



# Biomedical Research Training at Texas State

## Preparing Bobcats for doctoral programs in the biomedical sciences

Melinda H. Spooner, Karen A. Lewis, and Steven T. Whitten



**Bridges to the Baccalaureate, 1999—2003**  
Southwest Texas State & Alamo Community College (PI: Dana García)

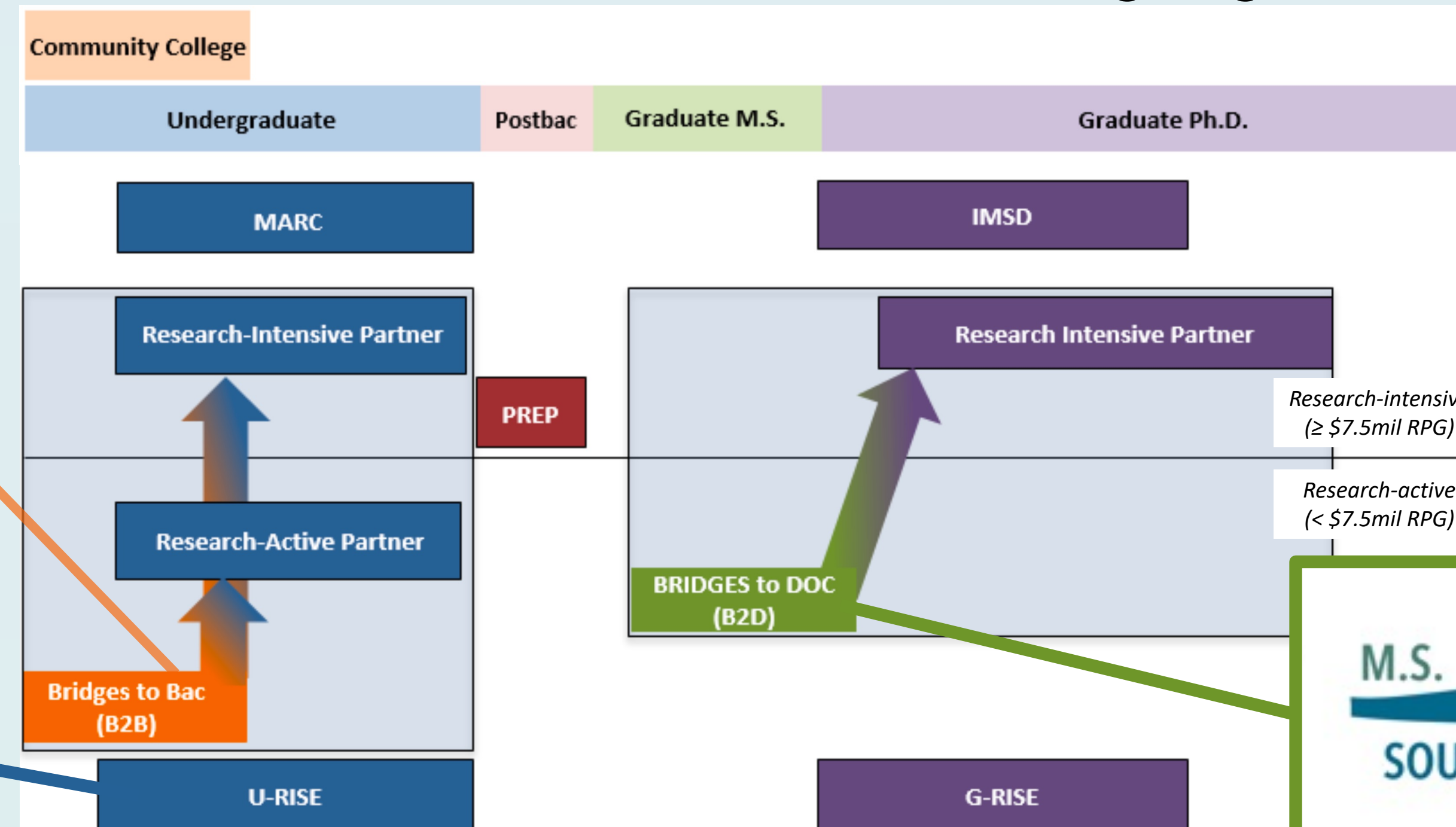
**Bridges to Biomedicine, 2013 – 2015**  
Texas State University, San Antonio College, & Northwest Vista College (PI: Ron Walter)

**B.S. → Ph.D.**



**Texas State U-RISE**  
**2021 – 2026**  
(PI: Karen A. Lewis)

### NIH – NIGMS Institutional Research Training Programs



**M.S. → Ph.D.**



**South Texas Doctoral Bridge Program**  
**2013 – 2023**

Texas State University & UT Health San Antonio  
(TxSt PI: Steve Whitten, formerly Ron Walter)

## Multi-Year, Integrated Training Programs

### Pre-RISE

### U-RISE



**Bobcat Days**  
Bobcat Preview  
STEM sections of US1100  
Career Exploration Workshops

**60% Tuition Remission + ~\$12,000 Annual Stipend**  
Career Exploration & Development  
Mentored Research @ TxSt  
Summer Research @ R1 Partners  
PhD Application Mentoring

### M.S. Year 1

### M.S. Year 2



**Program Orientation**  
Interview Mentors  
Select Thesis Lab

**Coursework**  
Conferences

**First-Year Review**

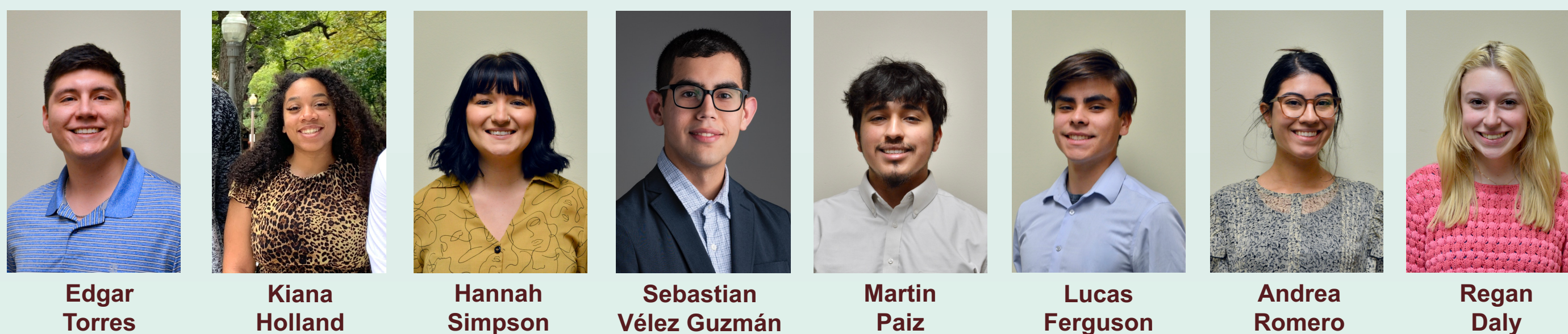
**100% Tuition Remission + ~\$20,000 Annual Stipend**  
Thesis Research  
Weekly Development Workshops + Individualized Career Mentoring (IDP)

**Conferences**  
PhD Applications

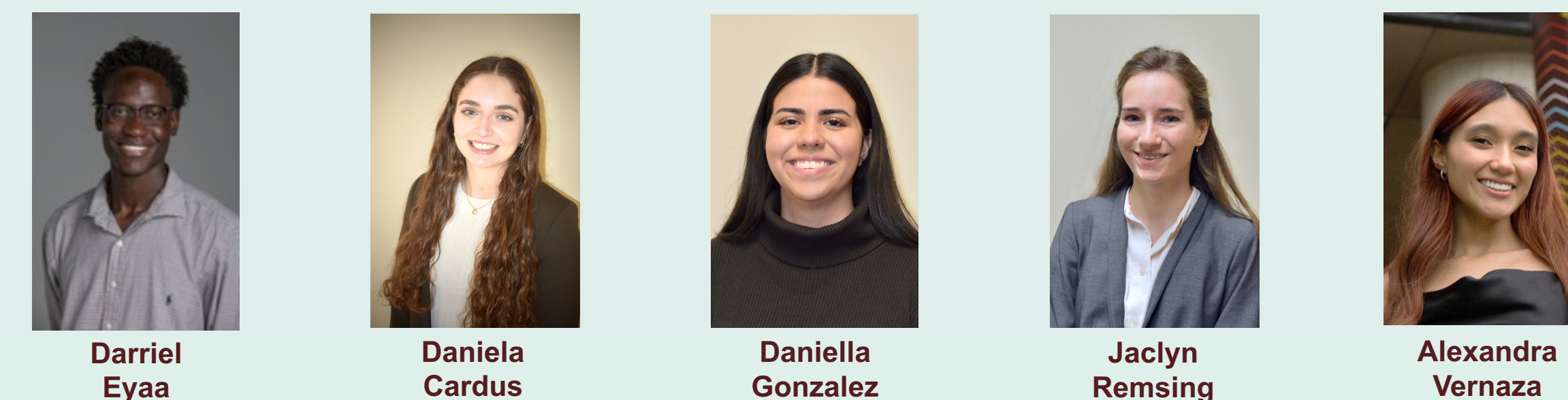
**PhD Interviews**  
Coursework  
Thesis Defense

## 2022 – 2023 TxSt Biomedical Research Scholars

### U-RISE Scholars



### STDBP Scholars



## Outcomes and Impact

### Increased Workforce Diversity

#### U-RISE

- Scholars: 100% URM, 58% first-gen, 58% women
- 5 majors represented across 2 colleges

#### STDBP

- Scholars: 100% URM
- URM in Chem/Biochem M.S. nearly doubled from 2012 to 2020 (28% to 44%)

### Alumni Matriculate to Doctoral Programs



**10 U-RISE trainees** over 2 years

- > 25 PhD interview invitations
- Class of 2022: 100% PhD acceptance rate; 75% offered additional scholarships

**36 STDBP trainees** over 10 years

- 5 in progress
- 24 completed
- 21 pursued PhD (4 now postdocs)

### Texas State Research Culture

#### Fellowships = productivity

- 37 peer-reviewed publications
- > 100 conference presentations
- Support faculty research grants

#### National recognition

- 3 NIH F31 awards
- 2 NSF GRFP applications

#### Promote institutional success

- Reduced time to MS graduation by 10%
- Increased MS graduation rate to >80%