

## Workshop Planning Committee

Maggie Jameson, IESP Assistant to the Director  
Amy Landis, IESP Fellow

### Discussion Leaders

Daniel Born, Nancy Carr, Ashley Preston,  
Cynthia Rutz, and Don Whitfield

### Special Thanks to our scribes:

Timothy Allen, Kara Borden, Bryan Gaul,  
Steffen Mueller, and Brian Scott

### Shared Inquiry

The Great Books Foundation will be moderating the workshop's shared inquiry breakout sessions. Shared Inquiry is a distinctive method of learning in which participants search for answers to fundamental questions raised by a text. This search is inherently active. It involves taking what the author has provided and attempting to grasp its full meaning through integration with our experiences. Readings will provide the focus for the three breakout sessions. Discussion will be expanded by incorporation of concepts from the plenary session presentations.

[www.greatbooks.org](http://www.greatbooks.org)

**UIC** University of Illinois  
at Chicago




The National Science Foundation  
Biocomplexity in the Environment Program



Institute for  
Environmental  
Science and Policy



Peggy Notebaert  
Nature Museum

 THE GREAT BOOKS FOUNDATION



**Hotel Allegro**  
**Chicago, Illinois**  
**June 8-9, 2004**



Institute for Environmental Science and Policy  
at The University of Illinois at Chicago

[www.iesp.uic.edu](http://www.iesp.uic.edu)

*The sustainability of an enterprise or concept results from a complex interplay of economics and policy, examined at several levels, with other factors such as technical innovations, scientific breakthroughs, and advances in design and product development.*

## Agenda



### Tuesday, June 8<sup>th</sup>

#### Hotel Allegro

- 7:30 Continental Breakfast
- 8:00 Welcome & opening remarks
- 8:15 Plenary Session I
- 10:30 Break
- 10:40 Shared Inquiry Breakout Session I
- Required Reading:** William McDonough and Michael Braungart. *Cradle to Cradle*. New York: North Point Press, 2002. Chapter 2: "Why Being 'Less Bad' Is No Good."
- 12:00 Lunch and Breakout Session I Summary
- 1:15 Plenary Session II
- 3:30 Break
- 3:40 Shared Inquiry Breakout Session II
- Required Reading:** William R. Moomaw. "Energy, Industry and Nitrogen: Strategies for Decreasing Reactive Nitrogen Emissions." *Ambio* **2002**, 31, 184-189.
- 5:00 Break
- 5:15 Breakout Session II Summary

#### Hancock Building Signature Room at the 95<sup>th</sup>

- 6:30 Reception
- 7:00 Banquet

### Wednesday, June 9<sup>th</sup>

#### Hotel Allegro

- 8:00 Plenary Session III
- 10:15 Break
- 10:30 Shared Inquiry Breakout Session III
- Required Readings:** Lester Brown. "Food Scarcity: An Environmental Wakeup Call." *The Futurist*. **1998**, 32, 34-38.
- Julian L. Simon. *The Ultimate Resource 2*. Princeton University Press, 1996. Selections from the Introduction and Conclusion.
- 12:00 Lunch and Breakout Session III Summary
- 1:30 Workshop Synthesis and Summary
- 3:00 Adjourn

The workshop on the Economic and Environmental Impacts of Biobased Production will address life cycle and economic issues surrounding bio-based production. Emphasis will be placed on the inclusion of economics and policy elements of biobased production, and how these inform and in turn are informed by scientific and technical findings. This is an opportunity to assess the state of knowledge surrounding biobased production and to identify knowledge gaps, an especially important aspect since change is occurring at a rapid pace. The collective expertise represented in the workshop participants is invariably multidisciplinary, thereby providing the basis for a synthesis of ideas that is essential to advancing knowledge on this complex topic.

### Plenary Session I, June 8<sup>th</sup>

- 8:15 **Prof. Lee Lynd**  
Dartmouth University  
*Prospects for achieving large resource and environmental benefits via biomass-based processes*
- 9:00 **Mr. John Sheehan**  
National Renewable Energy Laboratory  
*Toward a sustainable vision of energy from biomass: Adventures at the intersection of technology, economics, ethics and politics*
- 9:45 **Prof. Francis Epplin**  
Oklahoma State University  
*Lignocellulosic biomass as biorefinery feedstock: Benefits and challenges*

### Plenary Session II, June 8<sup>th</sup>

- 1:15 **Prof. Rob Anex**  
Iowa State University  
*An economic basis for biorenewable resource policy in a resource-constrained world: Economics, thermodynamics and biorenewable resources*
- 2:00 **Prof. Bruce McCarl**  
Texas A&M University  
*Climate change as a stimulus for biofuel adoption: An economic evaluation*
- 2:45 **Dr. Suzie Greenhalgh**  
World Resources Institute  
*Impacts of agricultural production on water quality and a possible policy solution*

### Plenary Session III, June 9<sup>th</sup>

- 8:00 **Dr. Michael Wang**  
Argonne National Laboratory  
*Energy and greenhouse gas emission impacts of fuel ethanol*
- 8:45 **Dr. Jose Moreira**  
University of Sao Paulo  
*Global biomass energy potential*
- 9:30 **Prof. Satish Joshi**  
Michigan State University  
*Towards a sustainable personal transport sector: Evaluation of large scale adoption of bio-based fuels*