

PPIC Technical Committee Meeting, Monday, March 11, 2019 12 – 1:30 pm, FScN 225G

In attendance: Pam Ismail – UMN
Claire Boyle – UMN
Amy Mathiowetz – UMN
Therese Liffbrig – UMN
Lolly Occhino – AURI
Clint Johnson – ConAgra
Baljit Ghotra – ADM, via WebEx
Dina Fernandez – ADM, via WebEx
Steve Hess – Hershey's, via WebEx
Carrie Lendon – Cargill, via WebEx

1. Introductions

2. Inaugural Meeting Re-cap

- a. Feedback survey collected information about success of various event aspects, overall positive feedback. Areas for improvement included more networking time/longer breaks and providing slide formatting guidelines to facilitate better viewing of the presentations

3. Executive Board (EB) Members and March 1st Meeting Re-cap

- a. Jason Robinson – AURI
- b. Christina Connelly – Canadian Consulate
- c. Julie Simonson – Schwan's (on behalf of the Schwan's Corporate Giving Foundation, not the company)
- d. Denis Chereau – IMPROVE
- e. Stacy Pyett – Wageningen University and Research, and Proteins for Life
- f. Greg Cuomo – UMN, CFANS Associate Dean for Research
- g. Potentially a new member from the Minnesota Department of Agriculture and a new researcher from the U of M
- h. Pam chairs the board but is not a member
- i. March 1 meeting was helpful in brainstorming potential new members and ways to contact companies as potential members
- j. EB will meet more frequently through the first year to maintain the momentum of the center, monthly meetings through June, as needed after that

4. Review Technical Committee (TC) Responsibilities

- a. Partners all get a member on the TC in order to help determine the future of PPIC research
 - i. Develop a call for proposals
 - ii. TC will seek complimentary researchers as needed and will make recommendations to the EB which will make final decisions
- b. Determine focus of workshops and short courses
- c. Research priorities and research responsibilities are on the website
- d. Lolly: Will all proposals go to all 13 researchers in the center?
 - i. Not necessarily, only to those that work in areas related to the proposals. We don't want to spread our resources too thin until we have more funding.
- e. Clint: Will all 13 researchers be involved on these projects?
 - i. It's a collaboration but not necessarily all researchers will be involved in all projects
- f. Baljit: At the inaugural meeting, we collected research priorities from the large group. Going forward, how will the TC get new ideas/add to the pool of research priorities?
 - i. We will still have research planning meetings where stakeholders and industry members will be invited to share ideas of where our priorities should be. The TC will streamline these ideas from the large group input to make the final decisions and direct PPIC research
- g. EB suggested having a confidentiality document signed within committees. Is this something the TC needs?

- i. Baljit: No need for it. At this level, confidential info shouldn't be shared. Difficult to draft a document when the agreement would be with multiple companies, not just one competitor.
- ii. Carrie: The impetus relies on members of TC to bring forward only information that feels comfortable at this platform. Added complexity with additional layers of confidentiality.
- iii. If we don't need it, we won't pursue this document.
- iv. Steve: Agree that it's not needed, not value added, we are focusing on pre-competitive research.

5. Reviewing Benefits to Partners

- a. Research Spotlight meeting will highlight PPIC work
- b. Access to workshops and short courses and trainings
 - i. Two members can attend for free as an incentive for membership
- c. Competitive research can still be done on separate contract basis

6. Current Partners and Conversations with Potential Partners

- a. Current: Schwan's Corporate Giving Foundation (supporter not member, funds specific for fellowships), Hershey's, Cargill, ADM, ConAgra, Kellogg is in progress
- b. Waiting to hear back after conversations with DuPont and AGT
- c. PepsiCo and DSM haven't responded after reaching out
- d. Ingredion, Novozymes, SunOpta, and Firmenich don't have money for membership this fiscal year, but are interested in membership for next year
- e. Kraft Heinz introductory phone call scheduled for Tuesday, March 12
- f. EB is working on reaching out to potential partners
- g. Pam is seeking other support (ex. AURI in kind support, will revisit next year to evaluate future support), FFAR, MDA
- h. Are current partners willing to share preferred suppliers or customers that might be interested in PPIC membership?
 - i. Carrie: Processors with critical protein processing equipment could be a good source, ex. Buhler
 - ii. Lolly: Commodity groups like Soy Nutrition Institute, or other promotion councils, for in kind support or membership, potentially Northern Crops Institute
- i. Suggestions for inviting researchers
 - i. Clint: How were researchers picked?
 - 1. Pam sent a specific invitation to the department members that work in PPIC related areas, as well as to other researchers at UMN who are working on protein crops. We don't want funding to be spread too thin. We are seeking complementary researchers that we can fund.

7. Current Budget

- a. 4 members who have signed on with a 20% discount per year (\$32,000 rather than \$40,000), can be paid yearly or all upfront. Membership agreement terms are active starting the day the form is signed.
- b. 15% of funds goes to CFANS for administrative costs
- c. Currently about \$333,000 to work with over the next three years. Most will go to research, but some will be reserved for admin costs and outreach programs.
 - i. When Kellogg signs on, they will contribute \$96,000 more for three years
- d. Pam is seeking other state and federal funding. Member dollars are important but not the only funding source.
 - i. FFAR (Foundation for Food and Agriculture Research) has matching funds
 - 1. Pre-proposal is due April 19. If invited to submit a full proposal from here, the deadline is June 12.
 - 2. This requires a focused project, they won't match all of our funds, but will match our industry dollars for projects that align with their focus on using new crops that produce dual benefits to farmers and the environment.
 - 3. Match up to \$500,000, which can be in kind

4. Fast approaching deadline, Pam will outline a pre-proposal and send out for discussion
- ii. MDA is interested in PPIC work
 1. Proposal cycle starts in October
 2. Invest in projects that bring benefit to MN companies and land
- iii. USDA - hope to eventually present PPIC in Washington

8. Overview of Research Priorities (Appendix 4)

- a. Clint and Dina: How were the research priorities ranked?
 - i. Discussed protein challenges at a round table meeting with AURI and the Protein Highway about a year and a half ago, created a steering committee that developed and categorized research priorities, which were presented, discussed, and added to at the inaugural meeting, then they were ranked during the large group discussion
- b. Pam: Does the TC still see these top six as the most important? What protein should be focused on? What should be the starting point? We have minimal funding and need to consider the cost of a project that relies on a MS or PhD student.
 - i. Clint: How long do we anticipate a project being? Is three years reasonable? What if companies pull their membership? Should we focus on a shorter term project to start?
 1. If we picked a year long project, it wouldn't be a student, it would have to be a postdoc or researcher. Part of the goal of the PPIC is to train future scientists in the protein space.
 - ii. Clint: Do we need to have funds in reserve?
 1. Yes, we don't want all of the money to be tied up in projects.
 - iii. Lolly: What are the stipulations of the Schwan's support?
 1. Very specific funding for two fellowships for graduate students per year in Pam's lab, however there is a lot of freedom in research topic as long as it relates to PPIC goals
 2. These funds are not included in previously mentioned budget, amount is still confidential
 3. Because Schwan's money doesn't include supplies or analytical support or travel, other funds can be supplemental as long as the other funding sources allow it
 - a. Ex. Current student being funded by Schwan's fellowship is being supplemented with USDA grant that has overlapping goals
 - b. This method reduces risk if membership dollars decrease, sort of a cost-sharing approach
- c. Carrie: How much of the \$333,000 should be reserved for admin costs? How flexible are the MDA and FFAR funds?
 - i. Very flexible, for MDA a research budget is developed based on needs of the project (travel, supplies, support, tuition, etc), for FFAR only 10% of the money can go to indirect/admin costs
 - ii. CFANS admin cost (15%) is already deducted from the \$333,000
- d. How much should be kept in reserves? How much should be devoted to research? 50/50?
- e. Clint: It's important to consider how much you can do with the money we have.
- f. Pam: Postdocs cost more but are more effective/better trained, it should be assumed that it costs about \$60,000 per year per project per person
 - i. Typically allot \$10,000/yr for supplies, \$2,000 for travel
- g. Clint: We should start with short term projects to prove viability and value and show that PPIC is producing results, then we can tackle longer term projects as PPIC gains funding
- h. Steve: Agree that we can move on to larger projects as we create a portfolio of work and results. It may be premature to set a spending split (ex. 50/50) before we receive project proposals, but maybe it's better to set a maximum amount to devote to research ("not more than 70% of funds go to research"). These top 6 priorities are the big challenges in the protein space, they are the right focus but are they focused enough? Are they too broad? They are a good framework for submitting proposals.
- i. Pam: Is 70% for research too high?
 - i. Lolly: 2/3 and 1/3? Hard to know the right split until we see proposals

- j. Pam: What should we focus on for our first attempt? What crop should we focus on? Are there any specific processing techniques we should address? Especially with regard to 1 year projects
 - i. We can refine these topics later in a separate discussion.
- k. Baljit: Some of these topics/research priorities apply to current proteins in the market, some of these priorities are more suited for new proteins. What does the industry need today in the short term? Currently these are all large projects. It would be helpful to determine what is already known, what are the gaps, share this info with members, then develop larger projects that address these gaps over the next 3 – 5 years
- l. Pam: Our lab has a lot of literature review info on plant proteins from latest theses. Would compiling this info be a valuable document?
- m. Dina: Yes, it would be great to see what is being studied right now in the major journals, what is research focusing on. Doesn't need to be in depth, but a simple review of titles and topics, how many are out there on these topics, what are areas to build on
 - i. Pam: We can create a shared document with this info
- n. Clint: What is a reasonable timeline for this?
 - i. We'll look at the availability of some of our researchers and find out
- o. Carrie: If we are looking for a short-term win, Lolly, does AURI have clients with questions they want addressed that would be in the scope of the PPIC but AURI just doesn't have enough resources for? PPIC projects could stem from AURI needs

9. Next Steps

- a. Doodle poll will be sent to schedule the next discussion of research topics for FFAR pre-proposal
- b. Lit review should be compiled before then
- c. Meeting frequency – as often as needed in the first year, about twice a year in the future
- d. April 19 deadline means next meeting should be in early April
- e. Pam will circulate pre-proposal outline before next meeting
- f. Carrie: Do we have the fellowship dollars to start right away?
 - i. Yes, we can start a fellowship in the fall with a PPIC project.
- g. The Research Spotlight meeting dates and topics will be open for discussion. This meeting is to present what is being done in the plant protein space, not just PPIC projects. Researchers will be invited to speak and present posters. More specific than the general talks given at the inaugural meeting.
- h. Workshop topics will be discussed later