oxford Medical School**
BM BCh (Distinction)
Intercalated BA in Medical Science (1st class)
Academic (“Old Members’”) scholarship
Oxford, UK

2007 | 2002 — **Eton College**
Academic (“Oppidan”) scholarship
7 ’A’s (Maths, Further Maths, Chemistry, Biology, French, Latin, Greek)
Windsor, UK

RESEARCH EXPERIENCE

2024 | 2021 — **Wellcome Trust PhD Fellowship**
Sanger Institute

- Single cell and spatial transcriptomic analysis of the adult and developing human heart
- 50% wet lab genomics (single-cell and spatial transcriptomic)
- 50% bioinformatics (python, Bash, R)

Last updated on 2022-12-27.

NIHR Academic Clinical Fellowship

- 2018: Genome-wide association study into ECG trait using UK Biobank data. Supervisor: Prof Patsy Munroe/QMUL.
- 2017: Introduction to zebrafish as a model for cardiovascular disease. Supervisor: Prof Calum MacRae/Harvard University
- 2016: A murine model of metabolic syndrome. Supervisor: Prof Chris Huang/Cambridge University.

2018 - 2016

2013

Bachelor's of Science (intercalated)

Investigating the role of the neuropeptide Galanin in cardiac autonomics using a guinea pig Langendorff model. Supervisor: Prof Neil Herring/Oxford University

Oxford University

CLINICAL EXPERIENCE

current | 2017

Specialty Training, Cardiology

East of England deanery

- ST6: Royal Papworth Hospital
- ST5: Norfolk & Norwich Hospital
- ST3 & ST4: Addenbrooke's Hospital

2017 | 2015

Core Medical Training

East of England deanery

- Papworth Hospital: Cardiology
- Hinchingbrooke Hospital: Respiratory
- Addenbrooke's Hospital: ICU

2015 | 2013

Foundation Training

North West Thames deanery

- Harefield Hospital: Cardiology
- Hillingdon Hospital: A&E
- Charing Cross Hospital: Acute Medicine

2013

Medical Elective

Mount Sinai Hospital, New York

- Cardiology Dept, Mount Sinai Hospital. Supervisor: Dr Valentin Fuster[7]

TEACHING EXPERIENCE

current | 2022

BJCA Trainee Representative to BHRS

Committe role representing electrophysiology trainees nationally.

current | 2020

Adult Life Support Instructor

Registered provider and instructor

2021 | 2020

Cardiology Webinars

Organised and recorded a series of educational webinars for cardiology trainees, now hosted at BJCA.tv

2020 | 2017

Trainee Representative for East of England

Designed and delivered training days, created website.

2017 | 2016

Preclinical (physiology) and clinical supervisor

Gonville & Caius College, Cambridge

2015 | 2014

Harefield Medical Student Teaching Programme

Organised a fortnightly schedule for rotating medical students. Taught regularly.

2015

ECG Course - Oxford Revision Courses

Oxford Medical School

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PUBLICATIONS

2022

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

Nature Cardiovascular Research

Vincent R. Knight-Schrijver, Hongorzul Davaapil, Semih Bayraktar, Alexander D. B. Ross, Kazumasa Kanemaru, **James Cranley**, Monika Dabrowska, Minal Patel, Krzysztof Polanski, Xiaoling He, Ludovic Vallier, Sarah Teichmann, Laure Gambardella, Sanjay Sinha

2022

Single-cell transcriptomics for the assessment of cardiac disease

Nature Reviews Cardiology

Antonio M. A. Miranda, Vaibhao Janbandhu, Henrike Maatz, Kazumasa Kanemaru, **James Cranley**, Sarah A. Teichmann, Norbert Hübner, Michael D. Schneider, Richard P. Harvey, Michela Noseda

2022

Pathogenic variants damage cell composition and single cell transcription in cardiomyopathies

Science

Daniel Reichart, Eric L. Lindberg, Henrike Maatz, Antonio M. A. Miranda, Anissa Viveiros, Nikolay Shvetsov, Anna Gärtner, Emily R. Nadelmann, Michael Lee, Kazumasa Kanemaru, Jorge Ruiz-Orera, Viktoria Strohmenger, Daniel M. DeLaughter, Giannino Patone, Hao Zhang, Andrew Woehler, Christoph Lippert, Yuri Kim, Eleonora Adami, Joshua M. Gorham, Sam N. Barnett, Kemar Brown, Rachel J. Buchan, Rasheda A. Chowdhury, Chrystalla Constantinou, **James Cranley**, Leanne E. Felkin, Henrik Fox, Ahla Ghauri, Jan Gummert, Masatoshi Kanda, Ruoyan Li, Lukas Mach, Barbara McDonough, Sara Samari, Farnoush Shahriaran, Clarence Yapp, Caroline Stanasiuk, Pantazis I. Theotokis, Fabian J. Theis, Antoon van den Bogaerdt, Hiroko Wakimoto, James S. Ware, Catherine L. Worth, Paul J. R. Barton, Young-Ae Lee, Sarah A. Teichmann, Hendrik Milting, Michela Noseda, Gavin Y. Oudit, Matthias Heinig, Jonathan G. Seidman, Norbert Hubner, Christine E. Seidman

2022

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

Heart rhythm O2

Wern Yew Ding, **James Cranley**, David Begley, Archana Rao, Richard L. Snowdon, Greg Mellor, Dhiraj Gupta

2021

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

European Heart Journal

J Li, A Christodoulidou, **James Cranley**, F Ara, Charis Costopoulos, P Costanzo, M Osullivan, W Davies, C Densem, C A Martin

2020

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

Nature communications

Ioanna Ntalla, Lu-Chen Weng, James H. Cartwright, Amelia Weber Hall, Gardar Sveinbjornsson, Nathan R. Tucker, Seung Hoan Choi, Mark D. Chaffin, Carolina Roselli, Michael R. Barnes, Borbala Mifsud, Helen R. Warren, Caroline Hayward, Jonathan Marten, **James Cranley**, Pier D. Lambiase, Michele Orini, Julia Ramirez, Stefan Van Duijvenboden, David O. Arnar, Daniel F. Gudbjartsson, Hilma Holm, Patrick Sulem, Gudmar Thorleifsson, Rosa B. Thorolfsdottir, Unnur Thorsteinsdottir, Emelia J. Benjamin, Andrew Tinker, Kari Stefansson, Patrick T. Ellinor, Yalda Jamshidi, Steven A. Lubitz, Patricia B. Munroe

2020 **Pulsed Levosimendan in advanced heart failure due to congenital heart disease: a case series.**

European heart journal. Case reports

James Cranley, Antonia Hardiman, Leisa J Freeman

2019 **Clinical outcomes of bioresorbable vascular scaffolds implanted with routine versus selective optical coherence tomography guidance: results from a single-centre experience.**

EuroIntervention

Vincent Floré, Adam J. Brown, Joel P. Giblett, Kevin Liou, **James Cranley**, Stephen P. Hoole, Nick E.J. West

2019 **Catastrophic antiphospholipid syndrome causing ST-segment elevation myocardial infarction with non-obstructive coronary arteries.**

BMJ case reports

James Cranley, Unni Krishnan, Katharine Tweed, Rudolf Martin Duehmke

2018 **Regulatory and occupational considerations in cardiology**

Medicine

James Cranley, Catriona Bhagra

2018 **Ventricular pro-arrhythmic phenotype, arrhythmic substrate, ageing and mitochondrial dysfunction in peroxisome proliferator activated receptor-γ coactivator-1β deficient (Pgc-1β$^{-/-}$) murine hearts.**

Mechanisms of ageing and development

Shiraz Ahmad, Haseeb Valli, Karan R. Chadda, **James Cranley**, Kamalan Jeevaratnam, Christopher L.-H. Huang

2018 **A New Approach to an Old Problem: One Brave Idea.**

Circulation research

James Cranley, Calum A. MacRae

2016 **TCT-405 Optical coherence tomography-guided optimal bioresorbable vascular scaffold implantation informs subsequent implantation without intravascular imaging: further evidence for a 'learning curve'?**

Journal of the American College of Cardiology

Vincent Floré, Adam Brown, **James Cranley**, Joel Giblett, Stephen Hoole, Nick West

2013 **Long-term follow-up of patients undergoing free tissue transfer to the lower limb following trauma**

European Journal of Plastic Surgery

Dipender Gill, David J. Bruce, Mark J. Ponsford, **James Cranley**, Timothy E. Goodacre

2011

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

Journal of molecular and cellular cardiology

Neil Herring, **James Cranley**, Michael N. Lokale, Dan Li, Julia Shanks, Eric N. Alston, Beatrice M. Girard, Emma Carter, Rodney L. Parsons, Beth A. Habecker, David J. Paterson

2010

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

The FASEB Journal

Neil Herring, **James Cranley**, Michael N Lokale, Beth Habecker, David J Paterson

LINKS

1. https://www.sanger.ac.uk/
2. http://www.teichlab.org/
3. https://www.heartcellatlas.org/
4. https://crukcambridgecentre.org.uk/users/clh1113207
5. https://hsci.harvard.edu/people/calum-macrae-md-phd
6. https://www.qmul.ac.uk/whri/people/academic-staff/items/munroepatricia.html
7. https://profiles.mountsinai.org/valentin-fuster