President Salovey has identified the sciences as a top academic priority for Yale (see November 21, 2016 email re: University Priorities and Academic Investments). This committee will play a key role in giving shape to this priority. It will create a strategic plan for STEM at Yale. While the immediate task of the committee is to provide a set of priorities, it also has the opportunity to define science at Yale for decades to come.

Initially, I am asking the committee to “dream big,” unconstrained by resources or realism. If we were able to do everything the committee recommends, I would not consider that a success, but rather an indication that we have not dreamed big enough. But understanding that we will not be able to do everything comes with a second (and harder) task. I ask the committee to prioritize its ideas. This will require the committee to make difficult choices.

What would constitute a compelling vision of science for the community of Yale students and faculty, today and in the future? What are the big ideas that we should be considering? Big ideas might be areas of science, either contained within a single department or extending across the university. This committee is well-situated to identify initiatives that cross traditional boundaries. Other ideas might involve the way we organize ourselves as a scientific community, the way we fund graduate students, or the way we teach.

What are the principles that might guide us? First, the committee should consider Yale’s comparative advantages. It is easier to build on strength than on weakness. But there may be specific areas where Yale cannot afford to be weak, and hence where we might need also to build. And we must always maintain focus on our core mission: teaching, research, and practice.

I ask that the committee

1. Develop a list of approximately 4 – 8 big ideas, listed in order of priority. Please assess each idea in terms of impact, resources required (funding, space, faculty, etc.), feasibility, and comparative advantage.

2. Develop prioritized lists of ideas that could be accomplished at current levels of resources, as well as those that would be possible with an additional $50m, $100m, and $150m in annual expenditures.

3. Make suggestions about organizational structures and behaviors that could support excellence in STEM at Yale.
Finally, I ask each member of the committee not to think of themselves as representing their particular area, school, or department but instead as representing Yale, to take a long-range and university-wide view. I appreciate the creativity, wisdom, and institutional citizenship that this will require, and I thank each of you in advance. I look forward to working with you - and learning from you – on this important undertaking.