

Meha Jain

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EDUCATION

- Columbia University**, New York, NY 2008 - Present
- Ph.D. candidate in Ecology, Evolutionary, and Environmental Biology (E3B)
 - Certificate in Environmental Policy
- Princeton University**, Princeton, NJ 2007
- Graduated Cum Laude, A.B. in Ecology and Evolutionary Biology (EEB)
 - Certificate in Environmental Studies

RESEARCH EXPERIENCE

- Lead Researcher, S. Naeem and R. DeFries Lab**, Gujarat, India and Columbia University 2010 - Present
- Using remote sensing to analyze agricultural phenology changes to climate variability in India. Will be used to assess how farmers are adapting cropping patterns to climate change (Ph.D. Dissertation)
- Lead Researcher, M. Uriarte Lab**, Cayey, Puerto Rico and Columbia University Summer 2009
- Created and conducted semi-structured surveys to identify water quality and health perceptions in community-managed water systems and those that are managed by the government in Puerto Rico
- Lead Researcher, Compton Fellowship**, New Delhi, India 2007 – 2008
- Independently designed and implemented a study with the NGO Intercultural Resources that measured the forest structure and ecosystem services of community-managed forests in India
- Lead Researcher, D.I. Rubenstein Lab**, Princeton University 2006-2007
- Quantified the effects of cattle grazing on zebra behavior, dietary intake, and endo- and ecto-parasite loads in central Kenya.
- Work-study Research Assistant, J. Altmann Lab**, Princeton University 2003 - 2007
- Performed hormone methanol extraction and SPE hormone assays on freeze-dried fecal matter of baboons from Amboseli National Park, Kenya. Group studied baboon behavior and physiology.
- Field-Study Abroad**, Gamboa and Barro Colorado Island, Panama Spring 2006
- Conducted an independent study to examine how woody vine species (i.e. lianas) are impacting tree community composition and structure.
- Research Assistant, D.I. Rubenstein Lab**, Shackleford Banks, NC and Princeton University Summer 2005
- Used behavioral-scan data to determine leadership and group association behavior in feral horses.
- Research Assistant, P. Burns Lab**, Notre Dame University Summers 2003 - 2005
- Synthesized and characterized uranium crystals to determine the best ways to store nuclear waste.

FELLOWSHIPS AND GRANTS

- National Science Foundation Graduate Research Fellowship (NSFGRF) (\$150,000)** 2009-2012
- National Geographic Young Explorers Grant (\$5000)** 2011
- Earth Institute Travel Grant (\$400)** 2009
- Columbia E3B Departmental Grant (\$2000)** 2009
- Research Internships in Science and Engineering (RISE); (\$3000, Declined)** 2009
- Compton Foundation Mentor Fellowship (\$36,000)** 2007-2008
- Becky Colvin Fund, Undergraduate Thesis Research (\$2,500)** 2006
- Princeton Environmental Institute grant (\$500)** 2006

AWARDS AND HONORS

- Voted Best TA**, Columbia University Spring 2011
- Voted one of the best TAs on campus by students
(<http://spectrum.columbiaspectator.com/chalkboard/talented-tas-jon-lawhead-and-meha-jain>)
- Best Designed Presentation**, Columbia University E3B Seminar Spring 2010
- Documentary film on burrowing owls voted best designed presentation by departmental students
- Best Implications Presentation**, Columbia University E3B Seminar Spring 2009
- Research on community-managed forests in India voted research with best implications by departmental students

TEACHING AND ADVISING EXPERIENCE

- Teaching Assistant**, Columbia University 2009-2011
- Environmental Biology II (Introductory Biology for Undergraduates), Spring 2011
 - Sustainable Development (Undergraduate), Fall 2010
 - Environmental Biology I (Introductory Biology for Undergraduates), Fall 2009
- Graduate Student Advisory Council and Ecology Student Rep.**, Columbia University 2008- Present
- Serve as a graduate student voice for the Ecology Departmental faculty (2009), the University's administration (2008-2009), and the departmental graduate students (2008-Present).
- American Museum of Natural History (AMNH)**, New York, NY 2008 - Present
- Work with children to explore ecological and evolutionary exhibits to help develop scientific thinking
- Guest Lecturer**, Undergraduate Conservation Biology, Columbia University Spring 2010, 2011
- Gave lecture on relationships between humans and the environment
- Earth Institute Student Advisory Council**, Columbia University 2008 - 2009
- Helped plan and coordinate student and academic activities of Columbia's Earth Institute, including panels, seminars, exhibits, and media screenings
- Biology Tutor**, Princeton University 2006 - 2007
- Tutored university students in introductory biology

COMMUNITY SERVICE

- Best Buddies, Service Committee Co-Chair**, Princeton, NJ and New York, NY 2003 - Present
- Instill self-reliance in local community members with intellectual disabilities through one-on-one partnerships and group events.
 - President of Princeton chapter and Service Committee Co-Chair of Friends of Best Buddies in NYC
- Independent Documentary Film Maker**, Richland, WA 2007 – 2010
- Produced, wrote and narrated a film depicting the decline of the western burrowing owl in the Pacific Northwest. Film will be used by Fish and Wildlife Service and Audubon Society as educational tool.
- Fish and Wildlife Service**, Richland, WA Summers 2006 - 2008
- Field assistant; aided in bird mist-netting, building infrastructure to prevent erosion, inventoried invasive species, and reintroduced native oak trees into degraded ecosystems in Southeastern, WA.
- Student Environmental Communications Network**, Princeton University 2006 - 2007
- Producer, writer, and narrator for student-led radio show expressing views on current environmental problems. Aired on AirAmerica (select shows found at www.shannaweber.com under podcasts)

PROFESSIONAL SERVICE

- **Reviewer:** Human Ecology
- **Member:** Sigma-Xi Society, Ecological Society of America (ESA)

PRESENTATIONS

- **2011 ICARUS Adaptation Conference**, University of Michigan – ‘Agricultural Adaptation to Climate Variability: Farmers’ Responses to a Variable Monsoon.’ Presentation.
- **2011 Princeton-Penn-Rutgers-Columbia Conference**, Princeton University – ‘Agricultural Adaptation to Climate Variability: Farmers’ Responses to a Variable Monsoon.’ Speed Talk.
- **2011 E3B Departmental Seminar**, Columbia University – ‘Agricultural Adaptation to Climate Variability: Farmers’ Responses to a Variable Monsoon.’ Presentation.
- **2010 Student Conference on Conservation Science**, AMNH, NYC – ‘Agricultural Adaptation to Climate Variability: Farmers’ Responses to a Variable Monsoon.’ Presentation.
- **2010 Student Conference on Conservation Science**, Bangalore, India – ‘Forest Conservation and Ecosystem Services in Community-Managed Forests in India.’ Poster.
- **2010 E3B Departmental Seminar**, Columbia University – ‘Burrowing Owls in the Pacific Northwest.’ Documentary Film Presentation.
- **2009 Earth Institute Conference**, Columbia University – ‘Forest Conservation and Ecosystem Services in Community-Managed Forests in India.’ Speed Talk and Poster.
- **2009 E3B Departmental Seminar**, Columbia University – ‘Forest Conservation and Ecosystem Services in Community-Managed Forests in India.’ Presentation.

PEER-REVIEWED PUBLICATIONS

- **Jain, M.***, C.B. Yackulic*, M. Fagan*, A. Jina, Y. Lim, M. Marlier, R. Muscarella, P. Adame, R.S. DeFries, M. Uriarte. 2011. ‘Biophysical and Socioeconomic Factors Associated with Forest Transitions at Multiple Spatial and Temporal Scales. *Ecology and Society*. 16(3): 15.
- Odadi, W., **M. Jain**, S. Van Wieren, H.T. Prins, and D.I. Rubenstein. 2011. ‘Facilitation between bovids and equids on an African savanna.’ *Evolutionary Ecology Research*. 13:237-252.
- Flynn, DFP, N. Mirotnick, **M. Jain**, M.I. Palmer, and S. Naeem. 2011. ‘Functional and phylogenetic diversity as predictors of biodiversity-ecosystem-function relationships.’ *Ecology*. 92(8): 1573-1581.
- Forbes, T., V. Goss, **M. Jain**, and P.C. Burns. 2007. ‘Structure Determination and Infrared Spectroscopy of $K(UO_2)(SO_4)(OH)(H_2O)$ and $K(UO_2)(SO_4)(OH)$.’ *Inorganic Chemistry*. 26(18):7163-7168

* first authorship was shared equally by the starred authors.

ARTICLES AND REPORTS

- **M. Jain** (2010). ‘Conservation wisdom of a pastoral community in the Aravalli Hills, Rajasthan, India.’ *People in Conservation*. Kalpavriksh. 3 (1).
- **M. Jain** (2007). ‘Measuring the Effects of Cattle on Land and Wildlife in Laikipia, Kenya’ Undergraduate Thesis. Princeton University.