<u>Topical Lunch Minutes</u>

1. Dave Dieterich: the mission of CCSF
2. Max Zhang: Introduction of NSF/DOE/EPA RFP on Engineering Sustainable Buildings
   a. Current LEED certification is not enough
   b. Cornell pioneer in BACnet. 54 buildings are equipped with digital control building. Cornell campus is a perfect test bed for innovation.
   c. Transformational ideas in different areas
      i. Materials and sensing
      ii. Modeling and simulation
      iii. Concepts for automation and interdependence
3. Brian Chabot: Conference in Copenhagen showcased many things already in place in Europe
   Connect with what is going in Europe
      i. Carbon negative buildings
      ii. Understanding cultural needs to get there
      iii. Cradle to cradle approach
4. Norm Scott: Another funding opportunity NSF/IDR, PD 09-7951
   a. Interdisciplinary research
      i. Need support from 2 NSF program areas (primary ENG)
   b. Full proposal due Dec 7th
5. Ken Torrance: Need to find a niche at Cornell (no collaboration overseas)
   a. Max Zhang: Many other building programs in the country such as in Berkley, MIT, Purdue and others
   b. Norm Scott: Faculty at Columbia Working on sky-scraper with crops growing on the building
6. Al George: Seminar series so that professors get to know what others are working on
7. Ying Hua: Good buildings are
   a. Climate responsive (Environment): All inputs in a software are dependent on meteorology
   b. Occupant responsive: Individual occupant satisfaction
   c. Change responsive: Flexible
8. Helene Schember: Social sciences
   a. Understand how different groups use common spaces
   b. How best to position common resources
9. Al George: Systems approach
   a. Social input
   b. Mathematical analysis of all possibilities
   c. Look ahead and look at implications
   d. Likely outcome
10. Max Zhang: some out of box thinking?
    a. Sustainable landscape, is it part of the building?
       i. Building interaction with environment

ii. Social effects

iii. Where to draw the line?

b. A single building or a mixture of buildings or a community?

i. Autonomy of building or community?

c. Brian Chabot: In Copenhagen they have rejected autonomy of buildings

11. Zellman Warhaft: Solar Decathlon

a. Some of their students might be useful as they have expertise in buildings

12. Joe Laquatra: Green buildings are not equal to healthy buildings

a. Is green housing actually healthy housing?

i. Asthma

1. Mold and dust mites

2. More theories

13. Tom Whitlow:

a. Urban LTER

i. Transactional cost of getting something done is too high

ii. Would take too long and too much time

iii. Short term goals are good to allow collaboration

b. NSF Coupled Human and natural systems (CHN) could be another funding opportunity, Full proposal due Nov 17

c. Everyone presents for 10 minutes about how they could contribute

14. Tim Mount: Smart grid makes everything possible

15. Helene Schember and Mark Lawrence: Keep the group engaged, create "Sustainable buildings and communities group" listserv and wiki pages.

What's Next:

- On voluntary basis, faculty send a brief description of their proposal ideas related to **NSF SEED** and **NSF IDR** to Dave Dieterich, dd355, no later than Oct 2, 2009. Dave will try to organize and synthesize the ideas.

- Mark Lawrence will create "Sustainable buildings and communities group" listserv and wiki pages, only accessible internally at Cornell.

- Potentially we can arrange a series of short meetings in the coming semester.

Attendees:

Ken Torrance, ket1, MAE
Brandon Hencey, bmh78, MAE
Al George, arg2, MAE
Zellman Warhaft, zw16, MAE
Max Zhang, kz33, MAE
Santiago Naranjo Palacio, sn377, MAE
Joe Laquatra, jl27, DEA
Ying Hua, yh294, DEA
Tim Mount, tdm2, AEM
Tom Whitlow, thw2, Horticulture
Brian Chabot, bfc1, Ecology & Evolutionary Biology
Norm Scott, nrs5, BEE
Lindsay Anderson, cla28, BEE
Dan Roth, dnr6, Env. Compliance/Sustainability
Steve Beyers, smb75, Env. Compliance/Sustainability
David Dieterich, dd355, CCSF
Helene Schember, hrs6, CCSF
Mark Lawrence, mal64, CCSF

Other invitees:

Anurag Agrawal, aa337, EEB/CCSF
Jeff Tester, jwt54, CHEME/CCSF
Frank DiSalvo, fjd3, CHEM/CCSF
Chris Barrett, cbb2, AEM/CCSF
Kevin Pratt, kp238, ARCH
Bert Bland, rrb2
Lanny Joyce, wsj1

Others who might be interested:

Antonio Bento, amb396, AEM
Dana Cupkova, ARCH
Kieran Donaughy, kpd23, CRP
Ann Forsyth, af16, CRP
Don Greenburg, dpg5, ARCH/CIS/JGSM
Katherin McComas, kam19, COMM
Mike Silver, mss339, ARCH