

Biomass to Biofuels Workshop  
December 7, 8 (9), 2005 Doubletree Hotel, Rockville MD

*Brief agenda—December 2, 2005*

December 7

- 8:00 Welcome / Joint Program Goals(Ari Patrinos/ Richard Moorer)
- 8:15 Workshop Objectives, Agenda, Output (John Ferrell / John Houghton)
- 8:35 Industry Perspective on Bioethanol—The role of biofuels in transforming our energy future (Justin Adams, BP)
- 8:45 Industry “Technology Pull”
  - Title TBD (Doug Cameron, Cargill)
  - Enzymatic Biomass Conversion, and the Challenges Ahead (Bill Dean, Danisco Genencor)
- 9:45 Break
- 10:00- New Science from Systems Biology
  - Realizing the Billion Ton Vision (Chris Somerville, Stanford/Carnegie)
  - GTL Crosscutting Science Applied to Biomass (Jim Fredrickson, Pacific Northwest National Laboratory)
  - Genome-Scale Cellular Models (Christophe Schilling, Genomatica)
  - Engineering industrial biocatalysts by Metabolic Engineering (Greg Stephanopoulos, MIT)
- 12:00 Working Group Objectives and Workshop Process  
(Mike Himmel, National Renewable Energy Laboratory / Mike Knotek)
- 12:30 Participants pick up box lunches and join their assigned technical working groups to frame topical areas, create list of barrier technologies (BTRPs) and transformational challenges (TCs)
  - Working Group 1: Feedstock Genomics & Engineering
  - Working Group 2: Plant Cell Wall Deconstruction
  - Working Group 3: Biological Conversion of Biomass
- 3:30 break
- 4:00 Resume refining lists of BTRPs and TCs
- 6:30 Working dinner
- 9:30 adjourn

December 8

- 8:30 Group writing and discussions of BTRPs and TCs
- 12:00 Working lunch
- 1:00 Plenary Outbriefs and Discussion
- 3:00 Main meeting adjourns

Writing teams stay to write report sections

## Detailed Agenda---General Process Flow for Breakout Groups

<b>Day 1 Wednesday, Dec. 7</b>		
<b>Time Slot</b>	<b>Activity</b>	<b>Product</b>
<b>1:30 – 2:30</b>	Framing of Topical Area – presentations and discussions	Consensus Systems Definition of Problem Area –System Diagram
<b>2:30 – 4:00</b>	Creating the prospective list of 1) Barrier Technologies and 2) Transformational Challenges research areas (TCs)	Prospective List of Items End-to-End systems analysis – definition of critical path biology items
<b>4:00 – 6:00</b>	Culling the list and identifying research requirements	Consensus List of Items and fill out BTRP or TC form  ~5:00 PM: Each WG provides topic list (electronic) for printing & intergroup comparison over dinner
<b>6:00 – 7:30 All groups together for dinner</b>	Discuss BTRPs and TCs that transcend groups	Assign transcending BTRPs and TCs to specific groups
<b>Evening</b>	Continue Defining Research requirements and Outlining thoughts for writeups  Crosscutting group meets for discussions	Consensus items and research areas with prioritization  Beginning of definition of crosscutting portfolio
<b>Day 2 Thursday, Dec. 8</b>		
<b>8:30 – 12:00</b>	Group writing of BTRPs Group Chairs Audit Process, Discussions as needed	Draft BTRPs and TCs
<b>12:00-1:00</b>	Lunch.	All files (including presentations) provided electronically to ORISE staff for printing
<b>1:00 – 3:00</b>	Plenary Outbriefs and Discussions	Presentations and Comments
<b>3:00 Workshop adjourns for all except WG4 and chairs/writers from WG1-3 continue working</b>		ORISE staff to provide copies of all draft files—organized by WG—to participants. Participants can load files on thumb drives
<b>3:30-6:00 Remaining WG participants meet.</b>	WG4 Discussions to coalesce common cross-cutting capabilities, confirm with other groups as needed, assess gaps, and make writing assignments.  WGs 1-3 ID gaps, make assignments, finalize texts, etc.	Consensus output targets and refined outlines

<b>6:00-7:00 Dinner together</b>	Chairs and cochairs dine together	Identification of issues and problems
<b>Evening</b>	Work and discuss as appropriate – individual work time	Refined work products
	<b>Day 3 Friday, Dec. 9</b>	
<b>8:30-11:00</b>	Working groups continue writing	Second drafts for comparison
<b>11:00-12:00</b>	Groups convene together in plenary – ad hoc presentations for intercomparison and sanity check	Strategy adjustments, new assignments.
<b>12:00-1:00 Lunch</b>		
<b>1:00-3:00</b>	Groups convene separately to work on assignments.	Groups share electronic and hard copy files with ORISE assistance.
<b>3:00 Workshop adjourns for all</b>		Agree to additional items needed; followup process and assignment schedule.  All final files will be e-mailed to all participants and put on website