

Alison Gemmill, PhD, MPH

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CONTACT INFORMATION	Stony Brook University Program in Public Health HSC, Level 3, Room 071 Stony Brook, NY 11794	Work: 631-638-8523 E-mail: Alison.Gemmill@stonybrookmedicine.edu WWW: www.alisongemmill.com
ACADEMIC APPOINTMENTS	<i>Assistant Professor</i> Program in Public Health Department of Family, Population & Preventive Medicine Stony Brook University	2017 -
EDUCATION	<i>Ph.D. Demography</i> University of California, Berkeley <ul style="list-style-type: none">• Dissertation: <i>Biosocial Pathways of Reproductive Outcomes in the United States</i>• Committee: Joshua Goldstein (chair), Jennifer Johnson-Hanks, Ralph Catalano <i>M.A. Demography</i> University of California, Berkeley	2017 2012
	<i>M.P.H. Maternal and Child Health</i> University of California, Berkeley <ul style="list-style-type: none">• Thesis: <i>Residential proximity to methyl bromide use and birth outcomes in an agricultural population in California</i>	2011
	<i>B.A. Geography</i> University of California, Los Angeles	2004
RESEARCH INTERESTS	<i>Fertility and the family:</i> childlessness and infertility, fertility intentions and behavior, family planning <i>Life course and perinatal epidemiology:</i> developmental origins of health and disease, fetal loss, birth outcomes, biodemography of aging <i>Population health metrics:</i> maternal mortality, demographic methods, statistical demography	
FELLOWSHIPS & AWARDS	2016 Liberty Mutual Best Paper Award *This annual award recognizes the paper published in <i>Ergonomics</i> that best contributes to the advancement of the practice of ergonomics. Doctoral Completion Fellowship (\$18,000 per annum), University of California, Berkeley, 2016-2017 Dowdle Fellowship (\$3,000), University of California, Berkeley, 2016	

National Institute on Aging Training Grant (T32-AG000246) (\$22,920 per annum), National Institutes of Health, 2015-2016

Dowdle Fellowship (\$5,000), University of California, Berkeley, 2015

National Institute of Child Health and Human Development Training Grant (T32-HD007275) (\$22,000 per annum), National Institutes of Health, 2011-2015

Suzanne Llewellyn Center for Occupational and Environmental Health Award (\$5000), 2012-2013

Council of Women World Leaders Public Health Policy Graduate Fellow (\$3000), 2010

FUNDING

Using a biosocial approach to understand the relationship between fertility and post-reproductive health and mortality. (PI: Gemmill A). NIH K01. In preparation; to be submitted February 2019.

Health disparity or survival advantage? The dynamic case of non-Hispanic black preterm births. (Co-I; PI: Bruckner T). NIH R01. In preparation; to be submitted October 2018.

The post-recessionary baby boom and the future of US fertility. (\$35,000; PI: Gemmill A). Peter G. Peterson Foundation, 2018-2019.

Do psychosocial and behavioral factors shorten the “long arm of childhood?” A mediation and moderation analysis. (\$5,000; Co-I; PI: Puterman E). NIA-funded Stress Measurement Network pilot project. 2015-2016.

OTHER PROFESSIONAL EXPERIENCE & CONSULTING

Consultant, World Health Organization, 2017-

Graduate Student Researcher, Daniel Schneider, UC Berkeley Sociology, 2016

Consultant, World Health Organization and World Bank, 2011-2015

Graduate Student Researcher, Sylvia Guendelman, UC Berkeley School of Public Health, 2015

Consultant, The DHS Program, ICF International, 2014

Graduate Student Researcher, Center for Children’s Environmental Health Research, UC Berkeley School of Public Health, 2009-2011

Summer Fellow, World Health Organization, 2010

Senior Research Assistant, Guttmacher Institute, 2006-2009

Research Assistant-Geographic Information Systems, UCLA School of Public Health, 2003-2004

REFEREED JOURNAL PUBLICATIONS

32. **Gemmill A**, Kiang MV, Alexander MJ. (2018). Trends in pregnancy-associated mortality involving opioids in the United States, 2007-2016. *American Journal of Obstetrics & Gynecology*; in press.

31. Catalano R, **Gemmill A**, Bruckner TA. (2018). A test of famine-induced developmental programming in utero. *Journal of Developmental Origins of Health and Disease*; in press.

30. **Gemmill A.** (2018). From some to none? Fertility expectation dynamics of permanently childless women. *Demography*; in press.
29. **Gemmill A.** (2018). Perceived subfecundity and contraceptive use among young adult U.S. women. *Perspectives on Sexual and Reproductive Health*; 50(3):119-127. PMID: 29969174.
28. **Gemmill A,** Bradley SEK, van der Poel S. (2018). Reduced fecundity in HIV-positive women. *Human Reproduction*; 33(6):1158-1166. PMID: 29579247.
27. Casey JA, **Gemmill A,** Karasek D, Ogburn EL, Goin DE, Morello-Frosch R. (2018). Increase in fertility following coal and oil power plant retirements in California. *Environmental Health*; 17(1):44. PMID: 29720194.
*Covered online by TIME, CBS News, Yahoo News, and other outlets
26. Catalano R, Bruckner T, Avalos LA, Stewart H, Karasek D, Kariv S, **Gemmill A,** Saxton K, Casey J. (2018). Understanding periviable birth: A microeconomic alternative to the dysregulation narrative. *Social Science & Medicine*; in press. PMID: 29274689.
25. Catalano R, **Gemmill A,** Casey J, Karasek D, Stewart H, Saxton K. (2018). Separating the Bruce and Trivers-Willard effects in theory and in human data. *American Journal of Human Biology*; e23074. PMID: 29083077.
24. **Gemmill A,** Catalano R. (2017). Do post-reproductive aged females promote maternal health? Preliminary evidence from historical populations. *Evolution, Medicine, and Public Health*; 2017(1):136-143. PMID: 29593869.
*Editor's choice
23. Guendelman S, **Gemmill A,** Thornton D, Walker D, Harvey M, Walsh J, Perez-Cuevas R. (2017). Prevalence, disparities, and determinants of primary cesarean births among first-time mothers in Mexico. *Health Affairs*; 36(4):714-722. PMID: 28373338.
22. Guendelman S, Broderick A, Mlo H, **Gemmill A,** Lindeman D. (2017). Listening to Communities: Mixed method study of the engagement of disadvantaged mothers and pregnant women with digital health technologies. *Journal of Medical Internet Research*; 19(7):e240. PMID: 28679489.
21. Alkema L, Zhang S, Chou D, **Gemmill A,** Moller AB, Fat DM, Say L, Mathers CD, Hogan D. (2017). A Bayesian approach to the global estimation of maternal mortality. *The Annals of Applied Statistics*; 11(3):1245-1274.
20. Guendelman S, **Gemmill A,** Hosang N, MacDonald LA. (2017). Physical and organizational job stressors in pregnancy and associations with primary cesarean deliveries. *Journal of Occupational and Environmental Medicine*; 59(6):571-577. PMID: 28137753.
19. Smarr MM, Sapra KJ, **Gemmill A,** Khan LG, Wise LA, Lynch CD, Factor-Litvak P, Mumford SL, Skakkebaek NE, Slama R, Lobdell DT, Stanford JB, Jensen TK, Boyle EH, Eisenberg ML, Turek PJ, Sundaram R, Thoma ME, Buck Louis GM. (2017). Is human fecundity changing? A discussion of research and data gaps precluding us from having an answer. *Human Reproduction*; 32(3):499-504. PMID: 28137753.

18. Saxton KB, **Gemmill A**, Catalano RA. (2017). Reproductive suppression follows threats to child survival. *Journal of Evolutionary Biology*; 30(5):889-897. PMID: 28267227.
17. Schneider D, **Gemmill A**. (2016). The surprising decline in the non-marital fertility rate in the United States. *Population and Development Review*; 42(4):627-649.
16. Guendelman S, **Gemmill A**, and MacDonald LA. (2016). Biomechanical and organisational stressors and associations with employment withdrawal among pregnant workers: evidence and implications. *Ergonomics*. 59(12):1613-1624. PMID: 27119569.
*2017 Liberty Mutual Award for best paper published in *Ergonomics* in 2016
15. Puterman E, **Gemmill A**, Karasek D, Weir D, Adler NE, Prather AA, Epel ES. (2016). Lifespan adversity and later adulthood telomere length in the nationally representative US Health and Retirement Study. *Proceedings of the National Academy of Sciences*; 113(42):E6335-E6342. PMID: 27698131.
*Covered online by TIME, CBS News, Daily Mail, and other outlets
14. Catalano R, Saxton KB, **Gemmill A**, Hartig T. (2016). Twinning in Norway following the Oslo massacre: Evidence of a ‘Bruce Effect’ in humans. *Twin Research and Human Genetics*; 19(5):485-491. PMID: 27453297.
13. Alkema L, Chou D, Hogan D, Zhang S, Moller AB, **Gemmill A**, Fat DM, Boerma T, Temmerman M, Mathers CD, Say L. (2016). Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. *Lancet*; 387(10017):462-474. PMID: 26584737.
12. Falconi A, **Gemmill A**, Karasek D, Goodman J, Anderson B, Lee M, Bellows B, Catalano R. (2016). Stroke-attributable death among older persons during the Great Recession. *Economics & Human Biology*; 21:56-63. PMID: 26744999.
11. Catalano R, Goodman J, Margerison-Zilko C, Falconi A, **Gemmill A**, Karasek D, Anderson E. (2016). Timing of birth: parsimony favors strategic over dysregulated parturition. *American Journal of Human Biology*; 28(1):31-35. PMID: 25998321.
10. **Gemmill A**, Falconi A, Karasek D, Hartig T, Anderson E, Catalano R. (2015). Do macro-economic contractions induce or ‘harvest’ suicides? A test of competing hypotheses. *Journal of Epidemiology and Community Health*; 69(11):1071-1076. PMID: 26188057.
9. Karasek D, Goodman J, **Gemmill A**, Falconi A, Hartig T, Magganas A, Catalano R. (2015). Twins less frequent than expected among male births in risk averse populations. *Twin Research and Human Genetics*; 18(3):314-320. PMID: 25917386.
8. Margerison-Zilko C, Goodman JM, Anderson E, **Gemmill A**, Catalano R. (2015). Post-term birth as a response to environmental stress: The case of September 11, 2001. *Evolution, Medicine, and Public Health*; 2015(1):13-20. PMID: 25595852.
7. Say L, Chou D, **Gemmill A**, Tunçalp Ö, Moller AB, Daniels J, Gülmezoglu AM, Temmerman M, Alkema L. (2014). Global causes of maternal death: a WHO systematic analysis. *Lancet Global Health*; 2(6):e323-e333. PMID: 25103301.

*Journal's most cited article

*Covered online by The Guardian and other news outlets

6. Falconi A, **Gemmill A**, Dahl RE, Catalano R. (2014). Adolescent experience predicts longevity: evidence from historical epidemiology. *Journal of Developmental Origins of Health and Disease*; 5(3):171-177. PMID: 24901655.
5. Catalano R, Karasek D, **Gemmill A**, Falconi A, Goodman J, Magganas A, Hartig T. (2014). Very low birthweight: dysregulated gestation versus evolutionary adaptation. *Social Science & Medicine*; 108:237-242. PMID: 24593927.
*Commentary by Schooling CM. (2014). Sexual selection as a driver of population health. *Social Science & Medicine*; 108:243-245.
4. **Gemmill A**, Lindberg LD. (2013). Short interpregnancy intervals in the United States. *Obstetrics & Gynecology*; 122(1):64-71. PMID: 23743455.
3. **Gemmill A**, Gunier RB, Bradman A, Eskenazi B, Harley KG. (2013). Residential proximity to methyl bromide use and birth outcomes in an agricultural population in California. *Environmental Health Perspectives*; 121(6):737-743. PMID: 23603811.
*Feature article in journal's Science Selections section (*Environ Health Perspect* 121:A198 (2013))
*Children's Environmental Health Network article of the month (July 2013)
*Covered online by Scientific American, The Huffington Post, and other news outlets
2. Landry DJ, Lindberg LD, **Gemmill A**, Boonstra H, Finer LB. (2011). Review of the role of faith- and community-based organizations in providing comprehensive sexuality education. *American Journal of Sexuality Education*; 6(1):75-103.
1. Lindberg L, Sonfield AS, **Gemmill A**. (2008). Reassessing adolescent male sexual and reproductive health in the United States: research and recommendations. *American Journal of Men's Health*; 2(1):40-56.

OTHER

- PUBLICATIONS
4. World Health Organization, UNICEF, UNFPA, The World Bank, and UN Population Division. (2015.) *Trends in Maternal Mortality: 1990 to 2015*. Geneva: World Health Organization.
Corporate authorship; contributed to estimation exercise
 3. MacQuarrie KLD, Bradley SEK, **Gemmill A**, Staveteig S. (2014.) *Contraceptive Dynamics Following HIV Testing*. DHS Analytical Studies No. 47. Rockville, MD, USA: ICF International.
 2. World Health Organization, UNICEF, UNFPA, The World Bank, and UN Population Division. (2014.) *Trends in Maternal Mortality: 1990 to 2013*. Geneva: World Health Organization.
Corporate authorship; contributed to estimation exercise
 1. World Health Organization, UNICEF, UNFPA, and The World Bank. (2012.) *Trends in Maternal Mortality: 1990 to 2010*. Geneva: World Health Organization.
Corporate authorship; contributed to estimation exercise

UNDER REVIEW Casey JA, **Gemmill A**, Elser H, Catalano R. Sun smoke in Sweden: Perinatal implications of the Laki volcanic eruptions, 1783-1784. (Revise and Resubmit at *Epidemiology*.)

Hepburn P, **Gemmill A**, Chudnovskaya M. Wives' labor market participation and 2nd and 3rd births in the United States. (Revise and resubmit at *Journal of Family Issues*.)

Saxton K, **Gemmill A**, Catalano R. Increased lifespan follows Bruce Effect in humans. (Under review.)

IN PREPARATION **Gemmill A**. Can I get pregnant? Understanding variation in women's perceived fecundity.

Gemmill A, Bradley SEK. New population-level evidence on the return of fertility following contraceptive discontinuation.

Gemmill A. Variation in achieved and intended fertility and demographic scenarios for future fertility in the United States.

Gemmill A, **Howell EA**. Social and neighborhood disadvantage and severe maternal morbidity.

Gemmill A, Catalano R. Adolescent deprivation in Norway during the German occupation and subsequent cohort mortality.

Gemmill A, Cowan SK. Perceptions of pregnancy risk and sterility among women with unintended births.

Elser H, **Gemmill A**, Casey JA, Karasek D, Bruckner TA, Mayo JA, Lee HC, Shaw GM, Catalano R,. The relationship between live and stillbirths in the periviable period.

Peterson E, Chou D, Moller AB, **Gemmill A**, Barreix M, Alkema L. A systematic assessment of underreporting and misclassification in registration of maternal deaths in high and middle income countries using a Bayesian modeling approach.

Peterson E, Chou D, Moller AB, **Gemmill A**, Barreix M, Alkema L. Adjustment of misclassification of maternal mortality from vital registration data: A protocol for systematic review.

Weiss J, Rehkopf D, **Gemmill A**, Karasek D, Mendes WB, Epel ES, Puterman E. Machine-driven determinants of telomere length.

Authorship TBD. The contribution of lifespan adversity and sociodemographic, behavioral, and personality factors to later life mortality.

Authorship TBD. Life, death, and collective optimism: A population perspective.

TEACHING

Instructor

2019: Research Methods, Program in Public Health, Stony Brook University

2019: Advanced Research Methods, Program in Public Health, Stony Brook University

Guest Lecturer

2018: "Levels, trends, and determinants of maternal and perinatal health outcomes in the United States," Clinical Outcomes Research. Stony Brook University

2016: "Demography and public health," Epidemiology Doctoral Seminar. UC Berkeley

2013: "Global estimates of maternal mortality," Measurement Seminar in Reproductive Health. UC Berkeley

Graduate Student Instructor

2012-13: Social Consequences of Population Dynamics, Departments of Demography & Sociology, UC Berkeley

Graduate Student Reader

2013-14: Economic Demography, Department of Demography, UC Berkeley

CONFERENCE
PROCEEDINGS

Gemmill A. Adolescent deprivation in Norway during the German occupation and subsequent cohort mortality. Interdisciplinary Association for Population Health Sciences Annual Meeting. Washington, DC. Oct 2018.

Gemmill A. Can I get pregnant? Understanding variation in women's perceived fecundity. IUSSP conference on the Postponement of Parenthood. Lake Como, Italy. Sept 2018. (With travel scholarship.)

Catalano R, **Gemmill A** (presenter), Bruckner TA. Fetal origins of population health: counterintuitive findings. Population Association of American Annual Meeting. Denver, CO. April 2018.

Peterson E, Chou D, Moller AB, **Gemmill A**, Barreix M, Alkema L. (Poster) A systematic assessment of underreporting and misclassification in registration of maternal deaths. Population Association of American Annual Meeting. Denver, CO. April 2018.

Gemmill A. "I can't get pregnant anyway." Perceived subfecundity and nonuse of contraception. Population Association of America Annual Meeting. Chicago, IL. April 2017.

Gemmill A, Bradley SEK. New population-level evidence on time to pregnancy following contraceptive discontinuation: Does contraceptive type matter? Population Association of America Annual Meeting. Chicago, IL. April 2017.

Weiss J, Rehkopf DH, Karasek D, **Gemmill A**, et al. (Non-presenter.) Determinants of telomere length: A random forest analysis. Population Association of America Annual Meeting, Chicago, IL, April 2017.

Schneider D, **Gemmill A** (non-presenter). The surprising decline in the non-marital fertility rate: description and preliminary explanation. American Sociological Association Annual Meeting, Seattle, WA, August 2016.

Gemmill A. (Poster). Estimating subfecundity in longitudinal social surveys. Population Association of America Annual Meeting, Washington, DC, April 2016.

Falconi A, **Gemmill A**, et al. (Non-presenter.) Stroke-attributable death among older persons during the Great Recession. Population Association of America Annual Meeting, San Diego, CA, April 2015.

Alkema L, Chou D, Fat DM, **Gemmill A**, et al. (Presenter.) Estimating time trends in maternal mortality for all countries: A revised modeling approach. Population Association of America Annual Meeting, San Diego, CA, May 2015.

Gemmill A, Hepburn P, Chudnovskaya M. (Non-presenter.) Women's household income contributions and higher-order births in the United States. European Population

Conference, Budapest, Hungary, June 2014.

Gemmill A, Hepburn P, Chudnovskaya M. (Poster.) Women's household income contributions and higher-order births in the United States. Population Association of America Annual Meeting, Boston, MA, May 2014.

Gemmill A, Hepburn P, Chudnovskaya M. (Non-presenter.) Women's household income contributions and higher-order births in the United States. International Union for the Scientific Study of Population, Busan, South Korea, August 2013.

Gemmill A, Bradley SEK, Vanderpoel S. Measuring time to pregnancy HIV-positive women: Results from demographic and health surveys. International Union for the Scientific Study of Population, Busan, South Korea, August 2013.

Hepburn P, **Gemmill A**, Chudnovskaya M. (Non-presenter.) Women's household income contributions and higher-order births in the United States. American Sociological Association Annual Meeting, New York, NY, August 2013.

Falconi A, **Gemmill A**, Dahl R, Catalano R. (Poster.) Adolescent experience affects longevity: Evidence from historical epidemiology. Population Association of America Annual Meeting, April 2013.

Gemmill A, Lindberg LD. (Poster.) Short interpregnancy intervals in the United States. Population Association of America Annual Meeting, New Orleans, LA, April 2013. (Declined.)

INVITED TALKS **Gemmill A**. Stony Brook's Program in Public Health. CUNY School of Medicine (CUNY Cancer Research Training Workshop for Global and U.S. Special Populations), October 2018.

Gemmill A. "I can't get pregnant anyway:" Perceived subfecundity and nonuse of contraception. USC Dornsife Center for Economic and Social Research, February 2017.

Goldstein J, **Gemmill A**. (Non-presenter.) Compositional changes in contemporary human populations: What can we learn about fecundity from changing birth rates? NICHD meeting: "Is human fecundity changing?" Bethesda, MD, September 2015.

PROFESSIONAL SERVICE Member, Recruitment committee, Program in Public Health, Stony Brook University
Session Chair: Population Association of America Annual Meeting (2014), Session 158: Statistical Demography
Member, Maternal Mortality Estimation Inter-Agency Group
Member, Catalano Research Group, School of Public Health, UC Berkeley
Member, Directory of Experts in the Centre of Excellence for Civil Registration and Vital Statistics Systems, funded by the Global Affairs Canada and the International Development Research Centre

PEER REVIEW *American Journal of Sociology, American Sociological Review, Demography, International Journal of Health Policy and Management, JMIR Research Protocols, Journal of Developmental Origins of Health and Disease, Journal of Economic Education, Journal of Epidemiology and Community Health, Journal of the International Association*

of Providers of AIDS Care, PLOS One, Proceedings of the Royal Society of London B: Biological Sciences, Sleep Health, Social Science & Medicine, Women's Health Issues, World Development, World Medical and Health Policy

PROFESSIONAL
MEMBERSHIPS

Population Association of America
International Union for the Scientific Study of Population
Society of Family Planning
Interdisciplinary Association for Population Health Science
American Sociological Association
American Public Health Association
Evolutionary Demography Society

ADDITIONAL
TRAINING

RAND Summer Institute (with travel scholarship), July 2014
- Mini-medical School for Social Scientists
- Demography, Economics, Psychology, and Epidemiology of Aging Conference
Stanford Workshop in Formal Demography, March 2014
Stanford Workshop in Biodemography, May 2013