

## Enhancing Interdisciplinary Research (IDCR)

Committee Membership represents ~20 different Colleges/Agencies

### Approach:

- ✓ Identify Challenges and Opportunities for Improvements
  - ✓ Identify topics for developing white papers
1. Training to work more **effectively** in IDCR teams
  2. **Recognition** of each Faculty and Student Contribution
  3. Opportunities to **Collaborate**
  4. **Administrative** Issue
  5. Provide **data/feedback** on challenges and opportunities

### Challenges/Opportunities related to Building IDCR teams

- ✓ Studies indicate IDCR **Opportunities** include:
  - Increasingly valued by funding entities
  - A greater probability of sustained funding
  - Improved output with reduced errors and oversight
- ✓ IDCR sets an excellent example to graduate students and junior faculty who often recognize the benefits of IDCR *more than established and mid-career faculty*
- ✓ **Challenges** are to help faculty, students and administrators get better at IDCR

#### Needs:

- **Guidelines and training** in preparation of collaborative proposals and manuscripts
- **Best practices** to maintain successful collaborative research programs.
- **Mentoring program / workshops** on interdisciplinary research, focused on how to write team proposals / manuscripts, how to communicate, group dynamics and conflict resolution, staff/student management, data management, budget management
- **Guidelines on developing clear deliverables plans** for IDCR projects that set ground rules for definition of project roles, contributions, and how this relates to authorship on manuscripts and distribution of resources on future grant proposals

**Continued emphasis on training/service at the College level to streamline the administration of IDCR grants**

### Challenges/Opportunities related to Recognition of Faculty Contributions to IDCR

- ✓ Lack of encouragement or value at the departmental level
- ✓ Lack of appropriate credit for faculty IDCR involvement (especially junior faculty)
  - These concerns were voiced by the TAMU faculty as a whole in recent survey
- ✓ Given that IDCR is increasingly favored by funding agencies, reassess the value of research independence vs ability to perform, fund, direct research in a collaborative environment

**Generate Guidelines** for a University-wide recognition system of faculty contributions:

- Guidelines for **denoting authorship and author contribution** and a corresponding **recognition system of author contribution** for evaluating collaborative grants and manuscripts to be used on evaluations and promotion and tenure decisions
- Guidelines for **recognition** that co-corresponding authorship on collaborative proposals and manuscripts is **generally equivalent to single-authorship** to be used on evaluations and promotion and tenure decisions
- Guidelines to ensure that **participation in IDCR by junior faculty with senior faculty** will not jeopardize their perceived level of research independence for evaluations, promotion

**We recommend appropriate text be added to P&T bylaws and faculty record templates**

### Challenges/Opportunities to Improve Collaboration

- ✓ Reward System for Faculty participation in IDCR not built into tenure and promotion
- ✓ Reward system for Graduate students ~non-existent to punitive: may increase time to graduate, may become "poor stepchild", low faculty cooperation
- ✓ We struggle with "Bottom up" innovation from grad students who could bring together faculty of multiple disciplines if given the chance to innovate and discover

**Approaches for Faculty Collaboration:**

1. **Unrelated TAMU scholars relocate for a couple of weeks** during the summer to a remote site together and spend facilitated time in "think-tank" style dialog. Mini-think tanks could be a nice perk for newly tenured faculty, new hires, or part of the faculty leave options for ways to launch or wrap-up faculty sabbatical or leave periods.
2. **TAMU scholars relocate offices during the fall or spring semester** to other departments: could be a "scholar swap" or one-way exchange. Goal to work someplace else, meet different people, attend lectures and classes, generally immerse in the culture.
3. **Temporary relocation of INDUSTRY SCHOLARS** into multiple departments as part of their PAID sabbatical to TAMU. We would learn from them, they could provide and attend lectures, and generally contribute to student life and faculty growth while stimulating their own personal growth.
4. **Connecting researchers through an electronic forum** where researchers could post inquiries and look for partners, circulated monthly. The Scholars database being built by the libraries could be engaged?

### Challenges/Opportunities for Collaboration continued...

#### Approaches for Graduate Students:

1. Fund T3 style grants for Graduate students that pay for their GRA slot  
e.g., MUST have 3 faculty from separate colleges as committee members/mentors.
2. **Create graduate school, degrees or programs** resulting in research that are NOT housed in one college or Department but rather are housed in or start with challenges from a central group like Honors, McFerrin Center, I School etc.

### Challenges created by the current 'multi-institution' structure in Bryan College Station (BCS) for research faculty

**SR1501** requires faculty in ENG to submit grants through TEES, faculty in COALS to submit grants through AgriLife, and all others through TAMU.

- 1) Multi-investigator grants with faculty in COALS and ENG have **sub-contracts requiring substantial additional paperwork** (and convoluted signoff process) by both faculty and SRS if the grant does not initiate in the university (i.e. originates within the agencies). Some faculty see little incentive to work with others at TAMU versus other institutions since the subcontracting process is no different.
- 2) There is **no one BCS entity with which corporate partners** can establish cooperative agreements when expertise crosses colleges.
- 3) Federal **granting agencies view TAMU, AgriLife, and TEES as three independent** institutions. Faculty who move within the university have lost grants or are required to resubmit applications when grants are relinquished by one system component.
- 4) Federal **regulatory agencies view TAMU, AgriLife, and TEES as one entity**. Concerns voiced over compliance issues for TAMU faculty grants managed by TEES or AgriLife.
- 5) Federal agencies are increasing requiring academic institutions to **file mandatory reports** on any **faculty/staff accused of sexual harassment or scientific misconduct**. Many requirements centered on students, for which TAMU is specifically responsible. Liability for TAMU for reporting events in the agencies over which they have no oversight.
- 6) Concern over **split of PI return** when dealing with TEES, AgriLife, or HSC.
- 7) Impacts may differ across **grant types**: small/short term grants, with little or no IDC

### Administrative Challenges continued...

**Bottomline: Current system discourages IDRC**

- ✓ Those faculty brave enough to take on the cumbersome system face:
  - Increased cost, time
  - Unnecessary stress between colleagues/agencies
  - Unintended errors. It is a continuing issue, for faculty and SRS.

**Approaches:**

- ✓ Continuous feedback on specific issues that need to be addressed and work through proper channels to keep this a priority.
- ✓ Joint meeting with all relevant parties (leadership of system, agencies and university along with CPI) to discuss the issues and solutions to the current model.

### CPI will continue to assist by providing data and feedback on challenges and opportunities

1. Continue to **provide** Survey Data as needed
2. **Encourage usage** of available information on challenges and approaches to fostering IDCR and addressing obstacles
  - ✓ The University Research Council (URC) survey.
  - ✓ Studies of T3, X-Grants on the multidisciplinary/interdisciplinary culture at A&M.
  - ✓ Published Literature