JULIAN D. MARSHALL
Professor, University of Washington

Professional Preparation

Princeton University	Princeton, NJ	B.S.E. (High Honors)	1996	Chemical Engineering
University of California	Berkeley, CA	M.S.	2002	Energy and Resources
University of California	Berkeley, CA	Ph.D.	2005	Energy and Resources
University of British Columbia	Vancouver, BC	Postdoctoral	2005-6	Environmental Health

Appointments

2016-present	Professor, University of Washington, Seattle, WA
2016-present	John R. Kiely Professor of Environmental Engineering (since February 2016)
2013-2016	Associate Professor of Environmental Engineering, Univ of Minnesota, Minneapolis, MN
2007-2013	Assistant Professor of Environmental Engineering, Univ of Minnesota, Minneapolis, MN
2005-2006	Postdoctoral Research Fellow, Univ of British Columbia, Vancouver, Canada
2000–2005	Independent Contract Researcher, Berkeley, CA. Conducted research on energy and the environment for the California Air Resources Board (Sacramento, CA), Environmental Defense (Oakland, CA), United Nations University (Tokyo, Japan), and the U.S. Agency for International Development (Jakarta, Indonesia)
2001–2005	Student Researcher, Lawrence Berkeley National Lab, Berkeley, CA
1999	Volunteer, Ladakh Ecological Development Group, Kashmir, India
1998–1999	Lecturer and International Fellow, Temasek Polytechnic, Singapore
1996–1997	Environmental Consultant, Environ Corporation, Emeryville, CA

Products

Five articles most closely related (out of 63 peer-reviewed articles published and 8 submitted for review)

TW Aung, G Jain, K Sethuraman, J Baumgartner, C Reynolds, AP Grieshop, JD Marshall, M Brauer, "Health and climate-relevant pollutant concentrations from a carbon-finance approved cookstove intervention in rural India," Environmental Science & Technology, DOI: 10.1021/acs.est.5b06208, (2016).

S Hankey, K Sullivan, A Kinnick, A Koskey, K Grande, JH Davidson, JD Marshall, "Using objective measures of stove use and indoor air quality to evaluate a cookstove intervention in rural Uganda," Energy for Sustainable Development, 25, 67–74, (2015).

A Saraswat, JS Apte, M Kandlikar, M Brauer, SB Henderson, JD Marshall, "Spatiotemporal land use regression models of fine, ultrafine and black carbon particulate matter in New Delhi, India," Environmental Science & Technology, 47(22), 12903–12911, (2013).

AF Both, A Balakrishnan, B Joseph, JD Marshall, "Spatiotemporal aspects of real-time PM2.5: low- and middle-income neighborhoods in Bangalore, India," Environmental Science & Technology, 45(13), 5629–5636, (2011).

AP Grieshop, JD Marshall, M Kandlikar, "Health and climate benefits of cook-stove replacement options," Energy Policy, 39(12), 7530–7542, (2011).

Synergistic Activities

- Via my research and professional service, I am interested in studying and testing financially sustainable solutions to cookstove air pollution. I have conducted and evaluated multiple cookstove intervention studies in India and elsewhere. My areas of research focus are measurement of personal exposure to air pollution and the resulting health impacts; and

intervention effectiveness at reducing impacts from all stoves, not just the new stove (i.e., tackling "stove stacking").

- Co-founded and co-directed the Acara Program for social entrepreneurship at University of Minnesota (http://acara.umn.edu). Worked with students to start for-profit and not-for-profit ventures to address global grand challenges in low-income communities of developing countries. Work included students evaluating impacts of new ventures for specific problems and communities (mostly in India).
- Co-founded and co-directed the Peace Corps Masters International program in environmental engineering at University of Minnesota. Program includes 2 semesters at UMN plus 27 months service to the Peace Corps.
- Developed multiple publicly-available databases on air pollution, including z.umn.edu/no2map (NO2 concentrations), spatialmodel.com (air pollution concentrations and models), and http://people.hbs.edu/mtoffel/datasets (environmental performance datasets).
- Many peer-reviewed scientific journal articles published with Indian researchers as collaborators and co-authors.
- Multiple ongoing interactions with Indian NGOs and other organizations as research partners in cookstove intervention and other air pollution studies. Example collaborators in India include Samuha (Karnataka), ROI (Bangalore), Jagriti (Himachal Pradesh), National Institute for Nutrition (Hyderabad), and Public Health Foundation of India (Delhi). These close relationships and direct involvement in designing and conducting the research greatly facilitate evidence uptake.
- Several organizations I have worked with have hosted student interns from Acara (University of Minnesota) for 4 – 10 month fellowship. Examples organizations in India include TIDE (Karnataka), MyRain (Madurai), and Ternup Labs (Bangalore). These close relationships greatly facilitate evidence uptake.