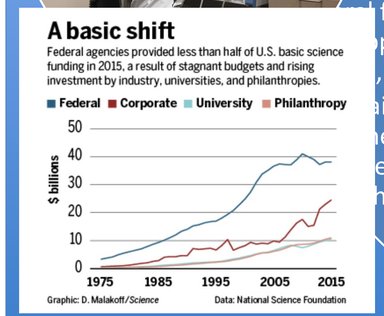
An Investigation into Philanthropy to Basic Science Research

Heide L. Ford, PhD

Collaborators/Mentors: Allison Krebs, MBA, Jamie Studts, PhD, Scott Arthur, MA, Richard Schulick, MD, MBA, John J. Reilly, Jr., MD

BACKGROUND

- A deep understanding of biology is critical to lay the foundation for developing breakthrough medical advances
- Targeted analysis of FDA approved ransformative drugs from 1995-2009 cluded 80% were directly linked to basic ce discoveries (Spector et al., *Sci Transl* 018)
- pid development of Covid-19 mRNA es could not have been realized without ies of basic research
- l funding is decreasing to basic research, ports less than 50% of such research , *Science* 2017)
- ain competitive, and to develop new nes, SOMs will need to devote es/effort to fundraising for basic n



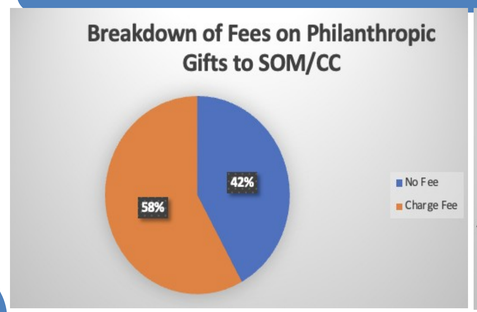
Mervis, *Science* 2017

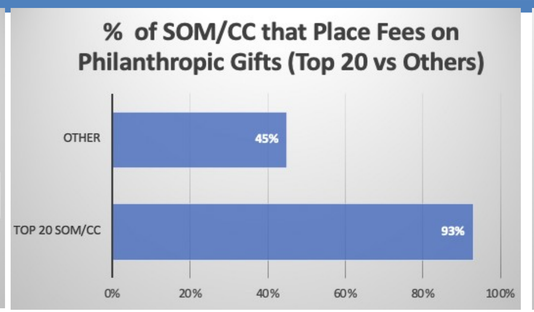
METHODS/APPROACH:

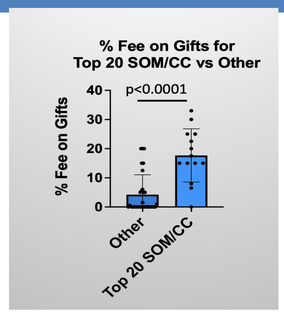
- Performed 10 interviews of the heads of advancement offices/center directors at CUSOM and across the country
- Studied published work that addresses the costs/benefits of devoting effort specific to fundraising for basic science research.
- Collected data by obtaining/performing surveys

RESULTS: Methods for raising philanthropic funds for basic research include:

- Fees administered on gifts
- Innovative programs to present to donors
- Routine practices of discussing with all donors how basic research can lead to medical breakthroughs
- Dedicated FTEs in advancement/communication s to basic science efforts

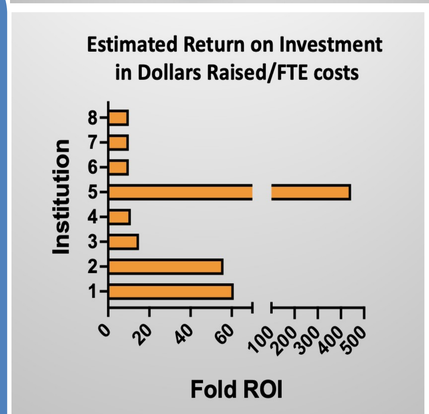


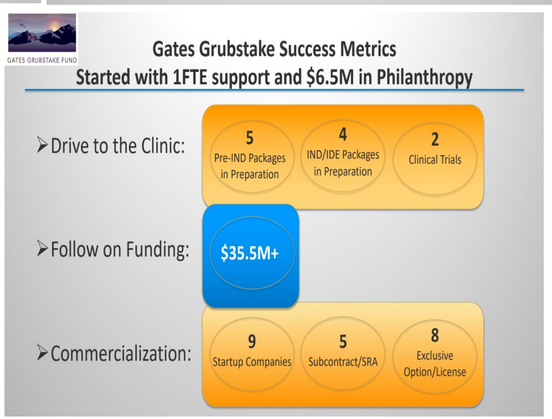




SPARK

THE TULLIE AND RICKEY FAMILIES SPARK AWARDS FOR INNOVATIONS IN IMMUNOLOGY





Conclusions/Impact:

- Investing in Philanthropy to the Basic Sciences pays off and can be carried out by numerous mechanisms
- These data form the basis of future discussions with leadership in CUSOM to increase our basic science philanthropy efforts

PURPOSE/OBJECTIVES: Identify best practices for fundraising for basic science research

Enhance our core research missions by:

Endowed Chair Celebration — Opening the Door to Discovery			
Increasing endowed chairs to recruit/retain basic science talent	Supporting development of multi-disciplinary large program projects	Supporting basic-clinical collaborations with the goal of translation	Increasing the diversity of our pool of basic scientists at all levels

*often not supported by federal funding

Special thanks to all the advancement personnel/center directors I interviewed and who participated in surveys

With specific thanks to The CU Advancement office for providing fee data, Heather Callahan and Dennis Roop for the Gates Center Example, and Christopher Lee for information about the SPARK program at the Jolla Institute of Immunology

Project Title: An Investigation into Philanthropy to Basic Science Research

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Collaborators and Mentors: Allison Krebs, MBA, Jamie Studts, PhD, Scott Arthur, MA, Richard Schulick, MD, MBA, John J. Reilly, Jr., MD

Topic Category: Research

Background, Significance of Project: A deep understanding of biology, as is attained through basic science research, is critical to lay the foundation for developing breakthrough medical advances. A targeted analysis of FDA approved "transformative" drugs (1995-2009) concluded that 80% of these drugs can be directly linked to basic science discoveries. Today's most prominent example of the power of basic science is that of the rapid development of mRNA vaccines against Covid-19, which could not have been realized without decades of basic research. Federal funding for basic research has been on the decline since 2005, and it is currently estimated that while 49% of such research is supported by federal sources, 44% is supported by philanthropy. To remain competitive in our research mission, we must develop philanthropy directed towards basic research.

Purpose/Objectives: The goal of this project was to identify best practices for basic research fundraising. Philanthropic funds will enhance our core research mission by: 1) Increasing endowed chairs that can be used to recruit/retain basic science talent; 2) Supporting development of multi-disciplinary large program projects; 3) Supporting basic-clinical collaborations with the goal of translation; and 4) Increasing the diversity of our pool of basic scientists at all levels. Such initiatives can often not be funded through traditional federal grants, and will move our basic science departments from excellent to exceptional.

Methods/Approach:

- Interview the heads of advancement offices at institutions across the country.
- Interview our own advancement office leadership, as well as center directors at the CUSOM who have been successful in raising philanthropic funds.
- Collect data by performing surveys that address how philanthropic funds are raised for basic research across institutions, as well as return on investment.
- Study published work that addresses the costs/benefits of devoting effort specific to fundraising for basic science research.
- Have discussions with the Dean, Cancer Center Director, and Basic Science Chairs regarding their visions for philanthropic efforts directed at basic science research at CUSOM.

Outcomes/Results: The methods for raising philanthropic funds for basic research differ across various institutions, and include: 1) Taxation of gifts; 2) Development of innovative programs to present to donors; 3) Routine practices of discussing with all donors how basic research can lead to medical breakthroughs; and 4) Dedicated FTEs in advancement/communications to basic science departments. While all methods are successful, data suggest that dedicated FTEs provide a measurable return on investment in philanthropic dollars. Specific examples further show that those dollars are leveraged for greater increases in follow-up funding.

Discussion/Conclusion/Potential Impact: The development of a targeted philanthropy effort towards basic science research is expected to have a significant impact on our institution by:

1. *Increasing flexible funds to basic science departments*. Such funds will elevate collaborative research, DEI and other initiatives, and may reduce the support that basic science departments need from centralized sources.
2. *Enhancing our Academic Reputation.* Elevating our basic research will lead to increased national and international reputation, via increased grant dollars/better NIH rankings, increased high profile publications, and increased translation of our findings from bench to bedside.