iSEE Critical Conversation 2019: Genetically Modified Mosquitoes May 23-24, 2019

Millennium Room, University Club, Chicago, IL

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Agenda

Thursday, May 23

5-6 p.m. — **Keynote Address:** May Berenbaum, Professor and Department Head of Entomology, University of Illinois at Urbana-Champaign and Editor-in-Chief, *Proceedings of the National Academy of Sciences* "GMO Mosquitoes – OMG! Cultural perceptions of genetic modification for mosquito control"

6-7 p.m. — Reception

8 a.m.-4 p.m. Friday, May 24

Welcome and Introductions

Evan H. DeLucia, Director, Institute for Sustainability, Energy and Environment (iSEE), University of Illinois at Urbana-Champaign

Madhu Khanna, Associate Director, iSEE, University of Illinois at Urbana-Champaign

Brian Allan, Associate Professor of Entomology, University of Illinois at Urbana-Champaign

Chris Stone, Director, Medical Entomology Lab, Illinois Natural History Survey

Holly Tuten, Medical Entomology Lab, Illinois Natural History Survey

Sarah Fisk, Process Consultant/Facilitator, Community At Work, San Francisco

Panel Discussion I: What are the public health, ethical, and cultural considerations for the use of genetically-modified (GMMs) for disease control?

Panelists:

Natalie Kofler, Founder and Director, Editing Nature

Christophe Boëte, Research Scientist, Institut des Sciences de l'Evolution (ISEM), Université de Montpellier

Karen Tountas, Scientific Program Manager, Foundation for the National Institutes of Health, Inc.

Goal: To address concerns that have been raised about the implementation of GMM control strategies, including whether GMM approaches can effectively integrate with other mosquito control approaches, how to engage communities in mosquito control/eradication, and how to navigate other important ethical and cultural considerations.

Panel Discussion II: What are the obstacles to long-term success in the use of GMMs for disease control?

Panelists:

Ana Kormos, Community Engagement Specialist, University of California at Irvine Malaria Initiative Andrew Hammond, Sir Henry Wellcome Postdoctoral Fellow, Imperial College London Mark Benedict, Research Biologist, Centers for Disease Control and Prevention

Goal: To consider areas of uncertainty in the use of GMMs, including whether various tools are ready for field implementation, if there is a sufficient regulatory process to support public health/environmental safety, and the role of science communication in public acceptance.

Lunch (provided) and Networking

Panel Discussion III: What are possible regulatory and other strategies to overcome these obstacles while accounting for the diversity of GMM technologies and for ethical and environmental concerns?

Panelists:

Jennifer Kuzma, Director, Genetic Engineering and Society Center, North Carolina State University John Leventhal, Justice, Supreme Court of the State of New York (Appellate Division, Second Department)

Steven Juliano, Professor of Ecology, Illinois State University

Goal: To discuss a regulatory framework for oversight of the development and use of GMM approaches, what this process would entail and what entities would provide this oversight, how to convey safety of these approaches to the public, and potential ecological ramifications of GMM interventions.

Wrap Up and Next Steps

Goals: To identify areas of consensus, including strategies for integrating GMM approaches with other mosquito control methods, transgenic approaches that may be better suited to ecological, cultural or ethical concerns, public communication and outreach strategies likely to ensure long-term success, and recommendations for a regulatory framework that may help achieve these goals.