# Monica Alexander

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### Education

Ph.D (Demography), University of California, Berkeley, Expected 2018.

M.Arts (Statistics), University of California, Berkeley, 2015.

M.Social Research (Demography), Australian National University, 2013.

B.Science (Hons) (Mathematics and Chemistry), University of Tasmania, 2008.

## Professional Experience

### World Health Organization

Consultant

September 2016 – Current

I am working on building a framework to help inform modeling decisions made for estimating national health indicators related to mortality and family planning.

### Data Science for Social Good

Fellow

May 2016 – September 2016

I applied machine learning techniques to to help identify students in grades K-2 who are at high risk of not being on third grade reading level.

### **Human Mortality Database**

Graduate Student Researcher

January 2015 - May 2016

I estimated mortality rates and construct lifetables for small populations and populations that do not have reliable mortality data. Mortality is modeled by applying a combination of traditional model lifetable techniques and Bayesian methods.

### **UNICEF Technical Advisory Group**

Consultant

 $March\ 2014-July\ 2015$ 

I constructed a model to estimate neonatal mortality rates for all countries worldwide based on data from a wide ranges of sources.

### The Centre for Aboriginal Economic Policy Research

Research Officer

April 2012 – December 2014

I helped research and write papers related to Australian Indigenous policy, particularly in the areas of employment and education.

## Reserve Bank of Australia

Analyst/Senior Analyst

February 2010 – June 2013

I conducted research on topics related to currency, as well as preparing periodical analytical reports. I was responsible for the creation, maintenance, and analysis, of large databases. I also gave currency-related presentations and had some supervisory responsibilities.

## Teaching Experience

### University of California, Berkeley

Instructor, Formal Demography Workshop, Berkeley Graduate Student Instructor, Demographic Methods

17–21 August, 2015

Fall Semester, 2014

### University of Tasmania

Tutor, Calculus and Applications ISemester 1, 2009Tutor, Data Handling and Statistics ISemester 2, 2008Demonstrator, Chemistry ISemester 1, 2008

## Papers

### Current working papers

**Alexander**, M., Barbieri M., and Kiang, M., 'Opioid deaths by race in the United States, 2000–2015.', https://osf.io/preprints/socarxiv/jm38s.

**Alexander, M.,** and Alkema, L., 'Estimating Neonatal Mortality', https://arxiv.org/abs/1612.03561.

**Alexander, M.,** Zagheni, E., and Barbieri, M., 'A Flexible Bayesian Model for Estimating Subnational Mortality', https://arxiv.org/abs/1607.03534.

### Peer-reviewed articles

Hunter, B., **Howlett**, **M.**, and Gray, M., 'The Economic Impact of the Mining Boom on Indigenous and Non-Indigenous Australians', *Asia & the Pacific Policy Studies*, 2015, 2 (3), 517-530.

Gray, M., **Howlett, M.,** and Hunter, B., 'Labour Market Outcomes for Indigenous Australians', *The Economic and Labour Relations Review*, 2014, 25 (3), 497-517.

Biddle, N., **Howlett, M.,** Hunter, B., and Paradies, Y., 'Labour Market and Other Discrimination Facing Indigenous Australians', *Australian Journal of Labour Economics*, 2013, 16 (1), 91-113.

### Other published papers

**Howlett, M.,** Gray, M., and Hunter, B., 'Unpacking the income of Indigenous and non-Indigenous Australians: Wages, government payments and other income', *CAEPR Working Paper*, No. 99, 2014, Australian National University, Canberra.

Hunter, B., **Howlett, M.,** and Biddle, N., 'Modelling Exposure to Risk of Experiencing Discrimination in the Context of Endogenous Ethnic Identification', *IZA Discussion Paper* #8040, March 2014.

### Honors

Elizabeth Scott Memorial Award (for promise in statistical research)	2015
Regents-Intern Fellowship (merit-based multi-year funding award)	2013-2015
Lado Ruzicka Prize in Social Research (for academic excellence)	2013
W.D. Borrie Prize (for best student paper on a population-related topic)	2012
University Medal	2008
Edith Rita Lowenstern Prize (for best mathematics honors student)	2008
Australian Student Prize (for academic excellence in secondary school)	2004