

Background

- The success rate for obtaining an R01-equivalent grant has fallen steadily from 33% in 1976 to 27% in 1996, and then to 20% in 2016.
- Inadequate resources and time for mentors has been cited as a contributing factor.
- Expanding the mentoring pool of senior investigators from other disciplines is proposed as one solution.

Objective

To provide an overview of the design and 5-year metrics of the Independent Investigator Incubator. The I³ is an interdisciplinary mentorship program established that provides 1:1 mentoring for new research faculty during the crucial early years of their careers at Indiana University School of Medicine.

Methods

The I³ Program

- Setting: large academic medical center
- Targets junior faculty during either:
 - First 3 years of research career to secure a career development award (K award)
 - Transition to investigator-initiated funding (K to R)
- One-on-one mentoring & grant writing support.
- Structured expectations, toolkits, and workshops.
- Other support services (biostatisticians).

Participants

Super-mentors

- Successful senior faculty investigators.
- Receive 5% protected time per mentee.

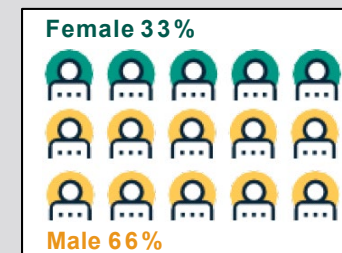
Mentees

- Paired with super-mentor (basic science or clinical).
- Requires departmental protected research time.
- In five years, 110 mentees have enrolled in the I³ program.

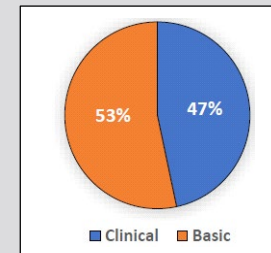
I³ Program Diversity

Super-Mentors

A) Gender

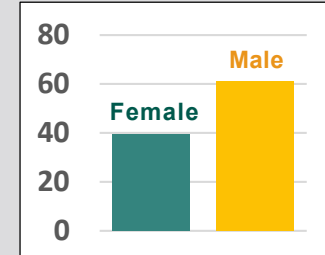


B) Research Focus

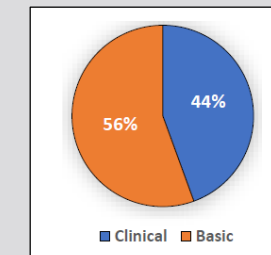


Mentees

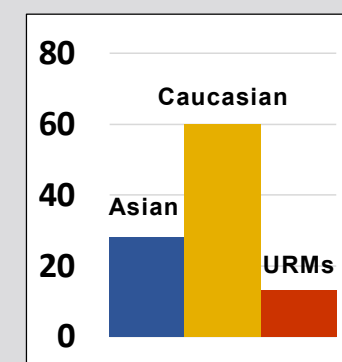
A) Gender



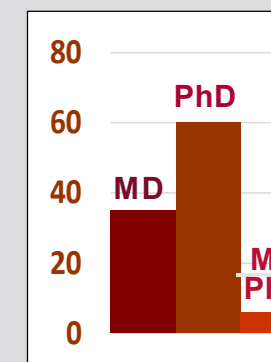
B) Research Focus



C) Race



D) Terminal Degrees



Results

Figure 1. Centralized, cost-sharing model of the I³ program.

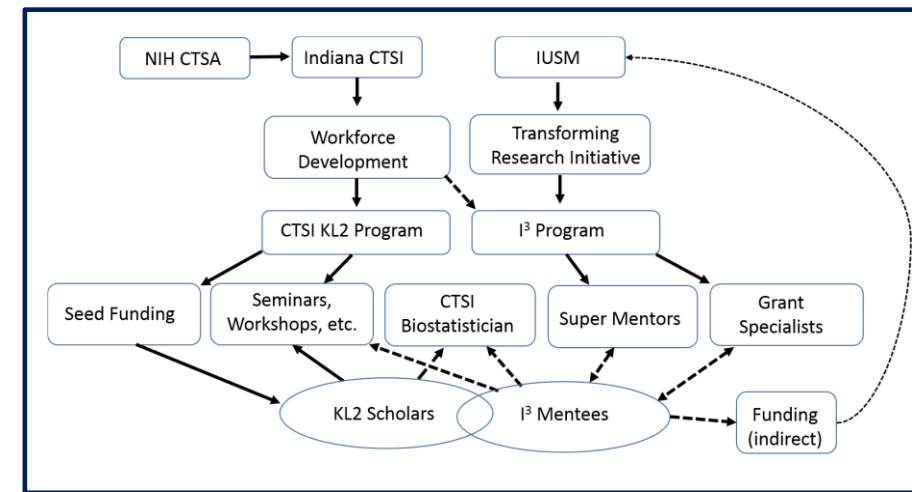


Figure 2. I³ Mentoring Program Survey: Outcomes. (N=59)

Displays funding sources as % for mentees who joined I³ during its first 3 years.

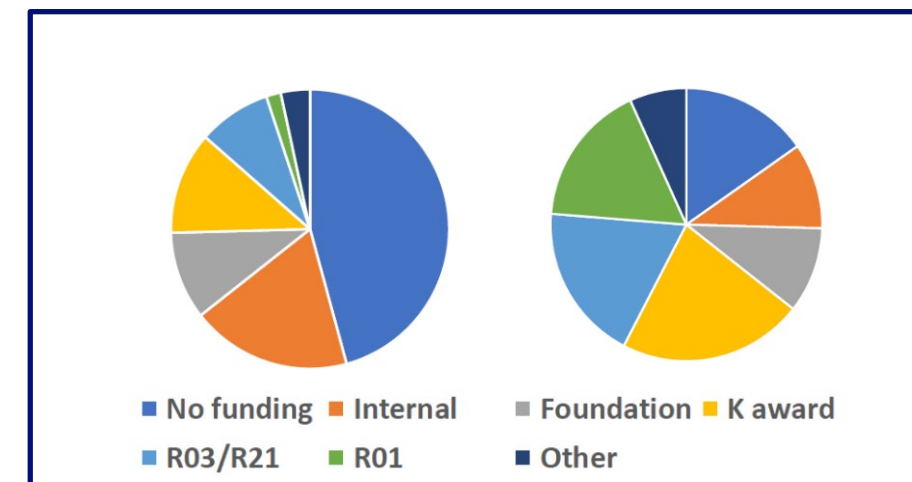
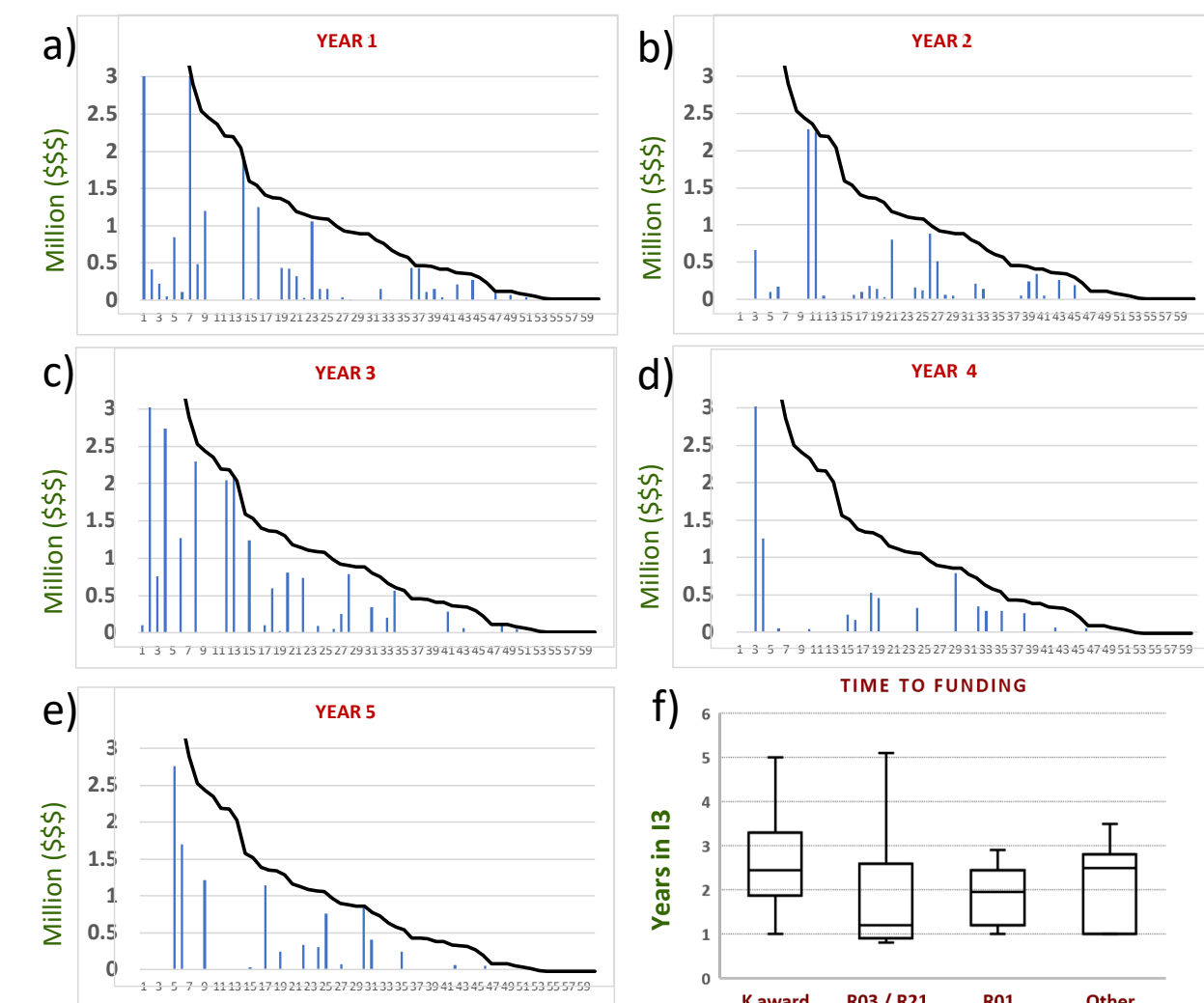


Figure 3. I³ Mentoring Program Survey: Outcomes. (N=59) Displays academic productivity outcomes and Time to Funding over 5 years.



*For mentees who joined the program in its first three years (n=59), the average time to a notable extramural grant (defined as a NIH or foundation grant >\$300K direct costs) was 2.2 years (median – 2.6 years).

Key Findings

- ✓ The I³ mentees represent a diverse group based on sex, ethnicity, terminal degree, academic track, and discipline.
- ✓ In five years, 110 mentees have enrolled in the I³ program. Upon entering, 53% of participants had no external funding, 28% had internal funding, 12% had K-awards, 7% had R03/R21 awards.
- ✓ Nearly all mentees were satisfied with their mentor pairing based on the mentor's "availability" and "valuable feedback," and all mentees wanted the mentoring relationship to continue.

Conclusions

Since 2014, the I³ Program has had a positive impact on the careers of junior faculty at IUSM as determined by faculty satisfaction and funding metrics. Future focus areas will include developing novel criteria/models for graduating from the program to balance fiscal sustainability with mentee needs during their transition to mid-career.

This mentoring program serves as a model of interdisciplinary and cross specialty mentorship that can be utilized to expand the mentor pool available in academic institutions in order to jumpstart productive research careers for junior faculty.