JAMES CRANLEY

My clinical interest lies at the intersect of inherited cardiac conditions and electrophysiology. During my research I have created a cell atlas of the human heart[1].

EDUCATION

N/A
Oxford University

N/A
Eton College

2024 | 2021
Wellcome Trust Doctoral Fellowship
Teichmann Lab
Sanger Institute

2019 | 2018
PG Certificate in Medical Education
Institute of Continuing Education
Cambridge University

2018 | 2015
NIHR Academic Clinical Fellowship
East of England deanery
Cambridge

2016 | 2015
Membership of the Royal College of Physicians (London)
Royal College of Physicians
RCP

RESEARCH EXPERIENCE

2024 | 2021
PhD Fellowship
Teichmann Lab
Sanger Institute

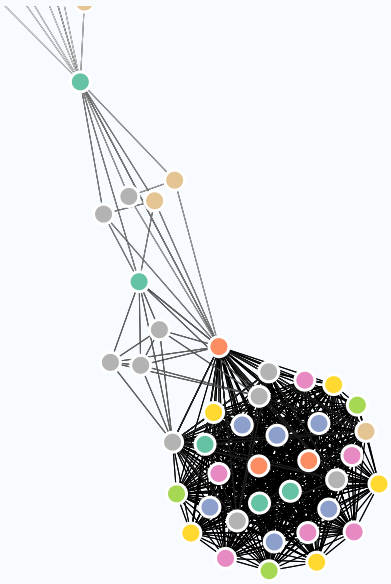
- Single cell and spatial transcriptomic analysis of the adult and developing human heart
- 50% wet lab genomics (single-cell and spatial transcriptomic)
- 50% bioinformatics (python, Bash, R)

2018 | 2018
Academic Clinical Fellow pt. 3
Munroe Lab
Queen Mary University of London

- Genome-wide associattion study into ECG trait (PR interval) using UK biobank data

2017 | 2017
Academic Clinical Fellow pt. 2
MacRae Lab
Harvard University

- Literature review and introduction to zebrafish model



View this CV online with links at */Users/jc48/Documents/GitHub/jame cranley.github.io/cv/cv.html*

CONTACT

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james-cranley
james-cranley.github.io
linkedin.com/in/james-cranley/

LANGUAGE SKILLS

- R
- Python
- Bash

*Made with the R package **pagedown**.*

The source code is available on github.com/nstrayer/cv.

Last updated on 2022-12-26.

2016 | 2016

Academic Clinical Fellow pt. 1

Huang Lab — Cambridge University

- Patch clamping rodent cardiomyocytes in a model of metabolic syndrome.

2013 | 2012

Intercalated BSc

Herring Lab — Oxford University

- Investigating the role of the neuropeptide Galanin in cardiac autonomics using a guinea pig Langendorff model

INDUSTRY EXPERIENCE

current | 2017

Specialty Training, Cardiology

East of England deanery — Royal Papworth Hospital, UK

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

Foundation training was in North West Thames, followed by Core Medical and Cardiology training in the East of England (run-through)

N/A

N/A

2015 | 2015

Core Medical Training

East of England deanery — Addenbrooke's Hospital

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

2015 | 2013

Foundation Training

NW Thames deanery — Charing Cross Hospital

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

2013 | 2013

Medical Elective

New York — Mount Sinai Hospital

TEACHING EXPERIENCE

I like education...

- N/A
- N/A
- N/A
- N/A
- N/A
- N/A

SELECTED DATA SCIENCE WRITING

- N/A
- N/A
- N/A
- N/A
- N/A
- N/A

I regularly blog about data science and visualization on my blog LiveFreeOrDichotomize.[2]

SELECTED PRESS (ABOUT)

- N/A
- N/A

- N/A

SELECTED PRESS (BY)

- N/A
- N/A
- N/A
- N/A
- N/A

SELECTED PUBLICATIONS, POSTERS, AND TALKS

2020

Building a software package in tandem with machine learning methods research can result in both more rigorous code and more rigorous research

ENAR 2020

- Invited talk in Human Data Interaction section.
- How and why building an R package can benefit methodological research

2020

Stochastic Block Modeling in R, Statistically rigorous clustering with rigorous code[3]

RStudio::conf 2020

- Invited talk about new sbmR package[4].
- Focus on how software development and methodological research can improve both benefit when done in tandem.

2020

PheWAS-ME: A web-app for interactive exploration of multimorbidity patterns in PheWAS[5]

Bioinformatics

- Manuscript detailing application for the exploration of multimorbidity patterns in PheWAS analyses
- See landing page[6] for more information.

2019 | 2019

Charge Reductions Associated with Shortening Time to Recovery in Septic Shock[7]

Chest

- Authored with Wesley H. Self, MD MPH; Dandan Liu, PhD; Stephan Russ, MD, MPH; Michael J. Ward, MD, PhD, MBA; Nathan I. Shapiro, MD, MPH; Todd W. Rice, MD, MSc; Matthew W. Semler, MD, MSc.

2019 | 2019

Multimorbidity Explorer | A shiny app for exploring EHR and biobank data[8]

RStudio::conf 2019

- Contributed Poster. Authored with Yaomin Xu.

2019 | 2019

Taking a network view of EHR and Biobank data to find explainable multivariate patterns[9]

Vanderbilt Biostatistics Seminar Series

- University wide seminar series.

2019

Patient-specific risk factors independently influence survival in Myelodysplastic Syndromes in an unbiased review of EHR records

Under-Review (copy available upon request.)

- Bayesian network analysis used to find novel subgroups of patients with Myelodysplastic Syndromes (MDS).
- Analysis done using method built for my dissertation.

2019

Patient specific comorbidities impact overall survival in myelofibrosis

Under-Review (copy available upon request.)

- Bayesian network analysis used to find robust novel subgroups of patients with given genetic mutations.
- Analysis done using method built for my dissertation.

2018 | 2018

R timelineViz: Visualizing the distribution of study events in longitudinal studies

Under-Review (copy available upon request.)

- Authored with Alex Sunderman of the Vanderbilt Department of Epidemiology.

2017 | 2017

Continuous Classification using Deep Neural Networks[10]

Vanderbilt Biostatistics Qualification Exam

- Review of methods for classifying continuous data streams using neural networks
- Successfully met qualifying examination standards

2015 | 2015

Asymmetric Linkage Disequilibrium: Tools for Dissecting Multiallelic LD

Journal of Human Immunology

- Authored with Richard Single, Vanja Paunic, Mark Albrecht, and Martin Maiers.

2015 | 2015

An Agent Based Model of Mysis Migration[11]

International Association of Great Lakes Research Conference

• Authored with Brian O'Malley, Sture Hansson, and Jason Stockwell.

2015 | 2015

Declines of Mysis diluviana in the Great Lakes

Journal of Great Lakes Research

• Authored with Peter Euclide and Jason Stockwell.

LINKS

1: https://www.heartcellatlas.org/
2: https://livefreeordichotomize.com/
3: http://nickstrayer.me/rstudioconf_sbm
4: https://tbilab.github.io/sbmR/
5: https://academic.oup.com/bioinformatics/advance article abstract/doi/10.1093 /bioinformatics/btaa870/5922817?redirectedFrom=fulltext
6: https://prod.tbilab.org/phewas_me_info/
7: https://www.ncbi.nlm.nih.gov/pubmed/30419234
8: http://nickstrayer.me/rstudioconf19_me poster/
9: http://nickstrayer.me/biostat_seminar/
10: http://nickstrayer.me/qualifying_exam/
11: https://www.semanticscholar.org/paper/An Agent Based Model of the Diel Vertical Migration Strayer Stockwell /40493c78e8ecf22bd882d17ec99fd913ec4b9820