

# Engaging STEM Doctoral Students: Group Mentoring on the Sidelines

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BRIDGE TO THE DOCTORATE

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- ❖ Funded by the National Science Foundation (NSF)
  - ❖ Began in 2003 as an initiative to support Louis Stokes Alliance for Minority Participation (LSAMP) alumni during their first two years of graduate studies
  - ❖ Available to national LSAMP alliances in Phase III or later
  - ❖ Two-year project that funds 12 STEM Ph.D. students:
    - ❖ Full tuition and fees
    - ❖ \$32,000 / year stipend
    - ❖ Student Health Insurance
    - ❖ Professional development
    - ❖ High-quality mentorship
    - ❖ Institutional funding following 2-year BD tenure



What is the Bridge to the Doctorate (BD) project?

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## ❖ Program Objectives

- ❖ Recruit and select a cohort of highly-motivated and well-prepared BD Fellows
- ❖ Induct BD Fellows into competitive research laboratories and projects
- ❖ Provide a complete and relevant professional development program
- ❖ Create a positive social environment with network and peer support
- ❖ Provide rich, continuous mentoring experiences
- ❖ Provide financial planning skills and security for the duration of doctoral studies

What is the BD project?

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Campus	BD Award Years
UT El Paso	2003, 2005, 2008, 2009, 2011, 2013, 2018, 2022
UT Rio Grande Valley	2004
UT Arlington	2010, 2014
UT San Antonio	2012

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The BD Project in the UT System

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❖ Main Factors that Contribute to the Ability to Complete Doctoral Degrees  
(CGS Ph.D. Completion Project Survey, N=1,406):

MAIN CONTRIBUTING FACTORS	% RESPONDENTS
1. Financial Support	80
2. Mentoring/Advising	65
3. Family	57
4. Social Environment/ Peer Group Support	40
5. Program Quality	36
6. Professional/Career Guidance	29
7. Program Requirements	22
8. Personal Circumstances	18
9. Other	11

What do Doctoral Students Need to Graduate?

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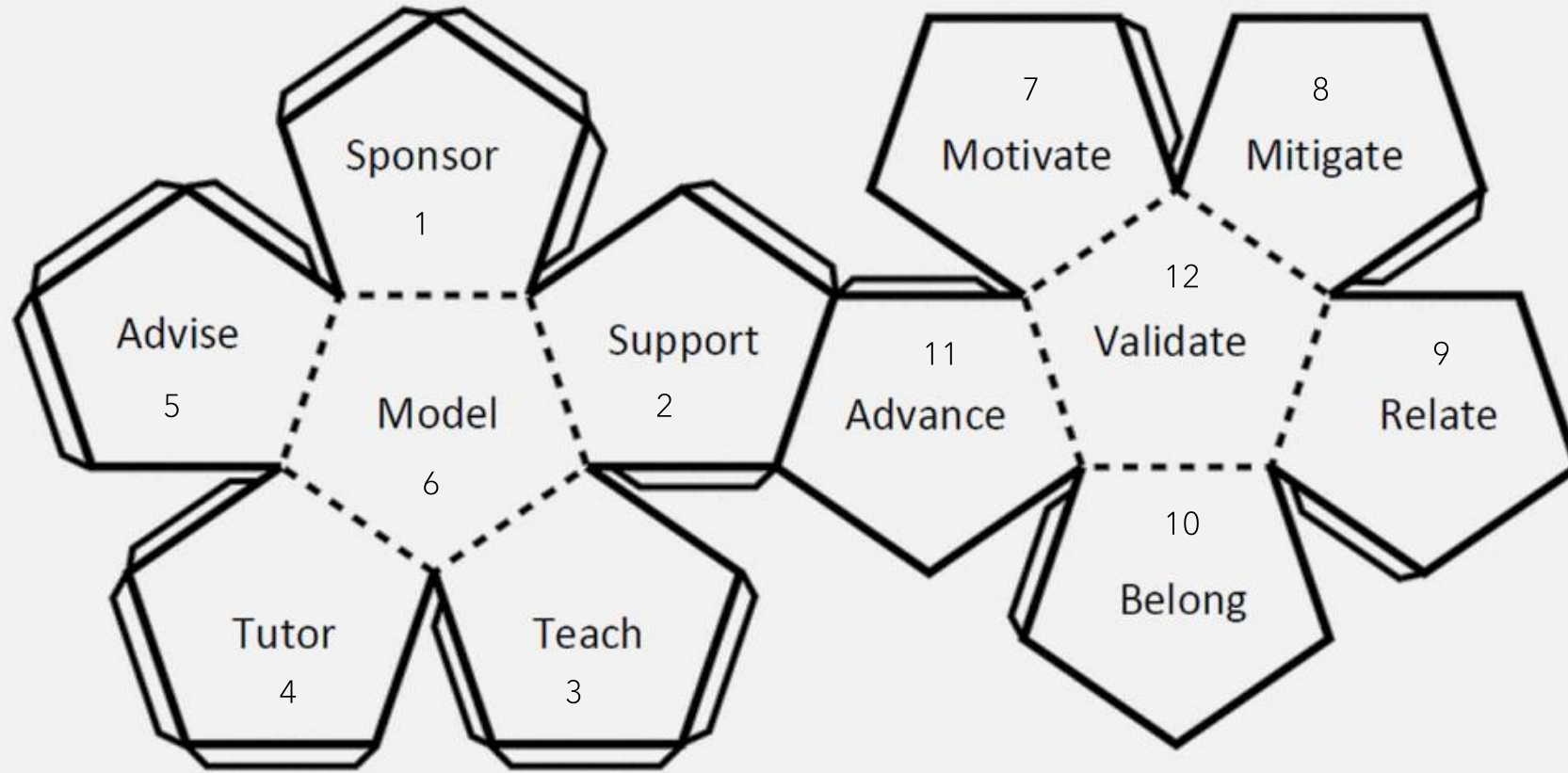
Holistic mentoring is a multifaceted, reciprocal, and conscious relationship in which a mentor engages a protégé or group of protégés from diverse backgrounds to advance their goals and to learn from their professional development experiences.

In addition to **guiding** the discovery of intellectual passions, **providing advice** and **access** to resources, and **advocating** for their protégés, holistic mentors readily **acknowledge** their protégés identity, **validate** their backgrounds and accomplishments, and **provide** supportive environments to prevent isolation by promoting cultural awareness and sensitivity.

Mentors and protégés work together toward a better future by engaging each other in a virtuous cycle of learning and **holistic growth of the individual**.

## Operational Definition of Mentoring

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## Facets of Mentoring



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- 4 semesters - 1 hour per week
  - Professional Development Curriculum
    - Research abstract
    - Research presentations (updates)
    - On-campus laboratory tours
    - Teaching Philosophy Statement
    - Research statement and plan
    - One-minute elevator speech
    - Three-minute thesis
    - Publish and flourish workshop
    - Mental Health workshop
    - Intersectionality workshop
    - Other
  - Service Component
    - UT System LSAMP Conference panel
    - UT System LSAMP Conference research poster judging



The BD Seminar

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Dr. Marcos Bolanos,  
ECE,  
FAA



Dr. Colin Knight,  
Biology,  
NIH



Dr. Angelica Lopez,  
Biology,  
DTRA



Dr. Arlene Smith,  
MASE,  
AFRL



Success Stories I

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Dr. Aрызbe Najera,  
UTEP ECE Dept.



Dr. David Espalin,  
UTEP AME Dept.



Dr. David Roberson,  
UTEP MMBE Dept.



Dr. Cristian Andresen,  
UW-Madison, Geography



Success Stories II

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1. Mentoring projects with a professional development component enrich the graduate student experience and allow for close monitoring of degree advancement.
  2. Milestone celebrations are an integral component of programming.
  3. Formative assessment provides opportunity for periodic program improvements.
  4. Program staff must be prepared to mitigate negative experiences when mentor/protégé relationships go awry.
  5. Mental health awareness, coaching, and resources humanize the graduate student experience.
  6. It takes a village: joint efforts coalesce people's assets that improve the graduate student experience.

Lessons Learned

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# Contact us

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