## Agenda

**External Advisory Board Meeting**  
Institute for Environmental Science and Policy  
September 25, 2013

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:30 am</td>
<td>Coffee and refreshments</td>
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<tr>
<td>9:00</td>
<td>Greetings, introductions</td>
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<tr>
<td>9:15</td>
<td><em>State of the Institute</em>, Thomas L. Theis, Director</td>
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<td></td>
<td>News</td>
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<td></td>
<td>Updates</td>
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<td></td>
<td>New programs and activities</td>
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<tr>
<td>10:00</td>
<td>Briefings from UIC Center Directors</td>
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<td>12:00 pm</td>
<td>Working Lunch</td>
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<td></td>
<td>EAB discussions</td>
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<td></td>
<td>Strategic Plan for the Institute</td>
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<td></td>
<td>Recommendations</td>
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<tr>
<td>2:00</td>
<td>Adjourn</td>
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IESP Mission Statement

• To advance interdisciplinary research and scholarship within the environmental sciences and engineering, economics, social thought, and policy communities among UIC’s faculty and students,

• To advance our understanding of sustainable systems with a particular focus on urban regions

• To transmit workable solutions for environmental problem to the public and private sectors, and

• To prepare the next generation of environmental decision-makers
Interdisciplinary Research…

“…a mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice”

NAE/NAS/IOM, 2005
IESP Crosscutting Themes

- Human-Nature Interactions
  - Ecological restoration
  - Systems ecology
  - Landscape ecology
  - Environmental chemistry
- Urban Sustainability
  - Urban ecology
  - Transportation systems
  - Urban planning
- Sustainable manufacturing
  - Life cycle assessment
  - Industrial ecology
  - Design for the environment
  - Material flow analysis
  - Occupational health and safety
  - Environmental technology
- Environmental Policy Analysis
  - Market-based tools for pollution control
  - Computational modeling
  - Risk assessment
Highlights 2012-2013

• Sybil Derrible, new faculty member (CME)
• Moira Zellner (UPP) promoted to Associate Professor on indefinite tenure
• $823K external sponsored research (total $2.6M)
• Ph.D. fellowships (4-2012)
  – Anna Czupryna (Biological Sciences)
  – Andrea Hicks (IESP/Civil and Materials Engineering)
  – Eunjung Shin (Urban Planning)
  – Kristin Woycheese (Earth and Environmental Sciences)
Highlights (continued)

• Ph.D. fellowships (2-2013)
  – Jiehong Guo (Environmental and Occupational Health Sciences)
  – Daniel Milz (Urban Planning and Policy)

• BURST Symposium

• Seminars:
  – Dr. John Krummel, Argonne National Laboratory
    • “Measuring and Forecasting: Emerging Trends in Environmental Data Collection, Analysis and Modeling”
  – Dr. Harry Saunders, Decision Processes, Inc.
    • “Sustainability and the Rebound Effect”
  – Dr. Brenda Ekwurzel, Union of Concerned Scientists
    • “Cooler Smarter: Practical Steps for Low-Carbon Living”
<table>
<thead>
<tr>
<th>Name</th>
<th>Depart/Col</th>
<th>Expertise</th>
<th>Rank</th>
<th>Percent</th>
<th>Appointed</th>
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<tbody>
<tr>
<td>Kathryn Nagy</td>
<td>EaES/LAS</td>
<td>Env. Geochemistry</td>
<td>Professor</td>
<td>40</td>
<td>2002</td>
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<td>Nurtan Esmen</td>
<td>EOHS/SPH</td>
<td>Risk Assess/ Env. Decision</td>
<td>Professor Emeritus</td>
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<td>2003</td>
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<td>Jane Lin</td>
<td>CME/COE</td>
<td>Transportation Systems/ Air Quality</td>
<td>Associate Professor</td>
<td>43</td>
<td>2003</td>
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<td>Moira Zellner</td>
<td>UPP/CUPPA</td>
<td>Public Policy/ Sustainability of Natural Resources</td>
<td>Associate Professor</td>
<td>50</td>
<td>2006</td>
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<td>David Wise</td>
<td>Biological Sci/LAS</td>
<td>Ecosystem Processes</td>
<td>Professor</td>
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<td>Emily Minor</td>
<td>Biological Sci/LAS</td>
<td>Landscape Ecology</td>
<td>Assistant Professor</td>
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<td>2008</td>
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<td>Samuel Dorevitch</td>
<td>EOHS/SPH</td>
<td>Urban Health</td>
<td>Associate Professor</td>
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<td>2010</td>
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<td>Ning Ai</td>
<td>UPP/CUPPA</td>
<td>Urban Sustainability</td>
<td>Assistant Professor</td>
<td>50</td>
<td>2011</td>
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<tr>
<td>Sybil Derrible</td>
<td>CME/COE</td>
<td>Urban Infrastructure Systems</td>
<td>Assistant Professor</td>
<td>50</td>
<td>2012</td>
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Current Distribution of Faculty with Environmental Interests by Department (~116 total)
Cumulative IESP Dollar Allocations by Department

- Art & Arch
- Biological Sci
- Economics
- Earth & ES
- Civil & Mat Engr
- Chemical Engr
- EOHS
- Epi Bio
- Public Adm
- Urban Planning
IESP Research Expenditures

Fiscal Year

FY02 FY03 FY04 FY05 FY06 FY07 FY08 FY09 FY10 FY11 FY12 FY13

$0 $200,000 $400,000 $600,000 $800,000 $1,000,000 $1,200,000
IESP Research Expenditures FY 2012-2013 ($6.6M)

Apportioned Departmental Research Expenditures ($4.7M)

Apportioned IESP Research Expenditures ($1.9M)
Research

- 29 current projects with 59 PIs + Co-PIs across 25 units
- New Research Initiatives (sample)
  - BRACE: Building Resilience Against Climate Effects in Illinois, Sponsor: CDC (Dorevitch/Forst/Ibrahim/Turnock)
  - From Farm Management to Governance of Landscapes: Climate, and Land Use Decisions in the Argentine Pampas, Sponsor: NSF (Zellner)
  - NCCLCs: Material Life Cycle of Nanomaterials (LCNano), Sponsor: EPA/NSF via Arizona State University (Theis)
  - CyberSEES: Feasibility of a Data Integration Framework for Urban Metabolism, Sponsor: NSF (Cruz/Ai/Derrible/Dorevitch/Theis)
  - Chicago Wilderness Congress 2014, Sponsor: Chicago Wilderness Trust (Wise)
  - Assessing Sustainable Freight Policies Using Microsimulation Approach, Sponsor: National Center for Freight and Infrastructure Research (Mohammadian/Derrible/Kawamura/Bo)
  - Workshops on Big Data and Urban Informatics: e-Infrastructure for Social Science Research on Sustainable Urban Systems, Sponsor: NSF (Thakuriah/Tilahun/Zellner)
New Initiatives

• Building Urban Resilience and Sustainability (BURST)
  – Office of the Vice Chancellor for Research
  – http://www.burst.uic.edu/

• UIC Sustainability Strategic Thinking
  – Office of Sustainability
  – http://www.uic.edu/sustainability/thinking/

• Argonne National Laboratory—Environmental Science Division
  – http://www.evs.anl.gov/

• Prairie Research Institute
  – http://www.prairie.illinois.edu/about-inrs.shtml
Urban-related Environmental Milestones at UIC

1978 Voorhees Center for Neighborhood and Community Improvement
1979 Urban Transportation Center
1982 UIC formally established
1995 CUPPA, Great Cities Institute
1999 Institute for Environmental Science and Policy
2002 Environmental Manufacturing Management IGERT
2006 Landscape Ecological Anthropogenic Processes (LEAP) IGERT
2006 Computational Transportation Science IGERT
2007 Energy Engineering program (MIE)
2011 UIC Energy Initiative
2012 Environmental Planning and Policy program (CUPPA)
2012 BRACE-Illinois (EOHS)
2012 BURST Initiative
IESP Strategic Planning 2014--Charge to EAB

• Overall goal: to recommend a roadmap for IESP that incorporates current and future priorities, and will serve as a guide for decisions on operational and strategic allocations of resources.

Tasks:
• Review IESP’s mission statement
  Evaluate the extent to which it has been fulfilled
  Suggest modifications
• Review IESP’s structure and model
  Should the current model be changed to a different one?
  Should new positions be added, others eliminated/modified?
  Is the current structure and model adaptive to changing needs?
• Review IESP’s programs
  Evaluate their effectiveness
  What new types of programs might be given consideration?
  Are there new strategic partnerships that might be formed?
• Review IESP’s budget
  Is it adequate to meet the mission of the institute?
  Should priorities be shifted and/or allocations be changed?
  Are there new sources of revenue that should be pursued?
Strategic Planning Timeline

- September 25, 2013
  Initial discussions, preliminary thoughts/recommendations
- October 31, 2013
  Review of IBHE application (2007)
  Identification of Possible Strategic Opportunities, Challenges, and Priorities
- November 30, 2013
  Discussion with IESP faculty and staff on preliminary findings
- January 31, 2014
  Finalization of Recommendations
  Presentation to VCR
Great Cities Institute (Teresa Cordova)
  – http://www.uic.edu/cuppa/gci/
Institute for the Humanities (Susan Levine)
  – http://huminst.las.uic.edu/
Energy Resources Center (John Cuttica)
  – http://www.erc.uic.edu/
Urban Transportation Center (P.S. Sriraj)
  – http://www.utc.uic.edu/
Center for Urban Economic Development (Howard Wial)
  – http://www.urbanecconomy.org/
Center for Advanced Design, Research, and Exploration (Melissa Naiman)
  – http://tigger.uic.edu/depts/ovcr/cadre/