# Monica Alexander

2232 Piedmont Ave, Berkeley, CA monicaalexander.com monicaalexander@berkeley.edu

# Education

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

#### University of Massachusetts, Amherst

Graduate Student ResearcherJanuary 2017 - currentI am working on estimating subnational populations of women of reproductive age in a<br/>group of developing countries. These estimates will be used in family planning monitoring.

#### World Health Organization

Consultant September 2016 – June 2017 I worked 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

FellowMay 2016 – September 2016I applied machine learning techniques to help identify students in grades K-2 who are athigh risk of not reaching grade reading level by the end of third grade.

#### 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 AnalystFebruary 2010 – June 2013I conducted research on topics related to currency, as well as preparing periodical analytical<br/>reports. I was responsible for the creation, maintenance, and analysis, of large databases. I<br/>also gave currency-related presentations and had some supervisory responsibilities.

### **Teaching Experience**

# University of California, BerkeleyInstructor, Formal Demography Workshop, BerkeleyInstructor, Formal Demography Workshop, BerkeleyInstructor, Formal Demography Workshop, BerkeleyGraduate Student Instructor, Demographic MethodsUniversity of Tasmania

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

#### Other

Instructor, Introduction to Causal Inference, ITAM, Mexico March 2017 Instructor, IUSSP Workshop on social media data and demography, Mainz, 31 August 2016

## 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 (revise and resubmit, *Demographic Research*).

Alexander, M., Zagheni, E., and Barbieri, M., 'A Flexible Bayesian Model for Estimating Subnational Mortality', https://arxiv.org/abs/1607.03534 (forthcoming in *Demogra-phy*).

#### Peer-reviewed articles

Howlett, M., Gray, M., and Hunter, B., 'Wages, government payments and other income of Indigenous and non-Indigenous Australians', textitAustralian Journal of Labour Economics, 2016, 19 (2), 53-76.

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.

#### Conference presentations

Alexander M., Barbieri M., and Kiang M.V., Opioid-related deaths by race in the United States: Trends and patterns in multiple causes of death. PAA Annual Meeting 2017: Chicago, IL (April 2017).

Goldstein, J., and **Alexander, M.**, Towards a New, Public Data Set for Studying Mortality Inequality: Matching the 1940 U.S. Census With Social Security Death Records, 1963-2011. PAA Annual Meeting 2017: Chicago, IL (April 2017). **Alexander, M.**, Zagheni, E., and Barbieri, M., A Flexible Bayesian Model for Estimating Subnational Mortality. PAA Annual Meeting 2016: Washington, DC (April 2016) and European Population Conference 2016: Mainz, Germany (August 2016).

Alexander, M., and Alexander, R., Mothers returning to study. International Conference on Population Geographies. Queensland, Australia (June 2015).

Alexander, M., Estimating Neonatal Mortality. PAA Annual Meeting 2015: San Diego, CA (April 2015).

Goldstein, J., and **Howlett**, M., Tempo and the economy: decomposing the effect of economic shocks on births into tempo and quantum. European Population Conference 2014: Budapest, Hungary (August 2014).

Howlett, M., Social and Cultural Determinants of the Self-Assessed Health of Indigenous Australians. PAA Annual Meeting 2014: Boston, MA (April 2014) (Poster).

Other published papers

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