John Perona, PhD, JD

Accomplished author, analyst and public speaker on climate change and renewable energy science and policy. Thorough knowledge of US legal system with specialization in environmental law. Experienced in government communications as a citizen advocate and lobbyist for a healthy climate. Scientific research leader with exhaustive record of extramural funding and publications. Exceptional ability to synthesize and explain technical material to layperson audiences in written and oral forms.

PROFESSIONAL EXPERIENCE

Published writings

- Author of a thorough guide to climate science, policy and advocacy, *From Knowledge to Power: The Comprehensive Handbook for Climate Science and Advocacy* (Ooligan Press, 320 pp, published Nov 30, 2021). Book endorsed by leading climate scientists, advocates and community leaders. Built and maintained book website containing endorsements and comprehensive supplementary material, including a curriculum guide. http://www.fromknowledgetopower.com
- Authored three 20-60 page science/policy analyses on groundwater resource management, the role of biofuels in the renewable energy economy, and government regulation of genetically modified organisms in agriculture. Published each paper in a leading law journal (2015-2017).
- Author/coauthor of over 100 peer-reviewed scientific articles in quantitative biochemistry and its application to environmental problems.
- Author of detailed, thoroughly referenced blogs on contemporary climate and energy topics, including recent US federal laws, climate advocacy, and biofuels.

Advocacy and public speaking

• Liaison to the office of Senator Ron Wyden on behalf of the nonprofit organization Citizens' Climate Lobby. Led lobbying teams and gained expertise in government communications and effective tactics. Advocated for an economy-wide tax on carbon with dividend return to American households. Bipartisan orientation and skilled partner with individuals from across the political spectrum. Led or participated in dozens of meetings with CCL in 2014-2021.

- Advocacy for healthy climate and renewable energy legislation and administrative rulemakings in Oregon. Wrote letters/offered testimony with a climate action team under the auspices of the Oregon League of Conservation Voters. Particular focus on the Oregon Clean Fuels Program and biofuels legislation (2020-2022).
- Led educational presentations for citizen climate lobbyists in the Pacific Northwest, including a monthly public seminar series on climate change and renewable energy in Portland OR (2017-2022). Skilled in leading seminars based on the En-Roads energy policy program.
- Delivered presentations to a variety of professional groups, universities, businesses, nonprofits and social organizations. Seminar topics include carbon sequestration, hydrogen economy, biofuels, roadmaps for the renewable energy transition and strategies to advocate effectively for a healthy climate (2018-2022).
- Participant in the 3-day climate advocacy training course with the Climate Reality Project, led by Vice President Al Gore (2016).

Environmental and energy law

- Legal internship: Environmental Defense Center, Santa Barbara CA. State and federal Public Records Act requests, analysis of scientific/legal materials on offshore oil and gas production, water rights, and land use (2005-2010).
- Earthrise legal clinic, Lewis & Clark University. Internal memoranda and briefs on natural gas pipeline development. Expertise with NEPA, Endangered Species Act, Natural Gas Act, FERC and EPA proceedings (2014-2015).
- CRAG environmental law firm, Portland OR. Preparation of legal materials and advocacy against industry proposals for liquified natural gas (LNG) facilities on the Oregon coast (2015-2016).

Scientific research and teaching

• For 28 years, directed a research group of 3-10 students, lab technicians and postdoctoral scholars to investigate fundamental problems in quantitative biochemistry. Applied this expertise to solve outstanding problems on the metabolism of

methanogens and its implications for methane generation and global warming. Also specialized in the synthetic biology of genetic code expansion and other areas of biotechnology with environmental implications.

- Mentor to about 50 undergraduate and graduate students. Supervised 14 Ph.D. dissertations in biochemistry and related fields.
- Career fundraising of ~\$12 million from federal and state sources, including the National Institutes of Health, National Science Foundation and NASA.
- Consultant to two private biotechnology firms in California.
- Patent: Generation of mini-circle DNA with physiological supercoiling; PTA 05-064. US patent application number 7,622,252 B1 issued Nov 24, 2009.
- Taught graduate and undergraduate courses at universities in California and Oregon, including fundamental biochemistry, environmental chemistry, synthetic biology, biotechnology and the climate science/policy interface.

EMPLOYMENT HISTORY

2011-2023	Professor of Environmental Biochemistry and Law, Portland State University
2011-2019	Adjunct Professor of Biochemistry, Oregon Health & Science University
1994-2011	Professor of Biochemistry, University of California, Santa Barbara
1990-1994	Postdoctoral Scholar, University of California, San Francisco

EDUCATION

1983	B.S. Chemical Engineering, Rutgers University (cum laude)
1986	M.Phil. Molecular Biophysics and Biochemistry, Yale University
1990	Ph.D. Molecular Biophysics and Biochemistry, Yale University
2008	J.D. Santa Barbara College of Law (with honors). Class rank: 3/26
2016	LL.M. Environmental & Natural Resources Law, Lewis & Clark University (magna
	cum laude)