

Lawrence Baker

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EDUCATION

Pardee RAND Graduate School

PhD Candidate in Policy Analysis; ongoing

Santa Monica, CA

September 2019 - present

Massachusetts Institute of Technology

MSc in Technology and Policy; GPA: 5.0/5.0

Cambridge, MA

September 2017 - August 2019

Thesis: Characterisation of Blood Glucose Management in Intensive Care

- Used python and SQL to extract and clean glucose measurements, insulin inputs and dextrose inputs for 19,000 intensive care stays
- Analysed data to investigate how well patients' blood sugar was controlled, compare hospital treatment policies to guidelines, and compare insulin boluses to insulin infusions

Relevant Coursework: Microeconomics, Econometrics, Health Policy, Science & Innovation Policy, Data Science, Statistics, Negotiation

University of Cambridge

MEng + BEng in Manufacturing Engineering; 1st Class Honours with Distinction

Cambridge, UK

September 2010-July 2014

EXPERIENCE

RAND Corporation

Assistant Policy Researcher

Cambridge, MA

September 2019 - present

RAND analyst with research interests including health care systems; pharmaceutical innovation; and program evaluation

Center for Biomedical Innovation

Research Assistant

Cambridge, MA

September 2017 - July 2019

Researcher investigating how to make the evidence generated in pharmaceutical research more useful for patient and provider decisions

- Researched the proliferation and potential uses of platform clinical trials for pharmaceutical development
- Created detailed literature reviews on the biology, societal burden and development pipeline of three different diseases

National Institute for Health and Care Excellence (NICE)

Science Policy Research Intern

London, UK

June 2018-August 2018

Intern in the Science Policy team, working to address challenges in the technology assessment of histology independent oncology drugs.

- Formulated recommendations for NICE's histology independent approval strategy, contributing to a peer reviewed paper
- Used JavaScript to create an interactive visualisation of the clinical data submission for oncology drugs

TTP

Medical Device Engineering Consultant

Cambridge, UK

September 2014 - July 2017

Engineer and manager, working in small teams to design novel medical devices

- Successfully led efforts on the sale of a multimillion device development project
- Created cost of goods model for estimating cost of new products, which was adopted department-wide
- Worked in teams to create novel technologies - inventor on three patent applications

RESEARCH PAPERS

"Cooper S, Bouvy JC, **Baker L**, Maignen F, Jonsson P, Clark P, Palmer P, Boysen M, and Crabb N. "How Should We Assess the Clinical and Cost Effectiveness of Histology Independent Cancer Drugs?" *BMJ* 368 (January 2, 2020).

HONOURS AND AWARDS

MIT Policy Hackathon Grand Prize Winner (2018): Competed with 25 teams to create policy solutions for real-world problems, policies addressed 'diaper need' in Connecticut

Churchill Next Generation Leadership Fellow (2015): Selected to participate in 9 days of intensive leadership training for young leaders

Hawthorne Prize (2014): For achievement and contribution to engineering at Churchill College, Cambridge

Morcom Lunt Prize (2013): For best academic performance in manufacturing engineering third year

Best Major Project (2013): For the design of Element - a low cost weather station

SKILLS

Python: Highly proficient in use for data science, especially using: NumPy, Pandas, Scikit-Learn, Seaborn

Microsoft Office: Highly Proficient

R: Moderate knowledge

SQL: Moderate knowledge

STATA: Moderate knowledge

LaTeX: Moderate knowledge

Adobe Illustrator: Moderate knowledge