

Short Curriculum Vitae

Jonathan Mark Gilligan

Jan. 25, 2022

1 Contact Information

Department of Earth & Environmental Sciences,
Vanderbilt University
PMB 351805
2301 Vanderbilt Place
Nashville, TN 37235-1805

jonathan.gilligan@vanderbilt.edu
MOBILE: 615.414.5750
DEPT OFFICE: 322.2976
ORCID: 0000-0003-1375-6686
www.jonathangilligan.org

2 Degrees Earned

Ph.D.: 1991, Yale University (Physics).

B.A.: 1982, Swarthmore College (Physics), with Honors.

3 Employment History

2016–present Associate Professor, Dept. of Civil & Environmental Engineering (secondary), Vanderbilt University.

2009–present Associate Professor, Dept. of Earth & Environmental Sciences, Vanderbilt University.

2003–2009 Senior Lecturer, Dept. of Earth & Environmental Sciences, Vanderbilt University.

2000–2003 The Robert T. Lagemann Assistant Professor of Living State Physics, Dept. of Physics & Astronomy, Vanderbilt University.

1996–1998 Associate Director, Center for Molecular and Atomic Studies at Surfaces, Vanderbilt University.

1995–2000 Research Assistant Professor, Dept. of Physics & Astronomy, Vanderbilt University.

1993–1994 Postdoctoral Research Associate, National Oceanic & Atmospheric Administration.

1991–1993 Nat'l. Research Council Postdoctoral Associate, Nat'l. Institute of Standards & Technology.

4 Honors and Awards

2018 The Chancellor's Award for Research, Vanderbilt University.

2017 The Morrison Prize for the highest impact paper of the year on sustainability law and policy.

1998 Outstanding Scientific Paper Award, NOAA Environmental Research Labs.

1995 NASA Group Achievement Award for outstanding accomplishments and contributions to the ASHOE/MAESA airborne research mission.

1991–1993 National Research Council Postdoctoral Associate

1985–1986 J.W. Gibbs Fellow, Yale University

5 Summary of Published Scholarship

One book, 76 journal papers, 3 book chapters, 19 substantive papers in conference proceedings, 2 patents, 7 open-source software packages.

5a. Citations and H-Index

As of Dec. 14, 2021, Google Scholar lists 6,229 citations, an h-index of 33, and 11 papers with 100+ citations, including 4 papers with 300+.

5b. Selected Publications

1. **J.M. Gilligan.** (2021). "Expertise across Disciplines: Establishing Common Ground in Interdisciplinary Disaster Research Teams," *Risk Analysis*, **41**, 1171–1177. DOI: 10.1111/risa.13407.
2. K.J. Ding, **J.M. Gilligan**, Y.E. Yang, P. Wolski, and G.M. Hornberger. (2021). "Assessing food-energy-water resources management strategies at city scale: An agent-based modeling approach for Cape Town, South Africa," *Resources, Conservation and Recycling*, **170**, 105573. DOI: 10.1016/j.resconrec.2021.105573.
3. K.S. Nielsen, P.C. Stern, T. Dietz, **J.M. Gilligan**, D.P. van Vuuren, M.J. Figueroa, C. Folke, W. Gwozdz, D. Ivanova, L.A. Reisch, M.P. Vandenbergh, K.S. Wolske, and R. Wood. (2020). "Improving Climate Change Mitigation Analysis: A Framework for Examining Feasibility," *One Earth*, **3**, 325–336. DOI: 10.1016/j.oneear.2020.08.007.
4. S. Elsawah, T. Filatova, A.J. Jakeman, A.J. Kettner, M.L. Zellner, I.N. Athanasiadis, S.H. Hamilton, R.L. Axtell, D.G. Brown, **J.M. Gilligan**, M.A. Janssen, D.T. Robinson, J. Rozenberg, I.I.T. Ullah, and S.J. Lade. (2020). "Eight Grand Challenges in Socio-Environmental Systems Modeling," *Socio-Environmental Systems Modeling*, **2**, 16226. DOI: 10.18174/sesmo.2020a16226.
5. **J.M. Gilligan** and M.P. Vandenbergh. (2020). "A Framework for Assessing the Impact of Private Climate Governance," *Energy Research & Social Science*, **60**, 101400. DOI: 10.1016/j.erss.2019.101400.
6. **J.M. Gilligan.** (2018). "Carrots and Sticks in Private Climate Governance," *Texas A&M Law Review*, **6**, 179–198.
7. **J.M. Gilligan**, C.A. Wold, S.C. Worland, J.J. Nay, D.J. Hess, and G.M. Hornberger. (2018). "Urban Water Conservation Policies in the United States," *Earth's Future*, **6**, 955–967. DOI: 10.1029/2017EF000797.
8. M.P. Vandenbergh and **J.M. Gilligan.** (2017). *Beyond Politics: The Private Governance Response to Climate Change*. New York, NY: Cambridge University Press. ISBN: 978-1107181229. 494 pp.

6 Research Grants

PI or Co-PI on current and past grants totaling \$14 million since 2011.

7 Selected Synergistic Activities

2021–present Principal Investigator, NSF Planning Grant to work with state and local governments, businesses, and communities to improve resilient and equitable access to of electricity, transportation, and telecommunications in urban and rural communities in the Southeast.

2020–present Member, research partnership between Vanderbilt, cities of Chattanooga and Nashville, and University of Tennessee, Chattanooga to improve the efficiency of public transit service.

2021–present Associate Editor for Climate Law and Policy, *Frontiers in Climate*.

2020–present Director, Vanderbilt Climate and Society Grand Challenge Initiative.

2020–present Contributor to Nashville Mayor's Sustainability Advisory Committee.

2016–2021 External Advisory Committee, Urban Water Innovation Network, an NSF-sponsored sustainability research network with \$12.5 million in funding.

2016–2019 Co-Principal Investigator, Vanderbilt Initiative for Smart-City Operations Research.