Stanford

Garry Sotnik

Lecturer

ChangeX

Bio

BIO

GARRY SOTNIK is a Lecturer with the Sustainability Science and Practice Program in the School of Earth, Energy and Environmental Sciences. He is a systems scientist with research focused on identifying robust strategies in contexts defined by deep uncertainty and global climate change. Garry develops and implements agent-based computer simulation models that explore co-evolutionary interactions among human cognition and behavior, on the one end, and biophysical conditions, on the other. He has experience designing and teaching courses on agent-based modeling and on different approaches to modeling coupled human and natural systems. Garry holds a Ph.D. in Systems Science from Portland State University and an M.A. in Economics and a B.S. in Management from Boston University.

ACADEMIC APPOINTMENTS

- Lecturer, ChangeX

Teaching

COURSES

2021-22

- Sustainability Leadership Practicum: SUST 240 (Aut, Win, Spr, Sum)

Publications

PUBLICATIONS

- **A new agent-based model offers insight into population-wide adoption of prosocial common-pool behavior** *JOURNAL OF MATHEMATICAL SOCIOLOGY*
  Sotnik, G., Shannon, T., Wakeland, W.
  2022

- **A global assessment of policy tools to support climate adaptation** *CLIMATE POLICY*
  Ulibarri, N., Ajibade, I., Galappaththi, E. K., Joe, E., Lesnikowski, A., Mach, K. J., Musah-Surugu, J., Alverio, G., Segnon, A. C., Siders, A. R., Sotnik, G., Campbell, D., Chalastani, et al
  2021

- **A systematic global stocktake of evidence on human adaptation to climate change** *NATURE CLIMATE CHANGE*
  Berrang-Ford, L., Siders, A. R., Lesnikowski, A., Fischer, A., Callaghan, M. W., Haddaway, N. R., Mach, K. J., Araos, M., Shah, M., Wannewitz, M., Doshi, D., Leiter, T., Matavel, et al
  2021

- **Practices in Social Ecological Research: Interdisciplinary Collaboration in 'Adaptive Doing' (Book Review)** *SOCIETY & NATURAL RESOURCES*
  Book Review Authored by: Sotnik, G.
  2021

- **A new agent-based model provides insight into deep uncertainty faced in simulated forest management** *LANDSCAPE ECOLOGY*
  Sotnik, G., Cassell, B. A., Duveneck, M. J., Scheller, R. M.
  2021

- **A transdisciplinary typology of change identifies new categories of adaptations and forms of co-adaptation in coupled human and natural systems** *SUSTAINABILITY SCIENCE*
  Sotnik, G., Fischer, A., Ibanez, I., Cousins, S. M.
  2021; 16 (5): 1609-1623

- **The Doubly-Bounded Rationality of an Artificial Agent and its Ability to Represent the Bounded Rationality of a Human Decision-Maker in Policy-Relevant Situations** *JOURNAL OF EXPERIMENTAL & THEORETICAL ARTIFICIAL INTELLIGENCE*
  Sotnik, G.
  2020; 32 (5): 727-749

- **The SOSIEL Platform: Knowledge-based, cognitive, and multi-agent** *BIOLOGICALLY INSPIRED COGNITIVE ARCHITECTURES*
  Sotnik, G.
  2018; 26: 103-117