

State of the University

PRESIDENT HARVEY G. STENGER | SEPTEMBER 8, 2016

BINGHAMTON
UNIVERSITY
STATE UNIVERSITY OF NEW YORK

**“In 2016,
the state of
Binghamton
University is
vibrant!”**

Each year at our State of the University address, I’ve shared with the campus what I think are the most important initiatives, or “Big Ideas,” that are crucial for our success in the coming years.

In 2016, the state of Binghamton University is vibrant!

I say vibrant because of our remarkable record of achievement. In the four-and-a-half years that I’ve been fortunate to be at Binghamton, we’ve had a remarkable run of success. Just as the Maine Endwell Little League team recently won 24 straight to become world champions, Binghamton has put together a stellar string of achievements.

When NYSUNY 2020 brought changes to the way SUNY funded research universities, we experienced an infusion of dollars that allowed us to make a series of strategic investments – to get bigger and better.

Through our collaborative Road Map to Premier strategic planning process that brought more than 400 people together to work on nine teams, we established five strategic priorities to guide us. Most importantly, the Road Map has provided a way for our campus community – faculty, staff, students, alumni and supporters – to chart a path for our future.

THESE PRIORITIES AND STRATEGIC INVESTMENTS HAVE ALLOWED US TO:

- add new research facilities at the Innovative Technologies Complex including the \$70 Smart Energy Research and Design Facility
- hire 257 new tenured and tenure-track faculty (136 net new)
- establish a new alumni center
- renovate dozens of classrooms

SINCE 2013, WE’VE FUNDED 124 PROJECTS THAT HAVE CHANGED OUR TRAJECTORY.

We’ve implemented initiatives, innovations and ideas including:

- the Freshman Research Immersion program
- the Division of Diversity, Equity and Inclusion
- additional support for graduate students
- establishment of our School of Pharmacy and Pharmaceutical Sciences (SOPPS)
- partnerships with universities around the globe
- a divisional reorganization to streamline and focus our efforts
- our five, collaborative Transdisciplinary Areas of Excellence that bring together scholars and researchers to address pressing social, scientific, technological, economic, cultural and policy issues that are too complex to explore from a single disciplinary perspective
- expansion of our Center for Learning and Teaching
- our commitment to focus on the Regional Economic Development Council (REDC) as a means of strengthening the relationship between the University and the community
- more high-impact learning experiences including international study, research opportunities and experiential education



TENURED AND TENURE-TRACK FACULTY

	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Net New
CCPA	20	24	26	27	27	33	13
DSON	14	15	16	19	20	21	7
GSE	19	20	21	19	18	17	-2
Harpur	323	343	365	369	390	399	76
SOPPS	—	—	—	—	3	6	6
SOM	33	36	38	38	40	41	8
Watson	66	71	76	85	91	94	28
Total	475	509	542	557	589	611	136

These are just a few of our accomplishments, and we're also providing more educational opportunities for more students – total enrollment has increased from 14,746 in 2011 to more than 17,000 students today, and graduate enrollment has increased 30 percent to more than 3,400 students this year. We continue to be selective, enrolling the very best students of the more than 32,000 freshman applications we receive each year.

In addition, our philanthropy now consistently tops \$10 million per year, placing us on target to raise \$16 million by 2020, the same year we aim to enroll 20,000 students.

Much of our success rests on the productivity of our faculty in their teaching, research, scholarship and creative activities. And faculty productivity, too, is on the rise. Commitments of external support for research are up 33 percent since 2013, from \$32.6 million to \$43.5 million, and our faculty are publishing more books, gaining larger and more impressive grants, and appearing as invited speakers and lecturers at the most prestigious conferences and seminars in their disciplines.

Last year, the big ideas we focused on revolved around opportunities presented by the Upstate Revitalization Initiative (URI) as part of the



REDC, which is helping us to establish the Southern Tier Health Sciences and Innovation Park in Johnson City. We will co-locate the Decker School of Nursing (DSON) there with the SOPPS, and provide facilities for pharmacy research, geriatric medicine and biopharmaceutical partnerships with industry.

Currently under construction, the SOPPS building will open in Johnson City in 2018. Property has been purchased to renovate for the DSON, which will open in 2019.

Since 2012, when the REDC process began, the Southern Tier has received over \$300 million in project funds, along with \$1.5 billion in private investment. These funds have supported a number of Binghamton University projects. The School of Pharmacy, of course, but also smart-energy development, undergraduate STEM education and the \$19 million Southern Tier High Technology

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Incubator in downtown Binghamton – a partnership between Binghamton University, SUNY Broome and the regional economic development community that will grow an entrepreneurial ecosystem to nurture emerging companies.

Funds from the Upstate Revitalization Initiative (URI), which last December awarded the Southern Tier REDC \$500 million over five years, will also support development of facilities in Endicott that house our Center for Advanced Microelectronics Manufacturing (CAMM). This support will help the CAMM, which is the leader of the New York node of a \$75 million Department of Defense initiative for flexible hybrid electronics, to drive innovation for the Endicott iDistrict. In April, New York state announced it would provide an additional \$20 million as part of the URI, creating up to 200 academic and industrial jobs.

The outcome of our collective and collaborative efforts over the past several years is that the rest of the world is taking notice. Our reputation and visibility continue to grow – which in turn helps us attract better students, better faculty and better support for our academic programs. National publications recognize our success. We’re the #8 public university and #15 overall in *Forbes’* “Best Value” ranking, a top-40 school according to *U.S. News & World Report*, #37 nationwide for having the most diverse student body according to BestColleges.com, and on The Princeton Review’s list of the top 50 “Colleges That Create Futures.”

When Binghamton students graduate, we can be confident that they will change the world.

And the world is taking notice. Every week, our faculty are highlighted in the popular press for

innovative research and scholarship. Our visibility and reputation continue to grow, influencing thought leaders in Albany, New York City, and Washington D.C., which in turn helps us attract better students, better faculty and better support for our academic programs.

Because of all of these changes, Binghamton University is having a greater impact across the board, changing the shape of our community by adding jobs, building partnerships and establishing Binghamton as a place where exciting and important things are happening.

All of our successes are reflected in the glowing reviews we continue to receive from the national publications that rank academic quality and campus life.

And we are outdoing our peers in New York: *Buffalo Business First* ranked Binghamton #20 in the entire U.S., calling us the “Smartest SUNY,” and ranks us as the best public college in New York. This is not just a best-value ranking. It’s “best overall.”

Because we know that “bigger is better,” we have established an ambitious goal: to reach 20,000 students by 2020, but also to change the mix of undergraduate and graduate students to more accurately reflect our status as a research-intensive University.

As we enter the fall 2016 semester, we have almost met our undergraduate target and graduate enrollment is also increasing – it’s up by 600 students since 2013. It will be a challenge for us to reach our target by 2020, but I am confident that we can do it and significantly raise Binghamton’s profile.





Road Map targets and priorities

It's clear that Binghamton University has ambitious goals — but how do we measure our successes?

Some of our goals are very challenging. It will be hard to move the needle, but they weren't chosen to be easy. They were chosen because they are important.

I'm a numbers guy. I think it's important to collect and analyze data to ensure that we are making progress on the Road Map and our other initiatives.

Early on in the Road Map process we established a system of targets and metrics that would enable us to measure our gains and identify places where we weren't being as effective as we'd hoped. It's important to recognize that many of the initiatives we've established are really just beginning, so we can't yet see or measure their true impact, but we are making progress on all fronts. We've already seen an increase in committed external funds for research, our graduation and retention rates are rising, we're a more diverse campus, our state and national impact is growing, and, most importantly, we are lowering our student-to-faculty ratio.

CHALLENGES AHEAD

The past four years have seen some remarkable achievements — as well as some areas with incremental, but still important change. Our goal as we look ahead is to lock in these successes while finding ways to continue the trajectory of success that the Road Map and NYSUNY 2020 helped us establish.

Complicating our efforts are several challenges — some of them affecting colleges and universities across the United States — and some impacting only Binghamton and our SUNY peers.

All of us — especially those of you with children in or getting ready to attend college — know that college just keeps getting more expensive, even at public universities like Binghamton. Although the rate of tuition increases has slowed, it still exceeds the inflation rate.

What can Binghamton do to keep our costs low? We have a competitive advantage as a “best-value University — so let's build off this.

We need to be sure that we adequately prepare students for the workplace and give them all the tools they need, not just the technical skills of

“Collaboration costs more time than money and has a strong, positive impact...”

their discipline, but the communication, critical skills and broad knowledge that will enable them to move between jobs and careers.

We need to maintain campus security and provide services in the classroom and in the residence halls that adequately address issues such as sexual assault and hazing. As our campus grows and develops new locations, these challenges will increase.

Students also want a campus that is diverse and welcoming. We need to support all of our students and encourage respectful discussion around even the most sensitive subjects.

The University must be a good citizen, which means being aware of our impact on the environment, including encouraging sustainability and energy efficiency.

All of this takes place at a time of demographic headwinds. The college-age cohort is shrinking so there is increasing competition for the best students.

And, in case you haven't heard — there's an election in two months. The presidential candidates have their own proposals to deal with these issues — especially college costs and debt — so we need to anticipate possible changes to federal laws regarding student aid and other types of support.

Closer to home, we need to confront new budgetary challenges. In March, the state legislature failed to reauthorize NYSUNY 2020, the law that was so vital to our Road Map and other initiatives. Plus, we have a new boss coming to town. Chancellor Nancy Zimpher has announced she'll be stepping down after this academic year. SUNY is conducting a search for her replacement, and I'm sure that whoever it is will have new initiatives and directions to pursue.

STRATEGIES FOR THE COMING YEAR

What we are looking at, both nationally and here in New York state, is a period of uncertainty: changes in funding, leadership, demographics, and how education is organized and sustained.

What should we emphasize in the coming year or two?

I think there are a few key approaches that we can draw on to continue our record of accomplishment:

- Hold our undergraduate enrollment steady (or perhaps have a slightly smaller first-year class, and focus on student success).
- Provide more opportunities for graduate students and work to grow graduate enrollment.
- Leverage external sources of funding: state funding beyond operating costs, federal grants and philanthropic support.
- Expand offerings in health sciences. We have hired a new dean for the DSON who has some exciting ideas about possible new programs, including in pre-health tracks, sports and exercise, and nutrition.
- In a world where everyone is getting older, how about new programs in rehabilitation sciences that would encompass physical and occupational therapy, help people regain their speech and language abilities or help them hear better?
- These proposed programs will have natural partnerships with new programs like the MPA and MS in health systems, as well as with the new SOPPS.
- I think we have an opportunity, particularly with the Decker School moving into Johnson City where it will have more room for research, clinical work and education, to broaden the Decker School's role on campus and help it find ways to better serve society.
- Look to faculty to develop a new TAE that could attract new resources in external support.

But most of all, I think the University will need to focus on becoming the collaborative University. I believe the ability to collaborate is absolutely vital, as it builds community, leverages resources across disciplines and divisions, and encourages innovation.

Collaboration costs more time than money and has a strong, positive impact on the quality of our teaching, research and outreach.

“BINGHAMTON IS AN INSTITUTION MAKING EXTRAORDINARY PROGRESS.... ALL MEMBERS OF THE CAMPUS COMMUNITY ARE TO BE COMMENDED FOR THIS RELENTLESS PURSUIT OF EXCELLENCE.”



Collaborating for success

Collaborating takes a real commitment to reach beyond your office, your department and your school. It's a way of breaking down the silos that can develop around our work.

As such, collaboration is liberating — it allows you to think in new ways, serve and reach different audiences, and re-conceptualize your work and work space.

Collaboration leverages resources to produce success.

EXAMPLES OF COLLABORATION

As I was preparing for this talk, I asked campus leaders for examples of collaboration — and I received dozens of projects that brought faculty, staff, students and other partners together.

Binghamton is a place that understands the power of collaboration — but I think we can do more.

I want to explain just three recent examples of how the University is coming together to leverage resources for success at all levels and in different arenas. One of these examples is brand-new, another is about a year old and the third has been under development for several years.

THE INNOVATION AND DESIGN CENTER

This brand-new idea was developed by students in an School of Management entrepreneurship class in conjunction with the Office of Entrepreneurship and Innovation, along with support from SOM, Watson, fine arts, facilities and external partners.

The idea is to create a space on campus where students across departments and disciplines can come together to brainstorm, conduct research, and develop new products and services that have market potential.

The center would be a suite of rooms arranged to encourage student collaboration and blue-sky thinking, bridging the disciplines from arts and sciences to management and engineering and drawing on the work of all five TAEs.

Five separate rooms would be equipped with technologies and materials that inspire and support the creative process — from Play-Doh and sculpting materials to cutting-edge computing equipment with business and analytic software; from rapid prototyping equipment such as 3-D printers and welding equipment to basic

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chemistry, biology and electronics labs; space to meet with and learn from experienced advisors including faculty, alumni and invited business leaders; and a shark-tank like room to pitch marketable ideas to potential investors.

We are in the initial stages of developing a fundraising campaign to support the project, with a goal of launching it in the near future.

This space would place Binghamton at the forefront of student innovation — there are few schools that have anything remotely like this.

This project will accelerate Binghamton’s path to premier, placing Binghamton students at the center of innovation, preparing them for the Fourth Industrial Revolution where products and development processes are linked through the internet and data is stored in the cloud.

THE LIVING BUILDING AT NUTHATCH HOLLOW

Nuthatch Hollow, a property on Bunn Hill Road that includes an older residential building and about 80 acres of land, was donated to the campus several years ago.

This collaboration will repurpose the property as an environmental classroom and research space, creating a learning space that is highly resilient and regenerative, and based on the principles of sustainability, equity, community and materials transparency. It incorporates both environmental and social standards in its construction.

The building will be net positive in both water and energy usage. It will produce more than it uses, while the materials used will be manufactured in ways that are both environmentally sound and socially equitable.

We’d like to see the process and design be replicable because this is a small, residential-sized building of about 2,500 square feet — about the size of an average home. We think that many of the sustainable features will be things that other builders in the community and beyond could incorporate in their own work.

The building will serve as a hub for collaborative education and discovery between multiple disciplines and TAEs including both the Sustainable Communities and the Smart Energy TAEs. The leading academic discipline will be our environmental studies program, but we expect many



other faculty will participate in and utilize this unique facility.

We will be seeking external support for the building with an initial \$149,000 provided by Road Map funds. Alumni and external partners can help us with the architectural work.

The building itself will receive Living Building certification. (Currently, only 11 other buildings in the world have achieved this status.)

A highly interactive and collaborative process involving students, faculty, staff and community members will design the facility over the next two academic years so students can participate. We already see a great deal of interest from different groups on campus as they learn about this building.

Physical facilities is contributing its expertise, such as construction management and landscape architecture — but other faculty from a broad range of disciplines will lead design teams. For example, people in geography will conduct topographic surveys, others will perform carbon footprint calculations, and still others will produce educational materials and a website associated with the project.

Construction will begin in 2018 and occupancy is scheduled for 2020. After one year of residential use, the building will be certified as a Living Building as part of the Living Building Challenge.

THE NEXTFLEX MANUFACTURING INNOVATION INSTITUTE

Last year, Binghamton was named the leader of the New York node of a \$75 million five-year initiative to develop flexible hybrid electronics as part of the Flex Tech Alliance — a collaboration between industry, academic and governmental agencies that is inventing and developing “flexible electronics.”

Flexible electronics involves printing or embedding computer chips on bendable materials, such as plastic, glass, paper and fabric — think of bandages that can sense infection, or clothing that can monitor your physical activity.

Binghamton houses its NextFlex facilities at our CAMM at the Huron Campus in Endicott — the hub of the Endicott iDistrict that is central to last year’s URI plan.

Binghamton collaborates with a number of regional partners as part of the Alliance (Corning, Inc., i3 Electronics, General Electric and Lockheed-Martin) to develop and manufacture this new technology. More companies are expected to join the initiative. Cornell University and the SUNY Network of Excellence in Materials and Advanced Manufacturing, representing all four

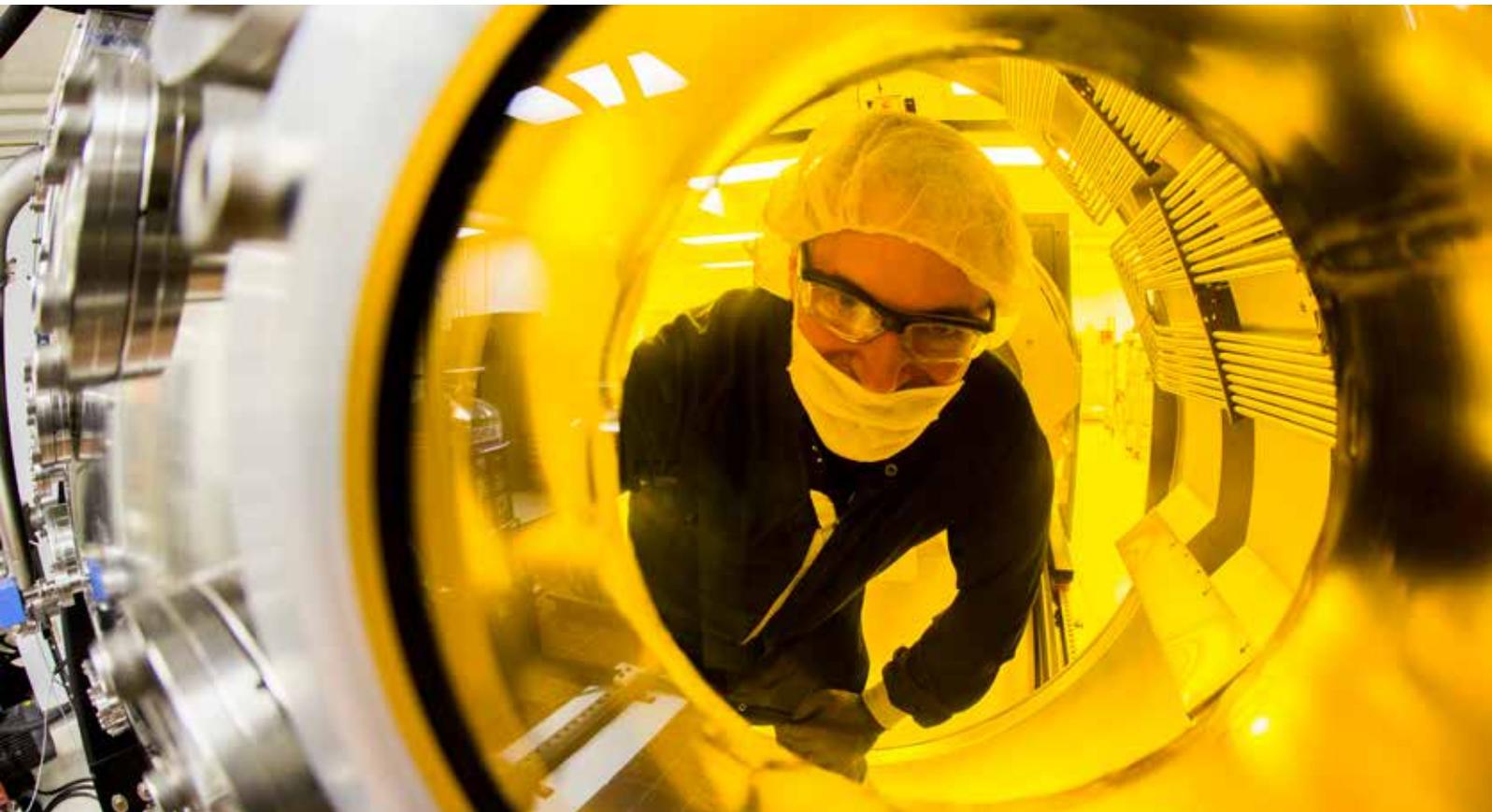
SUNY research campuses, are also involved. Other members across the U.S. include Cal Poly, Clemson University, UMass-Amherst and more than 50 industrial partners.

These institutions and partners develop proposals as part of the Flex Tech competition that are then funded by the federal government.

Here in New York, Gov. Andrew Cuomo has committed \$20 million to support projects emanating from the CAMM, with a potential \$40 million in total federal and state funds that will provide a real boost for research and development in the region. In just two years, the NY node has garnered over \$17 million in federal, state and industry funds for six different projects.

We anticipate that the innovations coming from the CAMM could generate as many as 200 well-paying jobs in the region over the next several years, helping reinvigorate a community that has suffered since IBM moved away in the early ’90s.

More important for the University, initiatives like this help build our reputation for stellar research in disciplines that will shape the future and show that when it comes to solving technical and scientific challenges, Binghamton University is the place to turn.





Road Map Renewal

We know what collaboration can do — but what does it look like in practice? We all know what a standard organization chart looks like — with its hierarchy and top-down approach. It's time to shake it up and turn those charts upside down and inside out.

You get to choose who you work with, what you can accomplish and how you can change the University and the world!

IT'S TIME TO B-COLLABORATIVE.

To do this, we will have to adjust our strategic priorities and develop new initiatives that address the changing environment — social, economic and educational. It's time to renew our strategic plan. We're calling for a Road Map Renewal!

The first Road Map established our path to premier, and we've had remarkable successes.

It's time for another Road Trip. Let's build on our successes and take another look at how to move Binghamton forward.

For an organization like Binghamton, five years can seem like an eternity. Many of you — not just students, but faculty and staff as well — weren't here for the first Road Map. Here's your chance to contribute.

Those of you who were here at that time have more experience and a broader vision of what's possible.

We are recruiting volunteers. You can register online at binghamton.edu/roadmaprenewal. We'll form teams and launch the Renewal by December.

We have a tight deadline: I want to have a new map in hand by April.

Like the first Road Map, our goal is to discover what new things we can do to make this the premier campus, by looking at what we are doing and finding ways to do everything better.

Most of all, we need to see innovation and imagination — along with a clear view of what it will take to make these changes happen.

The Road Map proposals that will emerge from the Renewal will be funded with resources already set aside for the projects.



This Renewal is about more than just the projects we design and implement. The directions and ideas that come out of this process will guide Binghamton University as we prepare for our next comprehensive gifts campaign that will bring millions and millions of dollars into the University. Our last campaign raised over \$100 million, and I am confident that our next campaign will do even better.

OUR SUCCESSES ARE NOTICED

We are a truly great, vibrant University, on an upward path to get bigger and better. There is much more awaiting us on the horizon.

As we continue to receive outstanding rankings in the popular press, we are gaining notice from influential leaders who understand the transformative impact we are having. But these accolades aren't just about the institution. They are really about you — the people who do so much for their students, colleagues and community — so I want to say thank you!

We have an exciting year coming up, so let me know what you think.

Volunteer for the Renewal. It's a great experience that will help you learn about and be even more proud of what we accomplish here.

AND MOST OF ALL — HAVE A GREAT YEAR!

“We are a truly great, vibrant University, on an upward path to get bigger and better.”



“THE REGION IS MAKING SERIOUS EFFORTS TO BOOST ECONOMIC GROWTH, WITH BINGHAMTON UNIVERSITY PLAYING A KEY ROLE IN FOSTERING LOCAL BUSINESS ACTIVITY. . . . THERE’S A STRONG UNIVERSITY THERE THAT’S STARTING TO MAKE A DIFFERENCE.”

New York Federal Reserve President William Dudley



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**QUESTIONS OR
COMMENTS?**

Contact President Stenger directly
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