

# Dear Colleagues:

e are at an important time in Binghamton University's history. The external environment presents strong headwinds; our local and national economies are struggling or at best, stagnant; the general public and federal and state governments are demanding accountability from schools, colleges and universities; and for the first time, loud voices question the value of a college education.

At the same time, Binghamton University is steadily advancing academic excellence by integrating the discovery of new knowledge, creative activities and an outstanding education for our students. With hard work and wise resource management, we are improving every year, gaining momentum and making progress against these external headwinds. Applications to our undergraduate and graduate programs continue to rise, and we matriculate exceptional students who are smart and engaged. We

attract excellent faculty who love to teach and have a passion for research and creative activities. Our regional impact is growing both economically and culturally.

The remaining four years of NYSUNY 2020 give us a rare opportunity to build on this momentum to become the premier public university in the United States. Specifically, rational tuition increases will allow us to decrease our student-to-faculty ratio, expand course offerings, increase the number of course sections and decrease class size. A simultaneous increase in undergraduate enrollment to 13,500 and graduate enrollment to at least 3,500 will make Binghamton University larger in size and in impact.



As we get bigger and better, we must continue to make wise choices. Our Road Map, built through a transparent, inclusive process, helped us develop our vision that will guide us as we invest our new resources to reach distinction as the premier public university of the 21st century.

But what defines the premier public university? In many ways, our months-long process to create this Road Map was an extended exercise in answering this question. Through many meetings and discussions, I believe a consensus formed around the essential attributes of a premier public: accountability, excellence, pride and balance.

As the premier public, we must, above all, be accountable to our students, taxpayers and communities that look to us for education, innovation and inspiration. We will be a place where discovery and creativity are supported and encouraged, shaping the world in profound and tangible ways. We will be diverse, inclusive and global, drawing on the broadest range of perspectives, experiences, talents and aspirations. And we will be guided by an unstinting commitment to excellence, striving to be the best in all our endeavors, building on our traditions and strengths, and applying them to the exciting challenges ahead.

Our dedication to excellence and accountability will generate pride in the accomplishments of our faculty and staff, the quality of education we deliver, the personal and professional relationships that develop among students and alumni, and the impact and effectiveness of our engagement with the

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community and the world. People around the globe will look to Binghamton University and will want to be connected with us.

As the premier public, we will be a growing, changing, complex institution, continually seeking balance between our roles. Achievements in one area will be complemented by successes in others. Faculty will be recognized as outstanding teachers, even as they engage in world-changing discovery in our laboratories and libraries. Students will learn in an academically challenging and rigorous environment while engaging in a culturally rich and socially diverse campus and surrounding community. We will push the frontiers of pure knowledge while adding to the economic strength and vitality of our region and state. Campus growth will be matched by a constant commitment to quality. Most of all, Binghamton University will be a place where people work hard, but find fun and enjoyment in everything they do.

As I picture Binghamton University in 20 years, I see a campus where undergraduates get the best education in the world, a growing number of graduate students pursue doctoral degrees that prepare them for a variety of roles, from the academy to government to

number of graduate students pursue doctoral degrees that prepare them for a variety of roles, from the academy to government to private entities, and master's students receive advanced training from world-renowned scholars and researchers that prepares them for successful lives and careers. I see a place where every undergraduate student will have the opportunity to graduate within four years with promising prospects for employment or advanced study. Binghamton will lead the region with a vibrant social, artistic and intellectual life, as a hub for community and cultural activity and as a place where other organizations and institutions turn for answers to critical social challenges. Alumni will be eager to connect and support Binghamton at levels that reflect the powerful and positive impact the University has had on their lives.

We have an ambitious path ahead as we become the premier public of the 21st century. I can't wait to begin the journey with you.

Sincerely,

Harvey G. Stenger, President



## Mission and Vision Statements

s an institution dedicated to providing an exceptional educational experience for its students, Binghamton University understands the value of having mission and vision statements to serve as guides to the future.

Our mission statement — a living document that defines us — is an important representation of our campus and provides an overall sense of identity. We must continually refer to and maintain it, because it is the reason we exist as a campus.

Our vision statement — both aspirational and optimistic — represents the core values of Binghamton University and allows us to clearly state who we want to be and in what direction we are headed.

#### **Our Mission**

Binghamton University is a premier public university dedicated to enriching the lives of people in the region, state, nation and world through discovery, creativity and education and to being enriched by partnerships with those communities.

#### **Our Vision**

Binghamton University will distinguish itself as a stellar institution of higher education, one that combines an international reputation for graduate education, research, scholarship and creative endeavor with the best undergraduate programs available at any public university.



e chose a combination of methods developed and used by other universities, government agencies, corporations and small community groups to build our Road Map. Beginning with a broad goal in mind — making Binghamton University the premier public university of the 21st century — we established a timeline and a general process that would involve people from across campus and from the community. However, we also agreed that, as a group, we would decide after each step of the process how the next step would be implemented. Our fundamental, guiding principle was that the process must be open, transparent and inclusive. This principle was embraced by the University community and drew endorsement from United University Professions, the union representing faculty and professional staff.

This decision also meant that our planning steps were not fully known when we began to build our Road Map in spring 2012. Like taking the classic family road trip, we knew where we wanted to go, but each leg of the journey — likely to bring surprises — was informed by the previous leg. Only when completed would we be able to fully describe the process and the outcomes of each step.



## Major steps in the Road Map process:

Our fundamental, guiding principle was that the process must be open, transparent and inclusive.

- Using the Senior Officers Group Plus (SOG+), which includes the president, vice presidents, deans and other leaders, we refined our mission and vision statements.
- With the input of SOG+, we identified the nine areas in which the premier public university must excel and developed teams to explore how we might achieve excellence in each.
- 3. We chose leaders from our faculty and staff to co-chair these nine teams, which were then populated by more than 400 faculty, staff, students, alumni and community members who had been nominated or volunteered to serve. Volunteers selected the team on which they preferred to serve. See Appendix 1 for complete team listings.
- 4. The co-chairs, together with the members of SOG+, formed a Steering Committee of 35 members.

- 5. Each team was assigned one or more sponsors from SOG+ to help the co-chairs guide it through the Road Map process and to provide information and resources when requested.
- Co-chairs and team members were invited to attend a kick-off meeting in September 2012, when President Harvey Stenger gave them their charge.
- Teams met weekly. Their first task was to collaboratively develop 5- and 20-year goals and visions.
- 8. Teams were then led by their co-chairs to develop projects, known as 3-I's —
  Initiatives, Innovations and Ideas that would help the University reach the goals established by the teams.



- Each team submitted its 3-I project proposals.
   There were 179 proposals in all.
- The full Steering Committee scored and ranked all 179 proposals.
- **11.** Selection of the proposals to be implemented was based on their ranking and a discussion among the Steering Committee.
- 12. After discussion, 46 proposals were selected and grouped by the Steering Committee under five strategic priorities that emerged logically from the nature of the proposals themselves.
- 13. The vice presidents of the five divisions of the University selected projects from the final list to champion or co-champion and then prepared implementation plans for each project, including milestones and budgets.

- 14. The implementation plans were scaled by the president and provost to maximize the use of our available resources to best achieve the collective milestones of the full list of projects.
- 15. The co-chairs and members of the nine teams who all played such a critical role in its development were invited to attend an implementation launch event on April 8, 2013, where the results of the Road Map process were presented.
- 16. Quarterly progress reports on each project will be prepared by the vice presidents responsible for implementation and reviewed by the Steering Committee.
- 17. Moving forward, there will be continual evaluation and assessment, and recommendations for change will be made as necessary.



# Road Map Strategic Priorities

t its January 22, 2013, meeting, the Road Map Steering Committee agreed to organize the 3-I proposals selected for implementation into categories that reflect the University's overarching goals. President Stenger suggested that these categories be called Strategic Priorities and offered an initial draft of what they might be.

After discussion of each Strategic Priority and the language to describe it, the committee agreed upon five and refined the descriptive language to best capture the work of the Road Map teams.

The Steering Committee also agreed that each Strategic Priority would be presented by completing the following statement:

#### "THE PREMIER PUBLIC UNIVERSITY OF THE 21ST CENTURY WILL..."

Taken together, these five Strategic Priorities, each accepted by unanimous consent of the Steering Committee, are imperatives that will guide Binghamton University toward its goal of becoming the premier public university of the 21st century.

While ambitious, the statements are succinct and require elaboration to capture the thoughts and conversations surrounding their creation. In the pages that follow, each Strategic Priority is presented, followed by a discussion of what it means for Binghamton.



# 1

# THE PREMIER PUBLIC UNIVERSITY OF THE 21ST CENTURY WILL engage in path-breaking graduate education, research, scholarship and creative activities that shape the world.

To become premier, Binghamton University must enhance its graduate programs and research activities. o become premier, Binghamton University must enhance its graduate programs and research activities. To accomplish this, we will use our world-class research facilities to their best advantage, and we will increase recruitment of faculty and graduate students to meet the demands of increased enrollment while lowering the student-to-faculty ratio.

Our research will focus on issues of societal, technological, economic, cultural, intellectual and aesthetic significance — all issues critical to our future — through thoughtful development of five transdisciplinary areas of excellence. These areas of excellence will include our cutting-edge efforts in smart energy and healthcare, as well as the work Binghamton scholars are doing in the humanities, social sciences and professional schools as they explore changes in the meaning of citizenship, challenges facing societies around the world as they seek to create sustainable communities, and the role of material objects and images in shaping society and culture.

This transdisciplinary research will transform the way we think, live and learn at Binghamton as we answer important questions. But more than that, it will

inspire our undergraduate and graduate students to pursue careers in which they can use the knowledge they gain at Binghamton to improve our world.

One specific enhancement the University is considering is the establishment of a school of pharmaceutical sciences and pharmacy. A feasibility study is underway, and we anticipate the many opportunities such a school would bring to enhance our life sciences research activities and help our students pursue exciting careers as healthcare professionals.

The University will foster a culture of research at all levels. Undergraduate students will be aware of and involved with research, mentored by both graduate students and faculty. Students and faculty will seek funding from alternative government and industry sources to complement our state funding.

Through the resulting growth of students, faculty and research activities, Binghamton University will lay the groundwork to seek membership in the Association of American Universities. This elite group is composed of 62 leading research institutions that shape their communities and the world. Through membership, Binghamton University will take its place among the top public and private universities in the country.

Table: Projects aligned with this Strategic Priority, the division owner and funding provided by Road Map and division.

Project title	Division ownership
Develop a Plan for Attaining Membership in the Association of Research Libraries	Provost
Establish a New College or School in the Life Sciences	Provost
Increased Institutional Support for Interdisciplinary Research	Research
Industry Funded Research	Research
Library Support to Develop Collections for New Programs and Departments	Provost
Increase the Funds Available for New Faculty Start-up Support	Research
Joining the Association of American Universities (AAU)	Provost
Raise Majority of PhD Programs to 50th Percentile or Above	Provost
Recruit Top Quality PhD Students	Provost
Smart-Energy	VPR
STARS: Strategic Targeted Academic Research Support Adopt Strategies for Investment to Create Exponential (Non-Linear) Increases in Extramural Funding	Provost

#### Total dollars allocated over the next 28 months

\$5,934,000



# THE PREMIER PUBLIC UNIVERSITY OF THE 21ST CENTURY WILL provide a transformative learning community that prepares students for advanced education, careers and purposeful living.

s the 21st century learning environment continues to change rapidly with the popularity of online education, MOOCs (massive open online courses) and "flipped" classrooms, Binghamton must offer students a unique and transformative learning experience. Through innovative classroom environments, high-impact learning experiences and encouragement of learning outside the University's walls, Binghamton graduates will continue to stand out.

Binghamton will incorporate high-impact learning experiences into every student's curriculum. These experiences will allow our students to become global citizens, successful professionals and lifelong learners. Through internships and externships, undergraduate research, service learning and study-abroad experiences, students will prepare themselves for successful, fulfilling and meaningful lives.

We will adapt the University's infrastructure to support the changing needs of students. We will experiment with "flipped" classrooms, create opportunities for self-paced learning and explore alternatives to the traditional semester. Our students will be more engaged with their academic advisors to ensure success and a supportive environment. Faculty will have access to greater support for pedagogical innovation and experimentation from a redesigned and more robust Center for Learning and Teaching.

Binghamton students will continue to thrive in an environment that facilitates and nurtures deep learning and challenges them to apply what they learn in the lab, the community and the workplace. These experiences will prepare Binghamton students to become leaders in their professions, their communities and the world. Through innovative classroom environments, high-impact learning experiences and encouragement of learning outside the University's walls, Binghamton graduates will continue to stand out.

#### Table: Projects aligned with this Strategic Priority, the division owner and funding provided by Road Map and division.

Project title	Division ownership
Enhanced Center for Learning and Teaching	Provost
Core Competencies for Binghamton University Undergraduates	Provost
Critical Staffing Needs to Support AV Technology in Classrooms and Other Spaces	Administration
Developing a Premier Student Experience through Academic Advising	Provost
EASSE into Premier: Expanding Academic Skills and Support in English	Provost
Fostering a Culture of Undergraduate Research	Provost
Gateways to Success: Teaching Introductory Courses as "Flipped," Mastery, Residential-based Classes	Provost
Task Force Study of Approaches to Graduate Study Success	Provost
High Impact Learning Experiences	Provost
The Role of Online Learning in a Premier University	Provost
Innovative and/or Technology-enabled Teaching in Semester-long Courses	Provost

Total dollars allocated over the next 28 months

See appendix 2, page 22, for brief explanations of these proposals.

\$1,571,000

# 3

# THE PREMIER PUBLIC UNIVERSITY OF THE 21ST CENTURY WILL unite to foster a diverse and inclusive campus culture.

Our campus community must make diversity and inclusiveness a priority.

ecoming the premier public university requires commitment and contribution from all members of the University community, in an environment that mirrors the diverse workplace of the 21st century and welcomes the insights of individuals from many cultural traditions. Consequently, our campus community must make diversity and inclusiveness a priority. As our enrollment grows, so must our efforts to ensure that every member of our campus is valued as an integral and fundamental part of the fabric of Binghamton University.

We will create a new position — Chief Diversity Officer — who will lead our efforts to ensure that we are not only diverse, but also inclusive. A dedicated staff person in each of the University's divisions will provide the support needed to guarantee success. These individuals will model a philosophy of equity and inclusiveness, a value system that will be represented in Binghamton's student body, faculty and staff and will be a reminder that diversity is the key to becoming the premier public university.

To enhance the diversity of our student body, the University offers a number of programs that provide financial, advising and academic support to more than 800 students from disadvantaged backgrounds. These programs include our Educational Opportunity Program, the Louis Stokes Alliance for Minority Participation Program, the Bridges to the

Baccalaureate Program, the Bridges to the Doctorate Program and the Ronald E. McNair Postbaccalaureate Achievement Program. We will continue to strengthen these programs so that they will become even more effective in serving our students. We will also increase the number and value of scholarships to aid in recruiting diverse students. Our classroom infrastructure will adapt to be inclusive of the needs of all students. With an adaptive technology specialist, Binghamton's classrooms and learning materials will be fully responsive to the specific needs of each student.

Binghamton University has a long tradition of bringing diverse perspectives to teaching and research. To become the premier public university, we must work hard to build on this tradition and increase the cultural and intellectual diversity of our campus. Increasing the number of faculty from diverse backgrounds, traditions and perspectives must, therefore, be a high priority. Under the leadership of a chief diversity officer and a vice provost for diversity and faculty development, we will take advantage of SUNY programs such as the Faculty Diversity Program to increase recruitment of diverse faculty. We will also study best practices for enhancing diversity developed by other top universities, integrate them into our hiring practices and provide support for schools and departments as they seek to build more diverse faculties.

\$1,451,000

Table: Projects aligned with this Strategic Priority, the division owner and funding provided by Road Map and division.

Project title	Division ownership
Adaptive Technology and Information Access Services	Student Affairs
Creation of a Divisional/Dept. Staff with Diversity Responsibilities	All
Explore Increasing Scholarship to Aid Recruiting Diverse Students, Undergrad and Graduate	Provost
Develop Organizational Structure to Support Diversity, Equity and Inclusiveness	President

Total dollars allocated over the next 28 months

See appendix 2, page 22, for brief explanations of these proposals.



# THE PREMIER PUBLIC UNIVERSITY OF THE 21ST CENTURY WILL enhance the University's economic, social and cultural impact through engagement from the local to the global level.

ver the next five years, Binghamton University will facilitate the development of multi-dimensional students. These students will participate in activities that engage them interpersonally, and on both local community and world-wide levels. They will study abroad, participate in local service and philanthropic endeavors, and develop character traits that will make them ambassadors for Binghamton University upon graduation.

In accordance with our current University growth plan, these students will be recruited from all corners of the globe. Through dedicated Binghamton representatives working abroad, pipelines of diversification, relationships with international partners and a simplified admissions process, Binghamton will become the first choice for international students looking to study abroad.

The University will also work toward a stronger brand beyond America's East Coast. Through brand development and consistency in marketing efforts, the visibility of Binghamton will expand across the United States and will improve an already trusted name abroad.

On the local and state levels, our students will find more ways to be involved with their communities. As soon as new students step on campus for their summer orientation, they will be engaged in service and philanthropic activities. Their coursework will include service components and they will have an opportunity to achieve a Service Learning Certificate upon graduation. Thus, a culture of giving will be integrated into the fabric of their Binghamton University experience.

Through these efforts, Binghamton University students will become more than outstanding academics with highly marketable skills. They will grow into informed, conscientious citizens who carry the Binghamton brand into their professional and personal endeavors while they are students and following their graduation.

As an institution, Binghamton University understands the value of collaboration and will continue to establish partnerships throughout the region and across New York state. Through these thousands of partnerships with local and regional businesses and agencies, technology transfer and research commercialization services, and a state-of-the-art incubator, Binghamton University will be an economic driver as the Southern Tier and New York state revitalize their economies.

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#### Table: Projects aligned with this Strategic Priority, the division owner and funding provided by Road Map and division.

Project title	Division ownership
Binghamton University Bearcat Dens (Satellite Visitor/Community Outreach Centers)	Administration
Bringing the World's Best and Brightest Students to Binghamton University	Provost
Carnegie Classification Application	Student Affairs
Creating a Nexus for Global Engagement: The Global Center	Provost
Enhance Brand Visibility and Consistency on Campus Increasing the Consistency and Visibility of the Binghamton Brand at Regional, National and International Levels Diversify Web Content	External Affairs
Provide Students with More and Enhanced Service and Giving Experiences through Coursework	Student Affairs
Promote International Student Success, Retention and Cultural Integration through Outstanding Programs and Services	Provost
Strengthen the Existing Opportunities for Students to Engage in Education Abroad	Provost

Total dollars allocated over the next 28 months

\$1,370,000

# 5

# THE PREMIER PUBLIC UNIVERSITY OF THE 21ST CENTURY WILL optimize the acquisition and allocation of human, technological, financial and physical resources.

Growth has its challenges and benefits; if done well it can make us better, but if done poorly it can cause hard-to-repair damage.

ur plan for significant and strategic growth, as outlined in our NYSUNY 2020 proposal, has to be addressed directly in these priorities and in our Road Map. Growth has its challenges and benefits; if done well it can make us better, but if done poorly it can cause hard-to-repair damage.

Our goal for the next four years — to grow by 2,000 students, or approximately 13 percent — does not necessarily mean that all areas of the University must grow at the same pace. During a time of growth, we must think wisely about each expenditure and investment of time, money and other resources. As a result, we may need to add support staff faster in some areas and more slowly in others. Simultaneously, we must maximize our use of technology to achieve gains in efficiency. Thus, the allocation of new human, technological, financial and physical resources (people, information technology, money and space) must be distributed carefully and strategically. The

implementation plans prepared by the divisions and the execution of those plans must carefully consider the need to use and distribute these resources in an optimum manner.

Additionally, Binghamton University must work to maximize the acquisition of new resources, including money, space and partnerships. We must be diligent as we recruit and obtain these resources, and we must then manage them well, since the external competition for these scarce resources is high. These resources include state support through the SUNY allocation process; direct, legislative state support; tuition revenue; federal appropriations; research revenues; funds generated by housing and dining services; philanthropic support; and other revenue opportunities through the Binghamton University Foundation. Vice presidents, deans and departments that own these resources must use them wisely to meet goals they have set and to enable their areas and the University as a whole to achieve the established Strategic Priorities.

Table: Projects aligned with this Strategic Priority, the division owner and funding provided by Road Map and division.

Project title	Division ownership
Plan and Execute the Next Successful Comprehensive Gifts Campaign	External Affairs
Increasing and Improving Instructional Space	Administration / Provost
Development of a Comprehensive Space Process	Administration
Network High Speed Redundant Link to the Internet	Administration
Infrastructure to Support Distance Learning	Administration
Enhance Creative Activities and Research Infrastructure	Research
Support Staff Required to Maintain and Operate New Buildings and Building Additions	Administration
Significantly Increase the Number of Prospects in the Donor Pipeline through a Revolutionary Change in the Development Cycle	External Affairs
Establish a Process for Vetting and Prioritizing Projects That Have the Potential to Be Funded by Private Support	External Affairs

#### Total dollars allocated over the next 28 months

\$3,043,000

See appendix 2, page 23, for brief explanations of these proposals.



# Binghamton University must achieve both academic and operational excellence if it is to become the premier public university.

Attaining academic excellence demands the recruitment and retention of excellent faculty who are committed to outstanding undergraduate and graduate teaching as well as cuttingedge research.

chieving operational excellence requires a strong, contemporary, well-maintained infrastructure; an effective and responsive organization; and outstanding staff who work together toward common goals and objectives. Attaining academic excellence demands the recruitment and retention of excellent faculty who are committed to outstanding undergraduate and graduate teaching as well as cutting-edge research.

These two dimensions of excellence are mutually reinforcing: without operational excellence, even the best faculty will not realize their potential; and without outstanding faculty, even the best infrastructure, staff, organization and processes will fail to produce excellence.

#### **Strategic Faculty Hiring**

While the nine Road Map teams developed proposals to achieve operational excellence, the provost and faculty leaders developed a faculty hiring plan designed to enhance academic excellence. Several assumptions guided this process.

First, as the University makes significant investments in new faculty, it must focus its hiring in a few areas that address pressing social, political, economic, cultural, intellectual, scientific, technological and policy issues. If we spread our investments thinly across many areas, we will achieve excellence in none.

Second, these areas of focus should be areas in which Binghamton University already has significant strength so that we can build on existing resources.

Third, we should hire faculty in groups or

Third, we should hire faculty in groups or "clusters" that include individuals drawn from multiple disciplines. This

approach will promote the kind of interdisciplinary and transdisciplinary collaboration necessary to tackle complex problems and enhance Binghamton's strength and reputation as a research university.

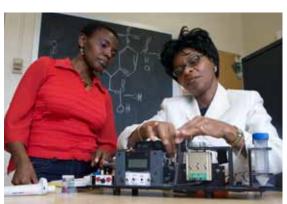
## **Developing Transdisciplinary Areas of Excellence**

Identification of transdisciplinary areas of excellence (TAE) began in 2010, when the University identified **healthcare** as a pressing societal concern that many of its researchers are currently addressing. Within this broad area, Binghamton faculty are engaged in cutting-edge research on health systems, addiction, neurodegenerative disease, stress, and the health of rural and elderly populations. In 2011, as Binghamton developed its NYSUNY 2020 proposal, University leaders identified **smart energy** as a second area of excellence. Its foci include energy storage, energy-efficient computing and electronics, and solar energy. During the 2012-13 academic year, cluster hiring began in each of these two areas.

Because Binghamton University has a longstanding tradition of excellence in the social sciences and humanities, the provost sought to identify areas of excellence in these domains. After consulting with faculty governance leaders, he appointed a Transdisciplinary Areas of Excellence Committee to identify several broad themes centered in the social sciences and humanities. This group was led by the chair of the Faculty Senate Executive Committee and included five faculty members appointed by that body and five named by the provost.

The committee worked throughout the fall 2013 semester and identified three additional areas of excellence: citizenship, rights, and cultural belonging; material and visual worlds; and sustainable communities (binghamton.edu/academics/provost/tae2013.html).

Each of the five areas of excellence will be guided by a steering committee consisting of highly accomplished faculty whose research is identified with the area. The steering committees will have responsibility for setting directions for the area, organizing scholarly conferences and symposia on critical topics in their area and providing leadership for faculty hiring in their area.



#### **Metrics**

Measuring the success of this faculty hiring strategy is imperative if we are to determine whether and in what form it should continue. Metrics for measuring the success include:

- Growth in proposals submitted by faculty and teams of faculty from the areas of excellence
- External funding awarded to faculty and teams of faculty from the areas of excellence
- Number of doctoral committees with faculty drawn from multiple departments participating in the areas of excellence
- Conferences, symposia and publications sponsored by faculty in the areas of excellence
- Interdisciplinary courses developed by teams of faculty from the areas of excellence



#### **Cluster Hiring**

During the coming years — AY 2013-14, 2014-15, and 2015-16 — the Division of Academic Affairs will allocate approximately 20 positions per year to hiring in the five areas of excellence. Schools may also devote some of the positions they authorize — with resources made available by retirements and resignations — to supplement hiring in the areas of excellence.

This strategic, cluster hiring in the five areas of excellence will be divided into two types of positions: *core* and *affiliated*. Core positions will be filled at the associate or full-professor level and will have a berth in an academic department. Those hired to fill core positions may also hold joint appointments. Affiliated positions will be filled by academic departments in consultation with the appropriate TAE steering committee and dean. Those hired for affiliated positions will meet individual department needs and also strengthen an area of excellence.

This strategic hiring, which will involve TAE steering committees working closely with departments and deans, will enable Binghamton University to build a critical mass of outstanding faculty in the five areas of excellence, enhance research collaboration, grow external support for research, recruit excellent graduate students and create an international reputation for excellence in research.



## Graduate Growth Initiative and Other Hiring

Not all new positions will be invested in the five areas of excellence. We will continue to allocate some positions to schools and departments to meet student demand and also to support the Graduate Growth Initiative (binghamton.edu/grad-school/graduate-growth-initiative), a program begun in 2012 to foster development of new, or increase enrollment in existing, career-oriented master's programs.

#### **Hiring Timeline**

Binghamton University's goal is to hire approximately 30 net new tenure-track faculty during each of the 5 years of NYSUNY 2020 support. The actual number of faculty hired will depend on continued support of the SUNY Board of Trustees for the rational tuition plan adopted in 2011, the balance of entry-level and senior positions allocated, and anticipated start-up needs. Because annual hiring plans are contingent on the success of hiring in the previous year, student demand, retirements and resignations, proposals generated by schools and departments, and the like, it is not possible to project how and where positions will be allocated. Decisions will be guided by our strategic hiring priorities and made by the provost with input from area steering committees, deans and departments, as well as assessment of the results of the previous hiring plans (and in the case of positions allocated through the GGI, the success of schools and

departments in reaching their enrollment targets).

We exceeded our hiring goal for 2012-13, achieving a gain of 34 net new tenure-track faculty. The 2013-14 hiring process began in August 2012 and is on target to produce a net gain of at least 30 tenure-track faculty. In March 2013, Provost Donald Nieman presented the Transdisciplinary Areas of Excellence (TAE) to the campus community and they are being used for the first time for the 2013-14 hiring cycle. TAE steering committees will be named for each area in April, and schools and departments will develop their hiring priorities for the 2013-14 hiring cycle during April and May.

The following timeline indicates the process the provost will follow in seeking input from steering committees, deans and departments, and the schedule for doing so through the remainder of the current hiring cycle and for the 2014-16 hiring cycles.

#### 2014-16 Hiring Cycles

February Provost announces TAE hiring priorities for upcoming academic year

TAE steering committees develop foci for core positions

Request for proposals (RFP) for GGI announced by Graduate School

March-May Schools, departments and steering commmittees develop requests for core, affiliated and

other positions

TAE steering committees develop plans for engaging core and affiliated faculty in current

academic year activities

June Schools and TAE steering committees submit hiring priorities to provost

Provost assesses success of cluster hiring for the just-completed academic year

July Provost allocates core, affiliated, GGI and other positions to schools and areas of excellence

August Provost announces hiring plan for the upcoming year

September Provost assesses success of prior year's GGI, decides whether to issue an RFP for another year

TAE steering committees, schools and departments develop position announcements and

form search committees

October-April Searches conducted and faculty hired



# Appendices Appendix 1..... Road Map teams Appendix 2..... Road Map proposals moving forward Appendix 3..... Transdisciplinary areas of excellence 20

## Road Map teams

#### Thank you to all Road Map team members

#### Advancing Learning

Co-chairs Don Loewen Tom O'Brien

**Sponsors**S.G. Grant
John Meador, Jr.
Donald Nieman

RM team representative Matt Austin

#### **Team members** Murnal Abate

Don Blake George Bobinski George Catalano Jim Conroy Alison Dura Mark Fowler Sarah Glose Zach Greenberg Kris Gregory J. David Hacker David Hagerbaumer Richard Hodges Jess Huev Surinder Kahai Joe Keith Kelly Kinney Janice Kinzer Sarah Lam Alyssa Lanoye Kevin Lockwood Andrew Loso Paul Marco Cornelia Mead Caroline Millen Cheryl Monachino Renee Mooney Joe Morrissey Joshua Palev Owen Pell Leanne Pinard James Pitarresi Susan Pitely Curt Pueschel Janet Ranucci Mark Reed Mark Reisinger Randy Scholtz Lenny Simmons Greg Steele Andrew Tucci Cherie Van Putten Akshay Verma Roger Westgate Warren Winter Ali Yavla William Ziegler

#### Community Engagement

Co-chairs Sheila Doyle Terry Kane Pam Mischen

Sponsors
Joyce Ferrario
Patricia Ingraham

#### RM team representative Matt Austin

#### **Team members**

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Didi Zang

#### Appendix 2

# Road Map proposals moving forward



Engage in path-breaking, graduate education, research, scholarship and creative activities that shape the world.

#### Proposals moving forward under this Strategic Priority:

 Develop a Plan for Attaining Membership in the Association of Research Libraries

Attain membership in the Association of Research Libraries to reflect our distinguished collections, services and research resources and to open up avenues for increased funding.

· Establish a New College or School in the Life Sciences

Immediately develop a task force to identify the feasibility, potential barriers and resources needed to establish a school of pharmaceutical sciences and pharmacy to enhance our graduate programs in the life sciences.

Increased Institutional Support for Interdisciplinary Research
 Encourage interdisciplinary research through faculty incentives
 and centralizing our research facilities.

Industry Funded Research

Increase industry-funded research based on best practices utilized by other successful industry-funded research institutions.

 Library Support to Develop Collections for New Programs and Departments

Expand the Library's collections, monographs, journal and database subscriptions.

 New Faculty Initiative; Increase the Funds for New Faculty Start-up Support

Close the gap between available resources for new faculty start-ups and the actual start-up costs.

Joining the Association of American Universities (AAU)

Run a study comparing Binghamton to the average American Association of Universities member on key metrics and pursue tactics to elevate Binghamton based on those metrics.

Raise Majority of PhD Programs to 50th Percentile or Above

Elevate half of our PhD programs measured by Academic Analytics to above national averages, including 1/5 above the 66th percentile and 1/6 above the 75th percentile, by 2016.

· Recruit Top Quality PhD Students

Recruit top-quality PhD students through increased graduate assistantship openings, increased incentives for faculty to sponsor research project assistantships and decreased student:faculty ratios in master's and doctoral-level classes.

Smart-Energy

Align Binghamton's existing strengths with grand societal challenges and adopt a strategic investment plan that would propel Binghamton to a leadership role in the area of smart energy; become a national center for smart-energy research.

 STARS: Strategic Targeted Academic Research Support; Adopt Strategies for Investment to Create Exponential (Non-Linear) Increases in Extramural Funding

Employ the method of targeted cluster faculty hires to rapidly enhance Binghamton's stature as a research institution and elevate Binghamton's graduate programs. Recruit and retain a national faculty that ensures long-term productivity and a culture of accomplishment, competitive interaction and innovation.

2

Provide a transformative learning community that prepares students for advanced education, careers and purposeful living.

#### Proposals moving forward under this Strategic Priority:

• Enhanced Center for Learning and Teaching

A new center to support and enhance a culture of excellence in teaching on our campus through a number of services.

• Core Competencies for Binghamton University Undergraduates

Create a set of competencies that will characterize a Binghamton University graduate. A committee will be charged with establishing a process to guide students' adaptation to competencies and monitor their success.

 Critical Staffing Needs to Support AV Technology in Classrooms and Other Spaces

Increase staff to ensure that Binghamton classrooms meet the standards of AV technology for an improved learning experience.

 Developing a Premier Student Experience through Academic Advising

Create a unique academic advising model distinct to Binghamton University to define the Binghamton student experience.

 EASSE into Premier: Expanding Academic Skills and Support in English

Expand academic skills and support in English for international students.

Fostering a Culture of Undergraduate Research

Promote undergraduate interests and ideas inherently enhancing the value of a Binghamton degree.

 Gateways to Success: Teaching Introductory Courses as "Flipped," Mastery, Residential-based Classes

"Flip" several introductory-level courses to improve knowledge mastery.

· Task Force Study of Approaches to Graduate Study Success

Engage in a road map of graduate education through studying several graduate student success metrics.

· High Impact Learning Experiences

Require that every Binghamton University student participate at least once in a high-impact learning experience such as service learning, study abroad, research or an internship.

· The Role of Online Learning in a Premier University

Create a framework for online education.

 Innovative and/or Technology-enabled Teaching in Semester-long Courses

Consider experimentation with traditional semester-long courses without compromising desired learning outcomes.



## Unite to foster a diverse and inclusive campus culture.

### Proposals moving forward under this Strategic Priority:

Adaptive Technology and Information Access Services

Ensure all University members equitable access to all visual and auditory aspects of University-related programming.

· Creation of a Divisional/Dept. Staff with Diversity Responsibilities

This dedicated staff will ensure that a commitment to diversity is woven throughout the fabric of the University.

 Explore Increasing Scholarship to Aid Recruiting Diverse Students, Undergrad and Graduate

Improve the graduation rates of minority students through an increase in the number and amount of scholarships offered.

 Develop Organizational Structure to Support Diversity, Equity and Inclusiveness

A new office to be led by a newly appointed vice president to promote and model a philosophy that diversity and inclusiveness is everyone's responsibility and an integral part of the fabric of our University.

4

# Enhance the University's economic, social and cultural impact through engagement from the local to the global level.

#### Proposals moving forward under this Strategic Priority:

 Binghamton University Bearcat Dens (Satellite Visitor/Community Outreach Centers)

Create visitor/community outreach centers in the Binghamton area or in the New York metro area.

 Bringing the World's Best and Brightest Students to Binghamton University

Improve international recruitment efforts by hiring in-country representatives, improving brand consistency internationally and diversifying the international student body.

· Carnegie Classification Application

The University will demonstrate its commitment to community service by implementing the Carnegie Classification Application.

Creating a Nexus for Global Engagement: The Global Center

Create a global center that will become the hub of global engagement for Binghamton University and will become a powerful symbol for our global brand.

 Enhance Brand Visibility and Consistency on Campus; Increasing the Consistency and Visibility of the Binghamton Brand at Regional, National and International Levels; Diversify Web Content

Increase brand consistency through one brand name and by creating a brand promise. Increase brand visibility through conducting a feasibility study to host a 2016 presidential debate, among other things. Provide more information and photographs on the University website to represent and convey our school's diverse populations.

 Provide Students with More and Enhanced Service and Giving Experiences through Coursework; Community Service as a Part of New Student Orientation

Increase emphasis on service and giving through classes focused on service learning, incorporating student philanthropy and creating a "service-learning certificate."

 Promote International Student Success, Retention and Cultural Integration through Outstanding Programs and Services

Pre-arrival programs and on-campus social adjustment services and academic support will aid a growing international student population.

 Strengthen the Existing Opportunities for Students to Engage in Education Abroad

Break down barriers to education abroad to help students expand their horizons and become global citizens.



Optimize the acquisition and allocation of human, technological, financial and physical resources.

#### Proposals moving forward under this Strategic Priority:

- Plan and Execute the Next Successful Comprehensive Gifts Campaign
   Plan and execute the next comprehensive gifts campaign.
- Increasing and Improving Instructional Space
   Regularly upgrade the technology in classrooms and teaching laboratories.
- Development of a Comprehensive Space Process

Obtain more physical space for growth and develop efficient utilization of existing and new spaces.

Network High Speed Redundant Link to the Internet

Add a second high-speed Internet link to the University to satisfy increased demand for bandwidth and serve as a back-up connection in case of unexpected damage to the first.

Infrastructure to Support Distance Learning

Increase equipment, network capacity, space and staff in support of distance education offerings on campus.

• Enhance Creative Activities and Research Infrastructure

Increase hires and training for technical and compliance support staff.

 Support Staff Required to Maintain and Operate New Buildings and Building Additions

Maintain the new buildings and additions on campus with increased support staff, safety features, cleaning materials, etc.

 Significantly Increase the Number of Prospects in the Donor Pipeline through a Revolutionary Change in the Development Cycle

Engage alumni capable of giving a major gift to their University through activities such as events and other opportunities to interface with current students and University operations.

 Establish a Process for Vetting and Prioritizing Projects That Have the Potential to Be Funded by Private Support

Develop avenues for donors to contribute to specific, high-priority Road Map proposals.

## Transdisciplinary areas of excellence

ince 1965, when it became one of four PhD-granting university centers in the State University of New York, Binghamton University has enjoyed a strong reputation for research and doctoral education. As its first doctoral programs approach their 50th anniversary, Binghamton intends to enhance that reputation through hiring approximately 150 net new tenure-track faculty members between 2012 and 2017.

To ensure that Binghamton makes the most of this rare opportunity, the provost will allocate a significant portion of these new faculty positions to five transdisciplinary areas of research and scholarship in which the University has significant existing strength and can achieve international prominence. All five areas of excellence address critical social, scientific, technological, economic, cultural and policy issues. By hiring faculty from a variety of disciplines to explore these five areas, Binghamton will develop solutions to complex and consequential problems. Brief descriptions of each area of excellence follow.

## Citizenship, Rights and Cultural Belonging

Citizenship has long derived from membership in a polity, yet citizens often associate through laws, norms and nongovernmental organizations that supersede or conflict with those of states. Competing social contracts produce tension among individuals and groups, and between individuals, groups and authorities. In this context, individuals and groups since the beginning of modernity have been mobilizing claims to citizenship and to rights, to enable them to fashion belonging, preserve their heritage or forge new personal identities.

Claims to rights, whether by individuals or groups, are rooted in the cultural fabrics of peoples. They are double-edged. They enhance assertions of equality and demands for fairness. They also divide people, generate dissent and sometimes conflict, contribute to inequalities and even determine survival.

This area of excellence seeks new understandings of the ideas of citizenship, rights and cultural belonging and supports inquiries that emphasize their cultural, ethnic, gendered, sexual, biological and transnational facets.

#### **Healthcare**

More than \$2 trillion is spent each year on health-care in the United States, and an aging population is challenging our system in new ways. The coming decade is certain to see advances in areas ranging from personalized medicine to electronic medical records. This area of excellence will integrate cutting-edge biomedical research with systems science, industrial engineering and microelectronic device development. Additional collaborations will draw upon expertise in disciplines such as psychology, nursing and leadership studies.

Faculty researchers are already focused on cancer detection, child mental health, Parkinson's disease treatment and medical devices, to name just a few projects. By coming together and partnering with healthcare institutions in the region and beyond, these scholars can have a positive impact on the quality, availability and affordability of American healthcare. This area of excellence will help to ensure that the latest innovations in healthcare travel speedily from lab bench to bedside.

#### **Material and Visual Worlds**

Objects and images have an undeniable hold on us. We may take them for granted; yet they shape our behavior even as our desires and behavior shapes them. As humans, the material and visual forms we create define us to a remarkable extent.

Increasingly, scholars recognize the fundamental role of materiality in shaping humanity. Ours is a material world, one that consists of ceaseless and varied interactions among people and their artifacts — including those artifacts we call images. Today we are called to think through things, to understand them as active players in our lives rather than as means to other ends. A well-established tradition has explored how the world has been represented; increasingly, we are now asking how the material also makes the world. We depend upon this material and visual culture, and through it realize our grandest aspirations. Our challenge is to consider how objects and images have joined with human actions, emotions and relations to make and remake society and culture from ancient times to the present.



In this changing intellectual landscape, scholars from a wide variety of disciplines — the social sciences, the humanities and the fine arts — seek to analyze things and images as gatherings of technologies, materials, histories and interactions extending through space and time. The production and distribution of a commodity reshapes a vast global landscape. Gift exchange between cultures establishes diplomatic and economic ties. The physical expression of a border between nations both constrains and enables behavior on both sides. Our approaches to the material world challenge us to consider its impact on the most diverse realms of human life.

#### **Smart Energy**

Energy research is gaining importance nationally and globally. Political and industrial leaders have identified energy challenges as among the most pressing they face. Demand for energy, and particularly alternative energy, will only increase over the coming decades. This area of excellence will build upon existing strengths in four key areas of alternative energy research:

- solar and thermoelectric energy harvesting
- energy storage
- · energy efficiency in electronic systems
- sensor development for energy resource management

Scholars in fields such as chemistry, physics, mechanical engineering, computer science and materials science are contributing to this critical research. They are working to make solar power economically competitive. They are discovering ways to reduce and use the thermal energy generated by computers and other electronic devices. They are also contributing to new mechanisms for the storage and transmission of energy through high-capacity batteries, fuel cells and ultra capacitors.

A new Smart Energy Research and Development Facility will foster new partnerships with industry and provide faculty members working in this area with cutting-edge labs, state-of-the-art classrooms and integrated outreach offices.

#### **Sustainable Communities**

Communities are complex and dynamic; they require nurturing to sustain core elements such as environmental quality, safe neighborhoods, good schools, accessible healthcare and engaged citizens. To sustain this balance of ecological, social, economic and political vitality, communities must continuously adapt and improve. Scholars can help, but too often, rigid disciplinary boundaries get in the way. By combining the perspectives and methodologies of several disciplines, we can examine the many dimensions of sustainability — spatial, temporal, and systemic — and devise powerful solutions to complex problems.

By developing new paradigms and vital partnerships with community members and organizations, this area of excellence will help us understand what it takes to model, build and maintain sustainable communities. Collaboration among faculty from many disciplines will enable a deeper understanding of past, present and future trends in society and nature. New ideas will emerge and enable us to improve our policies and practices at local, national and global levels.



binghamton.edu/roadmap

