While preparing for this presentation, I checked the dictionary and found that most definitions of *investment* referred to commitment of money in order to make money. That’s not what we’re talking about today, so I’ve provided my own definition.

**Framing the discussion**

We’re here to discuss investment: in expansion of the faculty and staff, and in our growth as a research university, in accord with our shared aspirations, the needs of our students, and our intended place in the world.

One thing we'll talk about today is **$20M in new support** for investments in genesis and initiation of research, organizational capacity and infrastructure, and faculty recruiting - all in pursuit of our **goals for the kind of university we want to be**, and making use of the **creativity and drive in this room and across campus**.
So the headline that could be written is “Lehigh to invest $20M in research and faculty recruiting.

The story that all of us need to write is “Lehigh uses its resources, its creativity, its opportunities, to grow as a 21st century, student-centered, globally engaged, research university.”

I want to be clear here about what I mean by growth. **Getting bigger is not an end unto itself. It's an opportunity to grow in other ways.**

**Foundation and aspiration**

One mark of a great place is that as good as you may be, you still see ways in which you ought to grow and change. And as good as you may have been, you still see ways in which you need to live into the future.

We do some extraordinary work here - work that's relevant to public concerns, responsive to the human urge to understand, deep and difficult as befits an academic enterprise, and communicated by people with an urge to inform others.

If you listen to students describe what they discovered through conduct of their independent work, and how they’re changed by the process of doing it, or if you go to a seminar and listen to the quality of the questions that students ask of guest speakers, you get a glimpse of how young minds can be cultivated in our academic environment.

Yet clearly, and appropriately, Lehigh people want to do more, and better, and more daring.

Calling attention to ourselves isn’t a Lehigh habit. There’s an earnestness to Lehigh by which we don’t look for attention without real underlying substance - which sounds a lot to me like an institution living out good academic standards. I think, though, that we should be a lot less shy, as long as the substance is there.
A couple of weeks ago, at a workshop on a particular grant program, one of the successful junior members of the faculty who was presenting noted that so far in his career at Lehigh, he’d had two really good ideas, posing questions that no one else had yet asked, and those were the two that got funded. That’s as it should be. Our goal is for that talented young investigator to be in an environment in which the ideas keep flowing and he can act on them effectively.

We do want to be noticed for what we do, in part to attract talented, and like-minded, colleagues and students. What we do to deserve notice should include both the quality and character of our research and the quality and character of a Lehigh education.

Vision, Strategy, and Place

Much of what I have to say about aspiration is grounded in the work of the Faculty Task Force on Research that worked through the Spring of 2016, the companion report of the Task Force on Graduate Education, the Graduate and Research Committee’s study and further thinking on those reports during the 2016-17 academic year including GRC’s survey of the whole faculty, and of course lots of conversation and correspondence with Lehigh colleagues.

I still recommend review of those task force reports, which for example, recommended use of hiring to build collective faculty strengths, well before we knew we’d be adding 100 colleagues, and emphasized the important relationship at Lehigh between research and education.

I’ll quote from the Research Task Force: They spoke of striving to further excel. That Lehigh research “merits a culture of vibrant intellectualism marked by individual distinction, interdisciplinarity, collaboration (within and beyond Lehigh), collegiality, and intellectual freedom.”
They said that common statements about how research “enhances instruction” don’t capture “the role of research in shaping every aspect of education at Lehigh, where a faculty of active and engaged scholars lead a community of inquiry that embraces graduate and undergraduate students.” - and went on to declare that “the research environment is a critical element of a comprehensive Lehigh education.”

The task force stated that “This culture can thrive only under material conditions that “create focused time and tools for research, in which excellence is rewarded, and collective efforts can grow to scale and prominence according to their merit,”

...and that “Faculty, staff, and university leadership all have roles and responsibilities in establishing and maintaining these material conditions.”

The reason we’re here, and for Pat Farrell’s and John Simon’s efforts to identify $20M to invest in ourselves, is to work toward creating those material conditions.

It remains an effort in which all of us have roles and responsibilities.
Four strategic elements

I want to identify four specific, strategic, elements that I see as characterizing our intentions.

**Excellence.** Our work should merit the highest admiration of our academic colleagues.

Lehigh faculty are journal editors, leaders in professional societies, originators of new lines of inquiry.

Meriting admiration is different from instantly receiving it. Risky, contrarian, potentially field-changing work is often not recognized at the outset. We need an environment that fully supports that kind of work and the choices inherent in pursuing it.

**Coalescence of faculty members around areas of collective strength.**

These should become fertile, supportive, intellectually generative, and challenging environments for our faculty, undergraduate and graduate students and fellows, and attractors for those who consider joining us.

Whether the work is solo or team-based, people can benefit from working under a collective umbrella in which colleagues support and challenge each other, take collective responsibility for their students, and share resources and relationships. Collective strength can bring stability, helping to protect those risky, contrarian, and long-term lines of inquiry that we value.
A focus on collective strengths can be particularly important for a university our size. Yet universities ten times larger can struggle to bring people together across departments and colleges in ways that ought to be entirely possible at Lehigh.

Public value.

We should earn the trust and appreciation of non-academic communities, be they professional communities of practice, governments, industries, lay communities, or non-profit organizations.

We should merit, and maintain, relationships that bring new insight to our work and new opportunities for us and for our students.

The interest in public-facing work among Lehigh faculty, is very much a part of who we are. It’s also a distinct advantage at a time when whole books are being written about the need for American universities to renew their public covenants. We need to also remember that our public value is grounded in our intellectual independence, in our ability to pose and pursue questions that others haven’t even noticed, or perhaps are a bit afraid of.

Value to students.

The research environment and the relationships it secures should serve as the foundation for an unparalleled experience for students at all levels.

I’ll repeat the quote from the research task force: “the role of research in shaping every aspect of education at Lehigh, where a faculty of active and engaged scholars lead a community of inquiry that embraces graduate and undergraduate students.”

Our success as a research university is tied up in our ability to do this exceedingly well.
Investments

Back to investments, and then on to process...

We have identified $20M, about
- ⅓ for genesis and initiation of research
- ⅓ for infrastructure
- ⅓ for support of faculty hiring

Genesis and initiation of research can include things *such as*…

- Launch of research support offices in the colleges.

  If you are in the College of Arts and Sciences, you’re probably familiar with the Office of Interdisciplinary programs, that supports about 21 interdisciplinary undergraduate programs with a small, expert, staff. That office provides a model for what shared services supporting research could look like.

- Major research program investments, perhaps like our current Accelerator program, only larger and with higher expectations.

- Community-building and ideation - support for workshops, study groups and symposia in which new ideas and new ventures might be cultivated.
Infrastructure can include things such as renovations to facilities, equipment, and new and improved research services. In the sciences, research services include core laboratories that maintain complex shared equipment, as well as experimental design and statistical consulting. They can also include newer services like producing software for those not in a position to write their own. Our Digital Media Studio is a good example of a shared research resource.

And assistance in faculty hiring

Because hiring of faculty is a long-term investment, a convincing story for support of a new hire requires a long-term view and a long-term plan. It requires that we look ahead to what our world is likely to look like in five years. What’s Lehigh’s position in that likely future environment? How will this hire improve our position?

We’ll expect clear ways to know when we’re succeeding.

We should also be clear about what else is needed. What aspects of our academic environment need to change so that these new hires can fully succeed? How will we go about putting those things in place?
Our timeline involves working backward from a first cadre of new faculty starting at Lehigh in September of 2021. These are people we’ll recruit during the 2020-21 academic year, based on new faculty lines approved in May of 2020. To make that possible, we’ll require proposals from the deans in April of 2020.

Expect a formal announcement this September. The time to start thinking is now.

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**Process and principles**

This brings us to process.

As we get underway, these are a few basic principles regarding how we should proceed…

We need to **be clear about the kind of academic environment we intend to build**.

We need to **be frank with ourselves about ways in which we’re not yet there**. The 2016 task forces identified a number of areas in which we have work to do. In [the document I posted online](#), I elaborated on these, providing a list of imperatives for growth and change. The point is neither self-pity, nor self-criticism without steps to improve. The intent is to identify work to be done, elicit creativity, and guide action.

We need to **be imaginative about how things can be different**. The fact that the world is changing, that old formulas may not apply, can be unnerving. It should also be liberating.
And we need to **be true to our covenants with students and stakeholders**. We get to be here because of how we’re valuable to others.

There also needs to be a **clear set of principles that guides our use of funds**, or for that matter, any investment of resources.

**We should have the intention, with every investment that we make, that it has lasting effect.**

It can be a program launched. Even better, it can be a research program that deepens relationships with constituents, or integrates research, graduate education and undergraduate education in productive ways. Even further, it can be learning how to repeatedly launch such programs.

It can be a new colleague whom we get to keep. It should also be learning creative ways to attract new colleagues.

It can be an organizational capacity we didn’t have before, that involves staff members in rewarding roles and enables faculty to focus more effectively on their research.

It can be securing important relationships that give rise to opportunities for faculty and students. And it can be learning how to structure those relationships effectively.

**We should maintain a bias toward action and experimentation.** We should be putting funds to use, thoughtfully, by this fall. We won’t have a magic formula for success. We will look for ways to test ideas quickly, and commit to learning from experience.

We need to accept risk. Mitigate it by looking for ways to know early on if something is working. And when that’s not possible, take on the risk knowingly. Understand that those who take on potentially groundbreaking research will tend to fail more often, and succeed more spectacularly.

We should receive ideas generously. Don’t expect neat solutions. Expect to combine and recombine ideas, especially when it comes to things like how we organize work and structure time.

The common university habit is that we write proposals and get a “yea” or “nay”, when we really should be **developing ideas, playing them out in our minds, and figuring out**
ways to try them. To the degree possible, and without delaying action, I would like this to be a creative process.

And we’ll need to be disciplined. Key questions to be asked with each investment are

**What do we expect to be different because of this investment?**

**How will we know when we’ve been successful?**

**How might we know early on how we’re doing, so that we can change our approach or go on to something else?**

I recently had the pleasure of hearing alumnus Frank Douglas, who was a Chemistry major at Lehigh and went on to a remarkable career in academia and in the pharmaceutical industry, recalling that he was once asked to compare the productivity of different research environments. The best, he said, were the ones in which people paused now and then to reflect on whether they were asking the right questions. We should apply the same habit of critical reflection that makes for great research, to the ways in which we craft the research environment.

As provost, Pat’s responsible for decisions about support for faculty hires. And I’m responsible for decisions about other investments.

In support of the goal of engaging people in a creative process, I’ve asked these people to serve on advisory committee:

- Susan Woodhouse (Education)
- Jim Gilchrist (Chemical & Biological Engineering)
- Naomi Rothman (Management)
- Deep Singh (English)
- Jebrell Glover (Chemistry)
- Kathy Zimmerman (Provost’s Office)
- Kate Bullard (VP Research)
Susan and Jim are on the Senate Research Subcommittee, and Susan is on GRC, which I think are useful connections, providing those bodies with additional avenues for agency.

My intent is that this group can help to ensure that this is the kind of creative process that it ought to be. They’re there for their perspective and creative energy. My office will handle all of the organizational matters. We want to have a process by which all constructive thoughts and ideas are valued. We start placing these investments by this fall. Of course the investments, and investments of time and energy will be ongoing.

As we get underway, please do share your ideas. As I was collecting my thoughts, I put them in a document and a number of Lehigh colleagues were kind enough to critique and lend their own thoughts. That document is online along with some others.

Kate Bullard ensures that our Twitter feed always includes things worth knowing about and this is no exception.