

Stanford



Jack O'Sullivan

Postdoctoral Research Fellow, Cardiovascular Medicine

Bio

BIO

I am an Australian physician (MD, PhD) currently working as a Post-Doctoral Research Fellow at Stanford University. I am jointly supervised by Professor Euan Ashley and Professor John Ioannidis and am an active member of both labs: the Ashley Lab and Meta-Research Innovation Center at Stanford (METRICS, Ioannidis).

My fellowship concerns the diagnosis and risk prediction of cardiovascular disease. I employ a variety of statistical methods to assess new diagnostic technologies, such as smart phones and smart wearables, and my work also extends to computational cardiac genetics. The data sources I utilize to conduct my research are numerous, but include large datasets such as the UK Biobank, as well as publicly available dataset (meta-analysis and meta-research). I have also previously used large electronic health records (>250 million EHRs).

Aside from my own research prioritizes (above), I also work on studies conducted collaboratively within the Ashley Lab, the Division of Cardiovascular Medicine and METRICS. These studies broadly include digital health randomized controlled trials (RCTs) and meta-research (including statistical methods such as meta-analysis, meta-regression etc).

I previously completed a DPhil (PhD) in clinical epidemiology at the University of Oxford as a Clarendon Scholar. The title of My DPhil thesis was: "Biostatistical and meta-research approaches to assess diagnostic tests". My published research is available at my google scholar page (<https://scholar.google.co.uk/citations?user=n517tL8AAAAJ&hl=en>) and some of my code is publicly available at my GitHub (<https://github.com/jackosullivanoxford>).

Beyond academic institutions, I also consult to the World Health Organization (WHO); including on WHO guidelines, where I am currently the methodological chair for a WHO guideline concerning the early(ier) detection of disease in adults. I also work as an associate editor at one of the BMJ sub-journals: BMJ EBM. During my DPhil I worked clinically at Oxford University Hospitals (John Radcliffe Hospital) and intend to return to clinical practice as a Physician-Scientist at Stanford upon the completion of my research Fellowship.

You can follow me on twitter (<https://twitter.com/DrJackOSullivan>): where you will find me tweeting about statistics, surfing, cardiology, medicine, epidemiology, health policy, and, occasionally, politics.

STANFORD ADVISORS

- John Ioannidis, Postdoctoral Faculty Sponsor
- Euan Ashley, Postdoctoral Research Mentor

Publications

PUBLICATIONS

- **Aspirin for the primary prevention of cardiovascular disease in the elderly.** *BMJ evidence-based medicine*
O'Sullivan, J. W.
2019
- **Introducing the EBM Verdict: research evidence relevant to clinical practice.** *BMJ evidence-based medicine*
Heneghan, C., Brassey, J., Aronson, J., O'Sullivan, J. W.
2019
- **Temporal trends in use of tests in UK primary care, 2000-15: retrospective analysis of 250 million tests.** *BMJ (Clinical research ed.)*
O'Sullivan, J. W., Stevens, S., Hobbs, F. D., Salisbury, C., Little, P., Goldacre, B., Bankhead, C., Aronson, J. K., Perera, R., Heneghan, C.
2018; 363: k4666