

EMILY L. PAKHTIGIAN

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ACADEMIC EMPLOYMENT

2020– Assistant Professor of Public Policy, Pennsylvania State University
Jeffrey L. and Sharon D. Hyde-McCourtney Career Development Professor

EDUCATION

2020 Ph.D. in Public Policy (Economics Concentration), Duke University
M.A. in Economics, Duke University
Certificate in College Teaching, Duke University

2015 B.A. in Economics with honors, minor in Mathematics, Moravian College
B.A. in Political Science, Moravian College

PROFESSIONAL EXPERIENCE

2021– Affiliate, Energy Access Project, Duke University

2020– Cofunded Faculty, Institutes of Energy and the Environment, Pennsylvania State University
Faculty Associate, Population Research Institute, Pennsylvania State University
Graduate Faculty, Energy, Environment, and Food Economics, Pennsylvania State University

RESEARCH INTERESTS

Environmental Economics ◊ Development Economics ◊ Public Health

PAPERS AND PUBLICATIONS

⁺ *Student co-author*

Peer-Reviewed Journal Articles

2022 ⁺Broyles, L. M. T., **Pakhtigian, E. L.**, Rosinger, A. Y., and Mejia, A. (Forthcoming). Climate and hydrological seasonal effects on household water insecurity: A systematic review. *WIREs Water*.

Komisarow, S. and **Pakhtigian, E. L.** (2022). Are power plant closures a breath of fresh air? Local air pollution and school absences. *Journal of Environmental Economics and Management*, 112, 102569. <https://doi.org/10.1016/j.jeem.2021.102569>

◊ Coverage in [Edutopia](#)

2021 Komisarow, S. and **Pakhtigian, E. L.** (2021). The effect of coal-fired power plant closures on emergency department visits for asthma-related conditions among 0- to 4-year-old children in Chicago, 2009-2017. *American Journal of Public Health*, 111(5). 881-889. <https://doi.org/10.2105/AJPH.2021.306155>

◇ Coverage in U.S. News & World Report, Health Day

Aziz, S., **Pakhtigian, E. L.**, Akanda, A. S., Jutla, A., Huq, A., Alam, M., Ashan, G. U., Colwell, R. R. (2021). Does improved risk information increase the value of cholera prevention? An analysis of stated vaccine demand in slum areas of urban Bangladesh. *Social Science and Medicine*, 272,113716. <https://doi.org/10.1016/j.socscimed.2021.113716>.

2020 **Pakhtigian, E. L.**, Jeuland, M., Dhaubanjari, S., and Pandey, V. P. (2020). Balancing intersectoral demands in basin-scale planning: The case of Nepal’s western river basins. *Water Resources and Economics*, 100152. <https://doi.org/10.1016/j.wre.2019.100152>.

2019 **Pakhtigian, E. L.**, Jeuland, M., Bharati, L., and Pandey, V. P. (2019). The role of hydropower in visions of water resources development for rivers of Western Nepal. *International Journal of Water Resources Development*, 1-28. [10.1080/07900627.2019.1600474](https://doi.org/10.1080/07900627.2019.1600474).

Pakhtigian, E. L. and Jeuland, M. (2019). Valuing environmental quality: Evidence from Western Nepal. *Ecological Economics*, 158, 158-167. [10.1016/j.ecolecon.2018.12.021](https://doi.org/10.1016/j.ecolecon.2018.12.021).

Book Chapters

2018 Pattanayak, S. K., **Pakhtigian, E. L.**, and Litzow, E. L. (2018). Through the looking glass: Environmental health economics in low and middle income countries. *Handbook of Environmental Economics*, 4, 143-191. [10.1016/bs.hesenv.2018.08.004](https://doi.org/10.1016/bs.hesenv.2018.08.004).

Working Papers

“Sustaining latrine use: Peers, policies, and sanitation behaviors” with K. Dickinson, S. K. Pattanayak, and J. Orgill-Meyer (*Revisions resubmitted*)

“Women who do not migrate: Intersectionality, social relations, and participation in Western Nepal” with G. Shrestha and M. Jeuland (*Revisions resubmitted*)

“Lost dividends from incomplete energy access transitions: Evidence from Honduras” with M. Jeuland, S. K. Pattanayak, and J. Phillips (*Under review*)

“Collective action for sanitation: Evidence from experimental games in rural India” with S. K. Pattanayak (*Under review*)

“Sanitation and hygiene during the COVID-19 pandemic in rural India” with H. Downs-Tepper⁺, A. Anson, and S. K. Pattanayak (*Under review*)

“Hydro-economic Modeling Framework to Address Water-Energy-Environment-Food Nexus Questions at the River Basin Scale” with M. Bekchanov, A. Sood, and M. Jeuland [[Working Paper](#)]

Selected Works in Progress

“Where there’s fire, there’s smoke: Forest fire emissions, behavior, and health” [[Draft](#)]

“Early warning systems, mobile technology, and cholera aversion: Evidence from rural Bangladesh” with S. Aziz, A. Akanda, and K. Boyle

“Joint impacts of indoor and outdoor air pollution on health in Indonesia” with S. K. Pattanayak and J-S. Tan Soo

Policy Reports, Blogs, and Other Writing

2021 “Why are the new climate normals abnormal?” *Institutes of Energy and the Environment Blog*. [[Blog](#)]

- “Collective action for environmental health: Evidence from sanitation in rural India” with S.K. Pattanayak. *Ideas for India*. [Blog]
- 2020** “Balancing economic and conservation objectives related to water resources in western Nepal” with M. Jeuland. *Global Water Forum*. [Article]
- “New Data and Technologies are Transforming Energy Access–Public Policy Must Catch Up” with J. Phillips and M. Jeuland. *Next Billion*. [Blog]
- 2019** “The energy access dividend in Haiti and Honduras” with N. C. Marzolf, E. Burton, M. Jeuland, S. K. Pattanayak, J. Phillips, C. E. Singer, H. Taylor, M. C. M. Hallack, J. Cuervo and C. Jacome. *Inter-American Development Bank*. [Report]
- “Chapter 2.1 Status and Trends–Drivers of Change” [Contributing author] in *Intergovernmental Science–Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment Report on Biodiversity and Ecosystem Services*. [Report]

EXTERNAL GRANTS

- 2020-22** Resources for the Future (RFF)
Co-Investigator: “Quantifying benefits of using satellite derived early warning systems to predict cholera in Bangladesh” with S. Aziz (PI), A. Akanda, and K. Boyle (\$100,000)
- 2019-21** International Growth Centre (IGC)
Co-PI: “Opening the black box of information interventions: Evidence from India” with S. K. Pattanayak (£56,800)

INTERNAL GRANTS

- 2021-22** College of Arts and Architecture Sustainability Research Team Grant
Co-Investigator: “Investigating well-being and inequality in the Chesapeake Bay Watershed” with S. Mainzer (PI) (\$5,000)
- 2021-22** Pennsylvania State University Institutes for Energy and Environment Seed Grant
PI: “Assessing distributional effects of coal-fired power plant operations on pollution and health” with W. Peng and H. Wiseman (\$30,000)
- 2021-22** Pennsylvania State University Institutes for Energy and Environment Seed Grant
Co-PI: “Towards sustainable and equitable household water security: Lessons from Bangladesh” with A. Mejia (PI) (\$30,000)
- 2021-22** Pennsylvania State University Institutes for Energy and Environment Seed Grant
Co-PI: “Analyzing the adoption of solar irrigation pumps in India within the food-energy-water nexus: Implications for carbon, groundwater depletion, and agricultural productivity” with D. Brent (PI) and M. Jacobson (\$29,479)
- 2020-21** Pennsylvania State University Population Research Institute
PI: “Quantifying benefits of using satellite derived early warning systems to predict cholera in Bangladesh” (\$2,760)
- 2018-19** Duke University Duke India Institute
PI: “Opening the black box of information interventions: Evidence from India” (\$1,860)

CONFERENCE AND SEMINAR PRESENTATIONS

* *Invited talk*

- 2022** Environmental Politics and Governance Conference (*upcoming*); Advances with Field Experiments Conference (*upcoming*); Association of Environmental and Resource Economists Annual Meeting (*upcoming*); Eastern Economic Association Annual Meeting (*upcoming*); Online Summer Workshop in Environment, Energy, and Transportation (Economics) (OSWEET); Sustainability and Development Conference; Allied Social Science Association Annual Meeting
- 2021** Resources for the Future VALUABLES Community Meeting*; 3rd International Public Management Conference* (*anceled due to COVID-19*); University of British Columbia*; ADBI-BMGF-IFS Workshop on Sanitation and Development; Pennsylvania State School of Public Policy Seminar*; European Association of Environmental and Resource Economists Annual Meeting; Association of Environmental and Resource Economists Annual Meeting; International Growth Centre Webinar on Building State Capacity*; Midwest Energy Fest; Pennsylvania State Water Insights Seminar*; ADBI-Bill & Melinda Gates Foundation Roundtable on Sanitation and Development*; Society for Benefit-Cost Analysis Annual Conference; Allied Social Science Association Annual Meeting
- 2020** 2nd International Public Management Conference*; Pennsylvania State Energy and Environmental Economics and Policy Seminar*; Environment for Development Annual Meeting; Association for Public Policy Analysis and Management Annual Meeting; IZA Workshop on Environment, Health and Labor Markets (*anceled due to COVID-19*); European Association of Environmental and Resource Economists Annual Meeting; Association of Environmental and Resource Economists Annual Meeting; Moravian College InFocus Conference
- 2019** Southern Economic Association Annual Meeting; Association for Public Policy Analysis and Management Annual Meeting; Camp Resources XXVI; Sustainable Energy Transitions Initiative Annual Meeting; Allied Social Science Association Annual Meeting; Digo Jal Bikas Dissemination Workshop
- 2018** World Congress of Environmental and Resource Economists
- 2017** Digo Jal Bikas Trade-off Arena Workshop
- 2015** Eastern Economic Association Annual Meeting

TEACHING EXPERIENCE

Instructor of record

- PPOL506: Statistics for Public Policy 2, Pennsylvania State University (Spring 2022)
- PPOL503: Statistics for Public Policy 1, Pennsylvania State University (Fall 2021)
- PPOL897: Environmental Policy, Pennsylvania State University (Spring 2021)
- PPOL809: Public Policy Analysis, Pennsylvania State University (Fall 2020, Spring 2022)

Short courses and workshops

- Master of Public Policy Math Refresher Course, Duke University (Fall 2018, Fall 2019)
- Advanced Course on Program Evaluation for Natural Resource and Environmental Economists Workshop, SANDEE (Fall 2018)

STUDENTS MENTORED

Masters Students

- Adrian Corbin (Pennsylvania State University MPP '21)
- Samiha Taseen (Pennsylvania State University MPP '22)
- Jeremy Hoffman (Pennsylvania State University MPP '23)

PhD Students

Lauren Broyles (Pennsylvania State University, Civil and Environmental Engineering, Committee Member)

Praharsh Patel (Pennsylvania State University, Energy, Environmental, and Food Economics, Committee Member)

Mingzhou Shen (Pennsylvania State University, Energy, Environmental, and Food Economics, Committee Member)

FELLOWSHIPS, PRIZES, AND AWARDS

2019 Fleishman Ph.D. Fellowship (\$10,600)

2018-19 Duke Graduate School Award for Conference Travel (\$1,125)

2018 Duke Graduate School Preparing Future Faculty Fellow

Duke University Center for International & Global Studies Graduate Awards for Research and Training (\$750)

Duke Graduate School Professional Development Grant (\$400)

2017-18 Duke University Center for International & Global Studies Grant for Graduate Working Groups on Global Issues (\$2,000)

2016-20 Sanford School of Public Policy Small Grants (\$2,700)

2016-19 Duke University Graduate School Summer Research Fellowship (\$22,000)

2011-15 Moravian College Comenius Medallion Scholarship (Full Tuition)

PROFESSIONAL SERVICE

2021– Awards Committee Member, School of Public Policy, Pennsylvania State University

2021– Faculty Representative, Universities Council on Water Resources

2020– Graduate Studies Committee Member, School of Public Policy, Pennsylvania State University

2020– Speakers and Events Committee Member, School of Public Policy, Pennsylvania State University

Journal Reviewer

Environmental Science and Policy; Journal of Health Economics; Journal of Hydrology; PLoS One; Resource and Energy Economics; Utilities Policy; Water Resources and Economics; Water Resources Research; World Development; World Development Perspectives

Conference Submission Reviewer

Association for Public Policy Analysis and Management Annual Meeting (2020, 2021); Sustainable Energy Transitions Initiative Annual Meeting (2019, 2020); UNC Water and Health Conference (2020, 2021)

RELATED SKILLS

Computing

Stata; R; GAMS; ArcGIS; AERMOD; L^AT_EX

Field Work

Bangladesh; India; Nepal