



James Holland Jones

Associate Professor of Earth System Science and Senior Fellow at the Woods Institute for the Environment

 Curriculum Vitae available Online

Bio

BIO

I am a biological anthropologist with research interests in human ecology, demography and life history theory, and the ecology and evolutionary biology of infectious disease. A sampling of current projects includes: (1) human dimensions of primate retroviral transmission, (2) the impact of mobility and social contacts on the spillover and transmission of avian influenza, (3) the demography of residential mobility among Hadza hunter-gatherers, (4) fertility change, economic shocks, and reproductive decisions.

ACADEMIC APPOINTMENTS

- Associate Professor, Earth System Science
- Senior Fellow, Stanford Woods Institute for the Environment

PROFESSIONAL EDUCATION

- Post-Doc, University of Washington , Center for AIDS and STD, Center for Statistics and the Social Sciences, Center for Studies in Demography and Ecology (2003)
- Ph.D., Harvard University , Anthropology (2000)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

I am a biological anthropologist with primary research interests in evolutionary demography and life history theory. In addition these fundamental interests in the evolution of human life histories, I work at the intersection of disease ecology, the analysis of dynamical systems, and social network analysis. My work combines the formalisms of population biology, statistics, and social network analysis to address fundamental problems in biodemography, epidemiology, and human decision-making in variable environments.

PROJECTS

- Adaptation to Arid Climates, Climate Change, and Mobility in a Rural Nomadic Population
- The Most Rational People in the World
- Individual Decisions and Emergent Aggregate Patterns: Kin Co-residence among Hadza Hunter-Gatherers
- Comparative Ethnographic Networks
- Biological and Human Determinants of Primate Retroviral Transmission
- Comparative Spillover Dynamics of Avian Influenza in Endemic Countries

Teaching

COURSES

2019-20

- Biological and Social Networks: ESS 109, ESS 209 (Win)
- Community Leadership: ESS 135 (Aut, Win, Spr)
- Global Change and Emerging Infectious Disease: EARTHSYS 114, EARTHSYS 214, ESS 213, HUMBIO 114 (Spr)
- Social Structure and Social Networks: ESS 360 (Win)
- The Most Rational People in the World: ESS 86N (Sum)

2018-19

- Community Leadership: ESS 135 (Aut, Win, Spr)
- Global Change and Emerging Infectious Disease: EARTHSYS 114, EARTHSYS 214, ESS 213, HUMBIO 114 (Spr)
- Social Structure and Social Networks: ESS 360 (Win)
- The Most Rational People in the World: ESS 86N (Aut, Sum)

2017-18

- Adaptation: ESS 185 (Spr)
- Community Leadership: ESS 135 (Aut, Win, Spr)
- Environmental Change and Emerging Infectious Diseases: ANTHRO 177, ANTHRO 277, HUMBIO 114 (Win)
- Topics in Earth System Science: ESS 301 (Aut, Win, Spr)

2016-17

- Community Leadership: ESS 135 (Aut, Win, Spr)
- Demography and Life History Theory: ESS 363 (Win)
- Social Structure and Social Networks: ESS 360 (Spr)
- Topics in Earth System Science: ESS 301 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Advisor (AC)

Mary-Catherine Anderson

Doctoral Dissertation Co-Advisor (AC)

Laura Bloomfield, Caroline Muraida

Master's Program Advisor

Samuel Maull

Doctoral (Program)

Mary-Catherine Anderson

Publications

PUBLICATIONS

- **Contact structure, mobility, environmental impact and behaviour: the importance of social forces to infectious disease dynamics and disease ecology** *PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES*

-
- Arthur, R. F., Gurley, E. S., Salje, H., Bloomfield, L. S., Jones, J. H.
2017; 372 (1719)
- **Minimally Symptomatic Infection in an Ebola 'Hotspot': A Cross-Sectional Serosurvey** *PLOS NEGLECTED TROPICAL DISEASES*
Richardson, E. T., Kelly, J. D., Barrie, M. B., Mesman, A. W., Karku, S., Quiwa, K., Marsh, R. H., Koedoyoma, S., Daboh, F., Barron, K. P., Grady, M., Tucker, E., Dierberg, et al
2016; 10 (11)
 - **Measuring selective constraint on fertility in human life histories** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Jones, J. H., Tuljapurkar, S.
2015; 112 (29): 8982-8986
 - **The evolutionary dynamics of timing of maternal immunity: evaluating the role of age-specific mortality.** *Journal of evolutionary biology*
Metcalf, C. J., Jones, J. H.
2015
 - **Resource Transfers and Human Life-History Evolution** *ANNUAL REVIEW OF ANTHROPOLOGY, VOL 44*
Jones, J. H.
2015; 44: 513-531
 - **The marginal valuation of fertility** *EVOLUTION AND HUMAN BEHAVIOR*
Jones, J. H., Bird, R. B.
2014; 35 (1): 65-71
 - **The marginal valuation of fertility.** *Evolution and human behavior : official journal of the Human Behavior and Evolution Society*
Jones, J. H., Bird, R. B.
2014; 35 (1): 65-71
 - **A meta-analysis suggesting that the relationship between biodiversity and risk of zoonotic pathogen transmission is idiosyncratic** *ECOLOGY LETTERS*
Salkeld, D. J., Padgett, K. A., Jones, J. H.
2013; 16 (5): 679-686
 - **The role of social sciences in predicting and responding to emerging zoonotic diseases** *The Lancet*
Janes, C., Corbett, K., Jones, J. H., Trostle, J.
2012; 380 (9857): 1884-1886
 - **Primates and the Evolution of Long, Slow Life Histories** *CURRENT BIOLOGY*
Jones, J. H.
2011; 21 (18): R708-R717
 - **A high-resolution human contact network for infectious disease transmission** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Salathe, M., Kazandjieva, M., Lee, J. W., Levis, P., Feldman, M. W., Jones, J. H.
2010; 107 (51): 22020-22025
 - **Plague outbreaks in prairie dog populations explained by percolation thresholds of alternate host abundance** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Salkeld, D. J., Salathe, M., Stapp, P., Jones, J. H.
2010; 107 (32): 14247-14250
 - **Dynamics and Control of Diseases in Networks with Community Structure** *PLOS COMPUTATIONAL BIOLOGY*
Salathe, M., Jones, J. H.
2010; 6 (4)
 - **Increased mortality and AIDS-like immunopathology in wild chimpanzees infected with SIVcpz** *NATURE*
Keele, B. F., Jones, J. H., Terio, K. A., Estes, J. D., Rudicell, R. S., Wilson, M. L., Li, Y., Learn, G. H., Beasley, T. M., Schumacher-Stankey, J., Wroblewski, E., Mosser, A., Raphael, et al
2009; 460 (7254): 515-519
 - **Time Preferences, Risk Preferences, and Climate Change Adaptation**
-

Jones, J.
WILEY.2020: 133

- **Estimating the impact of violent events on transmission in Ebola virus disease outbreak, Democratic Republic of the Congo, 2018-2019.** *Epidemics*
Wannier, S. R., Worden, L., Hoff, N. A., Amezcua, E., Selo, B., Sinai, C., Mossoko, M., Njoloko, B., Okitolonda-Wemakoy, E., Mbala-Kingebeni, P., Ahuka-Mundeke, S., Muyembe-Tamfum, J. J., Richardson, et al
2019: 100353
- **New Estimates of Hunter-Gatherer Mortality Patterns From Improved Fits of the Siler Model**
Jones, J., Gurven, M. D., Price, M. H.
WILEY.2019: 116
- **Hadza Hunter-Gatherers Exhibit Gender Differences in Space Use and Spatial Cognition Consistent with the Ecology of Male and Female Targeted Foods**
Wood, B. M., Harris, J. A., Vashro, L., Sayre, M., Raichlen, D. A., Pontzer, H., Sancilio, A., Berbesque, J., Crittenden, A. N., Mabulla, A. P., Jones, J. H., Cashdan, E.
WILEY.2019: 273–74
- **Temporal clustering of sexual contacts can maintain endemic sexually transmitted virus in mobile subsistence populations**
Hazel, A., Jones, J.
WILEY.2019: 99–100
- **Genome-wide patterns of gene expression in a wild primate indicate species-specific mechanisms associated with tolerance to natural simian immunodeficiency virus infection.** *Genome biology and evolution*
Simons, N. D., Eick, G. N., Ruiz-Lopez, M. J., Hyeroba, D., Omeja, P. A., Weny, G., Chapman, C. A., Goldberg, T. L., Zheng, H., Shankar, A., Switzer, W. M., Frost, S. D., Jones, et al
2019
- **Flexible Labors: The Work Mobility of Female Sex Workers (FSWs) in Post-Socialist China** *HUMAN ORGANIZATION*
Yu, Y., McCarty, C., Jones, J.
2018; 77 (2): 146–56
- **Anatomy of a Hotspot: Chain and Seroepidemiology of Ebola Virus Transmission, Sukudu, Sierra Leone, 2015-16** *JOURNAL OF INFECTIOUS DISEASES*
Kelly, J., Barrie, M., Mesman, A. W., Karku, S., Quiwa, K., Drasher, M., Schlough, G., Dierberg, K., Koedoyoma, S., Lindan, C. P., Jones, J., Chamie, G., Worden, et al
2018; 217 (8): 1214–21
- **Opportunities and constraints in women's resource security among agro-pastoralists in Kaokoveld, Namibia**
Hazel, A., Meeks, G., Jones, J.
WILEY.2018: 115
- **Response to Economic Crisis Reveals Risk-Averse Fertility Preferences**
Jones, J.
WILEY.2018: 134
- **Addressing the Challenges of Missing Data in Anthropological Networks**
Ready, E., Hazel, A., Jones, J.
WILEY.2018: 221
- **A novel, age-structured model of the evolution of economic preferences**
Price, M. H., Jones, J. H.
WILEY.2018: 214
- **Remoteness influences access to sexual partners and drives patterns of viral sexually transmitted infection prevalence among nomadic pastoralists** *PLOS ONE*
Hazel, A., Jones, J.
2018; 13 (1): e0191168
- **Redefine statistical significance** *NATURE HUMAN BEHAVIOUR*
Benjamin, D. J., Berger, J. O., Johannesson, M., Nosek, B. A., Wagenmakers, E., Berk, R., Bollen, K. A., Brems, B., Brown, L., Camerer, C., Cesarini, D., Chambers, C. D., Clyde, et al
2018; 2 (1): 6–10

- **Redefine statistical significance.** *Nature human behaviour*
Benjamin, D. J., Berger, J. O., Johannesson, M., Nosek, B. A., Wagenmakers, E. J., Berk, R., Bollen, K. A., Brembs, B., Brown, L., Camerer, C., Cesarini, D., Chambers, C. D., Clyde, et al
2018; 2 (1): 6–10
- **Remoteness Influences Access to Sexual Partners and Drives Patterns of Viral Sexually Transmitted Disease Prevalence among Nomadic Pastoralists**
Hazel, A., Jones, J.
WILEY.2017: 212–13
- **The Shape of Selection on Human Life Histories**
Jones, J.
WILEY.2017: 234–35
- **The Importance of Ethnographic Data and Social Network Structures in Determining Infection Risk for Individuals in Rural Communities of Bangladesh and Uganda**
Bloomfield, L. P., Hazel, A., Jones, J. H.
WILEY.2017: 124
- **Uncertainty about future payoffs makes impatience rational** *BEHAVIORAL AND BRAIN SCIENCES*
Jones, J.
2017; 40: e330
- **Assessing Commitment and Reporting Fidelity to a Text Message-Based Participatory Surveillance in Rural Western Uganda** *PLOS ONE*
Lester, J., Paige, S., Chapman, C. A., Gibson, M., Jones, J. H., Switzer, W. M., Ting, N., Goldberg, T. L., Frost, S. D.
2016; 11 (6)
- **Assessing Commitment and Reporting Fidelity to a Text Message-Based Participatory Surveillance in Rural Western Uganda.** *PloS one*
Lester, J., Paige, S., Chapman, C. A., Gibson, M., Holland Jones, J., Switzer, W. M., Ting, N., Goldberg, T. L., Frost, S. D.
2016; 11 (6)
- **In-Transitivity: Network Patterns of Female Sex Workers (FSWs) in China** *HUMAN ORGANIZATION*
Yu, Y. J., McCarty, C., Jones, J. H., Li, X.
2016; 75 (4): 358-370
- **Human Social Behavior and Demography Drive Patterns of Fine-Scale Dengue Transmission in Endemic Areas of Colombia** *PLOS ONE*
Padmanabha, H., Correa, F., Rubio, C., Baeza, A., Osorio, S., Mendez, J., Jones, J. H., Diuk-Wasser, M. A.
2015; 10 (12)
- **Beyond Bushmeat: Animal Contact, Injury, and Zoonotic Disease Risk in Western Uganda** *ECOHEALTH*
Paige, S. B., Frost, S. D., Gibson, M. A., Jones, J. H., Shankar, A., Switzer, W. M., Ting, N., Goldberg, T. L.
2015; 11 (4): 534-543
- **Pursuit: A Foraging Simulation Tool for Research and Teaching** *EVOLUTIONARY PSYCHOLOGY*
Wood, B. M., Jones, J. H.
2015; 13 (4)
- **Public health perspective on patterns of biodiversity and zoonotic disease** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Salkeld, D. J., Padgett, K. A., Jones, J. H., Antolin, M. F.
2015; 112 (46): E6261-E6261
- **Genomic Resources Notes Accepted 1 December 2014-31 January 2015** *MOLECULAR ECOLOGY RESOURCES*
Blanchet, S., Bouchez, O., Chapman, C. A., Etter, P. D., Goldberg, T. L., Johnson, E. A., Jones, J. H., Loot, G., Omeja, P. A., Rey, O., Ruiz-Lopez, M. J., Switzer, W. M., Ting, et al
2015; 15 (3): 684-684
- **Gender inequality and HIV transmission: a global analysis** *JOURNAL OF THE INTERNATIONAL AIDS SOCIETY*
Richardson, E. T., Collins, S. E., Kung, T., Jones, J. H., Tram, K. H., Boggiano, V. L., Bekker, L., Zolopa, A. R.
2014; 17

- **Gender inequality and HIV transmission: a global analysis.** *Journal of the International AIDS Society*
Richardson, E. T., Collins, S. E., Kung, T., Jones, J. H., Hoan Tram, K., Boggiano, V. L., Bekker, L., Zolopa, A. R.
2014; 17: 19035-?
- **Beyond Bushmeat: Animal Contact, Injury, and Zoonotic Disease Risk in Western Uganda.** *EcoHealth*
Paige, S. B., Frost, S. D., Gibson, M. A., Jones, J. H., Shankar, A., Switzer, W. M., Ting, N., Goldberg, T. L.
2014
- **Metapopulation Dynamics Enable Persistence of Influenza A, Including A/H5N1, in Poultry** *PLOS ONE*
Hosseini, P. R., Fuller, T., Harrigan, R., Zhao, D., Arriola, C. S., Gonzalez, A., Miller, M. J., Xiao, X., Smith, T. B., Jones, J. H., Daszak, P.
2013; 8 (12)
- **Interactions between Social Structure, Demography, and Transmission Determine Disease Persistence in Primates** *PLOS ONE*
Ryan, S. J., Jones, J. H., Dobson, A. P.
2013; 8 (10)
- **To kill a kangaroo: understanding the decision to pursue high-risk/high-gain resources.** *Proceedings. Biological sciences / The Royal Society*
Jones, J. H., Bird, R. B., Bird, D. W.
2013; 280 (1767): 20131210-?
- **To kill a kangaroo: understanding the decision to pursue high-risk/high-gain resources.** *Proceedings. Biological sciences / The Royal Society*
Jones, J. H., Bird, R. B., Bird, D. W.
2013; 280 (1767): 20131210-?
- **Prevalences of sexually transmitted infections in young adults and female sex workers in Peru: a national population-based survey** *LANCET INFECTIOUS DISEASES*
Carcamo, C. P., Campos, P. E., Garcia, P. J., Hughes, J. P., Garnett, G. P., Holmes, K. K.
2012; 12 (10): 765-773
- **Phenotypic quality influences fertility in Gombe chimpanzees** *JOURNAL OF ANIMAL ECOLOGY*
Jones, J. H., Wilson, M. L., Murray, C., Pusey, A.
2010; 79 (6): 1262-1269
- **Impact of Simian Immunodeficiency Virus Infection on Chimpanzee Population Dynamics** *PLOS PATHOGENS*
Rudicell, R. S., Jones, J. H., Wroblewski, E. E., Learn, G. H., Li, Y., Robertson, J. D., Greengrass, E., Grossmann, F., Kamenya, S., Pintea, L., Mjungu, D. C., Lonsdorf, E. V., Mosser, et al
2010; 6 (9)
- **The Effect of the Civil War on Southern Marriage Patterns** *JOURNAL OF SOUTHERN HISTORY*
Hacker, J. D., Hilde, L., Jones, J. H.
2010; 76 (1): 39-70
- **Early Assessment of Anxiety and Behavioral Response to Novel Swine-Origin Influenza A(H1N1)** *PLOS ONE*
Jones, J. H., Salathe, M.
2009; 4 (12)
- **The force of selection on the human life cycle** *EVOLUTION AND HUMAN BEHAVIOR*
Jones, J. H.
2009; 30 (5): 305-314
- **Demographic and Social Predictors of Intimate Partner Violence in Colombia** *HUMAN NATURE-AN INTERDISCIPLINARY BIOSOCIAL PERSPECTIVE*
Jones, J. H., Ferguson, B.
2009; 20 (2): 184-203
- **Demographic and social predictors of intimate partner violence in Colombia : a dyadic power perspective.** *Human nature (Hawthorne, N.Y.)*
Jones, J. H., Ferguson, B.
2009; 20 (2): 184-203
- **The "fire stick farming" hypothesis: Australian Aboriginal foraging strategies, biodiversity, and anthropogenic fire mosaics** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*

- Bird, R. B., Bird, D. W., Codding, B. F., PARKER, C. H., Jones, J. H.
2008; 105 (39): 14796-14801
- **Aging and fertility patterns in wild chimpanzees provide insights into the evolution of menopause** *CURRENT BIOLOGY*
Thompson, M. E., Jones, J. H., Pusey, A. E., Brewer-Marsden, S., Goodall, J., Marsden, D., Matsuzawa, T., Nishida, T., Reynolds, V., Sugiyama, Y., Wrangham, R. W.
2007; 17 (24): 2150-2156
 - **demogR: A package for the construction and analysis of age-structured demographic models in R** *JOURNAL OF STATISTICAL SOFTWARE*
Jones, J. H.
2007; 22 (10): 1-28
 - **Interval estimates for epidemic thresholds in two-sex network models** *THEORETICAL POPULATION BIOLOGY*
Handcock, M. S., Jones, J. H.
2006; 70 (2): 125-134
 - **The Marriage Squeeze in Colombia, 1973-2005: The Role of Excess Male Death** *Social Biology*
Jones, J. H., Ferguson, B. D.
2006; 53 (3-4): 140-151
 - **Fetal programming: Adaptive life-history tactics or making the best of a bad start?** *29th Annual Meeting of the Human-Biology-Association*
Jones, J. H.
WILEY-LISS.2005: 22-33
 - **Likelihood-based inference for stochastic models of sexual network formation** *THEORETICAL POPULATION BIOLOGY*
Handcock, M. S., Jones, J. H.
2004; 65 (4): 413-422
 - **An assessment of preferential attachment as a mechanism for human sexual network formation** *PROCEEDINGS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES*
Jones, J. H., Handcock, M. S.
2003; 270 (1520): 1123-1128
 - **Sexual contacts and epidemic thresholds** *NATURE*
Jones, J. H., Handcock, M. S.
2003; 423 (6940): 605-606
 - **Social networks: Sexual contacts and epidemic thresholds.** *Nature*
Jones, J. H., Handcock, M. S.
2003; 423 (6940): 605-6; discussion 606
 - **The raw and the stolen - Cooking and the ecology of human origins** *CURRENT ANTHROPOLOGY*
Wrangham, R. W., Jones, J. H., Laden, G., Pilbeam, D., Conklin-Brittain, N.
1999; 40 (5): 567-594