Boot Camp for I/UCRC Planning Grantees

Linda Caudill, Denis Gray, Larry Hornak and Eric Sundstrom

January 9, 2012
I/UCRC Annual Meeting
Crystal City, VA

The Industry / University Cooperative Research Centers Program
Boot Camp for I/UCRC Planning Grantees

OBJECTIVES

1. Fulfill the requirements of your Planning Grant Award
   • Each Center/Site PI must attend a boot camp prior to holding their planning meeting.

2. Maximize your potential for a submission of a successful Center proposal.

3. Maximize your potential for a successful center launch.
## Agenda

### Boot Camp for I/UCRC Planning Grantees

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 PM – 2:05</td>
<td>Welcome and Introduction</td>
<td>Sundstrom</td>
</tr>
<tr>
<td>2:05 – 2:55</td>
<td>Planning Process Fundamentals</td>
<td>Gray, Hornak, Caudill</td>
</tr>
<tr>
<td>2:55 – 3:10</td>
<td>Q &amp; A</td>
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<tr>
<td>3:10 – 3:15</td>
<td>Prep for Roundtable Session</td>
<td>Sundstrom</td>
</tr>
<tr>
<td>3:15 – 3:30</td>
<td>Break, Reconvene at Tables</td>
<td>All</td>
</tr>
<tr>
<td>3:30 – 4:20</td>
<td>Roundtables</td>
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<tr>
<td>4:20 – 4:30</td>
<td>Break</td>
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<tr>
<td>4:30 – 4:55</td>
<td>Report Out from Tables</td>
<td>Table Reporters</td>
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<tr>
<td>4:55 – 5 PM</td>
<td>Closing</td>
<td>Sundstrom, Hornak</td>
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</tbody>
</table>
I/UCRC Planning Process Fundamentals

Purpose: Maximize the potential for a successful Center Proposal.

LOI

Planning Grant Proposal

Awarded

Planning Grant Meeting with University Partners, Students, Center Evaluator, Prospective Members and NSF I/UCRC Program Directors

1.5 Day Meeting

Events Pre Meeting

Events Occurring at the Meeting

Day 1

Day 2

Events Post Meeting

LOI, Planning Grant Pending or Awarded, what now?

Planning Meeting Approaching...

Getting the proposal ready to go!
Why Create an IUCRC?
Career Opportunities

Since beginning your role as IUCRC director, what positions were you recruited for or offered, and what positions did you accept?

Career Impacts on Former Directors and Current Directors with 5+ Years of Service in the Role (n=70)

- Recruited for or Offered
- Accepted & Held

<table>
<thead>
<tr>
<th>Position</th>
<th>Recruited for or Offered</th>
<th>Accepted &amp; Held</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dept/Assoc Dept Head</td>
<td>35.7%</td>
<td>18.6%</td>
</tr>
<tr>
<td>Endowed Chair</td>
<td>28.6%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Dean/Assoc Dean</td>
<td>17.1%</td>
<td>18.6%</td>
</tr>
<tr>
<td>Lab/Center Director</td>
<td>14.3%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Corp Board Mbr</td>
<td>22.9%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Industry Exec</td>
<td>5.7%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Provost</td>
<td>7.1%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Vice Provost</td>
<td>10.0%</td>
<td></td>
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</tbody>
</table>
A Few I/UCRC Success Stories

• Accelerating Innovation Research (AIR) Awards
  - 3 of 8 awards in FY 2012 made to I/UCRCs
    - Center for Biophotonic Sensors and Systems (CBSS): Boston University
    - Center for Advanced Knowledge Enablement (CAKE): Florida International
    - Wireless Internet Center for Advanced Technology (WICAT): NY Poly

• Innovation Corps Awards; FY 2012
  - Safety, Security & Robotics (SSRC): Univ. of Minnesota
  - Intelligent Maintenance Systems (IMS): University of Cincinnatti
  - Laser and Plasma for Advanced Manufacturing (LPAM): University of Virginia
  - Connection One (C1): Rensselaer Polytechnic Institute

• 25th Anniversaries celebrated by I/UCRCs
  - Berkeley Sensor & Actuator Center (BSAC)
  - Security and Software Engineering Research Center (S²ERC)
  - Center for Non-Destructive Evaluation (CNDE)

*Graduated STC, now an I/UCRC
Industry-Spawning Applications from NSF-Funded University Technologies

Berkeley Sensor & Actuator Center  BSAC (UC Berkeley & UC Davis)

100+ Industry Members spanning 25 years of Innovation Research
5 Current 20+ year members
30 Start-up Companies
Multi-$Billion Impact

Applications
• Healthcare
• Plasmonics
• Integrated Optics
• Wireless Communications
• Energy
  • Harvest/Monitor
  • Conformal Electronics
• Processes & Packaging

Technologies
• Nanotechnology
• BioFluidics
• Optophotonics
• Wireless
• MicroEnergy
• Sensing & Actuation
• Materials/Process
March 19, 2012 Testimony before the **Subcommittee on Health Energy and Commerce Committee** entitled “A Review of Efforts to Prevent and Treat Traumatic Brain Injury (TBI)”
Economic Impact

- Retrospective impacts total nearly $1.27B, with a net present value of $1.25B.
- Each dollar invested by NSF-I/UCRC generated an estimated 64.7 dollars in impacts.

<table>
<thead>
<tr>
<th>IUCRC investments &amp; Impacts</th>
<th>TOTAL</th>
<th>IMS</th>
<th>BSAC</th>
<th>IUCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated impacts (present value)</td>
<td><strong>$1267.1M</strong></td>
<td><strong>$846,738,946</strong></td>
<td><strong>$410,727,849</strong></td>
<td><strong>$9,638,633</strong></td>
</tr>
<tr>
<td>Total investments (present value)</td>
<td><strong>$19.6M</strong></td>
<td><strong>$3,133,857</strong></td>
<td><strong>$13,250,712</strong></td>
<td><strong>$3,203,057</strong></td>
</tr>
<tr>
<td>Benefit:Cost Ratio</td>
<td><strong>64.7:1</strong></td>
<td><strong>270.2:1</strong></td>
<td><strong>31.2:1</strong></td>
<td><strong>3.0:1</strong></td>
</tr>
<tr>
<td>Net Present Value</td>
<td><strong>$1247.5M</strong></td>
<td><strong>$843,605,090</strong></td>
<td><strong>$397,477,137</strong></td>
<td><strong>$6,435,577</strong></td>
</tr>
</tbody>
</table>
Impact on Students

- Producing > 400 MS; 350 PhD; 200 BS students/year
- Consistently rated (by students & employers) superior on professional preparation, communication & teamwork than non-IUCRC students (Scott)
I/UCRC Planning Process

Purpose: Maximize the potential for a successful Center Proposal.

Events Pre Meeting
- Cultivate interest in the Center among prospective members
- Solidify center concept and proposed projects
- Secure adequate prospect attendance for meeting
- Organize an effective meeting
Events Planning Pre Meeting

Cultivate prospective member participation to support a successful planning meeting.

• It is essential to craft an effective message re your center that resonates with prospective members.
• The message should convey the value of your center to prospective members in your sector.
  • Value of your center in terms meaningful to a prospective member – Your Center’s unique technical and human capital
  • Value to prospective members of your center forming as an I/UCRC – The I/UCRC Franchise

Questions will be varied and many!
Understanding and Selling the IUCRC Franchise
The Industry/University Cooperative Research Centers (I/UCRC) Program

**Mission:**
- To contribute to the nation’s research infrastructure base by developing long-term partnerships among industry, academe and government
- To leverage NSF funds with industry to support graduate students performing industrially relevant fundamental research

**Vision:**
- To expand the innovation capacity of our nation’s competitive workforce through partnerships between industries and universities

Over 30 years of fostering and growing long-term trusted relationships between Industry and academe based on shared value
I/UCRC Fast Facts – FY12 Snapshot

Program Funding
- $16.4M in Program Funding (ENG, CISE)
- $130M in Total Center Funding,
- 8:1 Leveraging of NSF funds.

Centers Nationally:
- 61 Centers with 178 Sites
- Over 760 Members representing over 500 distinct organizations holding 1080 Memberships

- 52% Large Business, 26% SB, 15% Federal Members

Students
- 2100 students engaged
- 1000 graduated in 2011, over 30% hired by members
- 350 PhDs, 425 MS & 250 UGs graduated in 2011, trained in Center research

Sustainability
- Over 40 Graduated I/UCRCs remain in operation true to model

National Scope of I/UCRCs
ENG — Engineering
I/UCRC Approach

The NSF provides the framework for industry to realize early and ongoing value from university fundamental research

NSF Solicitation outlines partnership requirements

FUNDING PROFILE

Industry, Agency $

University

NSF $

RESEARCH PORTFOLIO

Cooperatively Defined, Sector Relevant Fundamental Research

Industry & Universities shape precompetitive research portfolio

Uniform cooperative agreements in all centers

EVOLUTION

Academic sites, members may evolve in time

NSF seeds center activity.
Centers succeed based on the value they provide to industry and faculty and the depth of the trusted relationships that result.
The I/UCRC Model

- Builds trusted long-term relationships for effective industry linkage to university fundamental research

Shared, Cooperatively Defined Portfolio

I/UCRC:
- collective ownership
- collective decision-making

Industrial Affiliates:
- collective ownership
- one-on-one decision-making

One-on-one contracts

Disadvantages of Affiliates Model:
- sub-critical mass projects
- no sense of community

Advantages of the IUCRC Cooperative:
- Conversation validates shared community needs
- Research needs identified that are sector-precompetitive
- Research shaped by shared member and academic value

Much more than collective ownership: Collective Value
I/UCRC Nucleus: A Cooperatively Defined, Funded & Shared Research Portfolio

- Cooperatively defined, selected
- Governed by NSF I/UCRC Agreement
- Royalty free nonexclusive access to IP by members

Value derived from portfolio

Requires trust be built in the model, and between all partners in the center.
I/UCRC Membership Agreement

- **Parties to Agreement, University and Center**
- **Annual membership fee structure**
- Patent rights held by university, with royalty free, non-exclusive rights to center members
- Companies wishing to exercise rights to a royalty-free license pay for the costs of patent application
- If only one company seeks a license, that company may obtain an exclusive fee-bearing license
- March-in Rights
- Publication delay policy
- Industrial Advisory Board – one representative from each company per membership
- **Indemnification clause(s)**

- Must sign the membership agreement form
- ONE center, and ONE membership agreement form
What value does an I/UCRC offer?

- High value research projects
- Investment leveraging
- Sector networking, learning from industry peers and customers
- Access to intellectual property
- Pre-publication access to research
- Center researchers & facilities
- Access to students
- New research and education program dimensions
- Leverage POC results for new funding
- Trusted relationships with industry
- Ready partners for translation of discoveries
- Student recruitment and placement
- Organize industry sector relationships
- Means to achieve institutional mission.

Outcomes from a cooperatively defined and managed, portfolio of industry-precompetitive fundamental research.

IAB Research Needs

I/UCRC Research

Value to IAB

Academic Value

Center Faculty Research
Improving Through Evaluation
Evaluation Goals, Roles and Tasks

**Goals**

1. To help NSF and local centers objectively evaluate their impact by documenting IUCRC outcomes and accomplishments
2. To promote **continuous improvement** by giving actionable, timely, data-based (formally collected and observational) feedback, analysis and advice to NSF and local centers;
3. 3)To identify and communicate information about I/UCRC best practices to NSF and local centers

**Evaluator’s Role**

- Member of Center Team
- Collect Outcome and Process Data & Provide Feedback
- Serve as an advisor on operations and strategy

**Activities**

- Facilitate Project Level Feedback: LIFE Forms
- Facilitate Center Level Feedback: Process/Outcome Questionnaires
- Prepare Evaluation Report: Submitted with Annual Renewal
I/UCRC Evaluation & Assessment

25+ year commitment to integrating evaluation with program planning, implementation and operation. *Local Evaluation – Global Assessment*

<table>
<thead>
<tr>
<th>CENTER INPUTS AND OUTPUTS ASSESSMENTS</th>
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<tbody>
<tr>
<td>CENTER LIFE CYCLE*</td>
</tr>
<tr>
<td>IP EVENTS</td>
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<tr>
<td>FUNDING SOURCES</td>
</tr>
</tbody>
</table>

TARGETED ASSESSMENTS AND RELATED WORK PRODUCTS

<table>
<thead>
<tr>
<th>IUCRC GRADUATION STATUS</th>
<th>Breakthrough Compendium</th>
<th>Gray &amp; Walters Director’s Guide</th>
</tr>
</thead>
</table>

Plus publication in open literature: > 80 publications in journals, national & international conferences: *Research Policy; AAAS; Journal of Technology Transfer; Sc. Public Policy; New Directions in Evaluation*
I/UCRC Planning Process

**Purpose:** Maximize the potential for a successful Center Proposal.

**Events Pre Meeting**
- Cultivate interest in the Center among prospective members
- Solidify center concept and proposed projects
- Secure adequate prospect attendance for meeting
- Organize an effective meeting

What is the value of your center to a prospective member??

**Events Occurring at the Meeting**
- Day 1
- Day 2

**Events Post Meeting**
- Complete initial *vetted project set*
- Effective Marketing
- Commitments for membership
- Final *vetted project set* for proposal

**Planning Grant Meeting with University Partners, Students, Center Evaluator, Prospective Members and NSF I/UCRC Program Directors**

**Awarded**

**Successful Proposal & 1st IAB Meeting**
Recruiting

Challenge
• IUCRC recruiting presents unique marketing situation
  – Join a “research club”
  – Defined by emergent research agenda
  – Club includes your competitors
  – Will have partial influence
    • Almost no knowledge base

Resources
• Other directors: tacit knowledge
• Purple book (See Chapter 4)
• Evaluator research on IUCRC
  – What experienced directors think
  – What firms tell us
Consider how your center/site identifies potential industry members. How effective have you found the following activities in generating leads for new members?
# Why: Center Marketing Study - Reported decision factors

Factors that directors believe account for joining:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Selected as a Top 3 reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance of research to organization needs</td>
<td>78.7%</td>
</tr>
<tr>
<td>High probability of future knowledge and technology transfer benefits</td>
<td>61.7%</td>
</tr>
<tr>
<td>Success of past Center/PI research accomplishments</td>
<td>40.4%</td>
</tr>
<tr>
<td>Quantity and/or quality of graduate students to recruit</td>
<td>21.3%</td>
</tr>
<tr>
<td>High financial leveraging provided by your center/site</td>
<td>21.3%</td>
</tr>
</tbody>
</table>

Factors that directors believe account for NOT joining:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Selected as a Top 3 reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of membership fee</td>
<td>51.1%</td>
</tr>
<tr>
<td>Lack of relevance of research to organization needs</td>
<td>38.3%</td>
</tr>
<tr>
<td>Concerns about IP and licensing rights</td>
<td>38.3%</td>
</tr>
<tr>
<td>Organization research priorities are very short term</td>
<td>34.0%</td>
</tr>
<tr>
<td>Organization rep did not have access to real decision makers</td>
<td>29.8%</td>
</tr>
</tbody>
</table>
Recruiting Success Rates

• Lead generation
  – On average, centers generate about 11 new leads over a 12 month period.
  – About 7 in every 10 new leads for membership emerge from existing relationships

• New member commitments
  – On average, for every 10 firms actively pursued by centers:
    • 3 will join
    • 2 will decline
    • 5 will be undecided

“Not now” is an Invitation to pursue later
Member Turnover Rate

- Turnover Percent
- Project based model
- Consortial model

NSF-I/UCRC Center Structure Database
Why do firms join/not join CRCs?

• Strategic analysis of anticipated benefits versus possible risks
  – CRCs present a diverse portfolio of both benefits and risks
  – The calculus for doing this assessment can vary widely from firm to firm
    • Firm A join for benefit Y - research
    • Firm B join for benefit Z – access to students
  – No one mentioned corporate goodwill or charity
Why do firms join/not join CRCs?

• **Strategic Research Relevance** (or lack thereof)
  
  – Research related to firm’s core competency
    • Strategic fundamental research (non-duplicative) that supports firm’s technology road map. Nearer-term research that provides “cost avoidance” or research leveraging
  
  – Research related to emerging or competitive technologies
    • Provides an efficient means for monitoring and exploring promising new technological avenues
Final Lessons from Firm Study

- “Champion’s” recommendation carries a lot of weight but decision is influenced by multiple people at different levels (mean=4)
  - Firms also have membership antagonists
    - Need to arm champion with data and information to overcome objections others will raise

- Timing matters: it is a lot easier to join if the money for it is in the budget than if it has to be found in a set budget
  - Budgets get set before calendar year
What’s Your Research Elevator Speech?

“If one wants to sell shoes you must have the best shoes in the world. We have to have something to sell. We have always recruited PIs from all over the country—the best science and the best PIs!-that is what sells!”
I/UCRC Planning Process

Purpose: Maximize the potential for a successful Center Proposal.

LOI → Planning Grant Proposal → Awarded
Planning Grant Meeting with University Partners, Students, Center Evaluator, Prospective Members and NSF I/UCRC Program Directors

1.5 Day Meeting

Events Pre Meeting
- Cultivate interest in the Center among prospective members
- Solidify center concept and proposed projects
- Secure adequate prospect attendance for meeting
- Organize an effective meeting

Events Occurring at the Meeting
- Day 1
- Day 2

Events Post Meeting

Successful Proposal & 1st IAB Meeting
The Planning Meeting: Purpose

- Demonstrate the value of the Center to prospective members, including:
  - Pre-competitive research
  - Access to faculty, students; possibly from multiple universities (sites)
  - Influence on research agenda
  - Leveraging your research dollar
- Introduce NSF and I/UCRC program to industry
- Introduce faculty, students to industry
- Demonstrate collaborative industry influence on research agenda
- Generate a sense of community among group
- Produce letters of commitment, intentions to join
The Planning Meeting: Planning 6-12 months before

- Begin establishing common membership agreement: [www.nsf.gov/eng/iip/iucrc/sample_agreement_form.jsp](http://www.nsf.gov/eng/iip/iucrc/sample_agreement_form.jsp)
- Establish website, Center Fact Sheet: [www.nsf.gov/eng/iip/iucrc/directory/instructions.jsp](http://www.nsf.gov/eng/iip/iucrc/directory/instructions.jsp)
- Set meeting date, contract space and food service
  - Confirm dates with NSF and Evaluator first
  - Ensure internet access and power strips in meeting room
- Publish marketing materials, press release, email distribution
- “Save the Date” announcement to prospective members and faculty
- Follow Program requirements for Planning Meeting (refer to congratulatory email from Program Director)
The Planning Meeting: Planning
3-6 months before

- Finalize common membership agreement, gain concurrence at all university sites
- Ongoing recruiting and marketing
- Update website with developing details, announcements
- Develop list of faculty (or student) speakers; share presentation details and deadlines for submission: [www.nsf.gov/eng/iip/iucrc/pgrant_first_meeting_slide.ppt](http://www.nsf.gov/eng/iip/iucrc/pgrant_first_meeting_slide.ppt)
- Begin developing meeting agenda: [www.nsf.gov/eng/iip/iucrc/planningGrantAgenda.jsp](http://www.nsf.gov/eng/iip/iucrc/planningGrantAgenda.jsp)
- Provide Executive Summary template to each speaker, set deadline for submission (each proposal will have a presentation and Executive Summary): [www.nsf.gov/eng/iip/iucrc/exec_summary_portfolios.jsp](http://www.nsf.gov/eng/iip/iucrc/exec_summary_portfolios.jsp)
### Executive Summary Form

**EXECUTIVE SUMMARY**

**PROJECT OVERVIEW**

<table>
<thead>
<tr>
<th>PROJECT NAME:</th>
<th>PROPOSAL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROJEC MANAGER:</td>
<td></td>
</tr>
<tr>
<td>PROGRAM NAME:</td>
<td>NEW</td>
</tr>
<tr>
<td>PROGRAM MANAGER:</td>
<td>CONT.</td>
</tr>
</tbody>
</table>

**DESCRIPTION:**

**EXPERIMENTAL PLAN:**

**RELATED WORK ELSEWHERE:**

**HOW OURS IS DIFFERENT:**

**RELATED WORK WITHIN THE CENTER:**

**MILESTONES:**

**1ST YEAR DELIVERABLES:**

**DELIVERABLES:**

**BUDGET:**

**POTENTIAL MEMBER COMPANY BENEFITS:**

- I/UCRC tools help guide industrial relevant research
- Centers provide industry with the right information to guide project selection including:
  - Project description
  - Research analysis
  - Project duration
  - Project cost
  - 1st Year Deliverables
  - Milestones
The Planning Meeting: Planning
2 months before

- Obtain NSF final approval of common membership agreement
  
  “One Center, therefore, one membership agreement.”
- Receive final NSF approval of Agenda, then finalize and distribute to industry, faculty
- Update website (e.g., with agenda, agreement)
- Remind speakers of expectations, deadlines
- Confirm meeting participation by industry, send reminders as necessary
The Planning Meeting: Planning
1-3 weeks before

- Distribute final details, agenda and participant list to all meeting attendees; remind all to bring laptops with them
- Finalize food service, other contracts
- Prepare meeting packets, to include:
  - Agenda and participant list, membership agreement
  - Instructions for logging onto the internet
  - Mission and Vision statements
  - Executive Summaries and presentations
  - Paper copies of LIFE forms
- Receive presentations and Executive Summaries from speakers by the deadline
- Work with Evaluator to get on-line LIFE Forms prepared: www.nsf.gov/eng/iip/iucrc/operational_tools.jsp
The Planning Meeting: Executing the day of

- Have a meeting packet and nametag for all participants
- Confirm all technology is working ahead of time
  - Internet access
  - Meeting computer and projector
  - Preload all presentations; verify
  - On-line LIFE Forms
  - Conference phone lines, microphones
- Ask participants to log onto the internet prior to the start of the meeting
- **Stick to the schedule**
- Promote discussion and feedback

“It’s all in the details.”
The Planning Meeting: Day One

Recommended Agenda

Day One

- Registration & Breakfast
- Welcome *(Center Directors, University Administrators)*
- Center Vision *(Center Director and Site Director(s))*
  - Mission, sector need that center will address
  - Capabilities of academic sites
  - Value proposition
- NSF I/UCRC Program *(NSF Program Director)*
- Center Evaluation *(Center Evaluator)*
- Project Presentations: First set, 5 projects max *(Center Faculty)*
  - Remember – one center, multiple sites
  - Organize by thrust area, not school
  - LIFE form completed after each
- Lunch
- Project Presentations: Second set, 5 projects max *(Center Faculty)*
- Industry Workshop: *(NSF Program Director)* What have prospective members not heard in the projects?
- Social & Poster Session, Dinner
The Planning Meeting: Day Two

Recommended Agenda

Day Two

- **LIFE Form Review and Discussion** *(Center Evaluator)*
- **Center Response to Feedback from industry session** *(NSF Program Director)*
  - Center leadership presents plans to better align proposed centers projects to prospective member needs
  - Based on prospective member feedback, plan includes
    - Adaptation of projects that were presented
    - Crafting of new projects
- **NSF Closed Door Session** *(Prospective Members and NSF Program Director)*
  - Answer remaining questions
  - Gauge interest
  - Determine what they need in hand to garner support for membership
- **Next Steps/Action Items**
  - Set schedule for providing materials to prospective members
    - Modified/new project Executive Summaries & ranking sheet
    - Marketing materials
    - Other materials requested to support organizational decision for membership
- **Closing & Boxed Lunches to Go**

**OUTCOMES For Prospective Members:**
- **Build confidence** that the Center will provide value
- Provide content to **justify membership commitment**
The IUCRC Research Portfolio Cycle

The co-operative process rapidly aligns the Center’s portfolio with Member Needs and University Strengths.
The Planning Meeting: Key Outcomes

Based on industry feedback, the center is able to:

- Better align its focus with industry sector needs
- Adapt existing project plans
- Identify new projects
- Establish a timeline for prospective members to rank projects based on their interests
- Establish a marketing packet to support industry membership commitment
The Planning Meeting to summarize...

- Long-range planning is required
- Attention to detail will make the difference between a good meeting and a great one
- Involve students wherever possible
- Remember your audience; prospective industry members and faculty each have different expectations and needs.
- The Planning Meeting is your most important face-to-face contact with industry: a professionally run meeting will set the stage for your Center’s success.

Did I mention planning and attention to detail?
I/UCRC Planning Process

Purpose: Maximize the potential for a successful Center Proposal.

LOI → Planning Grant Proposal → Full Center Proposal

- Events Pre Meeting
  • Cultivate interest in the Center among prospective members
  • Solidify center concept and proposed projects
  • Secure adequate prospect attendance for meeting
  • Organize an effective meeting

- Events Occurring at the Meeting
  - Day 1
  - Day 2

- Events Post Meeting
  • Complete initial vetted project set
  • Effective Marketing
  • Commitments for membership
  • Final vetted project set for proposal

Planning Grant Meeting with University Partners, Students, Center Evaluator, Prospective Members and NSF I/UCRC Program Directors
The Planning Meeting is Over… Now What?

- FOLLOW through ON SCHEDULE with the ACTION ITEMS from the end of the planning meeting
- STAY engaged with NSF & PROSPECTIVE MEMBERS
- PREPARE for a FULL CENTER PROPOSAL:
  - Recruit members (meet the minimum criteria as per the solicitation)
  - Obtain unambiguous and unqualified commitment letters (language!)
  - Compile the top 5 vetted projects from the planning meeting (adjusted based on which industries commit to join) and include in the full center proposal (executive summaries preferred).
  - Make sure the membership agreement is agreed to by all institutions and the NSF.

PREPARE PROPOSAL PER SOLICITATION!

If a center is awarded, the vetted research projects make up the nucleus of projects presented at the 1st IAB Meeting. From these, the IAB votes and selects the center’s first cooperatively defined research portfolio.
Questions?

NSF I/UCRC Planning and Operation Resources

- I/UCRC Evaluation Project Home Page
  - NCSU  http://www.ncsu.edu/iucrc/
  - The purple book: *Managing the I/UCRC*, Gray and Walters
  - CFSP: *Case Study for Managing a Multi-Site I/UCRC*

- NSF I/UCRC Home Page
  - Compendium of Technology Breakthroughs
  - Membership agreement
  - Links for industry members

- Other Centers
# Agenda

**Boot Camp for I/UCRC Planning Grantees**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Presenter(s)</th>
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<tbody>
<tr>
<td>2 PM – 2:05</td>
<td>Welcome and Introduction</td>
<td>Sundstrom</td>
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<td>2:55 – 3:10</td>
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PEER BREAKOUT GROUPS

- **Objective:** Exchange key learning points with peers

- **Peer Breakout Groups - by Phase or role:**
  - **Start-up:** LOI, Planning Grant Proposal, Now what?
  - **Planning Meeting:** Preparation, set-up, mechanics,…
  - **Full I/UCRC Proposal:** Planning, key elements,…
  - **1st IAB Meeting:** Pre-planning, roles, milestones…
  - **Center Operations:** Coordinator role(s)

- **In Your Peer-Group:**
  - **Roles:** Quickly choose Facilitator, Scribe, & Reporter
  - **RESOURCES:** Useful from today? … Brainstorm & top 3
  - **REMINDEERS:** Remember what? … Brainstorm & top 3

- **Report out:** Top 3 Reminders for where we are...
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