

RFF Welcomes New Fellow, Announces Postdoctoral Researcher Program, and Remembers Henry Diamond

Awards and Appointments

RFF President **Phil Sharp** was honored with the James R. Schlesinger Medal for Energy Security, awarded at a ceremony at the Department of Energy in Washington on January 20, 2016. The medal honors distinguished contributions to advancing understanding of the threats, opportunities, and energy policy choices impacting the domestic and international energy security interests of the United States through analysis, policy, or practice.

RFF University Fellow **Simon Levin** of Princeton University is one of the latest recipients of the National Medal of Science. The National Medal of Science is one of the nation's highest honors for achievement and leadership and is awarded annually to individuals who have made outstanding contributions to science and engineering.

Sir Partha Dasgupta, Frank Ramsey Professor Emeritus of Economics at the University of Cambridge and an RFF university fellow, has been awarded the 43rd Tyler Prize for Environmental Achievement. Dasgupta was honored for his lifetime of work illuminating connections among poverty, sustainable development, and environmental health, and for developing economic theory and tools to measure the relationships between human and environmental well-being.

RFF Fellow **Kailin Kroetz** won the first 2014 Outstanding Doctoral Dissertation

Award from the Association of Environmental and Resource Economists for her research on the costs of restrictions in tradable permit programs.

RFF Fellow **Casey Wichman** received the 2015 Dr. and Mrs. Bill V. Lessley Dissertation Excellence Award at the University of Maryland for his doctoral work, "Information and Environmental Policy." This award is given annually to the student who wrote the best dissertation in agricultural and resource economics in the preceding year.

Phil Sharp and Board Member **John Deutch** have been appointed to the Secretary of Energy Advisory Board Task Force on the Future of Nuclear Power.

RFF Vice President for Research and Senior Fellow **Molly Macauley** has been approved as a member of the National Academies' Decadal Survey Steering Committee for Earth Science and Applications from Space, under the Academies' Space Studies Board.

RFF University Fellow **Jesse Ausubel** of The Rockefeller University was awarded an honorary fellowship by the American Geographical Society during its Fall Symposium, "Geography 2050: Exploring Our Future in an Urbanized World," held at Columbia University.

Allen Blackman, RFF senior fellow and RFF Environment for Development Program director, accepted invitations to become a member of AidData Research Consortium and serve on the advisory board

for the Northeastern Agricultural and Resource Economics Association's 2017 workshop, "Climate Change Impacts and Land Conservation."

RFF Welcomes New Fellow

RFF has named its newest fellow, **Daniel**



M. Sullivan.

Sullivan is a PhD student in Harvard University's economics department. He will join RFF this summer.

RFF Vice President for Research and Senior Fellow Molly Macauley said, "Daniel Sullivan's academic training includes environmental, labor, health, and urban economics. He also has terrific programming skills and familiarity with 'big data.' These are all skills necessary to successfully address emerging public policy challenges in several vital areas. We look forward to having him on our team."

Sullivan is a native of Gilbert, Arizona. He earned his BS in mathematics and economics in 2010 from Brigham Young University, where he graduated magna cum laude. His graduate work has taken place from 2011 to the present at Harvard.

RFF Postdoctoral Researcher Program

RFF welcomes postdoctoral researchers Christy Zhou, Andrew Royal, Nina Kelsey, and Yunguang Chen to this new program, supported by RFF and the Alfred P. Sloan Foundation.

Christy Zhou will join RFF to work with RFF Fellow Benjamin Leard and Senior Fellow Joshua Linn on transportation economics. She is completing a PhD at the University of Maryland, College Park.

Andrew Royal will work with RFF Research Director and Senior Fellow

Margaret Walls and Fellow Carolyn Kousky on repeated extreme events in coastal areas, using his expertise in behavioral economics. He is finishing a PhD at Claremont Graduate University.

Nina Kelsey is working with RFF Darius Gaskins Senior Fellow Dallas Burtraw remotely from California. She graduated from the University of California, Berkeley, with a PhD in political science and works at the University of California's Center for Information Technology Research in the Interest of Society, the Berkeley Roundtable on the International Economy, and Berkeley's Institute of Governmental Studies.

Yunguang (YG) Chen is working on modeling a carbon tax with RFF Fellow Marc Hafstead and Senior Fellow and Director of Academic Programs Roberton C. Williams III. He holds a PhD in economics from Oregon State University and previously was at the Center for the Blue Economy at Middlebury Institute of International Studies at Monterey.

In Memory of Henry Diamond

Henry Diamond, a champion for outdoor recreation and conservation movements, passed away on February 21, 2016.

Diamond was a longtime friend to RFF, serving for a time on RFF's Board of Directors and most recently as co-organizer of the bipartisan Outdoor Resources Review Group, which relied on RFF for the empirical research that informed its recommendations. The group's report, *Great Outdoors America*, laid the groundwork for President Obama's America's Great Outdoors Initiative. Diamond was the first commissioner of New York's Department of Environmental Conservation, an advisor to conservationist Laurance Rockefeller, and co-executive director of the White House Conference on Natural Beauty.

Highlights from Recent Journal Articles by RFF Researchers

The Housing Market Impacts of Shale Gas Development

Lucija Anna Muehlenbachs | *American Economic Review* | December 2015 | Vol. 105, No. 12 | 3633–3659

Using data from New York and Pennsylvania and an array of empirical techniques to control for confounding factors, Muehlenbachs estimates property value impacts from shale gas development that vary with geographic scale and water source. Results indicate large negative impacts on nearby groundwater-dependent homes, while piped water-dependent homes are positively impacted by proximity (although by a smaller amount), suggesting an impact of lease payments. At a broader geographic scale, new wellbores can increase property values, but these effects diminish over time. Undrilled permits, conversely, may cause property values to decrease.

Expert Judgement and Uncertainty Quantification for Climate Change

Michael Oppenheimer, Christopher M. Little, and Roger M. Cooke | *Nature Climate Change* | April 2016 | Vol. 6 | 445–451

Expert judgement is an unavoidable element of the process-based numerical models used for climate change projections and the statistical approaches used to characterize uncertainty across model ensembles. This article highlights the need for formalized approaches to unifying numerical modeling with expert judgement in order to facilitate characterization of uncertainty in a reproducible, consistent, and transparent fashion. As an example, the authors use probabilistic inversion, a well-established technique used in many other applications outside of climate change, to fuse two recent analyses of twenty-

first century Antarctic ice loss. They recommend indicators or signposts that characterize successful science-based uncertainty quantification.

Who Will Be Affected by a Congestion Pricing Scheme in Beijing?

Joshua Linn, Zhongmin Wang, and Lunyu Xie | *Transport Policy* | April 2016 | Vol. 47 | 34–40

An examination of the distributional consequences of a congestion pricing scheme currently under consideration in Beijing reveals that only a very small proportion of motorized trips would be subject to the full congestion charge. The directly affected individuals typically have higher household incomes and are wealthier than individuals who are not directly affected by the congestion pricing scheme. This finding reflects the fact that individuals who drive to work in Beijing are relatively wealthy. More important, the authors find that the Suits index for the congestion charge is 0.027, indicating that the congestion charge is slightly progressive.

Dynamics of Pollution Permits

Makoto Hasegawa and Stephen W. Salant | *Annual Review of Resource Economics* | November 2015 | Vol. 7 | 61–79

This article reviews the literature on bankable emissions permits that has developed over the last two decades. Most articles analyze either theoretical or simulation models. The theoretical literature considers the problem of minimizing the discounted sum of social costs and the possibility of decentralizing the solution through competitive permit markets. Simulations permit evaluation of alternative government policies under uncertainty. The authors conclude with directions for future research.