

# Welcome to the R25 Workshop

## CABTRAC 2024

Research Education Program (R25) : Overarching goal is to support educational activities that complement and/or enhance the training of a workforce to meet the nation's biomedical, behavioral and clinical research needs.

# **Session Plan: Overview (15 mins) followed by break-out groups (30 mins)**

## **YES Panelists**

Jennifer Gillette – University of New Mexico

Jon Houtman - University of Iowa

Joyce Solheim - University of Nebraska Medical Center

Meredith Tennis – University of Colorado Anschutz

## **Research Experiences Panelists**

Kristin Eckert – Penn State U

Lalita Samant- U of Alabama

Thomas Kelly- University of Arkansas

Mary Reyland – University of Colorado Anschutz

# NCI R25 mechanisms

- **Research Experiences: PAR-23-277**
  - Intent is to stimulate interest in a cancer research career
- **Courses for Skills Development: PAR 23-276**
  - Intent is to increase core skills and/or enhance motivation toward a cancer-focused career
- **Curriculum or Methods Development: PAR 23-278**
  - Intent is to develop curricula, instructional approaches or computer-based tools to advance career research education
- **Youth Enjoy Science (YES): RFA-CA-21-026**
  - Provides support to develop and maintain innovative **early intervention strategies** to attract and engage **underrepresented students and their teachers** in active cancer research environments.

# Research Experiences: PAR-23-277

- Typically supports one full-time, 8 to 15-week research experience
  - Research experience may continue part-time afterward as long as total time does not exceed 15 weeks w/in 12 months
  - Up to 20% may serve as peer-mentors and complete a second research experience
  - Stipend (up to \$9,000 for 15 weeks), housing and travel allowance
- Original, peer-reviewed cancer research projects led by faculty mentors, alongside postdocs, graduate students, and technicians.
- Generally includes some didactic/developmental activities.
- Participants can be undergraduate and graduate, medical, and other health professional students.
- US Citizens or green card holders (may be noncitizens if strongly justified?)
- Budget cap of \$300,000 which can include PI/Admin support.
- Must include a robust evaluation plan.



### PROGRAM SUMMARY

Our summer research program offers 40 undergraduate students the chance to spend ten weeks in labs at the University of Colorado Anschutz Medical Campus, the largest academic medical center in the Rocky Mountain region.

The goal is to engage scientific curiosity in the next generation of scientists, challenging students to consider cancer-related careers in the future.

### EVENTS AND HIGHLIGHTS

- Twice-weekly lectures
- Professional development
- Research projects
- Career guidance
- Poster presentation
- CU Denver | CU Anschutz Graduate School application fee waiver

### PROJECTS & MENTORS

When applying, you can choose up to four faculty mentors in order of preference for your fellowship.

Projects span from basic cancer research to translational studies aimed at applying cancer biology to clinical settings.

### QUICK FACTS

Program Dates:

**May 27-Aug. 1, 2025**

Applications Due:

**February 3, 2025**

Financial Support:

**\$6,000 stipend  
\$1,000 housing**

Up to \$500 in travel, as needed

Eligibility:

- Current college undergraduates
- Open to US citizens, permanent residents, and DACA recipients

Contact:

Claire McGraw, Program Coordinator  
E-mail: [claire.mcgraw@cuanschutz.edu](mailto:claire.mcgraw@cuanschutz.edu)

**APPLICATIONS OPEN NOVEMBER 1st!**



University of Colorado Cancer Center

A NATIONAL CANCER INSTITUTE-DESIGNATED CONSORTIUM COMPREHENSIVE CANCER CENTER



# Research Experiences for Undergraduates (CREU) University of Colorado

- John Tentler, PhD. Program Director (20%), Claire McGraw, Program Manager (50%) and Mary Reyland, PhD, PI (10%)
- Long running program that has been funded mainly by the CU Cancer Center- this allowed us to demonstrate a history of success when we applied for the R25 in 2019.
- Up to 32 undergrads plus per summer. Co-recruit with ACS-DICR (total about 40)
- >Fifty mentors that include basic and translational researchers in four thematic areas.
- “Pipelines” with Chaminade University and U of New Mexico to increase diversity.
- A variety of programmatic activities that all together equal <4 hrs/week.
- Social activities.
- End of program poster session.
- Robust (independent) plan for program evaluation.
- For 2024 we received 230 applications for the then available 32 slots.



## R25 YES Program (RFA-CA-21-026) (NCI Center to Reduce Health Disparities)

The NCI Youth Enjoy Science (YES) Research Education Program (R25) provides support for institutions to develop and maintain innovative **early intervention strategies** to attract and engage **underrepresented students and their teachers** in active cancer research environments, and to help prepare students for a career in biomedical research.

# R25 YES Program

- Applicants are expected to develop holistic approaches that have sustained impact in student retention in the biomedical pipeline.
- Grades 6–12 and/ or undergraduate students from underrepresented racial/ethnic groups, with a disability, or from disadvantaged backgrounds, and/or grade 6–12 teachers and/ or undergraduate faculty.
- Supports creative educational activities. Applications that support of grades 6-12 students must include plans to engage teachers, families and communities.
- Must contain three components:
  - Research experiences. Grades 9-12, UGs and faculty should be in an individual mentored cancer research environment.
  - Curriculum or methods development. Teachers and faculty can use the RE to develop novel instructional tools to enhance science teaching.
  - Outreach activities to educate families and communities.
- Participant evaluation and tracking.
- Budget of up to \$400,000/year for up to 5 years
- Encouraged to submit LOI 30 days prior to application due date (Sangeeta Ghosh, PhD)



# Excerpts from summary statements PAR 18-478

## **Strengths**

- Program addresses an important need; there is a compelling argument that the program will effectively reach the potential applicant pool of URM HS students
- Program leverages strengths of similar educational and training programs at this institution, it does not duplicate or overlap with these programs
- Networking skill building and team science are strengths- detailed and innovative
- Addresses cultural competency and the value of diversity and inclusion in work-shops
- Environment is strong and supportive

## **Weaknesses**

- Not clear how the faculty will offer immersion experiences for the student participants.
- Scheduling, session length and durations of work-shops are not clearly delineated and details of community outreach activities are not sufficient.
- Methods to measure program impact and to track program graduates are not clearly described. The retention plan is also not very detailed.
- Mentors experience is with undergrad and professional students. Not clear how will they extend this program to HS students.
- It is not clear what sorts of “team-building activities” will be developed.
- It is not clear how the students and faculty are chosen to participate.
- How the students will engage with community outreach programs such as XX is not clearly described.

## Excerpts from summary statements PAR 18-478

### Strengths

- The major innovation of this proposal is the wide selection of workshops that takes full advantage of state-of-the-art research and core facilities that are the key strengths of XX.
- The pipelines from the University of XX and University of XX to recruit diverse students are innovative
- To make sure that students are adapting well and not falling through the cracks, they will meet in small groups with the PIs early in the program. This is particularly important for the target populations who will be having their first high-level research experiences and/or be far from home for the first time.
- Many letters of support are included that indicate buy-in and strong enthusiasm across numerous stakeholder departments, research areas, and core facilities.

### Weaknesses

- Unclear the extent to which this program is differentiated from other on-campus programs for URM
- The training records from past trainees are not provided in sufficient detail, and the number of mentors from diverse backgrounds is relatively low.
- It is crucial that mentors are able to provide laboratory experiences that show what cancer research is really like. It is unclear how effectively some of the mentors will be able to do this, given their focus on other topics such as Down syndrome and diabetes.
- Data to assess the quality of past trainees is not adequately provided.
- How does the program deal with variable quality of mentors? What is the nature of mentor training and how are detailed expectations provided to the mentors and the students?

## Excerpts from summary statements YES Program

### **Negatives**

- There is concern that the two Co-PIs are listed in the budget as devoting only 0.6 calendar months to the project. This seems quite inadequate.

### **Strengths**

- Clearly stated the goals of establishing a program that offers an integrated comprehensive strategy.
- Education opportunities for the underserved Latino/Hispanic, Native American and Pacific Islander populations in Utah.
- Offering professional development programs for graduate level credit through PathMaker Bridge to teachers serving the underserved population is a tremendous incentive.
- The evaluation plan for this application is clearly describe with an exceptional plan for assessment.
- The probability of this application's success increases greatly with the added mentor training, specifically the cultural relevant, diversity, inclusivity and culture.