

Curriculum Vitae

Ruth S. DeFries

Ecology, Evolution, and Environmental Biology
Columbia University
New York, NY 10027
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Current Appointment

Denning Family Professor of Sustainable Development, Columbia University (2008-2016)
(designated Denning Family University Professor in 2016)
Chair, Earth Institute faculty, Columbia University (2018-present)
Co-director, undergraduate program in Sustainable Development, Earth Institute (2010-present)

Research Interests

Role of tropical landscapes in climate adaptation and mitigation, conservation, food security, and human livelihoods;
Ecosystem services from tropical agriculture and forests;
Characterization of deforestation and anthropogenic land use change with remote sensing;
Application of science to policy for sustainable development.

Education

Ph.D. (1980)
Department of Geography and Environmental Engineering
Johns Hopkins University, Baltimore, MD

B.A., *summa cum laude* (1976)
Washington University, St. Louis, MO (major in earth science)

Fellowships and Honors

MacArthur Fellowship (2007)
Member, National Academy of Sciences (elected 2006)
University Professor (highest faculty rank), Columbia University (2016)
Fellow, Ecological Society of America (elected 2012)
Distinguished Scholar Award, American Association of Geographers (2015)
Honorary Doctorate, McGill University (2016)
Honorary Doctorate, University of Leuven Belgium (2017)
Oosting Lecture, Duke University (2016)
Breakthrough Paradigm Award (2014)
Web of Science, Highly Cited Researcher, 2016, 2017 (environment/ecology) and 2018 (cross field)
Fellow, California Academy of Sciences (elected 2017)
Fellow, American Academy of Arts and Sciences (elected 2010)
Fellow, American Geophysical Union (elected 2009)
Fellow, American Association for the Advancement of Science (elected 2008)
Fellow, Aldo Leopold Leadership Program of the Ecological Society of America (2001)
Fulbright Award for Research in India (2007)
Phi Beta Kappa

Previous Appointments

Chair, Department of Ecology, Evolution and Environmental Biology (2011-2014)

Associate Professor and Professor (Aug 1999 - 2008)
University of Maryland, College Park

Joint appointment in Department of Geography (50%) and Earth System Science Interdisciplinary Center (50%)

Associate Research Scientist (Aug 1991 - Aug 1999; 1991-97 60%; 97-99 80%)
Department of Geography, University of Maryland, College Park

Visiting scientist (June - Aug 1998)
Carnegie Institution of Washington, Department of Plant Biology, Palo Alto, CA

Senior Project Officer (June 1983 - Aug 1991)
National Research Council, Washington, D.C.

Research Associate (Feb 1981 - March 1983)
Environmental Science and Engineering Group
Indian Institute of Technology, Bombay, India

Hydrologist (Oct 1979 - Oct 1980)
United States Geological Survey, Baltimore, MD

Journal Articles (*=first author is student or postdoc supervised by DeFries)

- Marlier, M., T. Liu, K. Yu, J. Buonocore, S. Koplitz, R. DeFries, L. Mickley, D. Jacob, J. Schwartz, B. Wardhana, and S. Myers. 2019. "Fires, smoke exposure, and public health: An integrative framework to maximize health benefits from peatland restoration." *GeoHealth* 3: 1-12.
- *Davis, K., A. Chhatre, N. Rao, D. Singh, and R. DeFries. 2019. Sensitivity of grain yields to historical climate variability in India. *Environmental Research Letters* 14:064013.
- *Neelakantan, A., R. DeFries, and K. Ramesh. 2019. "Resettlement and landscape-level conservation: Corridors, human-wildlife conflict and forest use in central India." *Biological Conservation* 232:142-151.
- Anderson, C., DeFries, R., Litterman, R., Matson, P.A., Nepstad, D., Pacala, S.W., Schlesinger, W., Shaw, R., Smith, P., Weber, C., Field, C. in press. Maximize natural climate solutions - and decarbonize the economy. *Science* 363 (6430): 933-934.
- Smith, M., DeFries, R., Chhatre, A., Ghosh-Jerath, S., Myers, S. 40 (1):26-40. Inadequate zinc intake in India: Past, present, and future. *Food and Nutrition Bulletin*.
- Liu, T., M. Marlier, A. Karambelas, M. Jain, S. Singh, M. Singh, R. Gautum, and R. DeFries. 2019. Missing emissions from post-monsoon agricultural fires in northwestern India: regional limitation of MODIS burned area and active fire products. *Environmental Research Communications* 1 (01 1007).
- Cutsworth, D., Mickley, L., Sulprizio, M., Liu, T., Marlier, M., DeFries, R., Guttikunda, S., Gupta, P. 2018. Quantifying the influence of agricultural fires in northwest India on urban air pollution in Delhi, India. *Environmental Research Letters* 13.
- *Davis, K., Chiarelli, D., Chhatre, A., Richter, B., Singh, D., DeFries, R. 2018. Alternative cereals can improve water use and nutrient supply in India. *Science Advances* 4, 1-11.
- DeFries, R., Chhatre, A., Davis, K., Dutta, A., Fanzo, J., Ghosh-Jerath, S., Myers, S., Smith, M. 2018. Impact of historical changes in coarse cereals consumption in India on micronutrient intake and anemia prevalence. *Food and Nutrition Bulletin* 39, 377-392.
- Dutta, T., Sharma, S., DeFries, R. 2018. Targeting restoration sites to improve connectivity in a tiger conservation landscape in India. *PeerJ*:e5587 DOI 10.7717/peerj.5587.
- *Karambelas, A., Holloway, T., Kinney, P., Fiore, A., DeFries, R., Kiesweter, G., Chris, H. 2018. Urban vs rural health impacts attributable to PM2.5 and O3 in northern India. *Environmental Research Letters* 13, 064010.
- Rao, N., Min, J., DeFries, R., Ghosh-Jerath, S., Valin, H., Fanzo, J. 2018. Healthy, affordable and climate-friendly diets in India. *Global Environmental Change* 49, 154-165.
- *Velho, N., DeFries, R., Tolonen, A., Srinivasan, U., Patil, A. 2018. Aligning conservation efforts with resource use around protected areas. *Ambio*, 1-12.
- *Chang, X., DeFries, R., Liu, L., Davis, K. 2018. Understanding dietary and staple food transitions in China from multiple scales. *PLoS One*.

- *Liu, T., Marlier, M., DeFries, R., Westervelt, D., Xia, K., Fiore, A., Mickley, L., Cusworth, D., Milly, G. 2018. Seasonal impact of regional outdoor biomass burning on air pollution in three Indian cities: Delhi, Bengaluru and Pune. *Atmospheric Environment* 172, 83-92.
- Wood, S., Smith, M., Fanzo, J., Remans, R., DeFries, R. 2018. Trade and the equitability of global food nutrient distribution. *Nature Sustainability* 1, 34-37.
- DeFries, R. and H. Nagendra. 2017. Ecosystem management as a wicked problem. *Science*, 356, 265-270.
- *Schwartz, N., M. Uriarte, R. DeFries, K. Bedka, K. Fernandes, V. Gutierrez-Velez and M. Pinedo-Vasquez. 2017. Fragmentation increases wind disturbance impacts on forest structure and carbon stocks in a western Amazonian landscape. *Ecological Applications*, 1-15.
- *Schwartz, N., M. Uriarte, R. DeFries, V. Gutierrez-Velez and M. Pinedo-Vasquez. 2017. Land-use dynamics influence estimates of carbon sequestration potential in tropical second-growth forest. *Environmental Research Letters*, 12, 074023.
- Andela, N., D. Morton, L. Giglio, Y. Chen, G. Van der Werf, P. Kasabhatla, R. DeFries, G. J. Collatz, S. Hantson, S. Kloster, D. Bachelet, M. Forrest, G. Lasslop, F. Li, S. Mangeon, J. Melton, C. Yue and J. Randerson. 2017. A human-driven decline in global burned area. *Science*, 356, 1356-1362.
- *Agarwala, M., S. Ghoshal, L. Verchot, C. Martius, R. Ahuja & R. DeFries. 2017. Impact of biogas interventions on forest biomass and regeneration in southern India. *Global Ecology and Conservation*, 11, 213-223.
- DeFries, R., J. Fanzo, P. Mondal, R. Remans & S. Wood. 2017. Is voluntary certification of tropical agricultural commodities achieving sustainability goals?: A review of the evidence. *Environmental Research Letters* 12, 033001.
- DeFries, R., Mondal, P., Singh, D., Agrawal, I., Fanzo, J., Remans, R., Wood, S. 2017. Synergies and trade-offs for sustainable agriculture: Nutritional Yields and Climate-Resilience for cereal crops in central India. *Global Food Security*.
- *Cattau, M., Marlier, M., DeFries, R. 2016. Effectiveness of Roundtable on Sustainable Palm Oil (RSPO) for reducing fires on oil palm concession in Indonesia from 2012 to 2015. *Environmental Research Letters* 11, 105007.
- *Agarwala, M., DeFries, R., Qureshi, Q., Jhala, Y. 2016. Factors associated with long-term species composition in dry tropical forests of Central India. *Environmental Research Letters* 11, 105008.
- Koplitz, S., Mickley, L., Marlier, M., Buoncare, J., Kim, P., Liu, T., Sulprizo, M., DeFries, R., Jacob, D., Schwartz, J., Pongsiri, M., Myers, S. 2016. Public health impacts of the severe haze in Equatorial Asia in September-October 2015: Demonstration of a new framework for informing fire management strategies to reduce downwind smoke exposure. *Environmental Research Letters* 11, 094023. (selected as editor's choice for 2016)
- Meiyappan, P., Roy, P.S., Sharma, Y., Ramachandran, R., Joshi, P.K., DeFries, R., Jain, A.K. 2016. Dynamics and determinants of land change in India: Integrating satellite data with village socioeconomics. *Regional Environmental Change*, 1-14.
- *Agarwala, M., DeFries, R., Qureshi, Q., Jhala, Y. 2016. Changes in dry tropical forests in Central India with human use. *Regional Environmental Change* 16.
- *Cattau, M., Harrison, M., Shinyo, I., Tungau, S., Uriarte, M., DeFries, R. 2016. Sources of anthropogenic fire ignitions on the peat-swamp landscape in Kalimantan, Indonesia. *Global Environmental Change* 39, 205-219..
- *Clark, B., DeFries, R., Krishnaswamy, J. 2016. Intra-annual dynamics of water stress in the Central Indian Highlands from 2002-2012. *Regional Environmental Change* 16.
- DeFries, R., Sharma, S., Dutta, T. 2016. A landscape approach to conservation and development in the Central Indian Highlands: Introduction to the Special Issue. *Regional Environmental Change* 16.
- Mondal, P., Jain, M., Zukowski, M., Galford, G., DeFries, R. 2016. Quantifying fluctuations in winter cropped area in the Central Indian Highland landscape. *Regional Environmental Change* 16.
- *Fagan, M., R. DeFries, S. Sessie, J. Arroyo, and R. Chazdon. 2016. Targeted reforestation could combat declines in connectivity for understory birds in a tropical habitat corridor. *Ecological Applications* 26: 1456-1474.
- Marlier, M., Jina, A., Kinney, P., & DeFries, R. 2016. Extreme air pollution in global megacities. *Current Climate Change Reports* 2(15).
- *Dutta, T., S. Sharma, P. S. Roy, B. McRae, and R. DeFries. 2015. Connecting the dots: Connectivity mapping for tiger in central India. *Regional Environmental Change* 16.
- Anderman, T., R. DeFries, S. Wood, R. Remans, R. Ahuja, and S. Ulla. 2015. Biogas cook stoves for healthy and sustainable diets? A case study in Southern India. *Frontiers in Nutrition - Nutrition and Environmental Sustainability* 2:28.

- DeFries, R., J. Fanzo, R. Remans, C. Palm, S. Wood, and T. Anderman. 2015. Metrics for land-scarce agriculture: Nutrient content must be better integrated into planning. *Science* **349**:238-240.
- *Marlier, M., R. DeFries, P. Kim, S. Koplitz, J. Daniel, L. Mickley, and S. Myers. 2015. Fire emissions and regional air quality impacts from fires in oil palm, timber, and logging concessions in Indonesia. *Environmental Research Letters* **10**.
- *Marlier, M., R. DeFries, P. Kim, D. Gaveau, S. Koplitz, D. Jacob, L. Mickley, B. Margono, and M. S. 2015. Regional air quality impacts of future fire emissions in Sumatra and Kalimantan. *Environmental Research Letters* **10**(5).
- *Fagan, M., R. DeFries, S. Sesnie, J. Arroyo-Mora, C. Soto, A. Singh, P. Townsend, and R. Chazdon. 2015. Mapping species composition of forests and tree plantations in northeastern Costa Rica with an integration of hyperspectral and multitemporal Landsat imagery. *Remote Sensing* **7**:5660-5696.
- *Jain, M., S. Naeem, B. Orlove, V. Modi, and R. DeFries. 2015. Understanding the causes and consequences of differential decision-making in adaptation research: adapting to a delayed monsoon onset in Gujarat, India. *Global Environmental Change* **31**:98-109.
- *Mondal, P., Jain, M., DeFries, R., Galford, G., and Small, C. 2015. Sensitivity of crop cover to climate variability: Insights from two Indian agro-ecoregions. *Journal of Environmental Management* **148**:21-30.
- Kim, P., D. Jacob, L. Mickley, S. Koplitz, M. Marlier, R. DeFries, S. Myers, B. Chew, and Y. Mao. 2015. Sensitivity of population smoke exposure to fire locations in Equatorial Asia. *Atmospheric Environment* **102**:11-17.
- *Marlier, M., R. DeFries, D. Pennington, E. Nelson, E. Ordway, J. Lewis, S. Koplitz, and L. Mickley. 2015. Future fire emissions associated with projected land use change in Sumatra. *Global Change Biology* **21**:345-362.
- *Schwartz, N., Uriarte, M., Gutierrez, V., Baethgen, W., DeFries, R., Fernandes, K., Pinedo-Vasquez, M. 2015. Climate, landowner residency, and land cover predict local scale fire activity in the Western Amazon. *Global Environmental Change*:144-153.
- Remans, R., S. Wood, N. Saha, T. Anderman, and R. DeFries. 2014. Measuring nutritional diversity of national food supplies. *Global Food Security* **3**:174-182.
- *Anderman, T., R. Remans, S. Wood, K. DeRosa, and R. DeFries. 2014. Synergies and tradeoffs between cash crop production and food security: a case study in rural Ghana. *Food Security: The Science, Sociology and Economics of Food Production and Access to Food* **6**:541-554.
- Gaveau, D., M. Salim, K. Hergoualc'h, B. Locatelli, S. Sloan, M. Wooster, M. Marlier, E. Molidena, H. Yaem, R. DeFries, R. Nasi, L. Verchot, D. Murdiyarso, P. Holmgren, and S. D. 2014. An extreme fire event: haze and greenhouse gas emissions from Sumatra, Indonesia, during 2013 a non El Nino year. *Scientific Reports* **4**:1-7.
- *Mondal, P., M. Jain, A. W. Robertson, G. Galford, C. Small, and R. DeFries. 2014. Winter crop sensitivity to inter-annual climate variability in central India. *Climatic Change* **126**:61-76.
- *Gutierrez-Velez, V., M. Uriarte, R. DeFries, M. Pinedo-Vasquez, K. Fernandes, P. Ceccato, W. Baethgen, and C. Padoch. 2014. Land cover change interacts with drought severity to change fire regimes in Western Amazonia. *Ecological Applications* **24**:1323-1340.
- *Wood, S., A. Jina, M. Jain, P. Kristjanson, and R. DeFries. 2014. Smallholder farmer cropping decisions related to climate variability across multiple regions. *Global Environmental Change* **25**:163-172.
- Meyfroidt, P., K. Carlson, M. Fagan, V. Gutierrez-Velez, M. Macedo, L. M. Curran, R. DeFries, G. Dyer, H. Gibbs, E. Lambin, D. Morton, and V. Robiglio. 2014. Multiple pathways of commodity crop expansion in tropical forest landscapes. *Environmental Research Letters* **9**:074012.
- DeFries, R., M. Herold, L. Verchot, M. Macedo, and Y. Shimabukuro. 2013. Export-oriented deforestation in Mato Grosso: Harbinger or exception for other tropical forests? *Philosophical Transactions of the Royal Society B* **368**.
- *Gutierrez-Velez, V. and R. DeFries. 2013. Annual multi-resolution detection of land cover conversion to oil palm in the Peruvian Amazon. *Remote Sensing of Environment* **129**:154-167.
- *Jain, M., P. Mondal, R. DeFries, C. Small, and G. Galford. 2013. Mapping cropping intensity of smallholder farms: a comparison of methods using multiple sensors. *Remote Sensing of Environment* **134**:210-223.
- Liu, J., V. Hull, M. Batistella, R. DeFries, T. Dietz, F. Fu, T. Hertel, R. Izaurralde, E. Lambin, S. Li, L. Martinelli, W. McConnell, E. F. Moran, R. Naylor, Z. Ouyang, K. Polenske, A. Reenburg, G. Rocha, C. Simmons, P. Verburg, P. M. Vitousek, F. Zhang, and C. Zhu. 2013. Framing sustainability in a telecoupled world. *Ecology and Society* **18**:26.
- *Marlier, M., R. DeFries, A. Voulgarakos, P. Kinney, J. Randerson, D. Shindell, Y. Chen, and G. Faluvegi. 2013. El Nino and health risks from landscape fire emissions in Southeast Asia. *Nature Climate Change* **3**:131-136.

- Yang, J., D. Morton, Y. Jin, G. J. Collatz, P. Kasibhatla, G. van der Werf, R. DeFries, and J. Randerson. 2013. Long-term trends and interannual variability of forest, savanna, and agricultural fires in South American fires. *Carbon Management* 4:617-638.
- Brando, P., M. Coe, R. DeFries, and A. Azevedo. 2013. Ecology, economy and management of an agro-industrial frontier landscape in the southeast Amazon. *Philosophical Transactions of the Royal Society B* 368.
- Macedo, M., M. Coe, R. DeFries, M. Uriarte, P. Brando, C. Neill, and W. Walker. 2013. Land use-driven stream warming in southeastern Amazonia. *Philosophical Transactions of the Royal Society B* 368:20120153.
- Morton, D., Y. Le Page, R. DeFries, G. J. Collatz, and G. C. Hurtt. 2013. Understory fire frequency and the fate of burned forests in southern Amazonia. *Philosophical Transactions of the Royal Society B* 368:20120163.
- *Fagan, M., R. DeFries, S. Sesnie, J. Arroyo, W. Walker, C. Soto, R. Chazdon, and A. Sanchun. 2013. Land cover dynamics following a deforestation ban in northern Costa Rica. *Environmental Research Letters* 8:034017.
- Karant, K., L. Naughton-Treves, R. DeFries, and A. Gopalaswamy. 2013. Living with wildlife and mitigating conflicts around three protected areas. *Environmental Management* 52:1320-1332.
- Karant, K., A. Gopalaswamy, R. DeFries, and N. Ballal. 2012. Assessing patterns of human-wildlife conflicts and compensation around a Central Indian protected area. *PLoS One* 7:e50433.
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- Karant, K., R. DeFries, A. Srivathsa, and V. Sankaraman. 2012. Wildlife tourists in India's emerging economy: Potential for a conservation constituency? *Oryx* 46:382-390.
- DeFries, R., E. C. Ellis, F. S. I. Chapin, P. A. Matson, B. L. Turner II, A. Agrawal, P. J. Crutzen, C. Field, P. Gleick, P. Kareiva, E. Lambin, D. Liverman, E. Ostrom, P. Sanchez, and J. Syvitski. 2012. Planetary opportunities: A social contract for global change science to contribute to a sustainable future. *BioScience* 62:603-606.
- *Macedo, M., R. DeFries, D. Morton, C. Stickler, G. Galford, and Y. Shimabukuro. 2012. Decoupling of deforestation and soy production in the southern Amazon during the late 2000s. *Proceedings of the National Academy of Sciences* 109:1841-1846.
- Uriarte, M., M. Pinedo-Vasquez, R. DeFries, K. Fernandes, V. Gutierrez-Velez, W. Baethgen, and C. Padoch. 2012. Depopulation of rural landscapes exacerbates fire activity in Western Amazon. *Proceedings of the National Academy of Sciences* 109:21546-21550.
- Carpenter, S. R., et al. (DeFries one of ten authors). 2012. Program on ecosystem change and society: an international research strategy for integrated social-ecological systems, *Current Opinion in Environmental Sustainability*, 4(1-5).
- Davidson, E., et al. (DeFries one of 14 authors), 2012, The Amazon basin in transition, *Nature*, 481, 321-328.
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- Hansen, A., C. Davis, N. Pikielek, J. Gross, D. Theobald, S. Goetz, F. Melton, and R. DeFries. 2011. Delineating the ecosystems containing protected areas for monitoring and management. *BioScience* 61:363-373.
- *Karant, K. and DeFries, R. 2011. Nature-based tourism in Indian protected areas: New challenges for park management. *Conservation Letters* 4:137-149.
- Morton, D., R. DeFries, J. Nagol, C. Souza, E. Kasischke, G. C. Hurtt, and R. Dubayah. 2011. Mapping canopy damage from understory fires in Amazon forests using annual time series of Landsat and MODIS data. *Remote Sensing of Environment* 115:1706-1720.

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- *Karanth, K. and DeFries, R., 2010. Conservation and management in human-dominated landscapes: Case studies from India. *Biological Conservation* **143**(12): 2865-2869.
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Science-Policy Interface/Advisory Committees/Working Groups (selected)

- Board Member, Science for Nature and People Program (SNAPP), The Nature Conservancy and Wildlife Conservation Society, 2015-present
- Advisory Board Member, Planetary Health Alliance, 2016-present
- Member, National Geographic Society Committee for Research and Exploration, 2018-present
- Member, Science and Technology Advisory Committee, International Monetary Fund
- Board of Trustees, Environmental Defense Fund, 2010-present
- Board of Trustees, U.S. World Wildlife Fund, 2016-present
- Editorial Board, *Proceedings of the National Academy of Sciences*, 2007-present
- Editorial Board, *Environmental Research Letters*, 2017-present
- Editorial Board, *World Development Perspectives*, 2018-present
- Member, Technical Committee, High Carbon Stock Study for Sustainable Palm Oil Manifesto, 2014 – 2015
- Member, Scientific Steering Committee, Our Common Future Under Climate Change, 2015-2015
- Lead author, Intergovernmental Panel on Climate Change, Fifth Assessment, 2010 – 2014
- Member, National Research Council, Board on Environmental Change and Society, 2011-present
- Member, Scientific Committee for Ecosystem Change and Society (PECS), International Council for Science, 2008-2018
- Member, National Science Foundation Advisory Board for Social, Behavioral and Economic Sciences, 2013-2018
- Member, National Research Council, Committee on the Assessment of NASA's Earth Science program, 2010-2012
- Chair, Ecosystems, Land Use, and Biodiversity Panel of Decadal Survey for the Earth Sciences, National Research Council, 2005-2007
- Vice-chair, National Research Council, Committee on Earth Studies, Space Sciences Board, 2008-2011.
- Member, America's Climate Choices: Science Panel, National Research Council, 2008-2010
- Member, Terrestrial Carbon Group, 2007-2011
- Executive Editor, *Environment* magazine, 2006-2011
- Editorial Board, *Regional Environmental Change*, journal published by Springer-Verlag, 2003 – 2011.
- Coordinating Lead Author, Millennium Ecosystem Assessment, 2001-2005
- Member, Global Observations of Forest Cover, Forest/Land Cover Implementation Team, 2001-2015

Ph.D. Students

Awarded:

- B. Clark (co-advised with C. Palm), "Crops, canopies, and waiting for rain: Water for small-plot agriculture in the tropics" (awarded 2019)
- A. Neelakantan, "Moving people for tigers: Resettlement, food security and landscape-level conservation in Central India" (awarded 2018)
- N. Schwartz (co-advised with M. Uriarte), "Earth, Wind, and Fire: Interactions between Land Use and Natural Disturbance in a Dynamic Amazonian Landscape" (awarded 2017)
- M. Agarwala, "Forest Degradation and Governance in Central India: Evidence from Ecology, Remote Sensing and Political Ecology Forest Degradation in Tropical Deciduous Forests" (awarded 2014)
- M. Cattau, "Tropical Peat swamp Forest Loss in Indonesia: Linking Landscape Connectivity, Seed Dispersal, and Carbon Storage" (awarded 2016)
- M. Jain (co-advised with S. Naeem), "Adaptation to Climate Variability in Social Agro-ecological Systems" (awarded 2014)
- M. Fagan, "The Changing Matrix: Reforestation and Connectivity in a Tropical Habitat Corridor" (awarded 2014)

- M. Marlier (co-advised with K. Griffin), “Contributions of Biomass Burning to Air Quality Degradation” (awarded 2013)
- V. Gutierrez-Velez, “Oil Palm Expansion and Land Cover Changes in the Peruvian Amazon: Implications for Forest Conservation and Fire Management” (awarded 2013)
- M. Macedo, “Tropical Deforestation and the Land-Water Interface” (awarded 2011)
- K. Wurster, “Using MISR to Assess the Impact of Charcoal Production on Forest Regeneration Rates in Southeastern Senegal” (awarded 2010)
- S. Zeigler, “Incorporating Landscape in Population Viability Analysis: Improving Generic Modeling Platforms for Endangered Species Conservation” (awarded 2010)
- D. Morton, “Savannization of a Tropical Forest Frontier: Carbon Consequences of Climate and Anthropogenic Fire from a Height-Structured Ecosystem Model” (awarded 2008)
- J. Dempewolf, “Fire Dynamics and Woody Cover Changes in the Serengeti-Mara Ecosystem 2000 to 2005: A Remote Sensing Approach” (awarded 2007)
- L. Anderson (co-advised), “Analyzing the Impact of Participatory-Developed Conservation Policies in the Negril Environmental Protection Area, Western Jamaica” (awarded 2007)
- M. Songer, “Dynamics of Non-Timber Forest Product Extraction in a Protected Tropical Dry Forest Area in Southeast Asia” (awarded 2006)

Current:

S. Khanwilker
P. Choksi
V. Ramesh
J. Schoen