The goals of this group were to identify possible barriers to success for students in gateway STEM courses. The group identified the following barriers (in no particular order):

1) **Challenge first-year students have in speaking with professors**

Some good existing practices for overcoming this barrier include:
- requirement that peer mentors take their mentees to instructors' office hours
- faculty requiring that students come to see them (e.g. for credit)
- mandatory study group that interact directly with faculty

2) **perception that there is a less support for 1st year STEM students who are not in prehealth**

Good practices:
- see above
- Math Forum that reflects the importance of physical space with tutors and faculty offices nearby
- Chemistry Q&A sessions
- Tutors working closely with faculty and students (e.g. Genetics Learning Center)
- Peer Mentoring

Ideas for improvement:
- having more visible, inviting, attractive physical spaces in the Science Center where students can get help from peers and tutors (e.g. math forum model)
- increase the visibility/connectivity of student organizations (US2, NESBE, SWE, MAPS) and Centers (Spinelli and Jacobsen)
- expand peer mentoring beyond just first generation and underrepresented students by assigning mentors; there would be significant personnel, administrative and financial burdens of implementing this change; less administration and different financial models could be considered instead
- implement advising and mentoring support that currently exists for prehealth students to all STEM students

3) **course instruction that is not supportive of a variety of learning styles and student backgrounds**

Ideas for improvement:
- Faculty development, especially for new faculty and preferably organized and facilitated by the Sherrerd Center with focus on access; consider asking President McCartney for advice and associating it with Deborah Jewell-Sherman's visit to Campus this Spring
- recognize that there is a plurality of pedagogical approaches in STEM gateway courses and that some are more successful than others; survey students about specific course practices and elements from across disciplines that help them succeed - e.g., visually rich lectures, office hours, tutors, study group, others
- implement practices that encourage students to connect directly with faculty early on (see above)

4) **large class size and large number of advisees per faculty**

- may be barrier for access
- students through their organizations may want to address these issues directly to the College President, Provost, and Dean of the College