



NSF Industry/University Cooperative Research Center (I/UCRC) Planning Proposal Workshop

Objective (one of many): To conduct a process by which the potential constituents of the Center, made up of university researchers, industry representatives, and NSF program staff, work together toward a list of proposed Center projects that take advantage of the expertise, interests and resources of the universities to respond to near-term technical needs of the industry participants, leading to commercial opportunities.

Two key aspects of this process are 1) to outline the universities' capabilities through proposed project presentations and posters, and 2) an industry moderated panel session that encourages diverse industry input and discussion regarding significant, near-term technical challenges facing the industry.

Process:

Day One

- 1. Center vision and capabilities [center director]: A broad overview of the Center vision, capabilities and objectives that sets the stage for Center research and benefits. This is essentially a review of the important points included in the successful planning proposal that formulated this workshop.
- 2. Synopsis of the NSF I/UCRC Program [NSF representative and center evaluator]: An overview of the I/UCRC Program and LIFE evaluation to establish some guidelines/framework for the Center.
- 3. University project presentations [director and faculty]:
 - a. Specific project presentations with LIFE evaluation Within the corecompetencies of the Center as outlined in step 1, the director and faculty present tentative projects with objectives, activities, and potential outcomes that could be of value to the industry members. These could lead to funded Center projects with budgets and time-lines.
 - b. Each presentation is individually evaluated by the prospective Center industry members using the NSF LIFE (Level of Interest, Feedback and Evaluation) form consisting of a qualitative score from "Very Interested" to "No Interest", and personal open-ended comments. It is fair for the respondents to complete the form with a "self-serving" response; one that reflects the value his/her company would get from this project if funded. This viewpoint may be moderated by a consideration for what would be good for the overall benefit of the Center.

- 4. Industry moderated panel session [industry panel; industry representatives]:
 - a. This is the opportunity for the industry attendees who are prospective members to express their interests and needs in the Center. This step involves a panel of industry representatives who open the session with some current issues and engage the other attendees in some substantial discussion. Discussions can focus on some areas of general, pre-competitive investigation and technology development that would compliment their internal R&D activities and help solve issues or problems leading to new or improved products and processes. This ultimately leads to commercialization opportunities, higher profitability, or some other economic benefit to the companies. An important outcome of this session is discussion about potential projects that might be proposed which the group has not heard presented from the University.
 - b. This panel session is also evaluated and commented on by each prospective Center industry member using the NSF LIFE form.
- 5. University posters [faculty and students]: Poster with LIFE evaluation that further outlines the universities' capabilities and current research activities that could result in funded projects within the Center.

Day Two

- 6. LIFE review and discussion [center evaluator]: The Center Evaluator will prepare a report that is an aggregation of all the LIFE scores and comments from industry representatives following the University project presentations, the industry moderated session and the posters. The Evaluator will address each project, poster and the industry session one-by-one and facilitate open discussion between the directors, faculty and industry representatives with the LIFE comments as a starting point.
- 7. Feedback from industry moderated session [panel moderator]:
 - a. The panel moderator will summarize some key issues from the previous panel session and encourage discussion and ideas exchange between all the constituents.
 - b. Begin to precipitate consistent issues that the industry would like the Center to address, and that take advantage of the core expertise and resource set from the universities. This is leading to specific topics that may result in proposed Center projects suggested by both the universities and industry.
 - c. This session should also address administrative and operational aspects of the Center and include the Center director in the discussion. Leadership, meeting formats, communications, membership benefits, NSF support, recruitment activities, etc. may be discussed so potential members understand how the Center will function.

An important feature of the workshop process is the open format allowing the Center constituents to share ideas, information and vision for the Center. This process between university leadership and the industry representatives results in better defining the Center and proposing potential research projects that are of value to the prospective industry members, and hopefully to convince their management that it would be worth the membership investment in the Center. And the process helps convey to the NSF I/UCRC program director that this Center has the potential to be a successful I/UCRC with clear benefits to the industry members and the universities, and that it will ultimately have a positive impact on the society; advancing technology, security, safety, and the economy.

Stephen McGregor, Center Evaluator May 24, 2010