

Research Education Program (R25) Ron Hickman, PhD, RN, ACNP-BC, FAAN J. Daryl Thornton, MD, MPH













PROGRAM GOALS

The *overarching goal* of the R25 Program is to:

• Provide education activities that complement or enhance the training of a workforce to meet the nation's biomedical, behavioral, & clinical needs

The FOA supports creative educational activities that focus on:

- Exposure to the research across the spectrum of *translational science*
- Innovative hands-on exposure to clinical and translational science within & outside of academia
- Participants from *less research-intensive partner institutions*
- **Stimulate interest** and **advance the knowledge base** of participants to seek future education and scientific careers



PROGRAM GOALS

- R25 Program are expected to provide hands on exposures:
 - 1. Full-time experiences (40 hours per week) across 10 to 15 weeks
 - 2. Provide experiences in laboratory, clinical, and community settings
- Eligible program participants may include:
 - 1. Undergraduates
 - 2. Postdoctoral Fellows or Medical Residents
 - 3. Junior Factory
- Recruitment of student from diverse backgrounds identified as key component of NIH strategy to diversify the scientific human capital

Proposed Specific Aims

Recruit

Recruit talented underrepresented undergraduates through institutional partnerships with historically black colleges and universities, as well as the Ohio McNair Scholars Programs.

Implement

Implement an innovative curriculum that consists of research training and career development activities that will stimulate the pursuit of a career in translational research among program participants.

Evaluate

Evaluate the impact of the research education program, INSPIRE-US, on program participants, mentors, and the broader university community.



PLANS TO ACHIEVE GOALS

Intensive Summer Program in Translational Research for Underrepresented Students (INSPIRE-US)

- 12-week, residential summer program
- Undergraduate students recruited from CWRU's Northstar Partners (n=13); Ohio McNair Scholars Programs (n=4); and other institutional partners
- Participants will be able to **engage in program activities across 2 summers**
- Didactic instruction in translational science process (e.g., responsible conduct of research, team science, industry, nonprofit advocacy, commercialization, entrepreneurship)
 - Didactic, research education and skill development courses
 - Asynchronous, self-paced training modules
 - Micro-credentialing, certificate of completion
- Hands on research experiences that focus on:
 - Biological basis of health and illness
 - Clinical and public health research
 - Health Technology and Innovation



PLANS TO ACHIEVE GOALS



CAREER COACHING



SCHOLAR WORKSHOPS



SCHOLAR COMMUNITY



MENTOR TRAINING



SCHOLARSHIP OPPORTUNITY



OUTCOMES AND METRICS

INSIPIRE [Program-Level]

- Applicant pool and selectivity
- Applicant/participant demographic characteristics
- #Collaborative partnerships (i.e., clinical, industry, and community organizations)
- # Applicants that apply to CWRU and matriculate
- #Partnering institutions & participant job placements

Program Participants

- Participant satisfaction (i.e., mentors, curriculum, seminars, workshops, coaching, research experiences, etc.)
- Knowledge of & confidence in conducting translational research
- # Participants who return in Y2
- # Manuscripts and presentations that occur post-program
- Decision to pursue additional training or career in biomedical research
- # Participants applying for graduate studies & acceptance rates

OUTCOMES AND METRICS

Mentors

- Satisfaction with mentoring training & support
- Assessment of participant's knowledge & confidence in translation research
- Manuscripts and presentations with program participants
- Frequency of post-program interactions with program participants
- # Recommendation letters provided for program participants



YEAR 5 PLANS TO FILL GAPS



COORDINATION & INTEGRATION PLANS WITH THE OTHER PROGRAM ELEMENTS