

**Jeffrey Shaman**  
**Curriculum Vitae**

Department of Environmental Health Sciences  
Mailman School of Public Health, Columbia University  
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**AREAS OF INTEREST:** Large-scale climate dynamics, tropical meteorology, climate prediction, monsoons, the hydrologic cycle, hillslope hydrology, infectious disease transmission and epidemiology, mosquito-borne disease, mosquito ecology, modeling and prediction of infectious disease, climate and health

**EDUCATION:**

University of Pennsylvania, Bachelor of Arts in Biology, *Cum Laude* with honors in the major, 1990  
Columbia University, Masters of Arts, Department of Earth and Environmental Sciences, 2000  
Columbia University, Masters of Philosophy, Department of Earth and Environmental Sciences, 2002  
Columbia University, Doctor of Philosophy, Department of Earth and Environmental Sciences, 2003, Awarded with Distinction  
Harvard University, National Oceanic and Atmospheric Administration Post-Doctoral Fellow in Climate and Global Change, 2003-2005

**APPOINTMENTS:**

Professor, Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, 2019-present  
Director, Climate and Health Program, Mailman School of Public Health, Columbia University, 2017-present  
Associate Professor, Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, 2014-2018  
Co-Director, Climate and Health Program, Mailman School of Public Health, Columbia University, 2014-2016  
Assistant Professor, Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, 2011-2014  
Assistant Professor, College of Oceanic and Atmospheric Sciences, Oregon State University, 2005-2011  
National Oceanic and Atmospheric Administration Post-Doctoral Fellow, Harvard University, 2003-2005  
National Aeronautics and Space Administration Earth System Science Fellow (graduate), 2000-2003  
Laboratory Technician, Children's Hospital of Philadelphia and the University of Pennsylvania. Immunological research involving molecular and cellular experimentation investigating the class II system and its genetic expression, 1992-1994  
Field Researcher, The University of Pennsylvania. Plant biology surveys, experimentation and research of forest regrowth and plant community competition, 1990-1991

**AFFILIATIONS:**

Data Science Institute, Columbia University, Affiliate Member, 2017-present  
Earth Institute, Columbia University, Associate Faculty Member, 2016-present  
Research Associate, American Museum of Natural History, Division of Invertebrate Zoology, 2016-present  
Earth Institute, Columbia University, Junior Faculty Fellow, 2012-2016  
Institute for Social and Economic Research and Policy, Columbia University, Faculty Fellow, 2012-present  
Columbia Center for Environmental Health in Northern Manhattan, Mailman School of Public Health, Columbia University, 2011-present  
International Research Institute for Climate and Society, Columbia University, 2011-present  
College of Earth, Oceanic and Atmospheric Sciences, Oregon State University, Courtesy, 2011-2014  
Center for Communicable Disease Dynamics, Harvard School of Public Health, 2009-2015

**GRADUATE AND POSTDOCTORAL ADVISORS:**

Mark A. Cane, Columbia University (graduate)  
Eli Tziperman, Harvard University (post-doctoral)

**AWARDS:**

International Society for Disease Surveillance Outstanding Research Article in Biosurveillance in the Scientific Achievement Category, first prize (for Pei et al., 2018), 2018  
Tow Faculty Leadership Award, Mailman School of Public Health, 2015-2018  
Winner, Centers for Disease Control and Prevention 'Predict the Influenza Season Challenge', 2014  
International Society for Disease Surveillance Outstanding Research Article in Biosurveillance in the Scientific Achievement Category, first prize (for Shaman and Karspeck, 2012), 2013  
Junior Faculty Career Development Award, Columbia University Center for Environmental Health in Northern Manhattan, 2012-2014  
National Oceanic and Atmospheric Administration Post-Doctoral Fellowship in Climate and Global Change, 2003-2005  
Bruce C. Heezen Prize for graduate students making exceptional scientific contributions, 2003  
Columbia Sigma Xi, 2003  
Ph.D. Awarded with Distinction, 2003  
NASA Earth System Science Fellowship, 2000-2003

#### PEER REVIEWED PUBLICATIONS:

- Pei S, Cane MA, Shaman J. Predictability in process-based ensemble forecast of influenza. *PLOS Computational Biology*, **15(2)**:e1006783, doi:10.1371/journal.pcbi.1006783, 2019.
- Yang W, Li J, Shaman J. Characteristics of measles epidemics in China (1951-2004) and implications for elimination. *PLOS Computational Biology*, **15(2)**:e1006806, doi:10.1371/journal.pcbi.1006806, 2019.
- McGowan C, Biggerstaff M, Johansson M, Apfeldr KM, Ben-Nun M, Brooks L, Convertino M, Erraguntla M, Farrow DC, Freeze J, Ghosh S, Hyun S, Kandula S, Lega J, Liu Y, Michaud N, Morita H, Niemi J, Ramakrishnan N, Ray EL, Reich NG, Riley P, Shaman J, Tibshirani R, Vespignani A, Zhang Q, Reed C. Collaborative efforts to forecast seasonal influenza in the United States, 2015-2016. *Scientific Reports*, **9**:683, doi:10.1038/s41598-018-36361-9, 2019.
- Reich NG, Brooks L, Fox S, Kandula S, McGowan C, Moore E, Osthus D, Ray E, Tushar A, Yamana T, Biggerstaff M, Johansson MA, Rosenfeld R, Shaman J. Forecasting seasonal influenza in the U.S.: a collaborative multi-year, multi-model assessment of forecast performance. *Proceedings of the National Academy of Sciences*, doi:10.1073/pnas.1812594116, 2019.
- Pei S, Morone F, Liljeros F, Makse HA, Shaman J. Inference of the nosocomial transmission dynamics of Methicillin-resistant *Staphylococcus aureus*. *eLife*, **7**:e40977, doi:10.7554/eLife.40977, 2018.
- Alexander K, Heaney A, Shaman J. Distant climate controls and dryland flood pulse dynamics influence diarrheal disease and population vulnerability to climate change. *PLOS Medicine*, **15(11)**:e1002688, doi:10.1371/journal.pmed.1002688, 2018.
- Morita H, Kramer S, Heaney A, Gil H, Shaman J. Influenza forecast optimization when using different surveillance data types and geographic scale. *Influenza and Other Respiratory Viruses*, **12(6)**:755-764, doi:10.1111/irv.12594, 2018..
- Fu C, Dong Z, Shen J, Yang Z, Liao Y, Hu W, Pei S, Wang M, Shaman J. Population impact of the Lanzhou Lamb Rotavirus (LLR) vaccine: data from 9 years of immunization in Guangzhou, China. *JAMA Network Open*, **1(4)**:e181382, doi:10.1001/jamanetworkopen.2018.1382, 2018.
- Yang W, Cummings MJ, Bakamutumaho B, Kaya J, Owor N, Namagambo B, Byaruhanga T, Lutwama JJ, O'Donnell, MR, Shaman J. Transmission dynamics of influenza in two major cities of Uganda. *Epidemics*, **24**:43-48, doi.org/10.1016/j.epidem.2018.03.002, 2018,
- Biggerstaff M, Johansson M, Alper D, Brooks LC, Chakraborty P, Farrow DC, Hyun S, Kandula S, McGowan C, Ramakrishnan N, Rosenfeld R, Shaman J, Tibshirani R, Tibshirani RJ, Vespignani A, Yang W, Zhang Q, Reed C. Results from the second year of a collaborative effort to forecast influenza seasons in the United States. *Epidemics*, **24**:26-33, doi.org/10.1016/j.epidem.2018.02.003, 2018,
- Doms C, Kramer SC, Shaman J. Assessing the use of influenza forecasts and epidemiological modeling in public health decision making. *Scientific Reports*, **8**:12406, doi:10.1038/s41598-018-30378-w, 2018.
- Shea B, Knowlton K, Shaman J. The need for informed climate-health governance. *International Journal of Health Governance*, **23(3)**:196-204, doi:10.1108/IJHG-01-2018-0001, 2018.
- Kandula S, Yamana T, Pei S, Yang W, Morita H, Shaman J. Evaluation of mechanistic and statistical methods in forecasting influenza-like illness. *Journal of the Royal Society Interface*, **15**:20180174, doi:10.1098/rsif.2018.0174, 2018.
- Birger R, Morita H, Comito D, Filip I, Galanti M, Lane B, Ligon C, Rosenbloom D, Shittu A, Ud-Dean M, Desalle R, Planet P, Shaman J. Asymptomatic shedding of respiratory virus among an ambulatory population across seasons. *mSphere*, **3**:e00249-18. <https://doi.org/10.1128/mSphere.00249-18>, 2018.
- Gervais M, Shaman J, Kushnir Y. Mechanisms Governing the Development of the North Atlantic Warming Hole in the CESM-LE Future Climate Simulations. *Journal of Climate*, **31(15)**:5927-5946, doi:10.1175/JCLI-D-17-0635.1, 2018.
- Yang W, Cummings MJ, Bakamutumaho B, Kaya J, Owor N, Namagambo B, Byaruhanga T, Lutwama JJ, O'Donnell, MR, Shaman J. Dynamics of influenza in the tropical Africa: temperature, humidity and co-circulating (sub)types. *Influenza and Other Respiratory Viruses*, **12(4)**:446-456, doi:10.1111/irv.12556, 2018.
- Shaman J, Knowlton K. The need for climate and health education. *American Journal of Public Health*, **108(S2)**:S66-S67, 2018.
- Ukawuba I, Shaman J. Association of spring-summer hydrology and meteorology and human West Nile virus infection in

- West Texas, USA, 2002-2016. *Parasites & Vectors*, **11**:224, doi:10.1186/s13071-018-2781-0, 2018.
- Reis J, Shaman J. Simulation of four respiratory viruses and inference of epidemiological parameters. *Infectious Disease Modeling*, **3**:23-34, doi:10.1016/j.idm.2018.03.006, 2018.
- Chattopadhyay I, Kiciman E, Elliott JW, Shaman J, Rzhetsky A. Conjunctions of factors triggering waves of seasonal influenza. *eLife*, **7**:e30756, doi:10.7554/eLife.30756, 2018..
- DeFelice NB, Schneider ZD, Little E, Barker C, Caillouet KA, Campbell SR, Damian D, Irwin P, Jones HMP, Townsend J, Shaman J. Use of temperature to improve West Nile virus forecasts. *PLOS Computational Biology*, **14**(3):e1006047, doi:10.1371/journal.pcbi.1006047, 2018.
- Pei S, Kandula S, Yang W, Shaman J. Forecasting the spatial transmission of influenza in the United States. *Proceedings of the National Academy of Sciences*, **115**(11):2752-2757, doi:10.1073/pnas.1708856115, 2018.
- Shaman J, Morita H, Birger R, Boye M, Comito D, Lane B, Ligon C, Smith H, Desalle R, Planet P. Asymptomatic summertime shedding of respiratory viruses. *The Journal of Infectious Diseases*, **217**(7):1074-1077, doi:10.1093/infdis/jix685, 2018.
- Cummings MJ, Barnabas B, Yang W, Wamala JF, Kayiwa J, Owor N, Namagambo B, Byaruhanga T, Wolf A, Lutwama JJ, Shaman J, O'Donnell MR. Emergence and early-phase transmission dynamics of 2009 pandemic A/H1N1 influenza in Kampala, Uganda, 2009-2010. *American Journal of Tropical Medicine and Hygiene*, **98**(1):203-206, doi/10.4269/ajtmh.17-0524, 2018.
- Shaman J, Kandula S, Yang W, Karspeck A. The use of ambient humidity conditions to improve influenza forecast. *PLOS Computational Biology*, **13**(11):e1005844, doi:10.1371/journal.pcbi.1005844, 2017.
- Yamana T, Kandula S, Shaman J. Individual versus superensemble forecasts of seasonal influenza outbreaks in the United States. *PLOS Computational Biology*, **13**(11):e1005801, doi:10.1371/journal.pcbi.1005801, 2017.
- Kandula S, Hsu DJ, Shaman J. Sub-regional nowcasts of seasonal influenza using search trends. *Journal of Medical Internet Research*, **19**(11):e370, doi:10.2196/jmir.7486, 2017.
- Pei S, Shaman J. Counteracting structural errors in ensemble forecast of influenza outbreaks. *Nature Communications*, **8**, Article Number 925, doi:10.1038/s41467-017-01033-1, 2017.
- Little E, Bajwa W, Shaman J. Local environmental and meteorological conditions influencing the invasive mosquito *Ae. albopictus* and arbovirus transmission risk in New York City. *PLOS Neglected Tropical Diseases*, **11**(8):e0005828, doi:10.1371/journal.pntd.0005828, 2017.
- Quinn A, Shaman J. Health symptoms in relation to temperature, humidity, and self-reported perceptions of climate in New York City residential environments. *International Journal of Biometeorology*, **61**(7):1209-1220, doi:10.1007/s00484-016-1299-4, 2017.
- Quinn A, Kinney PL, Shaman J. Predictors of summertime heat index levels in New York City apartments. *Indoor Air*, **27**(4):840-851, doi:10.1111/ina.12367, 2017.
- Fu C, Shen J, Lu L, Li Y, Cao Y, Wang M, Pei S, Yang Z, Guo Q, Shaman J. Pre-vaccination evolution of antibodies among infants 0, 3 and 6 months of age: a longitudinal analysis of measles enterovirus 71 and coxsackievirus 16. *Vaccine*, **35**(31):3817-3822, doi:10.1016/j.vaccine.2017.06.002, 2017.
- Yang W, Wen L, Li S-L, Chen K, Zhang W-Y, Shaman J. Geospatial characteristics of measles transmission in China during 2005-2014. *PLOS Computational Biology*, **13**(4):e1005474, doi:10.1371/journal.pcbi.1005474, 2017.
- Tamerius J, Ojeda S, Uejio CK, Shaman J, Lopez B, Sanchez N, Gordon A. Extreme indoor conditions mediate influenza transmission in a low-resource tropical setting. *International Journal of Biometeorology*, **61**(4):613-622, doi:10.1007/s00484-016-1238-4, 2017.
- Pei S, Teng X, Morone F, Shaman J, Makse HA. Efficient collective influence maximization in cascading processes with first-order transitions. *Scientific Reports*, **7**:45240, doi:10.1038/srep45240, 2017.
- Kandula S, Yang W, Shaman J. Type- and Subtype-Specific Influenza Forecast. *American Journal of Epidemiology*, **185**(5):395-402, doi:10.1093/aje/kww211, 2017.
- DeFelice NB, Little E, Campbell SR, Shaman J. Ensemble Forecast of Human West Nile Virus cases and Mosquito Infection Rates. *Nature Communications*, **8**, Article Number 14592, doi:10.1038/ncomms14592, 2017.
- DeBlander E, Shaman J. Teleconnection between the South Atlantic Convergence Zone and the Southern Indian Ocean: Implications for Tropical Cyclone Steering. *Journal of Geophysical Research Atmospheres*, **122**, 728-740, doi:10.1002/2016JD025373, 2017.
- Li R, Bai Y, Heaney A, Kandula S, Cai J, Zhao X, Xu B, Shaman J. Inference and Forecast of H7N9 Influenza in China. *Eurosurveillance*, **22**(7):pii=30462, doi:10.2807/1560-7917.ES.2017.22.7.30462, 2017.
- Quinn A, Shaman J. Indoor temperature and humidity in New York City apartments during winter. *Science of the Total Environment*, **583**:29-35, doi:10.1016/j.scitotenv.2016.12.183, 2017.
- Lee WV, Shaman J. Heat-coping strategies, cooling appliance usage patterns, and bedroom thermal satisfaction in New York City. *Science of the Total Environment*, **574**:1217-1231, doi:10.1016/j.scitotenv.2016.07.006, 2017.
- Fu C, Lu L, Wu H, Shaman J, Cao Y, Wang M. Placental antibody transfer rate may be reversely related to maternal levels: specific for measles, hand-foot-mouth disease, poliomyelitis and HIV. *Scientific Reports*, **6**:38874, doi:10.1038/srep38874, 2016.
- Yang W, Olson DR, Shaman J. Forecasting influenza outbreaks in boroughs and neighborhoods of New York City. *PLOS Computational Biology*, **12**(11):e1005201, doi:10.1371/journal.pcbi.1005201, 2016.
- Heaney A, Little E, Ng S, Shaman J. Climate Change and Infectious Disease in Central Africa: a Review of Climate Data

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- Yamana T, Kandula S, Shaman J. Superensemble Forecasts of Dengue Outbreaks. *Journal of the Royal Society Interface*, **13**:20160410, doi:10.1098/rsif.2016.0410, 2016.
- Reis J, Shaman J. Retrospective parameter estimation and forecast of respiratory syncytial virus in the United States. *PLOS Computational Biology*, **12(10)**:e1005133, doi:10.1371/journal.pcbi.1005133, 2016
- Shaman J, Tziperman E. The superposition of eastward and westward Rossby waves in response to localized forcing. *Journal of Climate*, **29(20)**:7547-7557, doi:10.1175/JCLI-D-16-0119.1, 2016
- Little E, Campbell SR, Shaman J. Development and Validation of a Climate-Based Ensemble Prediction Model for West Nile Virus Infection Rates in Culex Mosquitoes, Suffolk County, New York. *Parasites & Vectors*, **9**:443, doi: 10.1186/s13071-016-1720-1, 2016
- Biggerstaff M, Alper D, Dredze M, Fox, S, Fung IC-H, Hickmann KS, Leis B, Rosenfeld R, Shaman J, Tsou M-H, Velardi P, Vespignani A, Finelli L for the Influenza Forecasting Contest Working Group. Results from the Centers for Disease Control and Prevention's Predict the 2013-2014 Influenza Season Challenge. *BMC Infectious Diseases*, **16**:357, doi: 10.1186/S12879-016-1669-x, 2016.
- Nguyen JL, Yang W, Ito K, Matte T, Shaman J, Kinney PL, The temporal association and prediction of cardiovascular disease mortality with increases in seasonal influenza infections. *JAMA Cardiology*, **1(3)**:274-281, 2016.
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- Seager R, Chiang J, Shaman J. Do the tropics rule? Assessing the state of tropical climate science. *Bulletin of the American Meteorological Society*, **96** ES211-ES214, doi:10.1175/BAMS-D-15-00043.1, 2015.
- Yang W, Zhang W, Kargbo D, Yang R, Chen Y, Chen Z, Kamara A, Kargbo B, Kandula S, Karspeck A, Liu C, Shaman J. Transmission network of the 2014-2015 Ebola epidemic in Sierra Leone. *Journal of the Royal Society Interface*, **12** 20150536; doi:10.1098/rsif.2015.0536, 2015.
- Shaman J, Kandula S. Improved Discrimination of Influenza Forecast Accuracy Using Consecutive Predictions. *PLOS Currents Outbreaks*. 2015 Oct 5. Edition 1. doi: 10.1371/currents.outbreaks.8a6a3df285af7ca973fab4b22e10911e, 2015.
- Tamerius JD, Viboud C, Shaman J, Chowell G. Regional variability of specific humidity and school vacation can explain multiple spatially-focused waves of 2009 pandemic influenza in Mexico. *PLOS Computational Biology*, **11(8)**: e1004337, doi:10.1371/journal.pcbi.1004337, 2015.
- Yang W, Cowling BJ, Lau EHY, Shaman J. Forecasting influenza epidemics in Hong Kong. *PLOS Computational Biology*, **11(7)**: e1004383, doi:10.1371/journal.pcbi.1004383, 2015.
- Alexander KA, Sanderson CE, Marathe M, Lewis BL, Rivers CM, Shaman J, Drake JM, Lofgren E, Dato VM, Eisenberg MC, Eubank S. What factors might have led to the emergence of Ebola in West Africa? *PLOS Neglected Tropical Diseases*, **9(6)**: e0003652, doi:10.1371/journal.pntd.0003652, 2015.
- Yang W, Lipsitch M, Shaman J. Inference of seasonal and pandemic influenza transmission dynamics. *Proceedings of the National Academy of Sciences*, **112(9)**:2723-2728, doi:10.1073/pnas.1415012112, 2015.
- Lofgren ET, Halloran ME, Rivers CM, Drake JM, Porco TC, Lewis BL, Yang W, Vespignani A, Shaman J, Eisenberg JNS, Eisenberg MC, Marathe MV, Scarpino SV, Alexander KA, Meza R, Ferrari MJ, Hyman JM, Meyers LA, Eubank SG. Opinion: Mathematical models: A key tool for outbreak response. *Proceedings of the National Academy of Sciences*, **111(51)**:18,095-18,096, doi:10.1073/pnas.1421551111, 2014.
- Shaman J, Yang W, Kandula S. Inference and Forecast of the Current West African Ebola Outbreak in Guinea, Sierra Leone and Liberia. *PLOS Currents Outbreaks*. 2014 Oct 28. **Edition 1**. doi: 10.1371/currents.outbreaks.3408774290b1a0f2dd7cae877c8b8ff6, 2014
- Shaman J. Letter to the Editor: Caution When Using Gridded Meteorological Data Products for Analyses in Africa. *Eurosurveillance*, **19(41)**:pii=20930, 2014.
- Yang W, Shaman J. Does Exposure to poultry and wild fowl confer immunity to H5N1? *Chinese Medical Journal*, **127(18)**: 3335-3343, 2014.
- Shaman J, The Seasonal Effects of ENSO on European Precipitation: Observational Analysis. *Journal of Climate*, **27(17)**: 6423-6438, 2014.
- Quinn A, Tamerius JD, Perzanowski M, Jacobson JS, Goldstein I, Acosta L, Shaman J. Predicting indoor heat index exposure within New York City residences. *Science of the Total Environment*, **490**: 686-693, 2014.
- Gog JR, Ballesteros S, Viboud C, Simonsen L, Bjornstad ON, Shaman J, Chao DL, Khan F, Grenfell BT. Spatial transmission of 2009 pandemic influenza in the US. *PLOS Computational Biology*, **10(6)**: e1003635, doi:10.1371/journal.pcbi.1003635, 2014.
- Yang W, Karspeck A, Shaman J. Comparison of filtering methods for the modeling and retrospective forecasting of influenza epidemics. *PLOS Computational Biology*, **10(4)**: e1003583, doi:10.1371/journal.pcbi.1003583, 2014.
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- Yang W, Petkova E, Shaman J. Examination of mortality during the 1918 pandemic in New York City. *Influenza and Other Respiratory Viruses*, **8(2)**: 177-188, 2014.
- Huang KE, Lipsitch M, Shaman J, Goldstein E. Quantifying the impact of school openings on the reproductive number of

- the 2009 A/H1N1 influenza epidemic in the United States. *Epidemiology*, **25**(2): 203-206, 2014.
- Shaman J, The Seasonal Effects of ENSO on Atmospheric Conditions Associated with European Precipitation: Model Simulations of Seasonal Teleconnections. *Journal of Climate*, **27**(3): 1010-1028, 2014.
- Shaman J, Karspeck A, Yang W, Tamerius JD, Lipsitch M. Real-time influenza forecasts during the 2012-2013 season. *Nature Communications*, **4**: Article Number 2837, doi:10.1038/ncomms3837, 2013.
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- Shaman J, Solomon S, Colwell RR, Field CB. Reply to Rice and Henderson-Sellers: Survival of the fittest is not always the best option. *Proceedings of the National Academy of Science*, **110**(29): E2663, doi:10.1073/pnas.1307874110, 2013.
- Rydbeck A, Maloney ED, Xie S-P, Hafner J, Shaman J. Remote Forcing versus Local Feedback of East Pacific Intraseasonal Variability. *Journal of Climate*, **26**(11): 3575-3596, 2013.
- Tamerius JD, Acosta LM, Jacobson JS, Goldstein IF, Quinn JW, Rundle AG, Perzanowski MS, Shaman J. Socioeconomic and Outdoor Meteorological Determinants of Indoor Temperature and Humidity in New York City Households. *Weather, Climate and Society*, **5**(2): 168-179, doi:10.1175/WCAS-D-12-00030.1, 2013.
- Gatton M, Chitnis N, Churcher T, Donnelly M, Ghani A, Godfray C, Gould F, Hastings I, Marshall J, Ranson H, Rowland M, Shaman J, White L, Lindsay S. The Importance of Mosquito Behavioural Adaptations to Malaria Control in Africa. *Evolution*, **67**(4): 1218-1230, 2013.
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- Shaman J, Lipsitch M. The ENSO-Pandemic Influenza Connection: Coincident or Causal? *Proceedings of the National Academy of Sciences*, **110**(Supplement 1):3689-3691, doi:10.1073/pnas.1107485109, 2013.
- Shaman J, Solomon S, Colwell RR, Field CB. Fostering Advances in Interdisciplinary Climate Science. *Proceedings of the National Academy of Sciences*, **110**(Supplement 1):3653-3656, doi:10.1073/pnas.1301104110, 2013.
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- Shaman J. Strategies for Controlling the Zoonotic Amplification of Arboviruses. *Journal of Medical Entomology*, **48**(6): 1189-1196, 2011.
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- Shaman J, Jeon CY, Giovannucci E, Lipsitch M. Shortcoming of Vitamin D-Based Model Simulations of Seasonal Influenza. *PLoS ONE*, **6**(6): e20743, doi:10.1371/journal.pone.0020743, 2011.
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## **EDITORIAL ACTIVITIES**

Manuscripts Reviewed for: *International Journal of Climatology*, *Climatic Change*, *Global Change Biology*, *Journal of Medical Entomology*, *Ecological Modelling*, *Journal of Climate*, *International Journal of Remote Sensing*, *Hydrological Processes*, *Geophysical Research Letters*, *Journal of Geophysical Research*, *PLoS ONE*, *Vector-Borne and Zoonotic Diseases*, *Quarterly Journal of the Royal Meteorological Society*, *Water Resources Research*, *Atmospheric Research*, *PLoS Medicine*, *PNAS*, *PLoS Neglected Tropical Diseases*, *Journal of Vector Ecology*, *Journal of the Atmospheric Sciences*, *American Journal of Epidemiology*, *Environmental Health Perspectives*, *Entomologia Experimentalis et Applicata*, *Malaria Journal*, *Acta Tropica*, *Proceedings of the Royal Society B*, *Transactions of the Royal Society of Tropical Medicine and Hygiene*, *Environmental Health*, *Journal of the Royal Society Interface*, *International Journal for Environmental Research and Public Health*, *BioMed Central Infectious Diseases*, *American Journal of Tropical Medicine and Hygiene*, *Journal of Theoretical Biology*, *Journal of the Meteorological Society of Japan*, *Epidemiology and Infection*, *Ecology Letters*, *WIREs Climate Change*, *Climate Dynamics*, *PLoS Computational Biology*, *International Journal of Biometeorology*, *Influenza and Other Respiratory Viruses*, *PLOS Currents Influenza*, *Disaster Medicine and Public Health Preparedness*, *Scientific Reports*, *PLOS Currents Outbreaks*, *Nature Climate Change*, *BMC Infectious Diseases*, *Epidemics*

Proposals Reviewed for: *NSF Climate and Large-Scale Dynamics*, *NOAA Climate Prediction Program for the Americas*

Review Panels: *EPA Biodiversity and Human Health*, *NIH Centers of Excellence for Influenza Research and Surveillance*, *NIAID Microbiology and Infectious Disease Research Committee K Awards*

Guest Editor: *PNAS*, *International Journal for Environmental Research and Public Health*, *PLOS Computational Biology*

Academic Editor: *PLOS ONE*, 2014-present

Editor: *PLOS Currents Outbreaks*, 2015-present