

I/UCRC Annual Center Directors Meeting, Washington DC  
January 8-9, 2015

# The Center Value Proposition: All That For Just \$50k?

Tom Flatley, Head

Science Data Processing Branch, NASA/GSFC

**IAB Member of the Center for High-Performance  
Reconfigurable Computing (CHREC)**



# About My Organization

What is your position and interest area?

- *Reconfigurable computing for spaceflight applications*

How long has your organization been a Center member?

- *Since the Center began operations in January 2007 (we were one of the founding members)*

Why is your organization a member of the Center?

- *Collaboration on technology development*
- *Source of excellent student interns/new hires*
- *Unfunded/under-staffed research “side jobs”*



# About Our Center

Our Center currently has 3 Sites:

**University of Florida (lead)**

**Brigham Young University**

**Virginia Tech**



*The mission of our Center is to address basic and applied research challenges at the nexus of reconfigurable, high-performance, and embedded computing, of prime interest to our industry, government, and academic partners. These challenges span from space computers to supercomputers.*

The Center grew from one to four sites over the period of 2007 to 2014, with one site going inactive in January 2015.



# Making the Case for Membership

How does your organization evaluate external research funding decisions like an I/UCRC membership?

How do you make the case for Center membership?

- *Making the case is fairly easy, but finding the funding is sometimes challenging ... it's all about prioritizing the limited (and often shrinking) resources*
- *Usually requires a combination of project and institutional funding*

What Center deliverables are most important in justifying funding? (Some of these may include research results, student recruitment, networking with faculty/other industry members, leveraged research money, opportunity to define pre-competitive research areas, etc.)

- *Leveraging other research/funding, student recruitment, and “low cost” collaboration*
- *We get a HUGE return on our investment, but the fiscal climate still makes funding a challenge in “lean” years*



# Making the Case for Membership (continued)

## Other pertinent information about your membership decision:

(e.g., Number of people involved in approving membership, budget schedules, internal membership “champions” or “antagonists,” legacy successes or failures linked to collaborative research projects, organizational research agenda as it relates to shared projects, etc.

- *One or two levels of line management*
- *Several project managers*
- *“Champion” (and helpers) gathering support (funding) each year*
- *Success of collaboration is never question due to our track record*



# The Case *Against* Membership

Center costs (e.g., financial cost, competitive risk, administrative overhead, travel and personnel cost).

- *There is no case against membership, other than fiscal constraints*

Next-best alternatives to membership: what benefits do we gain by *not* joining?

- *Save a little money but lose a huge return*



Given the benefits and costs of Center membership, how do you calculate the true value of Center Membership?

e.g., Research benefits (stimulated/ accelerated follow-on research, research cost avoidance, research scope, collaborative nature of research, etc.), Collaboration benefits (access to Center research PIs, students, and other industry sponsors), Student recruitment benefits, Commercialization and IP benefits, Others...

- *5x to 10x return on research investment*
- *Exceptional summer interns*
- *Excellent new hires, trained exactly as we need them*



# Lessons for Center Directors

What should Center Directors learn from your experience as an Industrial Sponsor?

(e.g., how might center activities be improved regarding: Center vision, project scoping, IAB-Center communications and marketing, etc.)

- *Partial / fractional memberships?*
- *Align funding cycle with fiscal year (vs. school year)?*
- *With regard to vision, project, communications (etc.) ...*  
*CHREC is awesome!*



# What Helps Turn “Interested” Potential Sponsors into long-term IAB members?

What can Center Directors do to cultivate lasting university-industry relationships?

- *Great schools doing great work*
- *Flexible funding methods, “trial” memberships?*
- *Publicize your success*



# Closing Words of Wisdom

Other comments about your experiences? Any “words of wisdom” for us to take home?

- *Keep doing what you're doing*
- *Challenge all Centers to be “top performers” (metrics/goals)*
- *Partial / fractional / trial memberships?*
- *Align funding cycle with fiscal year (vs. school year)?*
- *Publicize your success to mid-level management*

