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Education

Ph.D., Physics, Stanford University (January 2007)
A.B., History and Science, Harvard College (June 1999)

Professional Appointments

July 2012 – present	Assistant Professor, School of Global Policy & Strategy University of California, San Diego
Oct 2010 – June 2012	UC President’s Postdoctoral Fellow, Scripps Institution of Oceanography University of California, San Diego
Jan 2008 – Sept 2010	Postdoctoral Fellow; Center on Food Security & the Environment and Department of Earth System Science, Stanford University

Recent Peer-Reviewed Publications

1. H. Alaofe, J. Burney, R. Naylor, & D. Taren. “Prevalence of Anemia, Deficiencies of Iron and Vitamin A and Their Determinants in Rural Women and Young Children from Northern Benin,” *Public Health & Nutrition* (forthcoming).
2. W. D. Collins, S. J. Davis, R. Bales, J. Burney, R. McCarthy, E. Rignot, W. Torre, D. Victor, “Science and Pathways for Bending the Curve,” *Collabra*, 2:1 (2016).
3. H. Alaofe, J. Burney, R. Naylor, D. Taren, “Solar-powered drip irrigation impacts on crops production diversity and dietary diversity in Northern Benin,” *Food and Nutrition Bulletin*, 37:2 (2016).
4. A. Lamb, R. Green, I. Bateman, M. Broadmeadow, T. Bruce, J. Burney, P. Carey, D. Chadwick, E. Crane, R. Field, K. Goulding, H. Griffiths, A. Hastings, T. Kasoar, D. Kindred, B. Phalan, J. Pickett, P. Smith, E. Wall, E.K.H.J. zu Ermgassen & A. Balmford, “The potential for land sparing to offset greenhouse gas emissions from agriculture” *Nature Climate Change*, 6 (2016).
5. L. Sanford & J. Burney, “Cookstoves illustrate the need for a comprehensive carbon market” *Environmental Research Letters*, 10:8 (2015).
6. J. Burney & V. Ramanathan, “Recent climate and air pollution impacts on Indian agriculture,” *Proceedings of the National Academy of Sciences*, 111:46 (2014).
7. J. Burney, D. Cesano, J. Russell, E. L. La Rovere, T. Corral, N. S. Coelho, L. Santos, “Climate change adaptation strategies for smallholder farmers in the Brazilian Sertão,” *Climatic Change*, 126:1-2 (2014).

8. S. Davis, J. Burney, J. Pongratz, K. Caldeira, "Methods for attributing land-use emissions to products," *Carbon Management* 5:2 (2014).
9. J. Burney, S. Postel, R. Naylor, "The case for smallholder irrigation as a development priority in sub-Saharan Africa," *Proceedings of the National Academy of Sciences*, 110:31 (2013).
10. A. Kar, I. H. Rehman, J. Burney, P. S. Praveen, R. Suresh, L. Singh, V. K. Singh, T. Ahmed, N. Ramanathan, V. Ramanathan, "Real-time assessment of black carbon pollution in Indian households due to traditional and improved biomass cookstoves," *Environmental Science & Technology*, 46:5 (2012).
11. J. Burney & R. Naylor, "Smallholder Irrigation as poverty alleviation tool in Sub-Saharan Africa," *World Development*, 40:1 (2012).
12. J. Burney, S. Davis, D. Lobell, "Greenhouse gas mitigation by agricultural intensification," *Proceedings of the National Academy of Sciences*, 107:26 (2010).
13. J. Burney, L. Woltering, M. Burke, R. Naylor, D. Pasternak. "Solar-powered drip irrigation enhances food security in the Sudano-Sahel," *Proceedings of the National Academy of Sciences*, 107:5 (2010).

Currently Under Review

1. E. Matios & J. Burney, "Ecosystem services mapping for sustainable agricultural water management in California's Central Valley" (2016).
2. H. Alaofe, J. Burney, R. Naylor, & D. Taren. "Association Between Women's Empowerment and Maternal and Child Dietary Diversity and Nutrition Status in Northern Benin" (2016).
3. J. Burney, S. Phillips, & J. Lahl. "Assessing the productivity and profitability of the Solar Market Garden" (2016).

Other Recent Published Work

1. J. Burney "Creating synergies between water, energy, and food security for smallholders," Chapter 6 in *The Evolving Sphere of Food Security*, R. Naylor (ed.) Oxford University Press (2014).
2. J. Burney, C. Kennel, D. Victor, "Getting serious about the new realities of global climate change," *Bulletin of the Atomic Scientists*, 69:4 (2013).

Recent Fellowships, Grants, Awards

- 2016: NSF-INFIEWS grant recipient (co-PI)
- 2016: Inter-American Development Bank climate resilience grant recipient (co-PI)
- 2015: Bill and Melinda Gates Foundation Grand Challenges Explorations Round 14 Grant Recipient (co-PI)
- 2014: Named Kavli Frontiers of Science Fellow
- 2014: Qualcomm CSRO Grant Recipient
- 2014: Named Hellman Fellow
- 2011: National Geographic / Blackstone Ranch Institute Innovation Challenge Grant recipient (co-PI)
- 2011: Named National Geographic Emerging Explorer