JAMES CRANLEY

BM BCh, MA, MRCP

EDUCATION

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 Institute¹ in the lab of Dr Sarah Teichmann². I am using cutting edge **single-cell and spatial transcriptomic** methods to create a next-generation cell atlas of the human heart³.

Sanger Institute (University of Cambridge) 2024 Cambridge, UK PhD at Teichmann Lab 2021 **Cambridge University** 2019 Cambridge, UK PG Certificate in Medical Education **Academic Clinical Fellowship in Cardiology** 2018 National Institue for Health Research (NIHR) 2015 3 month research fellowships in: • Huang Lab⁴, Cambridge Unversity MacRae Lab⁵, Harvard Unversity • Munroe Lab⁶, Queen Mary University of London Membership of the Royal College of Physicians 2016 Q London, UK Royal College of Physicians Oxford Medical School 2013 Oxford, UK BM BCh (Distinction) 2007 Intercalated BA in Medical Science (1st class) Academic ("Old Members") scholarship **Eton College** 2007 Academic ("Oppidan") scholarship 2002 7 'A's (Maths, Further Maths, Chemistry, Biology, French, Latin, Greek) ♥ Windsor, UK



View this CV online with links at _https://james-cranley.github.io/cv/cv.html_

CONTACT

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📮 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)

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

Bachelor's of Science (intercalated) 2013

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 Fuster⁷



₽ TEACHING EXPERIENCE

current 2022

BJCA Trainee Representative to BHRS

Committe role representing electrophysiology trainees nationally.

current	Adult Life Support Instructor
2020	Registered provider and instructor
2021	Cardiology Webinars
2020	Organised and recorded a series of educational webinars for cardiology trainees, now hosted at BJCA.tv
2020	Trainee Representative for East of England
 2017	Designed and delivered training days, created website.
2017	Preclinical (physiology) and clinical supervisor
 2016	Gonville & Caius College, Cambridge
2015	Harefield Medical Student Teaching Programme
2014	Organised a fortnightly schedule for rotating medical students. Taught regularly.
2015	ECG Course - Oxford Revision Courses Oxford Medical School
	PUBLICATIONS
2022	A single-cell comparison of adult and fetal human epicardium defines the age-associated changes in epicardial activity Neture Cordinates Page 1888
	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

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

 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

2019

James Cranley, Catriona Bhagra

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

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

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



- 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