

NE-1017
Annual Meeting Minutes
June 11-12, 2008
Cornell University
Ithaca, NY

Participants (in alphabetical order):

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Minutes:

11 June 2008:

1:10 PM – Meeting called to order by Chair.

Welcome and orientation from Lou Albright (Host). Provides Campus Map for participants to orientate to parking, building location, etc... Dinner at will be at 7:00 p.m. at Olivia's. Tomorrow morning, will tour hydroponic lettuce demonstration greenhouse in morning from 10 until noon. Then we will tour the Cornell lake source cooling project.

Ron Lacey (TX) not able to attend meeting; A.J. Both will serve as Chair in his place.

1:20 – Introductions

AJB thanks LA for hosting us in place of Ron Lacey, who had volunteered to host the group this year but was unable to do so.

1:22 – AJB requests folks to look at minutes for last year. MG moves to approve minutes; seconded. 2007 minutes approved by the group.

Administrative Report from Ed Ashworth:

1 – Renewal of project due June 20th. EA stresses importance of incorporating changes and submitting very quickly. EA mentions that he was not directly involved in proposal review/writing response.

2 – There is a large quantity of money in Specialty Crops Research in the new Farm Bill. Currently, the final proposal/RFA is not finalized; however, August 2008 is the likely date when proposals are due. EA encourages us to submit part or all of our group project for a Specialty Crops Research Grant. Individuals, integrated groups, and ‘Centers’ may all apply for funds. EA suggests that projects focusing on solving greenhouse energy problems may be a good niche for proposals for our group.

AJB asks EA for more clarification about review process. Our proposal was favorably reviewed by external reviewers, and then we also got feedback from the MAC members. AJB asks if writing a response to the feedback from MAC will be enough or if we should directly incorporate changes into our proposal.

EA suggests that responses should be incorporated directly into the document. He mentions that one criticism in particular needs to be strongly addressed. That criticism is that our project is a group of individuals getting together without true research collaboration. E.A suggests that long-term, we should certainly think about ways to foster collaboration... For example, perhaps in the next proposal we could propose fewer objectives and focus more on collaboration. For example in the sensor section of the proposal, there appears no true collaboration or coordination among the group... From an outside perspective, it looks like research decisions are not made as a group.

AJB mentions that we are a research committee – not an information exchange committee. He asks E.A if we must write a different proposal to change to an information exchange committee in order to obtain funding.

EA suggests that for now we should just resubmit our materials with the changes. But, we really need to think about future ways to exchange information and collaborate better in the future.

AJB mentions that changing this will likely take time and quite a bit of effort.

EA suggests that we will likely have no problems getting approval of our current proposal with incorporation of the changes suggested.

AJB asks for questions/comments from the group. He also asks folks if they are considering writing proposals for the Specialty Crops Initiative (SCI).

GG responds to EA's comments. He suggests that we are looking at the big picture of what greenhouse growers are facing. We are on the right track, but, possibly not following the mechanism that USDA wants us to follow. GG suggests that we answer the questions MAC posed and submit our proposal as a complete proposal with a follow-up letter responding directly to each question. GG suggests SCI may be a good chance to get funding for collaborative projects and meet our goal of directly collaborating more on research projects. Since our research focuses on energy, water, labor, food production, sensors, etc..., our research leaves us really well positioned to get money because our projects are focused on serious problems facing the greenhouse industry. GG suggests spending time looking at SCI.

RB – Notes that SCI is focused on research that reaches across state lines; thus it looks like our group has a good opportunity to get funding.

AJB suggests that getting people together and motivated is one big obstacle to submitting a SCI proposal.

LA suggests the NSCORT (NASA Specialized Center of Research and Training) proposal submission process as a model for submitting a proposal. In NSCORT proposals, researchers have a principal objective with groups of individuals working on smaller projects that fit under the overall 'umbrella' objective.

GG suggests that the grant should include administrative support for the person who takes care of administrative responsibilities for SCI proposal.

AJB mentions that there is \$30 million for this year in SCI. One conflict possibly facing group members is that they will have the option to go with a proposal through NE-1017 or work with another, possibly university specific group. Also, due to short turn around time for proposals, AJB suggests that we must commit ourselves very soon and stay committed in order for things to work out.

MG has two comments:

1 – In regards to our NE-1017 proposal, AJB's response to question number 3 from MAC was a very good summary of our interactions and a good response to the criticism that our group lacks collaboration.

2 – One potential problem facing writing for SCI is that we are too diverse to be able to focus well. One possible option is for people under various topics to work together rather than work together as an entire group. MG suggests that we as a group may be too diverse to be successful.

LA mentions that model described (NSCORT) above may meet requirements of problem #2 mentioned by MG.

AJB asks the group what our next step is regarding SCI. Should we submit one proposal with a large topic and sub-topics. Or, should we discuss whether this proposal is really a good idea?

RB asks GG whether the five year proposal for NE-1017 is a good starting point for SPI research proposals.

GG responds that indeed, each of our topics may serve as sub-topics. But, we definitely need an umbrella – or, two umbrellas. The first umbrella should be food production in controlled environments. Possible sub-topics could be energy, labor, food quality, food safety, enhanced foods, locally grown foods, or foods for educating in science and technology. The second umbrella should propose that a permanent organization should be formed based on national research. This could be a national or regional organization.

RB asks if SCI is limited food?

GG states that it does include flowers. GG thinks the focus should be on food production, but, concedes that flower and food production in greenhouses face similar problems.

LA would like to include pharmaceuticals and other high value chemical producing crops.

AJB asks if anyone is interested in being overall lead for developing the SCI proposal.

GG and LA volunteer to be leaders for the proposal.

AJB wants them to get back to the committee with an outline of their umbrella topics and sub-topics that they would like people to think about.

GG would look to the topic leaders identified for the renewal proposal to lead research in their area.

AJB mentions that we are not limited to the topics in our proposal and we can potentially expand the SCI proposal beyond our NE-1017 proposal.

RH suggests organizing the ‘sub-topics’ by crop or possibly by research area. For example, Maine and Ohio could work together on water as a research area. R.H. questions what will encourage collaboration for SCI since the group has had difficulty collaborating in the past.

GG and LA suggest that grant money will make a big difference in encouraging collaboration.

LA suggests that if a portion of a project doesn't get completed, we should have a way of re-structuring the grant to fold money into other projects.

MG agrees that grant money will encourage collaboration. But, with our proposal, we still have too broad of a topic to encourage logical collaborations.

GG suggests that the umbrella should be broad enough to be sensed as a value by USDA. All of us contribute to the value of controlled environments. If the group is willing to have multiple sub-projects some can be large and some can be small. We, NE-1017, can act as the umbrella organization. The fact that our group has 20 years of greenhouse research experience and we have made significant contributions to the greenhouse industry suggests that we are a success story. In the SCI proposal, we must explain this and explain that all of our diverse projects contribute to this success story. 'Controlled Environment' is really a broad term... it includes high tunnels, low tunnels, drip irrigation in fields, etc... A 'controlled environment' is really any modification or control over the growing environment.

MG – Still expresses concern over the broad nature of our focus. Our strength is that we are inter-disciplinary and broad over regions. However, we may possibly be too broad to get funding.

EA mentions that a SCI proposal doesn't have to incorporate everyone... We may have to focus and not include everyone in the group to be successful.

LA suggests that we look at overall topics, not specific crops. For example, sensors, evaporative cooling, etc... could be topics with sub-topics that would fit under the overall umbrella.

GG notes that we must make the umbrella broad enough to allow new members to be added, new sub-topics to be added, and, generally for things to evolve.

AJB asks if there is agreement that we should go forward with G.G and L.A's ideas for developing an umbrella proposal with sub-topics.

NM asks if flowers and other crops can be included.

AJB suggests that we should include flowers as long as research involves a controlled environment.

GG mentions that we must listen to MG's criticism and make sure that we don't look like we are promising more than we are able to deliver.

MG suggests that if you start out diverse, you must focus to actually get money. We must also show the benefit of collaborating. Possibly we should put in grants under topics, not under an umbrella.

MK suggests that we list 5 different project types. We should work towards 'coordinated system' project types. In the proposal, we should look for short term solutions to issues in the proposal that meet long-term goals. Under this project, we can identify a 'center of excellence'. SCI will be looking for multi-institutional, multi-disciplinary projects.

MK suggests that we list 5 different project types. We should work towards 'coordinated system' project types. In the proposal, we should look for short term solutions to issues in the proposal that meet long-term goals. Under this project, we can identify a 'center of excellence'. SCI will be looking for multi-institutional, multi-disciplinary projects.

AJB asks again if we are interested in going forward with GG and LA's idea. The group appears to be interested.

MG still expresses concern that we are too broad, but, is supportive of the proposal.

GG suggests that we would want to include others not in our group as well to broaden our expertise.

AJB asks the group if we should talk about SCI proposals now or later.

GG suggests maybe we should discuss SCI at the end of the meeting, but, first, we should finish the work we have on the agenda now. He asks if folks are okay with renewal proposal topics being used as a template for SCI grant. GG wants folks to think about it and let him know if they have problems with him using our proposal as a template for a SPI proposal.

RB and SB mention that they agree with NM and would like the proposal to be broad enough to include flowering crops.

DDV mentions that food research has a very big draw because of problems involved in food safety and interest in locally grown food.

Review of Collaborative Projects:

LA mentions that his past collaboration with Mike Brugger (OH) on natural ventilation has ended. He is hopeful that collaboration will begin with Murat, Chieri, and Gene (AZ) in this area.

RB sent out a survey of to greenhouse growers concerning energy costs. Questions address how growers are dealing with energy costs and what they think of adding a fuel surcharge to plant prices.

SB is continuing her collaboration with Marc van Iersel (GA) on irrigation. This year, MvI and SB will collaborate with Jonathan Frantz (USDA-ARS) to include water use parameters in Jonathan's 'Virtual Grower' model.

MG has no current collaborations with the group.

NM is talking with LA, BL, and DDV about collaborating on a project looking at root exudates in lettuce production.

WB is collaborating with various states and is also attending meetings (i.e., NE-1017) in a collaborative spirit.

MK has no current collaborations with the group, but, he is hopeful for future collaborations with several people in NE1017 group. Apart from NE1017 project, M.K. collaborated with Peter Ling (OH) and AJB (Rutgers) on a higher education challenge grant this year. This HEC will develop courses looking at the engineering of controlled environment systems.

GG collaborated with Peter Ling (OH) and AJB on a higher education challenge grant. This HEC will develop a course looking at the engineering of controlled environment systems. They are still waiting to hear about funding...

RH has no specific collaborations.

GM has no current collaborations. He is hopeful for more collaborations on alternative heating options and has ideas for collaborations in that area.

JH has no collaborations, but, is hopeful for more next year.

Rutgers has written a collaborative paper with OH on heat pumps and energy storage.

AJB mentions the importance of strengthening collaboration of the group in the future. He encourages everyone to do a better job in the future.

GG says that collaborations should involve results for the industry and for the group.

Proposal Renewal:

AJB notes that our final response to comments from MAC should be submitted as a letter addressing individual comments. Also, we should re-work the proposal and re-submit it through the NIMSS system. AJB opens the floor to discussion of the draft of the response put together primarily by NJ and AZ.

Issues mentioned by MAC are as follows:

1. MAC worry about including economic impact – this concern was addressed by including Robin’s work.
2. Do we demonstrate and document transferability?
3. How do we demonstrate collaboration among members?

AJB opens the floor to discussion with mentions that we must submit comments by June 20th.

RH suggests that Mike Brugger’s collaboration with LA should be excluded.

SB mentions that we could include the book on water, media, etc... written by some group members as transferability and collaboration.

MK asks whether a letter of interest from companies would support transferability.

EA mentions that there is no formal place for that sort of letter in the proposal.

AJB asks if everyone was happy with the way the collaboration issue was addressed?

GM mentions that they are adding a bioenergy Extension faculty member (Francis (John) Hay) to their group in NE.

MG questions whether CT may provide information about wood as an alternative fuel source?

AJB intended to get this information from John Bartok.

EA wants to know if we will leave the meeting with objectives re-written or if our objective is for people to write AJB with comments/suggestions.

AJB intends to get feedback and then work that into the proposal. If possible he will send the revised proposal out again... He doesn’t think it’s possible for everybody to re-write the proposal.

AJB requests any other comments and says will e-mail with everyone new draft.

The group concurs that we trust AJB with the proposal revision.

Meeting Location:

AJB mentions that there is a small possibility that we won’t meet if the project is not renewed and asks for volunteers to host the meeting next year.

AJB opens the discussion by noting that we were scheduled to meet in TX this year. He will contact Ron Lacey first to see if he will host the 2009 meeting. He asks for volunteers to host the meeting in case Ron is unable.

GG notes that the sequence for past meetings is as follows:

NY (08), PA (07), CT (06), OH (05), NJ (04), MD (03), AZ (02), NH (01), KY (00), NY (99).

SB volunteers to host meeting in ME in 2009.

GG would like to host the meeting in AZ at some point, but, not 2009.

GM offers that UNL may be an option, but, that it might be a better option to be closer to northeast since most members are from the northeast.

AJB offers NJ as a host location.

AJB – NE, TX, ME, NJ, AZ have mentioned that they may be interested in hosting meeting. AJB will contact Ron Lacey first since he had originally offered to host the meeting in 2008. He will follow up by contacting the other universities.

Election of Officers:

Neil Mattson volunteers to be secretary next year, and the group accepts Neil's offer.

Other Business:

SB mentions that she is involved with a Sustainability Research Coalition with Roberto Lopez (Purdue) and Jennifer Dennis (Purdue) and Brian Krug (UNH). Neil and Robin are both interested in collaborating with the Sustainability Research Coalition.

GM has a Thermal Energy Camera available through UNL. He offers the possibility for folks to use it for various research projects. The camera cannot leave country, but, can leave the state.

GG announced a few meetings:

The GreenSys (ISHS) meeting will be in Quebec City, June 14-19 2009. The NCERA-101 group will have a special session possibly co-hosted by NE-1017 at the meeting.

There will be an Engineering/Crop production workshop for semi-arid regions October 20-24th, 2008 meeting in Tucson, AZ. A pre-conference tour will include a visit to Biosphere 2 and a tour of the phoenix/mars lander command center.

AJB announced the sixth annual lighting conference will be in Tsukuba, Japan next year (November 15-19).

The 2009 ASBAE meeting will be June 28-July 1 in Reno, NV.

AJB mentions that ME, GA, and AK are new members. He encourages us to continue to invite new members to join our group.

AF mentions that UK has hiring freeze/frost. UK has hired a student from UF (Rebecca Schnelle) who may be joining our group as well.

AJB – NCERA-101 has formed an international committee to develop controlled environment guidelines for growth chamber and tissue culture work. Their efforts have been published. The guidelines for growth chambers are online (NCERA-101 website) and tissue culture guidelines will be on-line soon. The NCERA-101 group is considering producing a document for greenhouse researchers and growers as well. Information will include parameters that should be measured, how often they should be measured, what should be reported, etc. They would like to team up with our group at the GreenSys Meeting in June 2009 in Quebec City. There will be a separate workshop for looking at new guidelines/minimum guidelines for greenhouse research. In addition to this session, we should have a broader session in the meeting with key-note speakers and several invited speakers to talk about issues related to greenhouse and controlled environment systems. Royal Heins will be the key-note speaker. AJB proposes that NE-1017 co-sponsors the workshop...

AJB opens the floor to discussion of co-sponsoring the workshop and development of guidelines.

The group agrees that this is an excellent idea. AJB notes that we should contact Chieri Kubota if we have ideas for speakers.

Last suggestion – round table discussion of what should be included in the guidelines document... May ask people to show intent/willingness to participate in the development of the guidelines. Reminds everyone that it takes a lot of effort to develop something like this...

The group considers meeting at GreenSys in Quebec City in 2009 to facilitate participation in discussion of these guidelines. An alternate option could be to meet in Maine before or after travel to the GreenSys meeting.

Business meeting terminated at 3:17

Break 3:17-3:41

Station Reports Beginning at 3:41 – reports submitted to secretary (SB)

Dinner at Olivia's 7:30

12 June – Meeting resumes at 8:15 am with a completion of station reports.

Meeting concludes at 11:00.

11:00 - 12:30 Tour of the lettuce demonstration greenhouse hosted by the manager Bob LaDue

12:30 - 1:00 Lunch at McDonalds

1:00 - 3:00 Tour of Cornell's lake source cooling project hosted by project engineer Tim Peer

Respectfully Submitted,

Stephanie Burnett