

Participatory Modeling

Award Year:

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Principal Investigator:

Steven Gray, Michigan State University
Alexey Voinov, University of Twente
Michael Paolisso, University of Maryland
Rebecca Jordan, Rutgers University

Associated Program:

[Enhancing Socio-Environmental Research & Education](#) [1]

Collaborative Site:

[Group Collaboration](#) [2]

Email List:

participatorymodeling@lists.sesync.org [3]

Email List Archives:

[List Archive](#) [4]

Modeling is the language of scientific discovery. Whether modeling the social interactions of individuals within a community in anthropology, the trade-offs of foraging behaviors in ecology, or the influence of warming ocean temperatures on circulation patterns in oceanography, the ability to represent empirical or theoretical understanding through modeling provides scientists with a semi-standardized language to explain how we think the world works. In fact, modeling is such a basic part of human reasoning and communication that the formal practice of scientific modeling has been recently extended to include non-scientists, especially as a way to understand complex and poorly understood socio-environmental dynamics and to improve research and decision-making. Although the field of participatory modeling (PM) has grown in recent years, there are still considerable questions about how different software tools common to PM can be used to facilitate communication and learning among diverse groups, which approaches are more or less suitable (given the nature of a community or environmental issue), and whether these approaches effectively lead to action-oriented outcomes. We propose to address these questions by convening a group of scientists, computational modelers, facilitators, and policy makers to systematically generate information about the process, the products, and the outcomes associated with different PM approaches. Further, to increase the impact of our findings, we will create a web-portal for knowledge exchange that includes:

- a PM software database;
- a case study and modeling file sharing database; and
- educational resources/videos about common tools available to educators, researchers, the public, and decision makers.

The Theme [Building Resources for Complex, Action-Oriented Team Science](#) [5] provides opportunities for the wider global community to interact with this Pursuit.

Participants:

Gabriele Bammer, Australian National University
Pierre Bommel, CIRAD
Beatrice Hedelin, Karlstad University
Klaus Hubacek, University of Maryland
Nagesh Kolagani, Indian Institute of Information Technology, Sri City
Kirsten Leong, National Park Service
Miles McNall, Michigan State University
Christina Prell, University of Maryland
Laura Schmitt Olabisi, Michigan State University
Alison Singer, Michigan State University
Eleanor Sterling, American Museum of Natural History
Jeremy Trombley, University of Maryland
Renee Wallace, FoodPLUS|Detroit
Maira Zellner, University of Illinois at Chicago
Todd BenDor, University of North Carolina, Chapel Hill
Philippe Giabbanelli, Northern Illinois University
Pierre Glynn, US Geological Survey
Josh Introne, Michigan State University
Karen Jenni, US Geological Survey
Antonie Jetter, Portland State University
Kirsten Leong, NOAA

Associated SESYNC Researcher(s):

[gbammer](#) [6]

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<https://www.sesync.org/project/enhancing-socio-environmental-research-education/participatory-modeling>

Links

[1] <https://www.sesync.org/opportunities/enhancing-socio-environmental-research-education>

[2] <https://collab.sesync.org/groups/participatorymodeling>

[3] <mailto:participatorymodeling@lists.sesync.org>

[4] <https://lists.sesync.org>

[5] <https://www.sesync.org/theme-11>

[6] <https://www.sesync.org/users/gbammer>