

## **ABSTRACT: 2015 ELAM Institution Action Project Poster Symposium**

**Project title: Excellence in Research Initiative at the University of Texas Medical Branch**

**Name and Institution:** Nisha J Garg, PhD, University of Texas Medical Branch at Galveston

**Stakeholders and collaborators:** JS Goodwin, MD (VP Research); DO Jacobs, MD (Provost, School of Medicine); S Mattamana, PhD (Associate Director for Technology Transfer); S Weaver (Director, Institute for Human Infection and Immunity), PhD; and DW Niesel, PhD (Dean, Graduate School of Biomedical Sciences).

**Background:** The UTMB Health is a major academic health Center with mission to improve health for the people of Texas and around the world through excellence in service, education and research. The 2020 Goals and Objectives Prioritization Report, produced with participation of tactical planning (150 participants) and survey (>1050 participants) teams, identified 18 objectives for which institutional resources should be deployed. Maintaining and enhancing research funding was recognized among the highest priorities (3<sup>rd</sup> out of 18 objectives). The UTMB community uniformly believes that research is vital to the UTMB mission and must be maintained if all other important objectives are to be achieved. The institutional excellence in research initiative was developed to address the selected opportunities for research investment that will potentially provide maximum return on investment. Among others, a clear need to develop and support collaborative translational research and entrepreneurial opportunities was identified.

### **Purpose/Objectives:**

- 1) Develop institute-wide grant development and review function to support faculty success and advancement of junior faculty
- 2) Extensive support for collaborative research programs that represent priorities of funding institutions and enhance multi-PI programs and entrepreneurial outcomes.

**Methods and Approach:** We have examined the best practices at the departmental/center level for pre-award grant support, and in process of developing and implementing institutional program, especially for junior faculty, to support all phases of grant concepts, grant development, and grant submission. Under this program, workshops were offered on the concept of ingredients of successful grant writing, successful writing of commercialization plan for SBIR/STTR type grants, developing multi-PI research programs etc. We have implemented an institution-wide External Grant Review Program that allows faculty to receive a scientific review from the experts in the field before submission of the grant application to the funding agency. Further, we implemented three intramural pilot research funding programs to 1) facilitate and enhance interdisciplinary collaboration, 2) build and expand strategic collaboration to be successful in submitting and receiving program grants, and 3) enhance commercialization of technologies developed at the UTMB and submission and funding of SBIR/STTR-type projects.

**Outcomes/Evaluation Strategy:** We plan to continue evaluating several parameters comparing the 2013, 2014, and 2015 outcomes. Some of the parameters that we will evaluate include: 1) enhancement in the faculty satisfaction rate, 2) number of faculty using the grant review program, 3) number of faculty submitting applications for the three pilot programs, 4) number of trainees, publications, interactions, collaborations etc. supported by the intramural pilot programs, 5) increase in the success rate of faculty in receiving external funding. These will provide critical information on the success of the existing programs as well as provide opportunities for improving the existing programs and develop new programs as needed for continuing research growth at the UTMB. The cost analysis and return on investment evaluation is planned.

**Nisha J Garg PhD, University of Texas Medical Branch at Galveston**

**Stakeholders and collaborators:** DL Callender, MD (President); DO Jacobs, MD (Provost, School of Medicine); JS Goodwin, MD (VP Research); S Weaver (Director, Institute for Human Infection & Immunity); S Mattamana, PhD (Associate Director for Technology Transfer); DW Niesel, PhD (Dean, Graduate School of Biomedical Sciences)

## BACKGROUND/OPPORTUNITY

The UTMB Health is a major academic health Center with mission to improve health for the people of Texas and around the world through excellence in service, education and research.

### The 2020 Goals and Objectives Prioritization (Feb 2014)

- Tactical planning: 150 participants; Survey: >1050 participants
- Identified & ranked 18 objectives for prioritization
- 3<sup>rd</sup> highest priority objective: Maintain and enhance research funding was recognized.

### Research Futures Committee Report (May, 2013)

Key stakeholders representing institutional research This report identified research as a vital mission for UTMB that must be maintained to achieve all other important objectives. Selected opportunities for research investment that will potentially provide maximum return on investment were identified:

- Protect top 20% faculty researchers
- Develop and retain junior faculty
- Extensive support for multi-PI collaborative programs
- Expert marketing and branding → Enhance visibility

## METHODS

### Institutional grant development and review function

- △ External grant review program
- △ Internal grant development and review program  
Examine best practices at departmental/center level  
Implement for IHII faculty → Expand

### Enhance multi-PI and entrepreneurial programs

- △ Multi-PI research workshop
- △ Inter-disciplinary pilot projects (IHII, VP Research)
- △ SBIR/STTR workshops (OTT, IHII, VP Res, GSBS)
- △ Technology commercialization pilots (OTT, IHII, VP Res)

### Enhance faculty response to targeted RFAs

- △ IHII Retreat
- △ Microbiome symposium

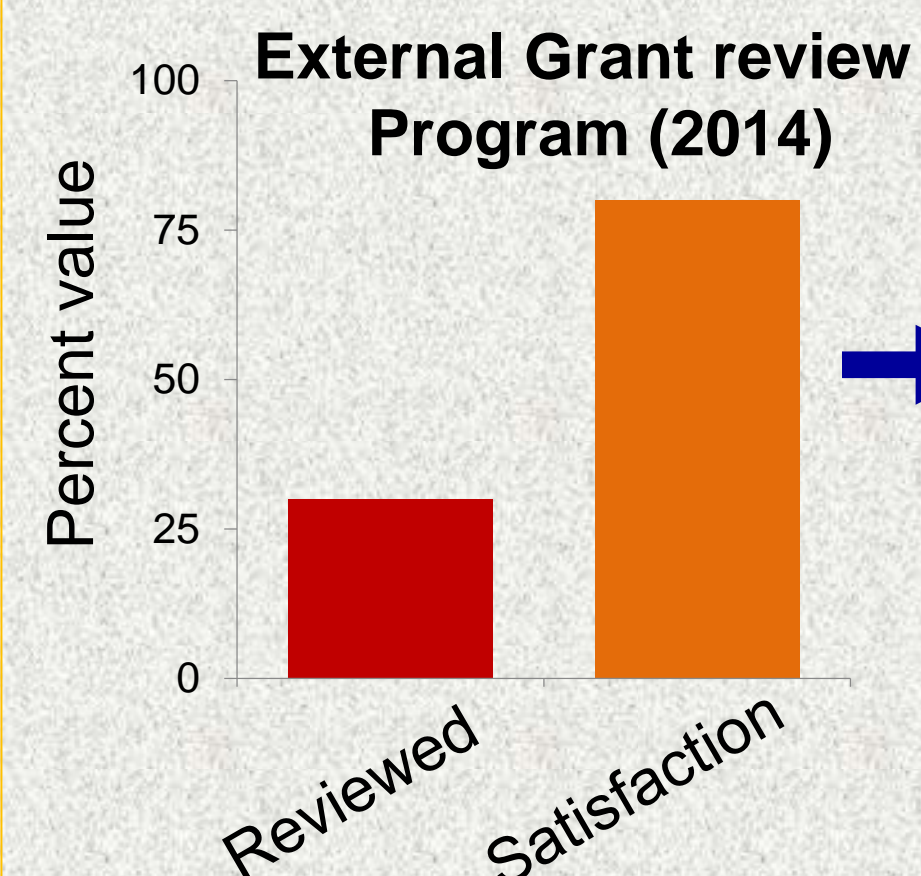
## PURPOSE

The UTMB community uniformly believes that research is vital to the UTMB mission and must be maintained if all other important objectives are to be achieved.

1. Develop institute-wide grant development and review function to support faculty success and advancement of junior faculty
2. Extensive support for collaborative research programs that represent priorities of funding institutions and enhance multi-PI programs and entrepreneurial outcomes.

## OUTCOMES → NEXT STEPS

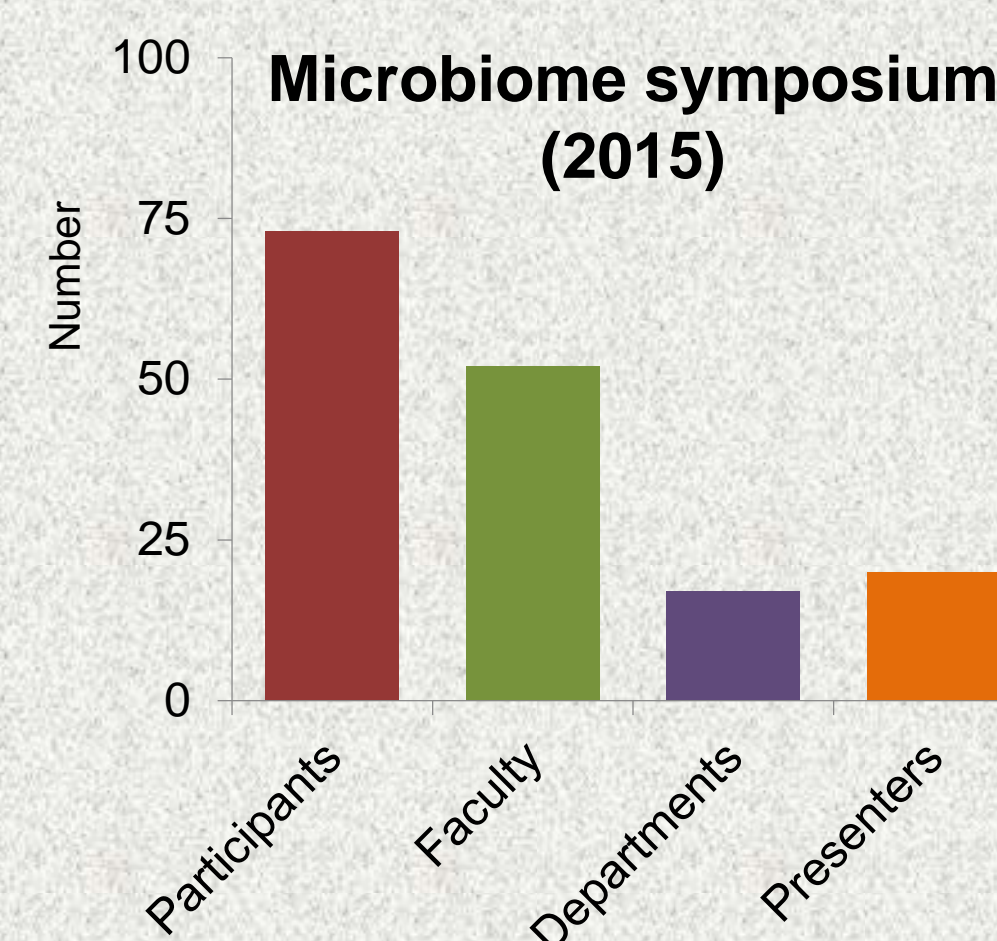
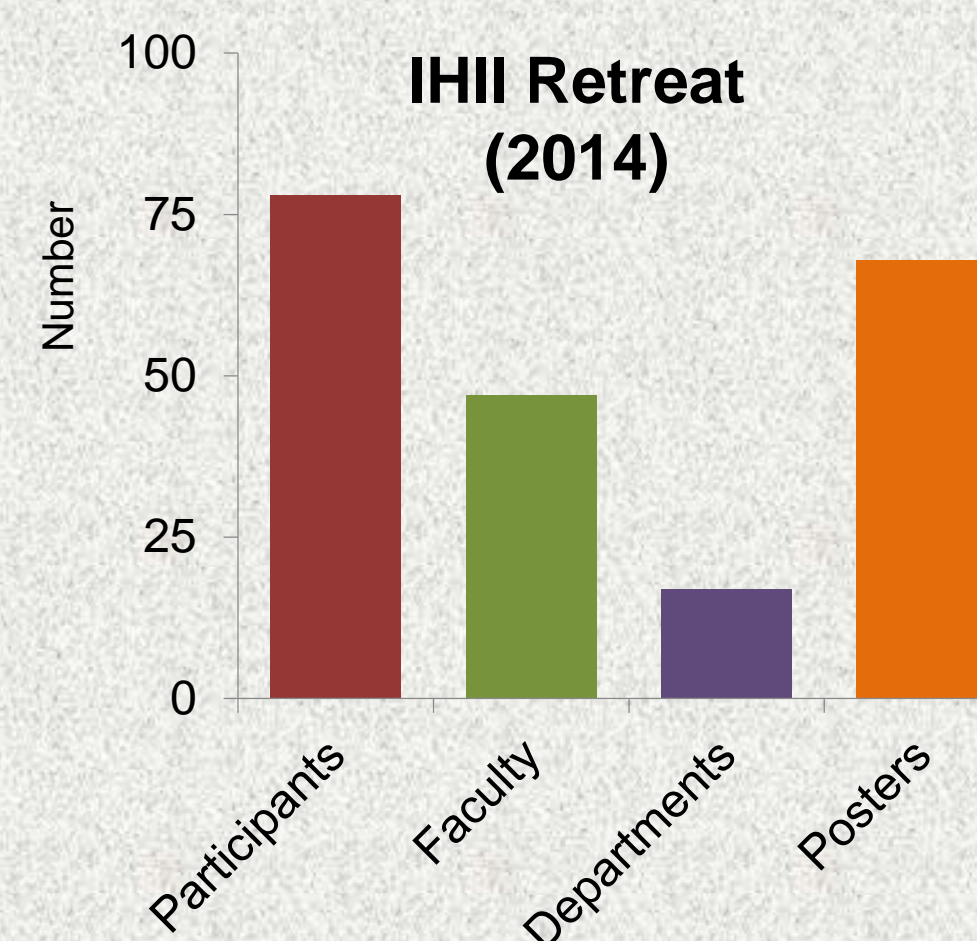
### Grant Development and Review program



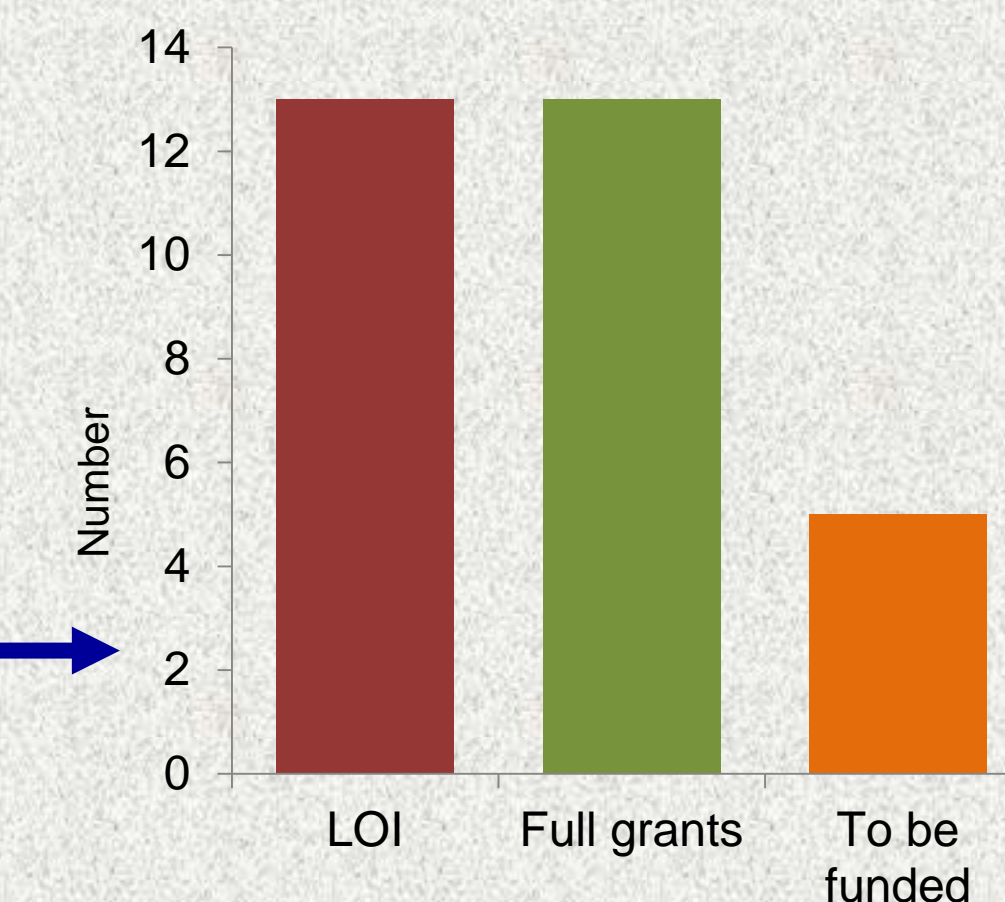
#### Grant Central

- ❖ Internal and external reviews
- ❖ Publishing support
- ❖ Grantsmanship
- ❖ Junior faculty mentoring in grant development

### Interdisciplinary and Multi-PI Collaborations

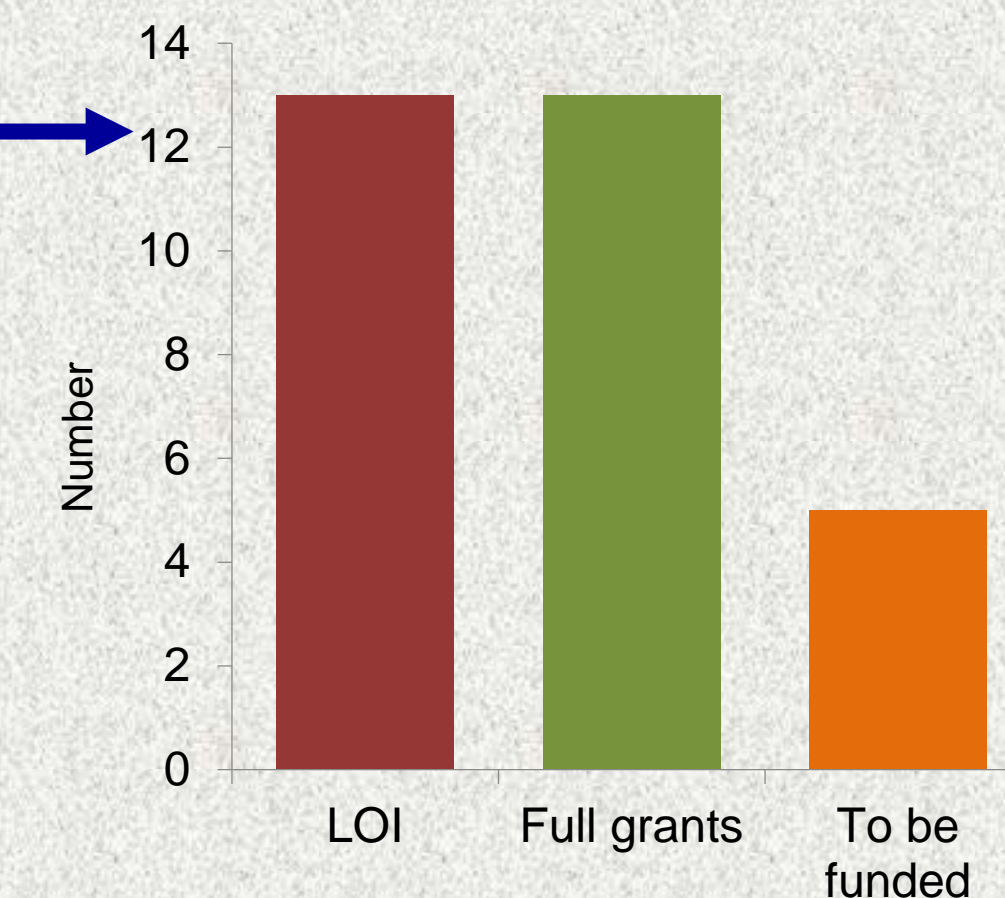


## Multi-PI Center Pilots



- ❖ Clinical + Basic Research partnership
- ❖ Future Extramural funding of P or U grants
- ❖ Enhanced capability to respond to current RFAs
- ❖ Strategic research strengths

## Technology Commercialization Pilots



- ❖ Clinical + Basic Research + Company partnership
- ❖ Develop push and pull approach to increase faculty participation and knowledge base
- ❖ Future SBIR/STTR grants

## SUMMARY

1. Strong commitment from the executive leadership to enhance academic research at the UTMB Health
2. More than US\$2-million dollars invested in intramural pilot programs
3. Resources committed for three years
4. Ongoing evaluation and fine-tuning of programs

