

September 5, 2013

Dr. Elizabeth L. Bringsjord
Interim Provost and Vice Chancellor for Academic Affairs
State University of New York
State University Plaza
Albany, NY 12246

Dear Interim Provost Bringsjord,

Please consider this a Letter of Intent and initial proposal to create a School of Pharmacy and related degrees at Binghamton University, State University of New York.

We request your assistance in expediting this effort. We would like to admit our first cohort of students in Fall 2017.

If you have any questions, please do not hesitate to contact me. Thank you.

Sincerely,



Donald G. Nieman
Executive Vice President for Academic Affairs
and Provost

c: Susan Strehle, Interim Vice Provost and Dean of the Graduate School
Fred Hildebrand, Assistant Provost, Academic Affairs, SUNY System

BINGHAMTON
UNIVERSITY
STATE UNIVERSITY OF NEW YORK

Proposed Title: Doctor of Pharmacy

Proposed Award: Doctor of Pharmacy (Pharm.D.),

Proposed Beginning Date: Fall 2017

Abstract: Binghamton University proposes to develop a research-oriented School of Pharmacy that would offer the Pharm.D. degree along with advanced coursework in Pharmaceutical Sciences. Over time, the program will grow to include the Ph.D. in Pharmaceutical Sciences and a dual Pharm.D./Ph.D. program to help alleviate the national shortage of pharmacy faculty. The proposed Pharm.D. program addresses a national and regional need for pharmacists; it builds on potential synergies with health care research at Binghamton University in fields including health systems engineering, rural nursing, behavioral neuroscience, clinical psychology, biofilms, and biomedical engineering, among others.

The proposed Pharm.D. degree will require four years of study, with courses taken in both pharmaceutical sciences and pharmacy practice, culminating in clinical placements during the last three semesters. The program design will meet the accreditation standards for the Accreditation Council for Pharmacy Education (ACPE). Leading to the National Association of Boards of Pharmacy Licensing Examination, requirements for this terminal professional degree follow 60-90 semester hours of pre-pharmacy undergraduate coursework.

This degree will help to fill the growing demand for pharmacists, created by the increasing complexity of the industry, by an aging population, and by the expansion of available drug therapies. With only one other public university in New York State (the University at Buffalo) offering the Pharm.D. degree, the addition of a second program offering an excellent education for competent professional pharmacists in an era of expanding health care needs will benefit the people of the Northeast region and the state of New York.

Institutional Mission and Planning

Relationship to the Mission of Binghamton University

As articulated by Binghamton University's Road Map process and the university's strategic plan, Binghamton University's mission combines academic excellence and public service:

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

The proposed School of Pharmacy and the Pharm D program will advance our mission. As one of the SUNY-system university centers, Binghamton has been involved in doctoral education for a half century, and has established a distinguished record of graduate education in professional practice. Our proposal to increase graduate enrollments has been approved by SUNY-system and the NYS Governor's office, and a strong School of Pharmacy grounded in and advancing research in the life sciences will contribute, as our mission directs us, to enriching the lives of people in the region, state, nation and world.

Existing or Projected Programs in Related Disciplines

There are no programs currently at Binghamton in pharmacy, and yet there are a several faculty involved in pharmacological-related research. A faculty committee constituted in spring, 2013, to explore the academic merits of a pharmacy program found that a “School of Pharmacy is likely to link with every other school in the university in the research being conducted by faculty. Indeed, there are so many collaborative links that the committee envisioned many ways in which areas of research excellence could be advanced.” This committee identified several potential areas of research synergy between new pharmacy faculty and current Binghamton faculty, who are already doing path-breaking research in smart drug delivery and device development; CNS therapeutics; individualized pharmacotherapy; immuno-pharmacology; and healthcare management and outcomes assessment. Binghamton has distinctive strengths in research that would provide a strong foundation for a pharmacy school, while benefitting in turn from new synergies with pharmacy research.

Required Clinical Instruction and Placement

Accreditation standards from ACPE require introductory practice experiences of at least 300 hours in the first three years, split between community or retail pharmacies and institutional settings. Advanced pharmacy practice, consisting of at least 36 weeks of full time experience, is required during the last academic year, and it must include a range of settings: community pharmacy, hospital or health-system pharmacy, ambulatory care, and inpatient/ acute care general medicine. Accordingly, pharmacy students need clinical placements in a variety of health care and pharmacy settings.

Binghamton President Harvey Stenger and Provost Donald Nieman have met with leaders of the local hospital systems to discuss plans for the School of Pharmacy and the need for clinical placements for students in hospital or health-system pharmacies and inpatient and acute care practice. They received enthusiastic expressions of interest and willingness to serve as clinical sites for pharmacy students from David Patak, President and CEO of Lourdes Hospital, and from Matthew Salanger, President and CEO of United Health Services (UHS), as well as Rajesh J. Davé, Executive Vice President of Clinical Integration and Chief Medical Officer at UHS. Other institutional sites for clinical placements include local nursing homes and clinics where ambulatory care pharmaceutical practice experiences would be available.

Retail pharmacies exist throughout the Southern Tier area, and they include large industry chains (CVS, Medicine Shoppe, Eckerd, Walgreen, and Rite-Aid), as well as pharmacies in supermarkets and retail stores (Target, Walmart, Wegmans). The community pharmacy practice required at both introductory and advanced levels would be readily arranged with these pharmacies.

Market: Need and Demand

Availability and Capacity of Similar Programs in SUNY System

There is currently only one pharmacy program in the SUNY system, at the University at Buffalo. Enrollments have ranged from 478 to 495 in this program, meaning that the four-year program can accept a maximum of only 125 students per year. In relation to the need for graduates of such a program and to student demand, it is clear that New York needs another public pharmacy program, one offering both the excellent quality and the affordable access associated with SUNY education.

The Pharm. D. program at Binghamton University will not impact Buffalo's programs for several reasons. First, this relatively small program, over 150 miles from Buffalo, will admit only 60 students per year. Second, the existing research specializations in pharmacological-related research at Binghamton are likely to generate unique transdisciplinary research work in the Binghamton School of Pharmacy, including drug delivery and device development with the Watson School or healthcare management and outcomes assessment with the Decker School of Nursing and the School of Management. Collaborative research of this kind between our School of Pharmacy faculty and faculty in other schools will differentiate Binghamton's program from Buffalo's.

Affordable access to high quality pharmacy education is clearly an important public need. Studies by the US Bureau of Labor Statistics in 2012-13 indicate that by 2020, the employment of licensed pharmacy professionals will increase by over 25%; an additional 69,700 pharmacists will be needed. SUNY can take appropriate steps to meet this increasing need by adding a

second Pharm. D. program, located at a distance from any other New York program with existing clinical placements. A highly selective Binghamton University program will offer strong students affordable access to excellent pharmacy education.

Similar Programs at non-SUNY Institutions

Nationally, there are 124 US-based colleges and schools of pharmacy accredited by ACPE, of which 63 are in public universities. In New York, in addition to 1 public school of pharmacy at the University at Buffalo, there are 6 schools of pharmacy at private colleges and universities: Albany College of Pharmacy and Health Sciences, D'Youville College and St. John Fisher College in the upstate area; St. John's University, Long Island University, and Touro College of Pharmacy in the downstate area. Each of these colleges and universities is distant from the area served by Binghamton University: the closest, St. John Fisher, is over 100 miles away, and the four in the New York City area are at least 150 miles away. From this perspective, a new School of Pharmacy at Binghamton will have little impact on any of the programs offered at these private institutions. Clinical placements will not overlap; given the small projected size of Binghamton's program, our admission of 60 students per year will not have a significant impact on their enrollments. The Binghamton program will add a modest number of affordable spaces for pharmacy education and help to meet a growing public need.

Educational Need for the Program

The program will help fill an important need in the state and the nation. It will also develop well-educated pharmacists in an area of New York with poor and rural populations that are chronically underserved.

Nationally, the demand for pharmacists is projected to increase by 25% by 2020, faster than the average for all US occupations. The Bureau of Labor Statistics has identified pharmacy as one of the "Bright Outlook Occupations" in the US; according to projections released in January 2012, an additional 69,700 pharmacists will be employed by 2020. Between increased demands for paperwork, a growing number of prescriptions for an increasing number of medications, and an aging population, the need for additional pharmacists is projected to continue.

While the demand for, and availability of, prescription drugs is increasing, pharmacists have taken on added responsibilities to assess, monitor, and adjust therapy for patients. When the Medicare Drug Plan included payment for "medication therapy management" services, pharmacists took on additional roles as counselors and caregivers. Pharmacists are increasingly being hired in very diverse settings, from managed care clinics to nursing homes to remote assistance locations to mail order companies. While the aging population of the US will require increased services from pharmacists, the pharmacist population itself is aging; in 2009, 37% of practicing pharmacists were over the age of 55.

In New York State, according to a study done by the Pharmacy Manpower Project in November, 2012, demand currently outpaces supply by a narrow margin. Rural populations, like those in several upstate New York areas near Binghamton, remain underserved by health care delivery, including pharmacy.

Anticipated Student Demand

Because of the availability of well-paying jobs in pharmacy, student demand has been and can be predicted to remain strong. Enrollments in Pharm. D. programs have risen steadily for eleven consecutive years, with increases of between three and four percent in each of the last five years. In New York, enrollments in Pharm. D. programs have mirrored the national trends.

Although application data for Pharm. D. programs reveals modest decreases in recent years for both New York and national programs, in the latest year for which national studies are available, 2011, seven applicants sought every available seat, and admissions remain highly competitive.

Demand for a new program at Binghamton University can be expected to be high. In 2010, over 10,300 applicants sought admission to D. Pharm. programs in New York. 918 applicants applied to the one SUNY program, the D. Pharm. with under 125 available spaces, offered by the University at Buffalo. Because SUNY public education is known for high quality graduate and professional education at affordable prices, we can reasonably anticipate demand at levels of eight or nine applicants for every available seat.

Employment Opportunities

This program will prepare graduates for immediate employment, and opportunities will be readily available to them. The US Bureau of Labor Statistics reports that in 2010, pharmacists worked in retail pharmacies (62%) and hospitals (23%), as well as clinics, mail-order pharmacies, wholesalers, home health care agencies, or the federal government. Most work full time (79%), while some work part time (21%). Because an increasing number of pharmacies are open 24 hours a day, some work nights and weekends.

The US Bureau of Labor Statistics projects total employment increases for pharmacists of 25.4% by 2020, with the largest increases in home health care services (72.1%), ambulatory health care services (45%), outpatient, laboratory, and other ambulatory care services (43.1%), health and personal care stores (40.9%), and professional, scientific, and technical services (40.5%). Hospitals are also projected to employ increased numbers of pharmacists, but their growth is likely to be more modest (13.2%), while grocery stores (13.5%) and general merchandise stores (18.2%) are likely to see even greater increases of employment for pharmacists.

Enrollment and Fiscal Factors

Projected Enrollment

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Steady State
Total students in program	60	120	180	240	240	240	240
Projected increase/year (new and continuing)		60	60	60	0	0	
Number of new students/year	60	60	60	60	60	60	60
Number of new full-time students	60	60	60	60	60	60	60
Number of graduates/year				60	60	60	60

Assumptions:

100% of the students will be full time and complete the degree in four years

90% of the students (about 54) will be in-state

10% of the students (about 6) will be out-of-state

These projections were determined by calculating the appropriate size for a program of this kind in the Binghamton area and in light of the funding and facilities we have available. Given the projected need for pharmacists and the projected student demand, the program could be larger, but we see 240 highly qualified students as the optimal number for our program.

Projected Costs

We developed these projections in consultation with Robert W. Piepho, former dean of the School of Pharmacy at the University of Missouri- Kansas City. Dr. Piepho, who has served as a team member on ACPE accreditation visits, visited Binghamton University and remains actively involved as a consultant on all aspects of our plans to develop a School of Pharmacy, from numbers of faculty to projected expenditures and revenues.

	2015- 16	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	Steady State
Total employees	5	9	25	33	35	35	35
Administrative Staff: Dean (1), Associate Deans (2), Executive Assistant (1) Admissions Director (1), Clerical Support (1), Development officer (1), Academic Support & Placement (1), Tech Support (1), Clerical Staff (1-3)	5	7	8	11	11	11	11
Senior Faculty (2), Senior Faculty Clinical (2)	0	2	4	4	4	4	4
Faculty	0	0	7	10	10	10	10
Clinical faculty	0	0	6	8	10	10	10

Projected Expenditures:

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Projected Expenditures	\$715,000	\$1,596,090	\$5,054,042	\$4,652,213	\$4,917,579	\$4,571,387	\$4,734,014
Projected Revenues	\$0	\$25,000	\$1,969,360	\$4,117,534	\$6,461,891	\$9,021,483	\$9,453,777
Projected Net	-\$715,000	-\$1,571,090	-\$3,084,682	-\$534,679	\$1,544,312	\$4,450,096	\$4,719,763

How resources will address the costs:

In planning for the addition of a School of Pharmacy, we recognize that we will need to use existing resources to initiate the program, and that it will require four years of significant investment to establish an excellent and fully accredited program; after four years, it will begin to generate revenue. Binghamton's fiscal planners have always been successful, prudent, and farsighted in their approach to funding projects like this, and we see significant benefits arising from the Binghamton School of Pharmacy for SUNY, for the state of New York, and for citizens in and beyond our area. For these reasons we are proposing to add this degree to advance our public service mission, to create synergies with our existing research in the life sciences, and to offer an excellent public education in a highly desirable health field.

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