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DISCUSSION ON STATE OF FIU RESEARCH

MARCH 2014



THE OUTLOOK FOR FEDERAL RESEARCH FUNDING

- Period of flat or declining federal funding for university research
- ➤ U.S. funding of research going through fundamental changes
- Future of science is innovation, change, team science, and partnerships
- We need a comprehensive strategy to sustain research growth in the context of this new reality
- Moments of challenge are moments of opportunities



WHAT CAN FIU DO?

- ➤ Build on our strengths remarkable growth in past 20 years \$15M annual in 1992-93 to \$102M 2012-13; \$400M in past four years, with no earmarks
- Dedicate faculty lines to research growth and startup resources to those research lines
- **>** Be more focused on the areas in which we invest our resources
- Strengthen ties to industry
- ➤ Intensify efforts to secure funds from private foundations
- Expand the role of centers, institutes and interdisciplinary research
- Anticipate funding trends and position FIU to be more responsive (need to provide more internal resources for such efforts)

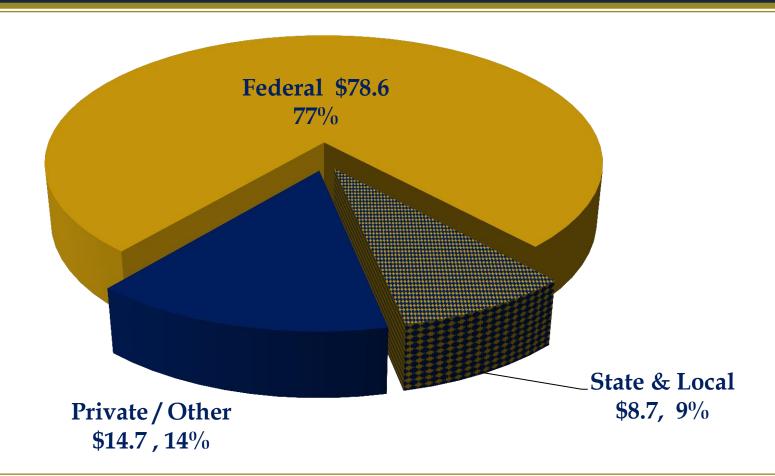


10-YEAR HISTORY OF RESEARCH EXPENDITURES



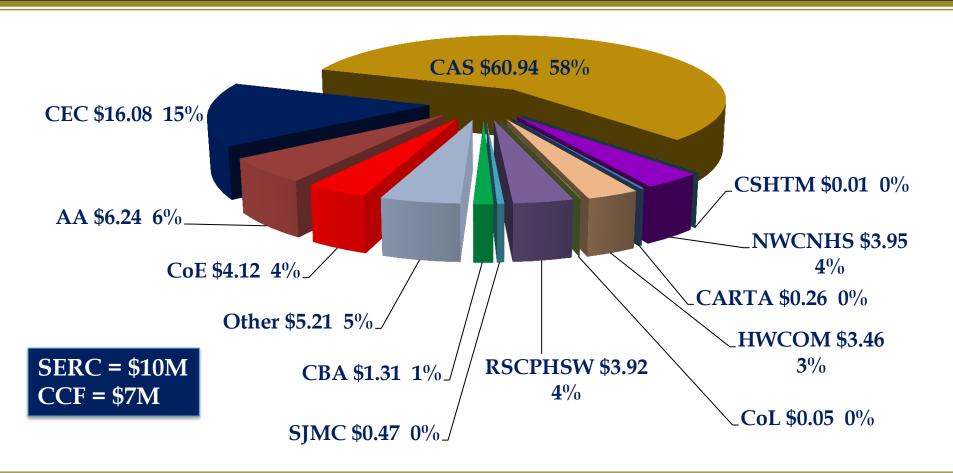


FY 2012-2013 RESEARCH AWARDS BY SPONSOR TYPE



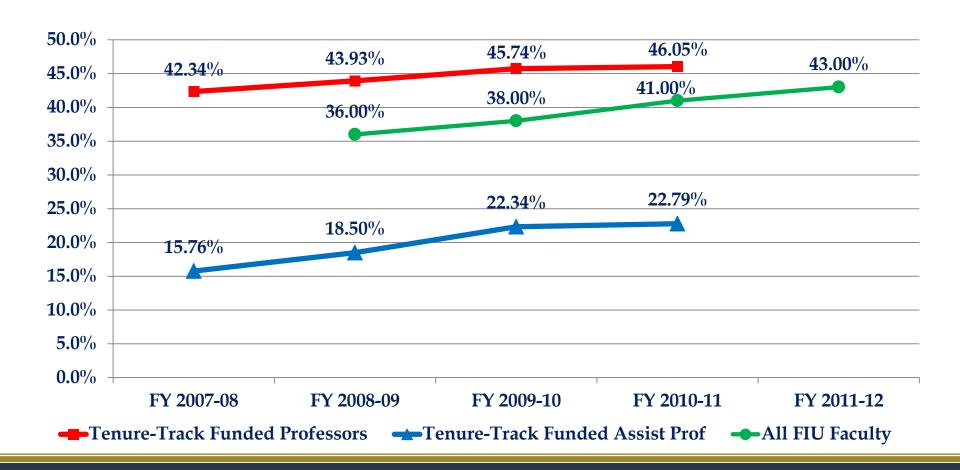


FY 2012-2013 RESEARCH AWARDS BY UNIT (IN MILLIONS)



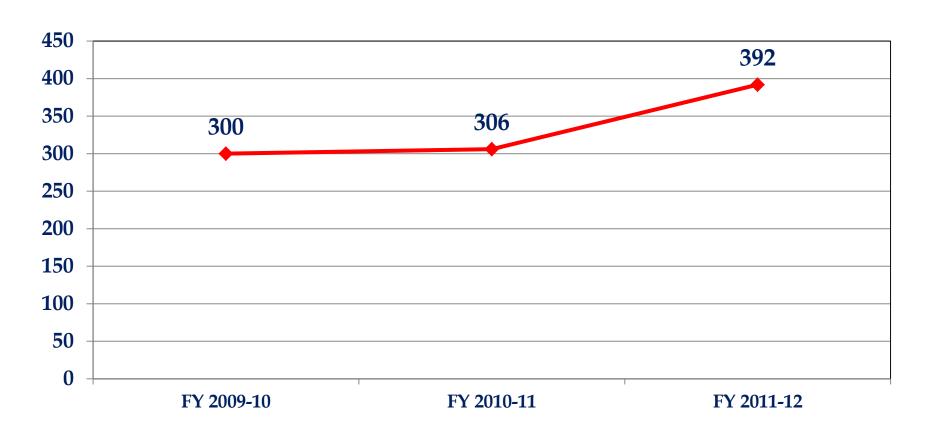


TRENDS IN PROPORTION OF FACULTY WITH EXTERNAL FUNDING



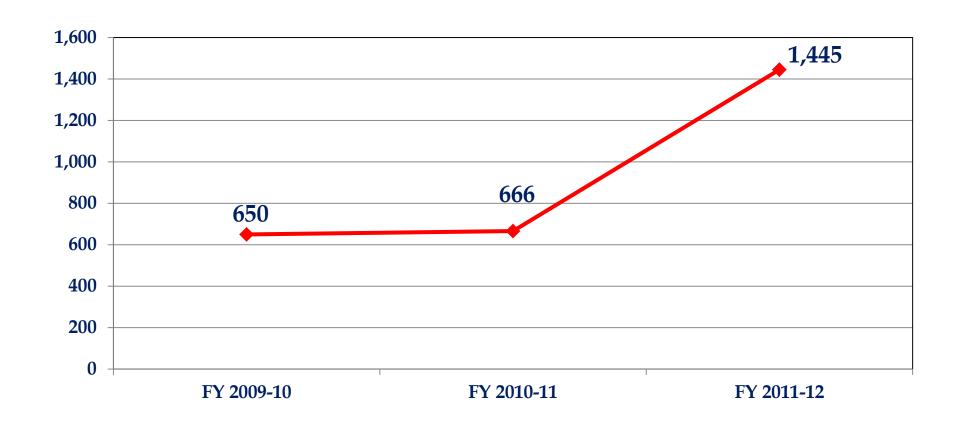


Number of Principal Investigators on Externally Funded Grants



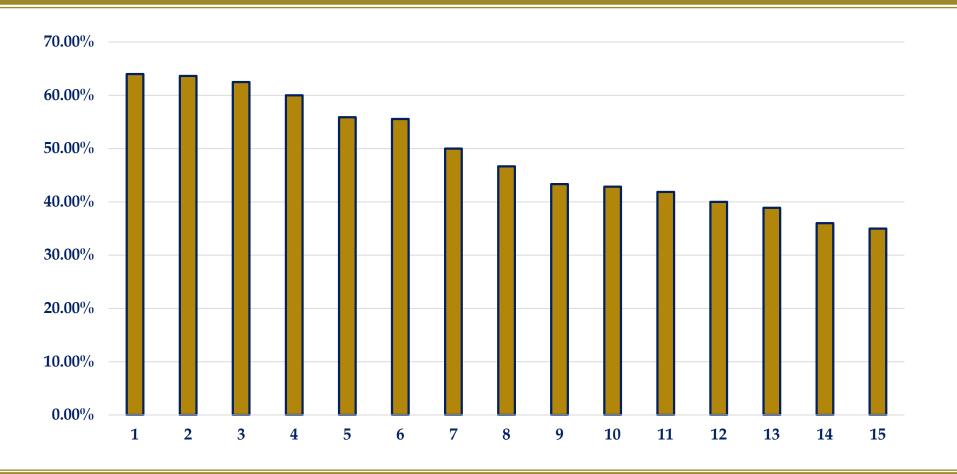


Number of Personnel on Externally Funded Grants



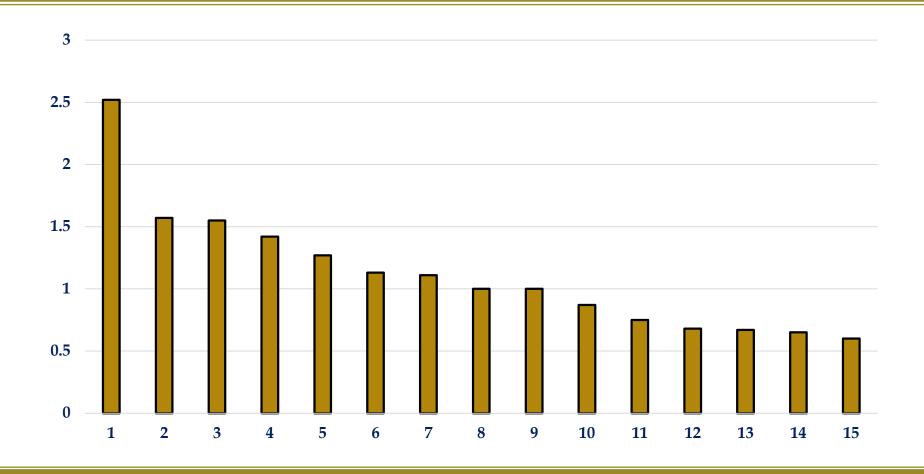


PROPORTION OF FACULTY BY DEPARTMENT WITH GRANT AWARDS FOR PAST TWO FISCAL YEARS COMBINED





AVERAGE # OF GRANTS PER FACULTY BY DEPARTMENT FOR PAST TWO FISCAL YEARS COMBINED





KEY RECOMMENDATIONS FROM IREAL RESEARCH WORKING GROUP

- FIU has lowest number of graduate assistantships compared to SUS counterparts
- To increase research productivity, we need to focus faculty resources in areas of high productivity
- Need increased investment in "right mix" of graduate students, research faculty and instructors
- Centers' performance indicates potential for increased investments in centers to drive research growth
- Increase private-sector funding
- Incentivize colleges, departments and faculty to participate in multidisciplinary research



DOR 13-STEP PLAN TO ADVANCE FIU RESEARCH ACHIEVEMENT

- 1. Develop Strategic Plan to support FIU's research growth goals
- 2. Continue to improve services with the goal of reducing faculty research administrative burdens—adopt and adapt practices proven effective in other universities
- 3. Dedicate resources to strategic research areas
- 4. Foster greater interdisciplinary research and collaboration across research centers and institutes
- 5. Expand research development resources (mentoring, seeding ideas, "sandbox" initiatives, internal and external grant proposal reviews)
- 6. Increase startup funding and provide faculty lines budget in strategic areas
- 7. Work closely with UGS to foster growth and quality Ph.D. programs



DOR 13-STEP PLAN TO ADVANCE FIU RESEARCH ACHIEVEMENT

- 8. Foster a more integrated post-doctoral fellows climate at FIU
- 9. Increase technology transfer efforts through faculty recruitment, fund raising, industry partnerships and the creation of an incubator
- 10. Establish team-level incentives for research growth (college, department, center)
- 11. Establish VPR RAC* to serve as a conduit for sharing information between research faculty and the VPR, and to stimulate collaborative problem solving—Dr. Ranu Jung has agreed to chair the Committee, and invitations to a broadly representative membership will be going out
- 12. Create greater interactions among centers and institutes by establishing a Center Collaborative Council (CCC) and getting major centers to lead DOR's internal research development programs
- 13. Initiate Translational Research Initiative



^{*} Research Advisory Committee

THE CHALLENGE OF STRATEGIC CHOICES: SUMMARY OF KEY RESEARCH AREAS IN SELECTED COLLEGES FOR 2013

| CAS | CEC | HWCOM | RSCPHSW | NWCNHS | СоЕ | |
|---|--|--|-------------------------------|---|--|--|
| Biomolecular Sciences | Energy & Environment -biotechnology, alternative energy, sustainability | Interdisciplinary Institute on Aging: > Neurosciences > Musculoskeletal diseases > Cancer > Cardiovascular | HIV/AIDS & Substance Abuse | Aging/Geriatrics | Student Achievement in Urban Schools | |
| Behavioral Sciences – child mental health | Health-Related Technologies - bio- nano-medical, bio- informatics | Cardiovascular Diabetes/Obesity/ Metabolomics Community Participatory & Applied Research | Tobacco | Chronic Diseases & Chronic Disease Prevention | Early Childhood Education | |
| Cognitive Neuroscience | Community Infrastructure – hurricanes, transportation | | Aging | Simulation & Simulation Based Learning | STEM | |
| Forensic Science | | | Obesity/Diabetes | | | |
| Freshwater Ecosystems | | | Health Outcome Metrics | | | |
| Coastal Ecosystems/ Ecotoxicology | | Environmental Science & Toxicology | | | | |
| Tropical Botany | | HIV/AIDS/Infectious Diseases | | | | |



DIVISION OF RESEARCH

ANNUAL CUSTOMER SURVEY RESULTS SUMMARY



ANNUAL CUSTOMER SURVEY

- ➤ The Division of Research (DOR) conducts annual customer service surveys.
- Surveys were conducted for fiscal years 2007-08, 2008-09/2009-10, 2010-11 and 2011-12. Fiscal year 2012-13 represents the 5th annual survey.
- The surveys are sent to all faculty who either submitted a grant proposal or had current grants during the year.
- ➤ The annual survey contains separate sections regarding Pre-Award, Post-Award, Technology Transfer and other general issues.
- ➤ Both close-ended and open-ended questions are included.

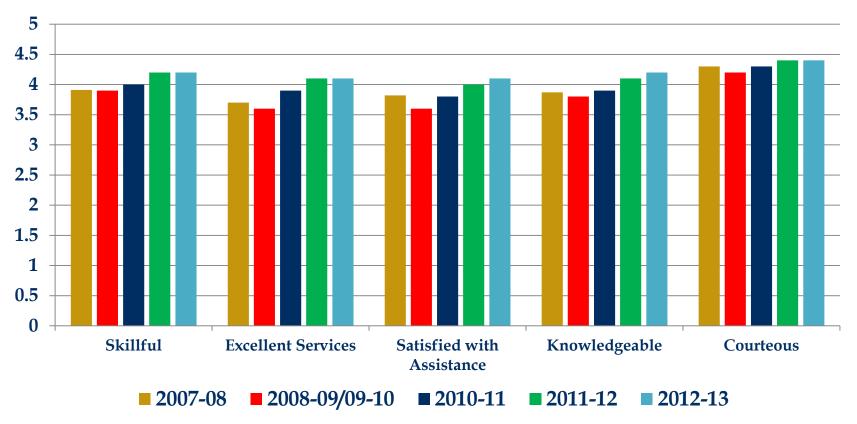


ANNUAL CUSTOMER SURVEY RESPONSE RATES

- Fiscal Year 2007-2008: 54.4% (111 out of 204)
- Fiscal Year 2008-09/09-10: 64.2% (194 out of 302)
- Fiscal Year 2010-2011: 48.4% (152 out of 314)
- > Fiscal Year 2011-2012: 55.4% (194 out of 350)
- Fiscal Year 2012-2013: 48.2% (172 out of 357)



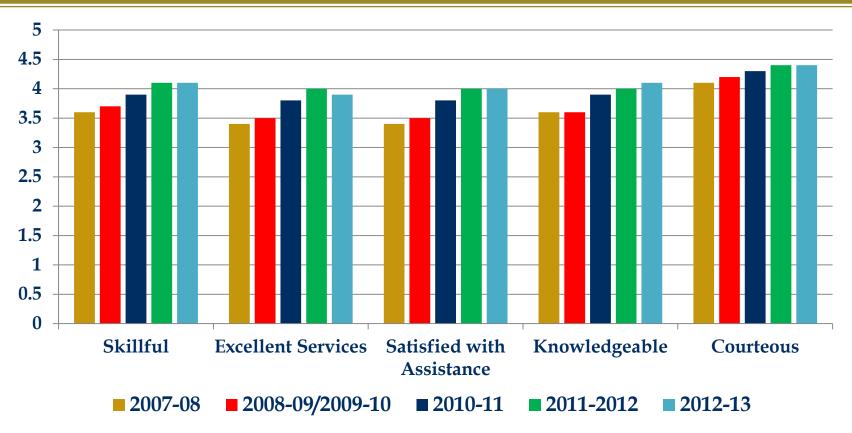
EXPERIENCES WITH PRE-AWARD STAFF*



* Scoring: Scale 1 to 5; 5 indicates highest level of satisfaction or agreement



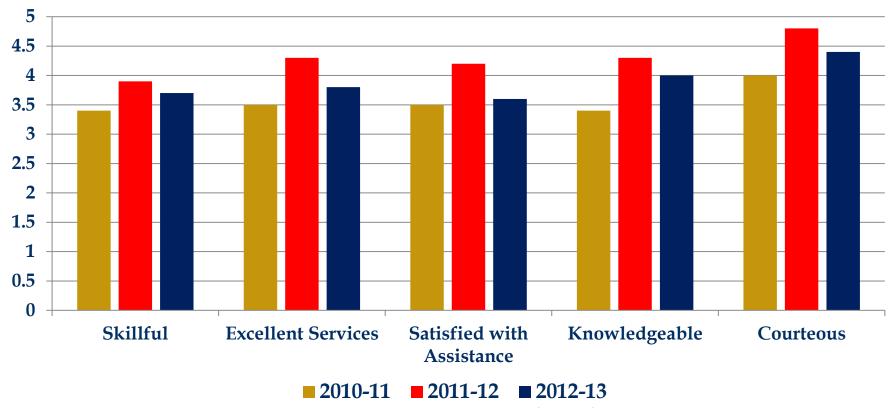
EXPERIENCES WITH POST-AWARD STAFF*



^{*} Scoring: Scale 1 to 5; 5 indicates highest level of satisfaction or agreement



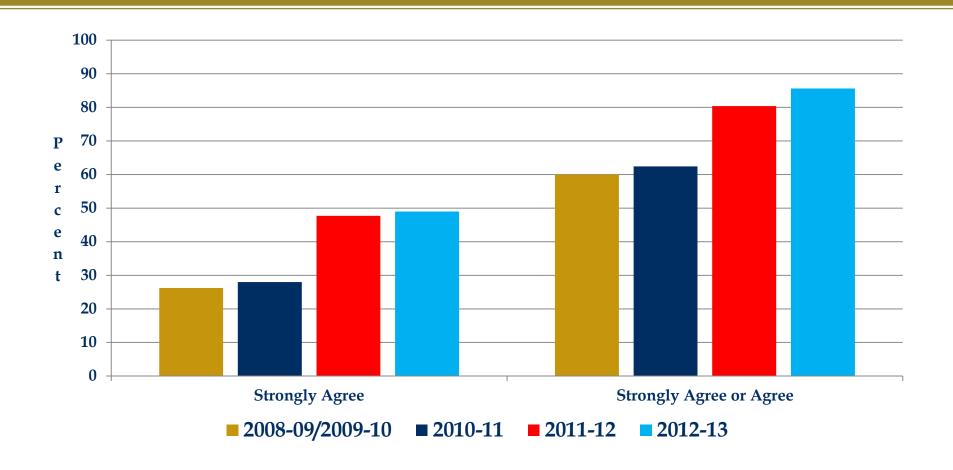
EXPERIENCES WITH TECH TRANSFER STAFF*



^{*} Scoring: Scale 1 to 5; 5 indicates highest level of satisfaction or agreement.

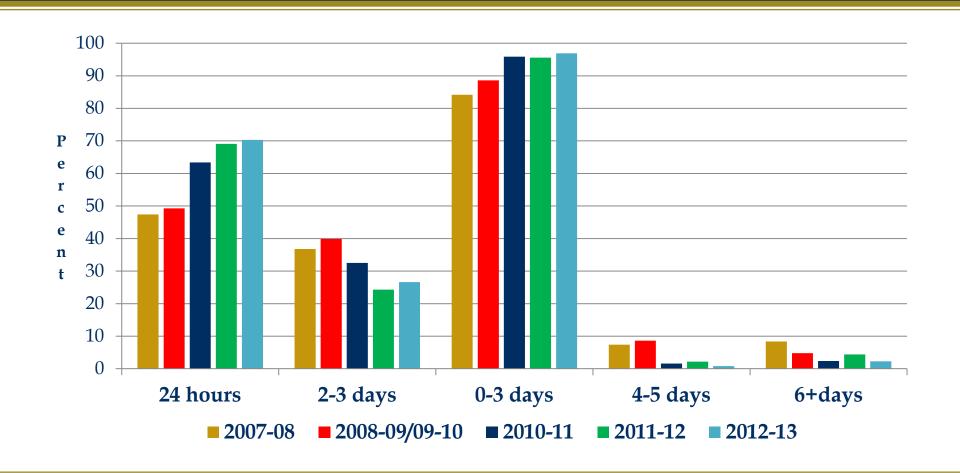


THERE IS PROMPT NOTIFICATION OF NEW AWARDS





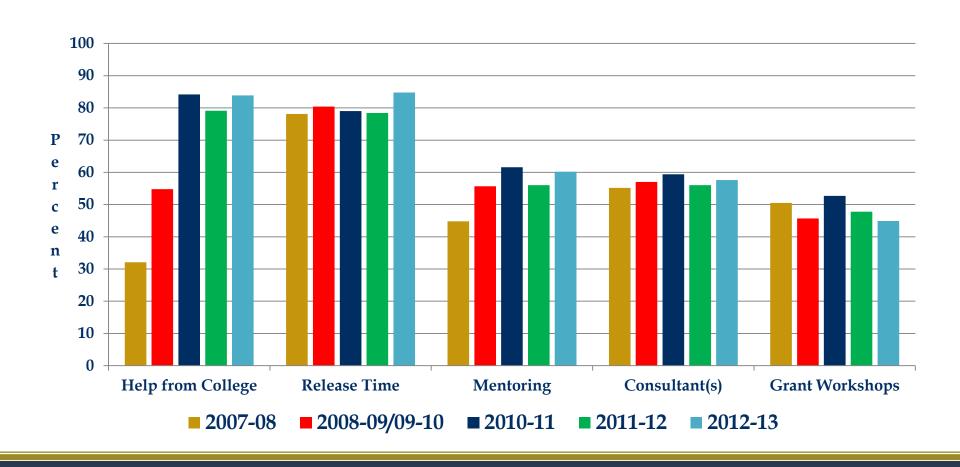
LENGTH OF TIME FOR DOR TO RETURN PHONE CALLS





LEVEL OF IMPORTANCE FOR PRE-AWARD AREAS OF SUPPORT FOR PI

(% "VERY IMPORTANT" & "IMPORTANT")





SUMMARY OF KEY FINDINGS

> Areas with declining satisfaction:

- ✓ Purchasing items on grants
- ✓ Personnel hiring on grants
- ✓ College assistance with grants and contract management

Areas with improving satisfaction:

- ✓ Understanding budgets
- ✓ General Counsel assistance
- ✓ IRB and IACUC support



SUMMARY OF KEY FINDINGS (CONT.)

DOR areas needing improvement, as identified by faculty:

- Three areas in which the responses from this year's survey indicate increases in the need to make improvements:
 - 1) budget and account set-up for new grants
 - 2) financial reports for existing grants
 - 3) hiring of personnel for grants and contracts

Areas with continued trend of faculty reporting lesser needs for DOR to make improvements:

- ➤ Assistance with budget reports and PantherSoft
- ➤ Assistance with IRB/IACUC/IBC



PLANNED ACTIONS TO ADDRESS FOUR KEY AREAS OF PERSISTENT CHALLENGES

EPRAF, PERSONNEL HIRING AND PURCHASING

- 1. Problem: Difficulties with ePRAF
 - 1.1 Actions:
 - Increase Pre-Award embedding in colleges and have DOR staff assist with ePRAF
- 2. Problem: Difficulties in hiring personnel and purchasing2.1 Actions:
 - Create on-line DOR Hotline to detect, track and solve difficulties early



PLANNED ACTIONS TO ADDRESS FOUR KEY AREAS OF PERSISTENT CHALLENGES

PERSONNEL HIRING AND PURCHASING

- **2.1.1** The Hotline will be first launched with the College of Engineering and Computing to test the following approach:
 - ➤ Hotline checked twice a day by one DOR staff member
 - ➤ Within 24 hours, faculty member sending the message will receive acknowledgement that message was received
 - ➤ Internal DOR team will review Hotline inquiry and determine whether DOR alone can solve the problem (e.g., assist the faculty member directly) or whether there is a need to work with HR, Purchasing or the College toward a solution
- **2.1.2** DOR will work with HR and/or Purchasing to problem-solve identified difficulties as needed
- **2.1.3** VPR will have one weekly meeting to be informed about situations that have not been resolved during the week



PLANNED ACTIONS TO ADDRESS FOUR KEY AREAS OF PERSISTENT CHALLENGES

PANTHERSOFT AND TECH TRANSFER

- 3. Problem: Difficulties with budget reports in PantherSoft3.1 Actions: (sample report in next slide)
 - DOR will provide new monthly reports for PIs
 - Reports tested this month with college administrators
 - Launch reports to PIs next month
- 4. Problem: Lower rating of Technology Transfer4.1 Actions:
 - Create standard templates for prompt IP agreements
 - Work with Research Foundation Board to establish commercialization fund and better IP vetting process



PLANNED ACTIONS TO ADDRESS FOUR KEY AREAS OF PERSISTENT CHALLENGES

PANTHERSOFT

| FIU Division of Research - Project Financial Report | | | Project ID | 8 | 399999999 | | | | As of Date: | | 2014-02-28 | |
|---|-------------------------------------|-----------------|----------------------------|-----------------------------|---------------------------|-----------------|------------------------|----|--------------------------------|--------------------|----------------------|-------------------------|
| Project Title | Special Relativity | Dep | artment | Physi | ics | | | | - 1 | F&A | Rate Basis | MTDC |
| Project Start Date | 2010-06-01 | Cont | tract Type | CR_L | OC | | | | | F&A | Rate Percent | 45 |
| Project End Date | 2015-05-31 | 2000 | t Award Grants nager | Smith | h, Susan | | | | | | | |
| Principal Investigator | Einstein, Albert | Sponsor Name | | National Science Foundation | | | Report Views Summary | | | Additional Columns | | |
| FIU Award Number | AWD00000009999 | Sponsor Award # | | CNS-99999999 | | Budget Category | | | | | | |
| Award Description | Theory of Relativity | Cos | t Share on Award | on Award No | | | Detail | | | | | |
| Account | | Bu | udget Obligated to Date | | penditures vious Month | E | xpenditures to Date | | eEncumbrances/ Encumbrances | | Available Balance | Available Percentage |
| Temporary Employ | ment | \$ | 111,272.40 | \$ | (4) | \$ | 100,278.21 | \$ | - | \$ | 10,994.19 | 9.88% |
| Fringe | | \$ | 155,861.90 | \$ | 1,223.96 | \$ | 146,099.80 | \$ | | \$ | 9,762.10 | 6.26% |
| Total Salary & Wages, Temporary Employment, Fringe | | \$ | 796,302.86 | \$ | 5,405.60 | \$ | 722,567.64 | \$ | 120 | \$ | 73,735.22 | 9.26% |
| Travel | | \$ | 500.00 | \$ | 7 <u>2</u> 8 | \$ | 524.00 | \$ | - | \$ | (24.00) | N/A |
| Scholarships, Stipe | nds and Tuition | \$ | 2 | \$ | 721 | \$ | 일 | \$ | 227 | \$ | 2 | N/A |
| Subcontracts | | \$ | 201,415.00 | \$ | 121 | \$ | 155,448.31 | \$ | 45,966.69 | \$ | 2 | N/A |
| Professional Fees | | \$ | 700.00 | \$ | 721 | \$ | 700.00 | \$ | 2 | \$ | 2 | N/A |
| Other Operating Ex | xpenses and Materials & Supplies | \$ | 132,857.01 | \$ | 727 | \$ | 77,915.79 | \$ | 11,830.95 | \$ | 43,110.27 | 32.45% |
| Restricted Expense | Restricted Expenses | | - | \$ | (F) | \$ | - | \$ | - | \$ | = | N/A |
| Equipment and Other Capital Outlay | | \$ | 269,573.00 | \$ | *** | \$ | 202,821.85 | \$ | 25,058.75 | \$ | 41,692.40 | 15.47% |
| Total Operating Expe | Total Operating Expenses | | 605,045.01 | \$ | | \$ | 437,409.95 | \$ | 82,856.39 | \$ | 84,778.67 | 14.01% |
| Total Direct Costs | N | \$ | 1,401,347.87 | \$ | 5,405.60 | \$ | 1,159,977.59 | \$ | 82,856.39 | \$ | 158,513.89 | 11.31% |
| Total Facilities & Administrative Costs | | \$ | 385,492.26 | \$ | 2,432.52 | \$ | 367,361.19 | \$ | | \$ | 18,131.07 | 4.70% |
| Total | | \$ | 1,786,840.13 | \$ | 7,838.12 | \$ | 1,527,338.78 | \$ | 82,856.39 | \$ | 176,644.96 | 9.89% |
| rocardDetail / Expense | seDetail ExpensePivot PayrollDetail | P | ayroll Pivot Pr | rojec | tSummary | (0) | / | | | П | 4 m | |

