

Addressing the Needs of First-Generation Students at the University of Colorado School of Medicine

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Introduction

- The Association of American Medical Colleges (AAMC) projects a shortage of 13,500-86,000 doctors by 2036. By eliminating barriers to accessing care in underserved communities, it increases to 117,100-202,800 (4).
- The non-white workforce cares for a disproportionate majority of underserved communities (1).
- A major challenge to recruitment/retention of minorities occurs due to inequalities within medical systems (3).
- The AAMC has prioritized improving equity in education using "First-Generation-College-Student" and "SES Disadvantaged" tools in American Medical College Application Service (14).
- The University of Colorado created a mentorship program, "First Up," to better support first-generation students (FGS's, any student whose family has never attended medical school).
- First-Up was modeled after similar programs at Brown, Stanford, and University of Southern Florida. In its first year, 2018, First-Up recruited >20 students.
- Since then, First-Up has expanded to include >60 students as of the 2024-2025 matriculating year.

Project Aims

- Identify demographic information of mentors and FGS's; explore mentorship relationship characteristics in First-Up.
- Assess how FGS's use CU resources and identify needs.
- Design targeted intervention(s) and help students foster skills related to utilizing/developing mentorship relationships.

Methods

- An initial Qualtrics survey was sent to student body via email (N=50). We conducted zoom interviews with 20 students.
- Recordings were transcribed by a third-party and reviewed by 2 team members to improve interrater reliability.
- Codes were used to identify/isolate themes from data.

Biases, Limitations

- Team members are first-generation and prior leaders of First-Up, likely impacting analysis by sharing similar perspectives.
- Limited data pool (N=50), with data subjected to individual biases based on student perspectives and experiences.

Results

- Survey: N = 50 (Figures 1-2)
 - 26% first in family to attend/complete undergraduate education
 - 49% first in family to attend medical school
 - 37 report having a mentor in medical school
 - Participants discussed different topics with mentors and had mentors with different specialties
- Interview: N = 20 (Figure 3)
 - 5 primary themes identified
 - 1. Community and Belonging
 - 2. Navigating the Medical System
 - 3. First-Up Program
 - 4. Mentorship
 - 5. Self-Reported Student Needs
 - Subthemes identified as indicated in Figure 3

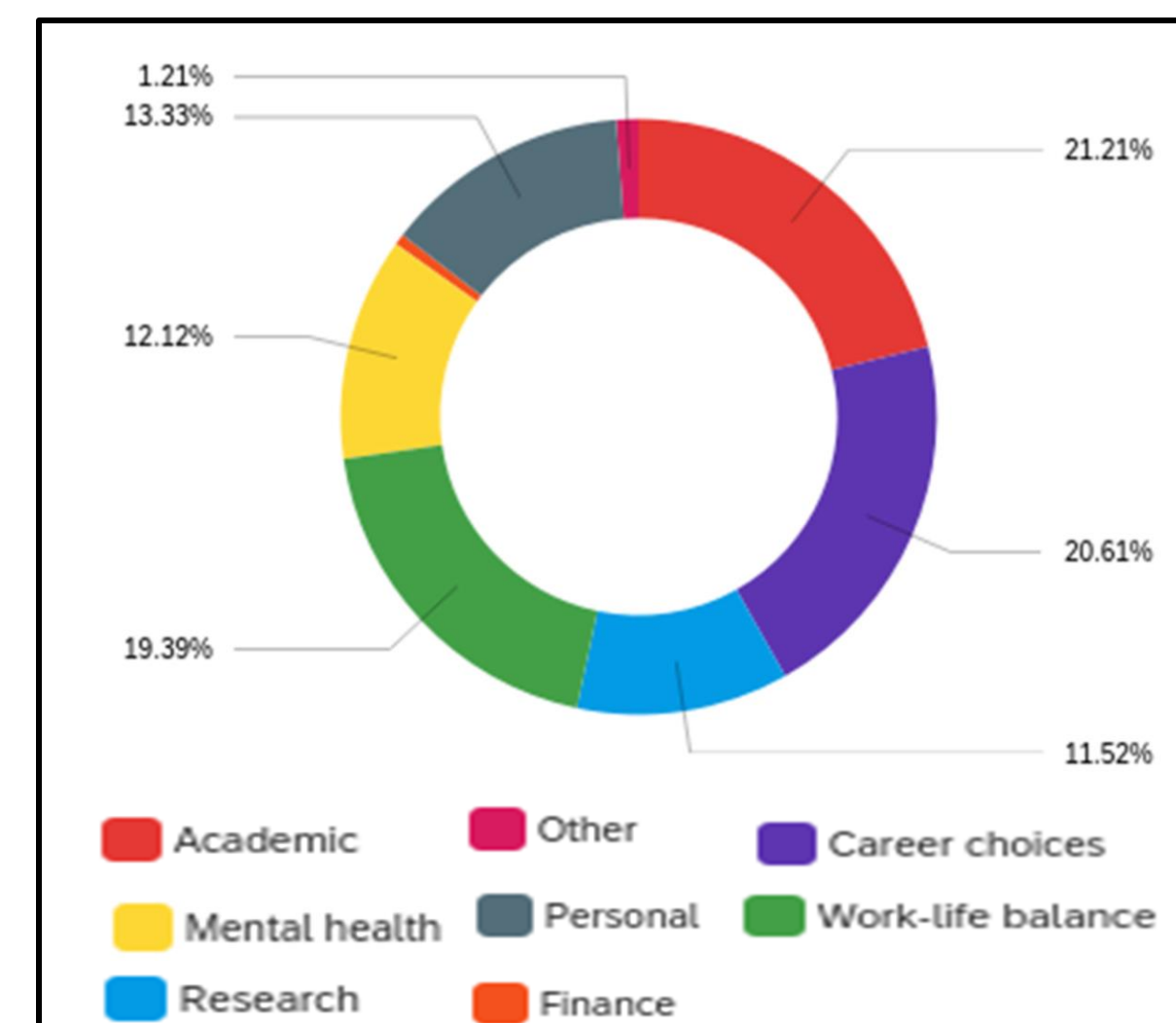


Figure 1. Major topics that 37 FGS's discuss with mentors.



Figure 2. Reported specialties of mentors for FGS's.

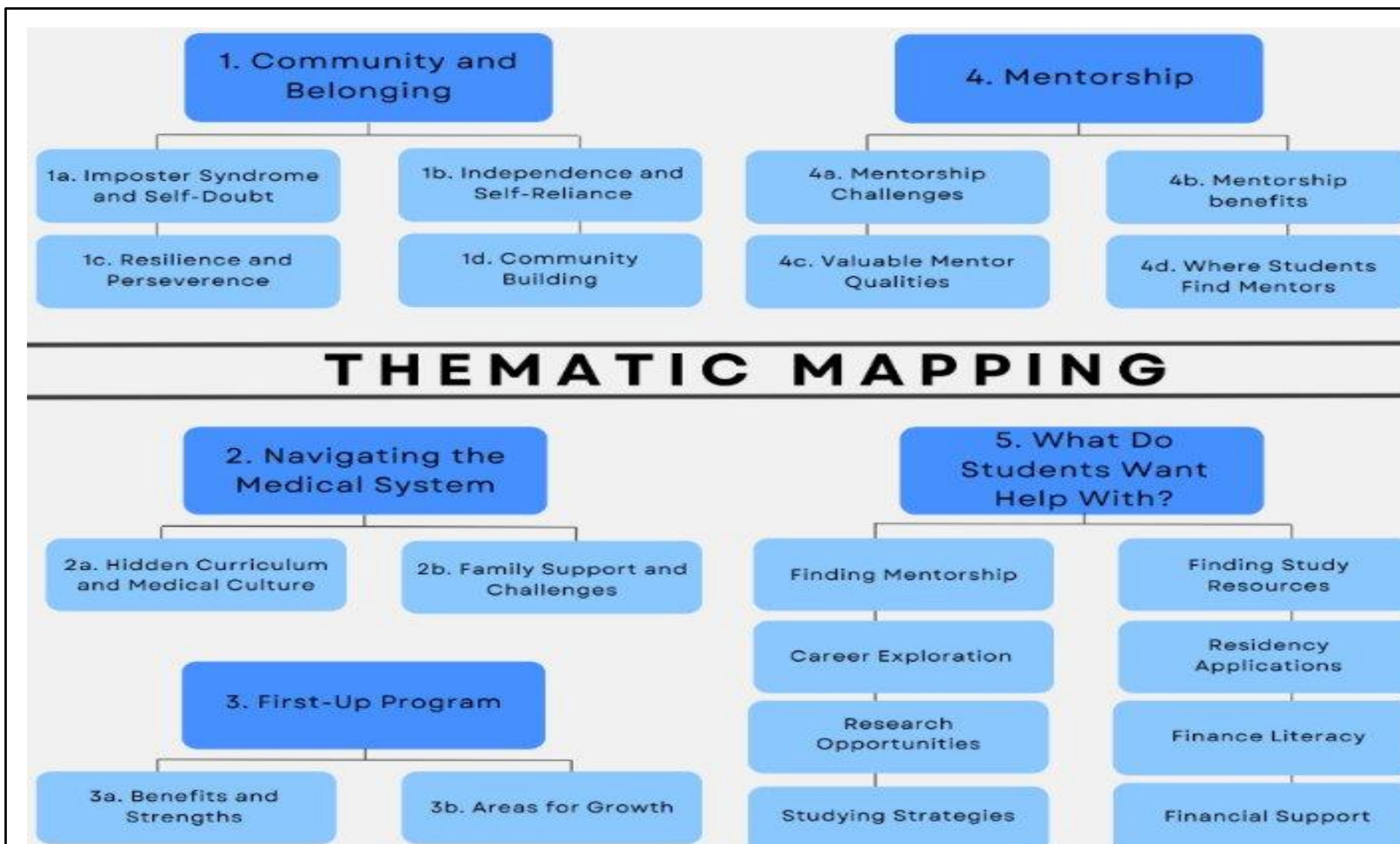


Figure 3. Concept/thematic map of 5 primary themes (1-5) and subthemes (a-d) identified during interview transcript analysis. N=20.

Discussion

- FGS's face unique barriers, such as stress, financial difficulties, and lower quality of life (13, 18, 20-23).
- FGS's offer diversity, innovative thinking, and insight. Their resilience and grit are valuable traits; ensuring they succeed in school grows an equitable workforce (23).
- While AMCAS has indicator tools, there is still a lack of support for matriculated FGS's (13).
- Mentorship has been proposed to increase retention of URIM students and improve their experiences, target interventions, and increase support (2, 22-23, 28-30).

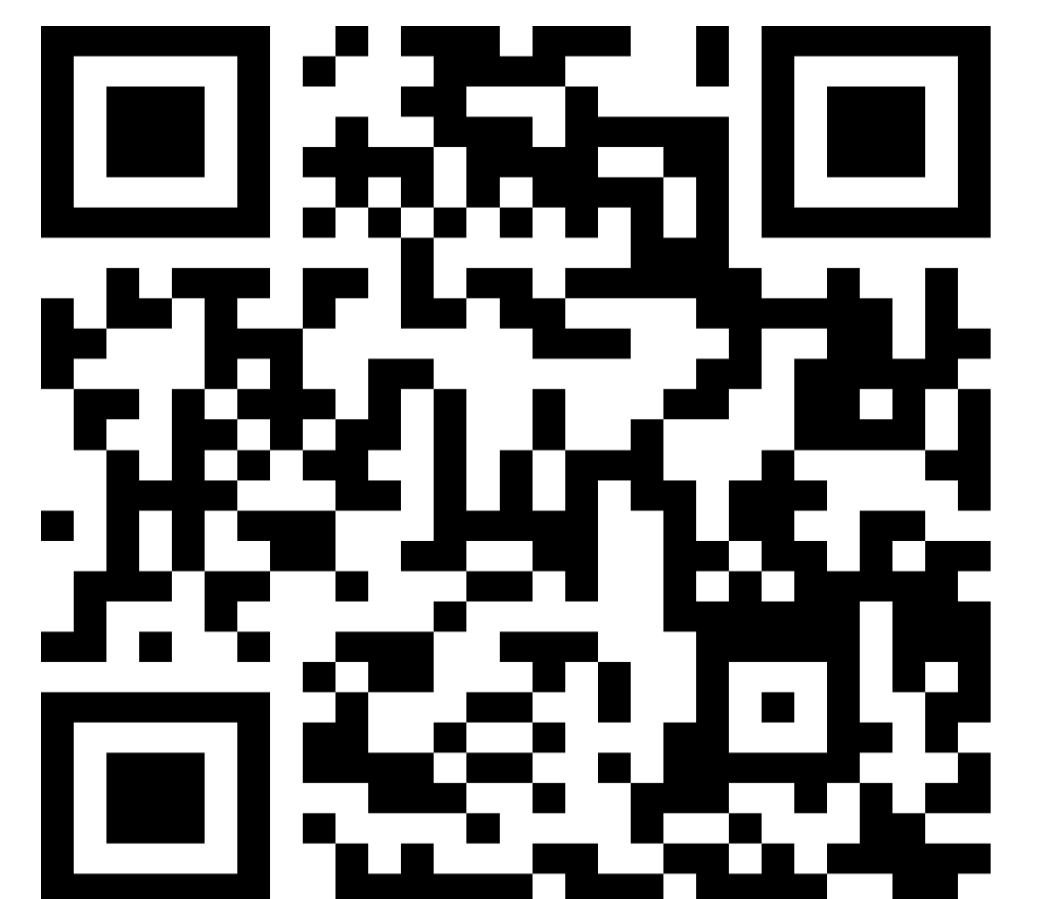
Future Directions

- Mentorship is an established avenue for support through programs like First Up, but there are still barriers to FGS finding mentors, who can help students navigate medical education (31).
- We need more research and attention on equity in education, including pipelining, investing in medical education, improving residency match and beyond.
- As a way forward at the University of Colorado, we propose an optional series of didactics offered during MS1 orientation, aimed to target specific FGS needs identified in this study (Figure 4).

Conflicts of Interest

- The research team reports no conflicts of interest.
- This project is funded by Slay Scholars.
- COMIRB: 22-2124.

Resources



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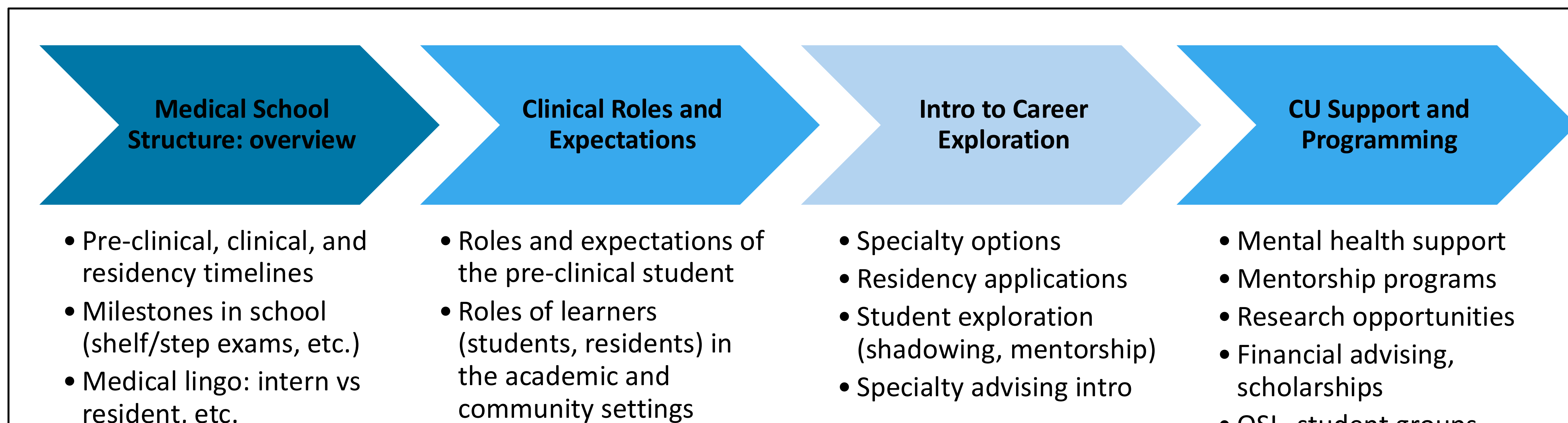


Figure 4: Proposed targeted interventions at University of Colorado based on needs identified in this study. "Medical School Structure: Overview" and "Clinical Roles and Expectations" to address Navigating the Medical System, "Intro to Career Exploration" to address Mentorship, and "CU Support and Programming" to address Self-Reported Student Needs (theme 5).