Dr. Omar I. Asensio Associate Professor Brook Byers Institute for Sustainable Systems Fellow Georgia Institute of Technology <u>asensio@pubpolicy.gatech.edu</u> https://datasciencepolicy.gatech.edu

Professional Preparation

| University of Southern California, Chemistry (minor in Philosophy) | B.S. 2002 |
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| University of Southern California, Materials Engineering | M.S. 2005 |
| UCLA, Environmental Science & Engineering (specialties in Economics) | Doctorate, 2015 |
| UCLA, Anderson School of Management Ziman Center & | Postdoc, 2015-2017 |
| Institute of the Environment and Sustainability | |

2023-Present

Appointments and Positions

Visiting Fellow, Harvard Business School

- Associate Professor, Georgia Institute of Technology, School of Public Policy
 2023-Present
 Director, Data Science and Policy Laboratory
 Faculty Affiliate, Institute for Data Engineering and Science (IDEaS)
 Faculty Affiliate, Machine Learning Center (ML@GT)
 Faculty Affiliate, Strategic Energy Institute
 Faculty Affiliate, Climate and Energy Policy Laboratory
 Fellow, Brook Byers Institute for Sustainable Systems (BBISS)
- Assistant Professor, Georgia Institute of Technology, School of Public Policy 2017-2023
- *Member,* National Academy of Sciences, Engineering, and Medicine, New Voices 2021-2023 (Selected by NASEM as top 22 early-to-mid career leaders from academia, industry and government within 10-12 years of the advanced degree)

Associate Editor, Data & Policy Journal, Cambridge University Press 2021-Present

Products

Most Closely Related to the Project

- 1. Asensio, O. I. and Delmas, M. A. (2015) "Nonprice incentives and energy conservation." *Proceedings of the National Academy of Sciences*, 112(6), E510-E515.
- 2. Asensio, O. I. and Delmas, M. A. (2017) "The effectiveness of U.S. energy efficiency building labels." *Nature Energy*, 2, 17033.
- 3. Asensio, O. I., Alvarez, K., Dror, A., Wenzel, E., Hollauer, C., and Ha. S. (2020) "Realtime data from mobile platforms to evaluate sustainable transportation infrastructure." *Nature Sustainability*, 3, 463-471.
- 4. **Asensio, O. I.**, Apablaza, C. Z., Lawson, M. C., Chen, E. W., and Horner, S. J. (2022) "Impacts of micromobility on car displacement with causal evidence from a natural experiment and geofencing policy." *Nature Energy*, 7, 1100-1108.

5. Asensio, O. I., Churkina, O., Rafter, B. E., O'Hare K. E. (2024) "Housing policies and energy efficiency spillovers in low and moderate income communities." *Nature Sustainability*

Other Significant Products and Publications

- Ha, S., Marchetto, D. J., Dharur, S., and Asensio, O. I. (2021) "Topic classification of electric vehicle consumer experiences with transformer-based deep learning." *Patterns*, 2: 100195.
- Hicks, D., Zullo, M., Doshi, A., and Asensio, O. I. (2022) "Widespread use of National Academies consensus reports by the American public." *Proceedings of the National Academies of Sciences*, 119(9), e2107760119
- 3. Asensio, O. I. (2022) "Shared electric scooters and electric bikes can reduce traffic in urban centres" *Nature Energy*, 7, 1013-1014.
- 4. Asensio, O. I., Lawson, M. C., and Apablaza, C. Z. (2021) "Electric vehicle charging stations in the workplace with high-resolution data from casual and habitual users." *Scientific Data*, 8: 168.
- 5. Asensio, O. I., Apablaza, C. Z., Lawson, M. C. and Walsh, S. E. (2021) "A field experiment on workplace norms and electric vehicle charging etiquette." *Journal of Industrial Ecology*, 26: 183-196.

Synergistic Activities

- UN Climate Change Conference of the Parties (COP 26), UK Government and UK Science and Innovation Network, "Research and knowledge to advance Glasgow commitments, UK Government Report on Zero Emissions Vehicles (ZEV) Policy: Evidence Needs and Knowledge Gaps. One of ten U.S. contributing authors
- NSF Panelist for Social, Behavioral and Economic Sciences (SBE) and Cyber-Physical Systems (CPS) Directorate;
- Recipient of the National Science Foundation CAREER Award (2020); the Association for Public Policy Analysis and Management (APPAM) 40-for-40 fellowship for early career contributions to the field of public policy (2018);
- Recipient of the Alliance for Research on Corporate Sustainability (ARCS) Emerging Sustainability Scholar Award (2022), and the ONE-NBS Research Impact on Practice Award by the Academy of Management Organizations and the Natural Environment (ONE) Division (2015);
- 2 x Co-Chair of the APPAM Natural Resource Security, Energy and Environmental Policy section (2021, 2022); Co-Chair of the Machine Learning in Science and Engineering Conference (MLSE) Policy track sessions (2018, 2019);
- Broadening Participation: *Participant, Research University Alliance (RUA) Research Exchange*: NSF AGEP program to increase diversity in STEM.

Summary of Teaching Contributions

• Developed three new data science courses for professionals and managers (PUBP 8751 Big Data & Policy; PUBP 3042 Data Science for Policy; PUBP 8803 Policy Analytics Lab). Curriculum innovations include classroom partnerships with the U.S. Department of Energy and U.S. State Department Diplomacy Lab. • Named to the Class of 1969 Teaching Fellows 2018-2019

Contracts and Grants (Selected)

Since 2017, Dr. Omar I. Asensio has received <u>\$6.5 million in sponsored research funding.</u>

- (PI) CAREER: Behavioral Analytics and Field Experiments in Sustainable Innovation Policies. **Sponsor: National Science Foundation**, 2020-2025, \$599,963 USD
- (Co-PI) CPS: Medium: Dynamic Pricing for Optimal Design of Sustainable Transportation Systems. Sponsor: National Science Foundation, 2019-2022, Amount \$1,018,602 USD
- (Co-PI) EFRI E3P: Plastics Recycling Processes by Integrating Mechanocatalytic Depolymerization, Monomer Purification, and Consumer Behavior, Emerging Frontiers in Research and Innovation. **Sponsor: National Science Foundation**, 2020-2024, Amount: \$1,999,999 USD
- (Co-PI) SCC-IRG Track 1: Fostering Smart and Sustainable Travel through Engaged Communities using Integrated Multidimensional Information-Based Solutions. **Sponsor: National Science Foundation**, 2021-2025, Amount \$2,500,000 USD
- (PI) ESRI: Albany Civic Data Hub, **Sponsor: Environmental Systems Research Institute, Inc.,** 2019-2022, Amount \$378,000 USD
- (PI) AI in Green Energy Transition: Machine Learning Experiments and Vehicle Electrification in East and Southeast Asia. **Sponsor: Microsoft Azure and U.S. State Department Diplomacy Lab**, 2021-2022 Amount \$25,000
- (PI) MSR: Microsoft Azure Sponsorship (IDEaS), Azure Computing Grant, **Sponsor:** Microsoft Azure, 2020-2021, Amount \$20,000 USD

Service Contributions (Highlights)

- International or National: Program Co-Chair, Association for Public Policy Analysis & Management (APPAM) Natural Resource, Energy and Environmental Policy Division 2020-2021; Chair Awards Committee, Academy of Management, Organizations and the Natural Environment (ONE) Division elected 2017-2019; Advisory Board, Electrada
- Institute Level: EVPR Junior Research Advisory Council (JRAC); PACE High Performance Computing Advisory Committee; Exploratory B.S. Data Science Committee
- School level: Elected to SPP Faculty Executive Committee (2021-2022); SPP Grad Committee, Core Comprehensive Exam Committee, E&E Specialty Exam Committee, Faculty Search Committees, Public Finance, Energy & Environmental Economics and Policy
- **Referee:** Reviewer for government agencies including NSF, DOE, Swiss National Science Foundation; Nature Energy, Nature Sustainability, Nature Communications, Nature Climate Change, Proceedings of the National Academy of Sciences, Review of Economics and Statistics, Journal of the Association of Environmental and Resource Economists, Communications Earth & Environment, JPAM, Energy Economics, Energy Policy, Energy Research and Social Science, Environment and Behavior, Journal of Cleaner Production, Ecological Economics, Conservation Letters, One Earth, Energy and Buildings, Transportation Research Board annual meetings, Academy of Management ONE and TIM Divisions, Alliance for Research on Corporate Sustainability