***Environmental, Energetic, and Economic Potential of Biochar***
CCSF Topical Lunch
November 19, 2008
Hosted by Johannes Lehmann (CL273@cornell.edu), Norm Scott (nrs5@cornell.edu), Brent Gloy (BG49@cornell.edu)
Contact Kelli Roberts (kgr25@cornell.edu)

Attending[i]:

- Brian F. Chabot
- Brian Chapman
- Dave Dieterich
- Francis J. DiSalvo
- Brent Gloy
- Fred Gouldin
- Anthony Hay
- Mike Hoffmann
- Dean Koyanagi
- Mark Lawrence
- Johannes Lehmann
- Tony Nekut
- Chuck Nicholson
- Marty Petrovic
- Kelli Roberts
- Helene Schember
- Norm Scott
- Francis Vanek
- Max Zhang
- Ali Ahmed
- Sharon Tregaskis
- Zellman Warhaft

*** Intellectual Collisions ***

Funding:
In response to the presentation several funding opportunities were discussed such as
Hatch fund – multi-state (specifically with Anthony Hay and ecotoxicity and biochar for remediation research)
Agricultural Companies, fertilizer companies – biochar could be seen as a co-product for agricultural companies, rather than a competition.
Millenium Venture Capital Fund
Existing interest from Venture Capital Funds was expressed.

Changing World Technologies currently using pyrolysis
(95% gasification for liquid fuel, on Butter Ball turkey farm in Missouri)

Most research on biochar's effects on soil biology, ecology & chemistry thus far done using slow pyrolysis (500C) chars

Articulation of Cornell's strength:
Produce a document to articulate why Cornell is the place for biochar
Digestible form of Cornell's competitive advantage

How do we measure biochar?
Standards in development.
Need to qualify biochar for C sequestration and economic markets

Where is biochar most likely to succeed:
Biochar potential at the intersection of 3 criteria: energy need, waste management, and soil improvement opportunities.
Eastern, mid-Atlantic states have large horticultural facilities – potential biochar market

Research needs of biochar and pyrolysis:
- environmental impacts, specifically emissions
- energy and pyrolysis modeling, experimentation, optimization
- chemical engineering analysis of biochar/pyrolysis production and emissions

The way forward:
Organize a Cornell biochar website as part of the CCSF AVF project
Leverage communication hub to keep potential and existing collaborators up to date through email
Consider a monthly biochar lunch meeting

[i] We apologize for any misspelled or forgotten names.