

# Northern Illinois University

2017 Program Review Report

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<b>Reporting Institution:</b>	Northern Illinois University
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Context: In 2015-2016, Northern Illinois University (NIU) underwent a comprehensive Program Prioritization process of all academic and administrative programs. Two Task Forces (one for academic programs and one for administrative programs) were created to review and categorize these programs using a specified set of criteria developed through a shared governance process. All programs completed program narratives that addressed these criteria in fall 2015. The Academic and Administrative Program Prioritization Task Forces completed their work and released their reports on April 30, 2016. Action planning across the university ensued at the point and culminated in a report on November 28, 2016. The 2016-2017 Program Review process, for which findings are reported here, incorporated materials from these processes including the Program Prioritization narratives written by program representatives, categorization from the Program Prioritization Task Forces, Action Plans from the academic units and colleges, and supplemental information provided by the programs. Internal peer review for these programs was undertaken in fall 2016 and included the synthesis and review of these materials as well as dialogue with program representatives. Following this review, a comprehensive review process for academic research centers was developed at NIU by the Division of Research and Innovations Partnerships (RIPs) and academic research centers will also undergo this review beginning in fall 2017. This report is written within this context.

Program: B.S. in Biological Sciences (26.0101)

Major Findings and Recommendations:

• <u>Major changes in the program</u>: The Bachelor of Science (B.S.) in Biological Sciences program prepares students for employment in a variety of biological areas in government, education, and industry, for entrance into graduate study in a biological discipline, and for professional schools such as medical, dental, podiatric medicine, optometry, veterinary medicine, and pharmacy. With some additional course work and student teaching, students may also be certified to teach at the middle school and high school levels. Students are provided engaged learning and research opportunities within the program. For example, in 2015 alone, 23 students presented in the NIU Undergraduate Research and Artistry Day, 17 students participated in an Office of Student Engagement and Experiential Learning program (e.g., Research Rookies), and 31 reported participating in student internships. With enrollments holding steady at around 600 majors for the past five years, and despite fewer tenure-track and tenured faculty in the program, faculty research and student engagement in research has grown.

- <u>Major findings and recommendations</u>: The program was considered strong and was recommended for enhanced resources in the 2016 Program Prioritization Academic Task Force Report. There are outstanding members in the department. The university has awarded four faculty members in the department with the Presidential Research Professor Award and one with the Presidential Engagement Professor Award. Biology courses play a critical role in general education of NIU students and the program serves a significant role in providing coursework to non-majors (educating over 1,200 students per year). Student diversity in the undergraduate biology program outpaces other peer programs in Illinois. In 2014, 47 percent of the undergraduate students enrolled in NIU's B.S. in Biology program of our closest public competitor that same year. Further, graduation rates of females in the program have surpassed males. In FY2014, 54 percent of the degrees conferred in the program were conferred upon women.
- <u>Actions taken since the last review</u>: Since the last review, a new department chair was recruited through a national search in an effort to move the department forward in a number of areas including updates in the curriculum. Within the undergraduate program, this has resulted in several curricular improvements such as a more streamlined undergraduate curriculum that allows students more choices in their program electives and which also saved on instructional costs; the creation of an introductory molecular biology course (and an associated lab course) designed to meet increased student demand and enabling students to gain an enhanced hands-on working knowledge of this high demand area; and the hiring of a new Director of the Human Anatomical Sciences (HAS), in the face of a looming retirement, who is working with newly hired HAS instructors to continue the excellent work that has been undertaken in this area and that has led substantially to the benefit of students, their learning outcomes, and their career success.
- <u>Actions taken as a result of this review</u>: Since the last review, the Department of Biological Sciences has become challenged with an aging professoriate and limited funding available to replace retiring faculty. Nearly two-thirds of the current faculty are retirement eligible and at least three retirements are anticipated in 2017. The faculty is half the size it was in the 1990s when the number of majors were in the 400s even though now the number of majors is over 600. The department has responded to this challenge by requesting additional faculty, particularly in the areas of biomedical sciences and microbiology, and relying more heavily on temporary instructors to deliver the curriculum, particularly in general education and non-majors' (service) courses. Further, the program is working to increase collaboration faculty in other units and colleges to improve undergraduate education, particularly within the Institute for the Study of Environment, Sustainability, and Energy; and the College of Health and Human Sciences.

#### Outcome

• <u>Decision</u>:

\_\_\_\_x\_\_ Program in good standing (review in eight years).

<u>Explanation</u>: The Bachelor of Science in Biological Sciences is a robust program with an engaging, research-focused curriculum; a noteworthy faculty; and a large number of majors that represent a diverse student population. The program also makes significant contributions to general education.

Program: M.S. in Biological Sciences (26.0101)

- <u>Major changes in the program</u>: The Master of Science (M.S.) in Biological Sciences program is designed for students who want to further their education and skills while specializing in human anatomy or bioinformatics. The program includes both a thesis or non-thesis option and is well suited for students preparing for a pre-professional health or research program. Student numbers in the program have remained relatively stable at around 40 students enrolled each year and around 15-20 degrees conferred each year with the exception of FY11 and FY12 when enrollments and degrees conferred were reported at 64 and 41 respectively as a result of a large educational grant that was received by NIU to engage in the preparation of M.S. prepared biology teachers.
- <u>Major findings and recommendations</u>: NIU's M.S. in Biological Sciences program was recommended for unchanged resources in the 2016 Program Prioritization Academic Task Force Report. As with the B.S. program, there are outstanding, award-winning faculty members teaching in the program. A challenge facing both the M.S. and the Ph.D. program is the low level graduate assistant (GA) stipends. Although GA stipends in the department are among the highest at NIU, they still lag behind competing schools by 30 percent or greater. This is having a notable negative effect on graduate student recruitment with five accepted students lost in late spring to other schools in 2017 alone. Gender diversity in the program is good with over 60 percent of the M.S. degrees conferred being awarded to women during the review period.
- <u>Actions taken since the last review</u>: As noted in the B.S. program review, a new department chair was recruited through a national search since the last review in part to promote updates in curriculum. Toward this end, curricular offerings in the M.S. program have expanded in immunology, conservation, ecology, bioinformatics, human anatomy and microbiology. The department is exploring the development of an 18 credit hour online graduate certificate program for regional high school teachers who want to be credentialed to teach dual-credit courses which could be expanded to a fully online M.S. in Biological Sciences at a later time.
- <u>Actions taken as a result of this review</u>: As noted with the B.S. program, addressing potential faculty retirements is critical to this program. Potential increases to GA stipends should be pursued as budgets allow. The program is also encouraged to continue to explore

on-line offerings and other program delivery modalities that will best suit student needs in the future.

## Outcome

• <u>Decision</u>:

\_\_\_\_x\_\_ Program in good standing (review in eight years).

<u>Explanation</u>: The Master of Science in Biological Sciences provides quality education that meets student needs and student numbers have remained stable in terms of enrollments and degrees conferred. Curricular offerings have been expanded and the program is exploring alternative program delivery modalities to meet student need.

Program: Ph.D. in Biological Sciences (26.0101)

- <u>Major changes in the program</u>: The Doctor of Philosophy (Ph.D.) in Biological Sciences serves to develop the next generation of biological scientists. The program is for students who want advanced skills to design and conduct independent research in the public or private sectors. The program boasts a 100 percent placement rate for graduates and enrollments had held steady over the review period at about 30 students enrolled annually. Over the review period, just over 60 percent of graduates from the Ph.D. program have gone on to academic posts, primarily in the region (IL, IN, and IA). Others go on to work in the private sector (e.g., biotech companies, pharmaceutical industry) or in government jobs.
- <u>Major findings and recommendations</u>: The Ph.D. in Biological Sciences program was recommended for unchanged resources in the 2016 Program Prioritization Academic Task Force Report. As with the B.S. and M.S. programs, there are outstanding, award-winning faculty members teaching in the program. As noted above, a challenge facing both the M.S. and the Ph.D. program is the low level graduate assistant (GA) stipends. Faculty research productivity has been strong and growing, with 41 percent of the external funding coming from assistant professors in the department. The program faculty has been focusing on several priority areas for research including cancer research, bioinformatics, and microbiology, among others.
- <u>Actions taken since the last review</u>: The new chair hired as a result of a national search following the last review has focused the program, in part, on addressing key challenges including budget shortfalls ensuing from the state's fiscal impasse and faculty and staff turnover. The budget challenge has been addressed with travel cuts, non-replacement or relinquished upgrades of equipment, and some course consolidation. The recent passage of

the FY18 state budget should provide some relief in this area. In terms of turnover, and in addition to impending faculty retirements, the program and department are focused on supporting faculty and staff morale through multiple avenues including low-cost, informal Biological Sciences' events designed to enhance community building and collegial support. These events have been viewed as successful and will carry into the foreseeable future.

• <u>Actions taken as a result of this review</u>: Following this review, the Ph.D. in Biological Sciences program is encouraged to address faculty retirements and increases to GA stipends as budgets allow. Further, it is recommended that the program faculty continue discussions that have started regarding a Biomedical Research program.

# Outcome

- <u>Decision</u>:
  - \_\_\_\_x\_\_ Program in good standing (review in eight years).

<u>Explanation</u>: The Doctor of Philosophy in Biological Sciences serves to develop the next generation of biological scientists. The program has a 100 percent placement rate for graduates. Doctoral students work collaboratively with faculty who have high research productivity.

Program: B.S. in Physics (40.0801)

- <u>Major changes in the program</u>: The Bachelor of Science (B.S.) in Physics program introduces students to the discipline of physics which describes the laws of nature that govern space, time, matter, and energy. The program includes emphases in professional, secondary teaching, and applied physics. Professional physics trains students for graduate study and eventually work in academia, national laboratories, or industry. The teaching emphasis leads towards a license as a high school physics teacher. Applied physics prepares students for careers in disciplines which require knowledge of physics, such as medicine, geology, oceanography, materials science, acoustics, optics, and biophysics. The program faculty also teach service courses for students in engineering and natural sciences as well as general education courses intended for non-science students.
- <u>Major findings and recommendations</u>: The 2016 Program Prioritization Academic Task Force recommended that the B.S. in Physics program consider transformation in regards to improving teaching outcomes. Total undergraduate credit hours has remained relatively flat over the past five years at approximately 7,600 credit hours annually. With an average of

approximately 53 majors over this same period, demand for credit hours is driven largely by the enrollment in other departments for which physics provides service courses. Service course enrollments for non-science majors have gone down as the numbers of such majors has decreased over time but enrollments by STEM majors such as electrical engineering, mechanical engineering, biology, and chemistry have increased, yielding an overall flat trend. The program offers numerous opportunities for student engagement including participation in a physics-calculus themed learning community, summer research opportunities at national labs including Argonne National Laboratory and Fermilab, and worldwide events on physics and society held in locales such as Brazil, Germany, and Washington, D.C. Two recommendations from the current Program Review are for the program to further assess the student learning outcomes from student engagement opportunities and to develop new marketing materials for recruitment of students to the program.

- <u>Actions taken since the last review</u>: Since the last review, many quality improvement activities have taken place. Among these are the development of stand-alone honors sections for Introductory Astronomy, General Physics I, and General Physics II to better serve the needs of both honors and non-honors students; a course transformation of PHYS 180, Acoustics, Music, and Hearing, leading to doubled enrollment in that course; and an investment of approximately \$50,000 to upgrade equipment in the advanced undergraduate laboratories. Strides have been made in the assessment plan for the program and the assessment of student learning outcomes. Among these, learning outcomes now reflect a stronger integration of computational methods into the physics curriculum as alumni data revealed that more program alumni are now working in areas requiring the integration of physics and computational methods.
- <u>Actions taken as a result of this review</u>: As a result of this review, the program faculty have been working with admissions and with the College of Liberal Arts and Sciences communications office to improve recruiting materials, focusing on advertising employment outcomes of previous graduates within those materials. The program is also working to continually improve assessment processes through building longitudinal assessments evaluating similar content from freshman to senior year. This stems from an appreciation that the ability to work more comfortably with basic concepts as students advance through the program is equally, if not more, important than the acquisition of new concepts.

#### Outcome

• <u>Decision</u>:

\_\_\_x\_\_\_ Program in good standing (review in eight years).

<u>Explanation</u>: The Bachelor of Science in Physics program has a growing student body that is well served by numerous engagement opportunities, has table credit hour production that is largely a result of the offering of many service and general education courses, and participates in continuous program improvement.

- <u>Major changes in the program</u>: The Master of Science (M.S.) in Physics provides students an opportunity to obtain mastery of the fundamentals of this subject. Students can choose to focus in one of three emphases: basic physics, applied physics, or physics teaching. Graduates of the program typically pursue careers in physics research or teaching at the college level, or pursue research careers in government, industry, or academia. Skills acquired by students in the program, particularly skills in research and data analysis, are also highly valued in the financial sector.
- Major findings and recommendations: The 2016 Program Prioritization Academic Task Force recommended that the M.S. in Physics be considered a candidate for enhanced resources. The program, and larger department, has high-quality, research-active, student-focused faculty. Most faculty research is sponsored by external grants and all program faculty collaborate with Fermilab and Argonne National Laboratory. Faculty publication rates are significantly above peer group comparisons within the field of physics and faculty research was funded in excess of \$11 million during the review period. Faculty excellence in research informs faculty teaching and provides opportunities for students to complete thesis projects at the M.S. level in cutting edge research that can lead to greater employment opportunities. Alumni surveyed over the past review period consistently reported 100 percent satisfaction with the program and the time needed to complete the student pass rate for M.S. qualifying exams, and (2) recommended that the program consider recruiting more recent graduates of NIU's baccalaureate program in physics into the M.S. program.
- <u>Actions taken since the last review</u>: Since the last review, student diversity, in terms of gender, has increased in the program. Female program enrollments have increased from 1 percent to 33 percent since the last review period. Although a similar increase in racial diversity has not yet been achieved, the program has made some progress in this area too and is more diverse than the national average for master's level physics programs. For example, 8 percent of the program's students are Hispanic and 6 percent African-American compared to national averages of 3 percent and 2 percent, respectively. Likewise, the program has pursued increased diversity in the faculty ranks over the review period but has met with limited success. Among the ranks of the 20 program faculty covered in the review period, four were Asian/Pacific Islanders and one was African-American.
- <u>Actions taken as a result of this review</u>: As a result of this review, the program is focusing on two areas for improvement. First, the program has implemented a change in scheduling so that students will now take the M.S. qualifying exam when they first arrive at NIU, in the week before classes start. This initial exam attempt will not be counted as a formal attempt at the exam, but rather will be used as a placement tool so that students can be directed to the best courses to improve their chances for passing the qualifying exam at a later time.

Second, the program is encouraging NIU graduates to pursue M.S. degrees in some specific circumstances. Examples would include: (1) students pursuing the teaching M.S., (2) students interested in the program's specialty areas such as beams physics, and (3) for students who would like more time to evaluate whether they are interested in pursuing a Ph.D.

## Outcome

• <u>Decision</u>:

\_\_\_\_x\_\_\_ Program in good standing (review in eight years).

<u>Explanation</u>: The Master of Science in Physics program has research productive faculty, satisfied alumni, and has made significant progress in diversifying its student body in terms of gender. Students benefit from the faculty excellence and gender diversity in the program.

Program: Ph.D. in Physics (40.0801)

- <u>Major changes in the program</u>: The Doctor of Philosophy (Ph.D.) program in Physics provides students an opportunity to obtain proficiency beyond the M.S. and to demonstrate that they can discover new knowledge in this field of physics. The department has research and teaching focused primarily in three areas, condensed matter, high energy, and particle beam physics. Strong collaborations exist with external partners including Fermilab, Argonne National Laboratory and CERN (Conseil Européen pour la Recherche Nucléaire). Upon earning their doctoral degree, students can pursue careers in research and teaching at the university level. Students may also pursue research careers in government, industry, or academic settings. As with the students earning M.S. degrees, the skills acquired by doctoral students in research and data analysis are also highly valued in the financial sector.
- <u>Major findings and recommendations</u>: The 2016 Program Prioritization Academic Task Force recommended that the Ph.D. in Physics be considered a candidate for enhanced resources. The program and department has high-quality, research-active, studentfocused faculty. Faculty publication rates are significantly above peer group comparisons within the field of physics and the faculty research was funded in excess of \$11 million during the review period. Six faculty members are Fellows of the American Physical Society and one is a Fellow of the American Association for the Advancement of Science. Program faculty hold eight NIU Presidential Research Professorships, one NIU Presidential Teaching Professorship, and two NIU Board of Trustees Professorships. Faculty excellence in research benefits doctoral students as the bulk of training at the Ph.D. level in physics is independent research closely supervised by a research mentor. By its nature, Ph.D. level research is a

highly engaged activity involving construction and use of apparatus, writing of software, developing mathematical models, and data analysis. Most students have the opportunity to conduct these activities with mentors from their work on-campus as well as at Fermilab, Argonne or CERN, with access to world class equipment. To date, all Ph.D. students have successfully published their research in peer reviewed journals within one year of completing the Ph.D. Faculty diversity is limited with only four Asian/Pacific Islander and one African-American faculty member on staff. Graduate Assistant stipends are low in comparison to like programs with limited funding available centrally to increase them.

- <u>Actions taken since the last review</u>: The primary quality improvement activity undertaken for this program since the last review is the expansion of student research opportunities at Fermilab and Argonne National Laboratory. A joint beam physics research arrangement with Fermilab provides access to doctoral students to Fermilab's unique beams physics research facilities. This collaboration offers students research opportunities in high energy physics. Further, program faculty collaborations with research groups at the Advanced Photon Source at Argonne National Laboratory have enabled doctoral students in condensed matter physics to gain access to the unique facilities at this nearby national laboratory.
- <u>Actions taken as a result of this review</u>: As a result of this review, the department plans to focus hiring in areas where there is a wide pool of potential candidates. Thus efforts will be directed in making the next hire in condensed matter physics, which is the largest area of physics research. The department also intends to focus on accommodating diverse faculty to make it easier to bring them to NIU and to pursue opportunity hires when possible. In addition, pursuing new targeted opportunity hires through the national labs could both strengthen connections with them and also help build diversity, since the national laboratories are also focused on increasing diversity. In an effort to increase GA stipends, the department will (1) consider using alumni donations to supplement these stipends in the form of recruitment scholarships and (2) consider directing research overhead returns for such scholarships.

# Outcome

• <u>Decision</u>:

\_\_\_x\_\_\_ Program in good standing (review in eight years).

<u>Explanation</u>: The Doctor of Philosophy in Physics program has faculty with strong collaborations with external laboratories that provide rich research opportunities for faculty and doctoral students. Graduates of the program find employment and successfully publish their research in peer reviewed journals in their field.

- Major changes in the program: The Bachelor of Science in Education (B.S.Ed.) in Physical Education/K-12 Licensure is designed to prepare students to teach physical education (P.E.) at the elementary, intermediate, or secondary level. This nationally accredited program is the largest of its kind in Illinois and also provides students with an opportunity to complete a minor in Health Education. This prepares students for health education teaching positions in schools and can also serve as a foundation for further academic work in school health services and instruction, and in maintenance of a healthful school environment. Due to the twin epidemic of childhood obesity and physical inactivity, there has been a surge in physical education/physical activity research and policy activity. The majority of states have increased these requirements in recent years. These national trends and the general need for teachers bode well for this program's graduates' job prospects. Between 2000 and 2012, there has been a dramatic increase in the number of districts nationwide that require elementary P.E. in the schools (94 percent). Additionally, there has been a 30 percent increase in middle schools requiring physical education teachers to provide daily lesson plans, currently 61 percent, since 2000. Furthermore, according to the US Bureau of Labor Statistics, job opportunities in the field are expected to increase over the next six years, with greater demand for P.E. teachers at the elementary (12 percent), middle (12 percent), and high school (6 percent) levels.
- Major findings and recommendations: The 2016 Program Prioritization Academic Task Force recommended that the B.S.Ed. in Physical Education be considered a candidate for reduction in resources. Enrollments in the program have been declining, down from 304 in fall 2011 to half that, 151 in fall 2014. That said, the program remains the largest in the state as peer institutions have experienced similar or more extreme declines. Given these statewide declines, the program has undertaken initiatives to increase recruitment and retention of students. Among these initiatives are: (1) increased involvement of the program in open houses and admitted student events; (2) participation in the college-coordinated student progress monitoring, and (3) use of the expertise of the department's two full-time professional advisors, one of whom has specialized experience in supporting B.S.Ed. in Physical Education majors. The program was found to have a high job placement rate (an average of 78 percent of students surveyed one year after graduation from 2010 to 2014) and a 100 percent licensure exam pass rate for spring 2016. The program review revealed that the current physical facilities pose challenges to the program as they are aging and in need of renovation.
- <u>Actions taken since the last review</u>: Since the last review, the program has made significant progress in four areas: (1) increasing faculty productivity, (2) revising curriculum, (3) addressing changes in licensure by the state of Illinois, and (4) updating the program's assessment system. Since the previous review, program faculty applied for over \$2 million in federally funded grants and have secured their first federal grant from the U.S. Department

of State. Significant changes were made to the program's curriculum, both as a result of continuous process improvement and to accommodate changing state licensure requirements as well as national accreditation requirements. Among these, more clinical experiences are embedded throughout the program and special attention has been paid to ensuring students are able to pass the State of Illinois's high stake licensure requirement, the edTPA. A new assessment system also in place that relies on authentic and systematically gathered assessments which yield more meaningful data to monitor performance and drive future improvement efforts.

• <u>Actions taken as a result of this review</u>: As a result of this review the program is: (1) working with the College of Education to acquire funds for the renovation of the current facilities, (2) setting a goal of maintaining program enrollment at or above 100 students, and (3) setting a goal of maintaining a 100 percent pass rate by students on the edTPA.

## Outcome

• <u>Decision</u>:

\_\_\_\_x\_\_\_ Program in good standing (review in six years to align with disciplinary accreditation).

Explanation: The Bachelor of Science in Education in Physical Education/K-12 Licensure is the largest program of its kind in Illinois. Graduates of the program have excellent job placement and high state licensure pass rates. The employment outlook for graduates of the program is strong.

Program: M.S.Ed. in Kinesiology and Physical Education (13.1314)

Major Findings and Recommendations:

 <u>Major changes in the program</u>: The Master of Science in Education (M.S.Ed.) in Kinesiology and Physical Education prepares students to become competent, knowledgeable, and reflective professionals who are actively engaged in the exercise science and physical education teacher education communities. Graduates of the program have the skills, knowledge, and dispositions necessary to conduct research and implement evidence-based practice and programming that is student- and/or client-centered, aiming at promoting lifelong physical activity engagement within a diverse society. Students in the program can select specializations in adapted physical education, exercise physiology and fitness, pedagogy and curriculum development, and sport and exercise psychology. Overall, the employment outlook for graduates of the M.S.Ed program is extremely strong. Examining the specialization of pedagogy or adapted physical education, the Bureau of Labor Statistics (BLS) projects that there will be a 12 percent growth for careers that align with graduates of this program between 2012 and 2022. Similar results are found for the specialization of sport and exercise psychology, as the BLS projects a 12 percent growth rate for careers that focus on the study of cognitive, emotional, and social processes and human behavior. Careers that align with the specialization in exercise physiology and fitness leadership are projected to grow by 19 percent through 2022.

- <u>Major findings and recommendations</u>: The 2016 Program Prioritization Academic Task Force recommended that the M.S.Ed. in Kinesiology and Physical Education be considered a candidate for reduction in resources. Despite employment outlook projections, enrollment in this program has remained flat with student numbers averaging 58 in the period between 2012 and 2015. Program faculty were found to exceed disciplinary peers in book publishing, publications, and grants. Over the period of 2010 to 2014, alumni reported high satisfaction levels with their degree programs and with their time to degree completion (96 percent and 92 percent respectively). The program review revealed that while investment in state-of-theart equipment has been undertaken, the current physical facilities pose challenges to the program look at expanding certificates related to the field and consider online delivery of the sport leadership and sport psychology specializations.
- Actions taken since the last review: Since the last review, the M.S.Ed. program has undergone a period of significant transition. Specifically, through numerous retirements and resignations, only four faculty remain on staff since the last program review. These circumstances have necessitated the need for the department to train new leaders to help guide future endeavors of the department. To this end, the program has already been successful in securing new faculty lines, equipment to enhance the quality of deliverable content, and developing curriculum changes at the graduate level. New faculty hires have allowed the department to offer specialized courses (e.g., graduate level biomechanics, graduate level sport performance) that were previously unable to be delivered. Additionally, these new faculty have established relationships with the Physical Therapy program at NIU resulting in collaborative research for disciplines that overlap. Since the time of the last program review, there has also been an influx of monies that has allowed the department to purchase state of the art equipment investing in new Olympic weight racks, high-speed treadmills, and various other exercise equipment. Furthermore, the exercise physiology lab has purchased a BodPod and DXA machine. These investments have not only enhanced the stature of the M.S.Ed. program, but have also aided students as they conduct research projects for their thesis.
- <u>Actions taken as a result of this review</u>: As a result of this review the program is: (1) working with the College of Education to acquire funds for the renovation of the current facilities, (2) working to increase research productivity through the development of a doctoral program and collaborative research efforts, (3) developing more opportunities for student engagement, and (4) enhancing recruitment efforts to attract more highly qualified students, including creating external partnerships that fund more graduate assistantship opportunities.

## Outcome

• <u>Decision</u>:

\_\_x\_\_\_ Program in good standing (review in six years to align with disciplinary accreditation).

<u>Explanation</u>: The Master of Science in Education in Kinesiology and Physical Education has stable enrollments, a productive faculty, and satisfied alumni.

Program: Regional History Center (90.4508)

- <u>Major changes in the program</u>: The Regional History Center (RHC) was founded in 1977 and has as its purpose to acquire, preserve, and make available to NIU, the NIU community, and the general public the most significant historical records of the 18 northernmost counties of Illinois, excluding Cook County. The Center contains three related sets of historical records available to researchers: University Archives, Regional Collections, and Local Government Records. The University Archives serves as the repository for all official records of Northern Illinois University that have permanent historical or administrative value. The Regional Collections include original manuscripts generated by private individuals, institutions, and organizations from throughout the region. The Center's Local Government Records are part of the Illinois Regional Archives Depository system administered by the Illinois State Archives and consists of records generated by county officials.
- <u>Major findings and recommendations</u>: The RHC was found to be a valuable asset that provides critical information for research projects and accreditation purposes. The RHC offers both faculty and students hands-on learning, training and development opportunities. The RHC teaches bibliographic and archival instruction to students. The RHC collaborates well with other departments and programs on campus and is responsive to varied external requests for services. RHC faculty and staff have been successful in fundraising and have secured some financial gifts since the last review to support the archival of documents and new collections. The RHC was encouraged to further leverage the relationships it has with donors and to develop a plan and budget for becoming as self-sufficient as possible. It was further recommended to the RCH that its leadership consider what RHC activities could be taken over by other entities on campus or other external entities should the Center need to downsize in the future.
- <u>Actions taken since the last review</u>: The 2016 Program Prioritization Administrative Task Force placed the Regional History Center in Category 3, candidate for reduction of resources. Action planning that emerged from University Libraries departed from this recommendation

and requested that the Center be continued with either sustained or enhanced resources. While recognizing the value of the RHC that is provided to the NIU community, in the November 2016 Division of Academic Affairs Program Prioritization Action Plan, the Center was encouraged to determine where resources can be reduced with the least impact on the scholarship and unique collections.

• <u>Actions taken as a result of this review</u>: On May 10, 2017, a second President's Program Prioritization Progress Report was released. In this report, the current status of the RHC was updated to indicate that the Center was investigating the integration of the RHC further within the organizational structure of the library by having the Center directors report directly to the Collections, Technical Services and Digital Scholarship associate dean as a unit within Distinctive Collections. The Center's collaboration with on- and off-campus units were reported as ongoing including loaning of materials for exhibits, providing expertise for oral history projects, co-sponsoring speaker events, providing workshops and bringing archives into 44 elementary classrooms. The Center also reported working to be more selfsustaining by securing external funding sources to cover operating expenses, professional development, and special projects.

## Outcome

• <u>Decision</u>:

\_\_\_x\_\_\_ Program in good standing (review in eight years).

Explanation: The Regional History Center is a valuable asset to NIU and the surrounding community. The Center is actively pursuing strategies to increase collaboration and reduce costs.

**Program**: Center for P-20 Engagement (90.1399)

Major Findings and Recommendations:

 <u>Major changes in the program</u>: Since its inception as the P-20 Task Force in 2002, the Center for P-20 Engagement (P-20 Center) has generated collaboration among partners from across NIU and the region to engage in activities that improve educational performance and bring innovation to schools, community colleges, work places, and other community settings for the continuum of learners from the youngest (P for preschool) through graduate school and beyond (20). The P-20 Center's commitment to engagement requires relationships between the university and its partners that identify shared problems, develop shared solutions, and result in mutual benefit. Four goals guide the work of the P-20 Center: (1) foster interdisciplinary learning communities and initiatives; (2) facilitate seamless transitions across the P-20 continuum; (3) participate in development and implementation of innovative education policies, systems, and initiatives; and (4) promote P-20 engagement by NIU students, faculty, staff, and partners.

- <u>Major findings and recommendations</u>: The program review found the P-20 Center to be advancing all four areas of the NIU mission through outreach initiatives and services. The outreach programs and efforts serve both internal and external partners well. The P-20 Center successfully embraces educators and students in collaborative efforts to promote research and scholarship initiatives and was commended for having success in fundraising through external grants, contracts, and fees, leveraging university investments to garner external support. It was noted that the P-20 Center has increasingly become more self-sufficient, being 47 percent self-funded and with a goal of being 75 percent self-funded within two years. It was recommended that the P-20 Center work more closely with other units on campus (e.g., Admissions) to better track the long-term impact of some of the P-20 Center's activities.
- <u>Actions taken since the last review</u>: The 2016 Program Prioritization Administrative Task Force placed the Center for P-20 Engagement in Category 4, requires transformation. Following this categorization, the P-20 Center participated in an across the university "complex conversation" related to school connections that was charged in the President's November 2016 Progress Report with both reviewing the ways in which NIU engages with K-12 schools and school districts and reviewing the ways in which the institution organizes and delivers functions such as outreach programs, professional development, hosting centers, and conducting research on K-12 teaching and learning.
- <u>Actions taken as a result of this review</u>: In response to the 2016-2017 Program Review dialogue and findings, the P-20 Center reported that several actions had been taken including: (1) the development and implementation of a set of metrics linked to the P-20 Center's goals and deliverables that will result in an annual summary report; (2) the publication of an annual report detailing the approximately 80 press releases and media stories covering the P-20 Center activities each year; (3) increased engagement with the Division of Enrollment Management, Marketing and Communications to develop targeted recruitment and retention efforts that can be measured going forward; and (4) strategically growing external revenues.

# Outcome

• <u>Decision</u>:

\_\_\_x\_\_\_ Program in good standing (review in eight years).

<u>Explanation</u>: The Center for P-20 Engagement is a valuable asset to NIU and the surrounding community. The Center is nearly 50 percent self-funded and is actively pursuing strategies to increase this self-sustainability.

#### Program: NIU Center for Economic Education (90.4506)

- Major changes in the program: The NIU Center for Economic Education is one of six centers in the statewide Econ Illinois network. The purpose of the Center is to provide quality professional development for elementary and secondary educators, as well as curriculum resources and programs that integrate fundamental economic and personal finance concepts and skills across core curricular areas while aligning with Illinois State Standards. The Center serves 11 counties in northern Illinois, pursuing its own goals and objectives as well as collaborating with Econ Illinois, the state affiliate of the National Center for Economic Education. The mission statement for the NIU Center for Economic Education is as follows: "The Center for Economic Education uses the existing talent and reputation of Northern Illinois University to transform the economic and financial skills of current and future generations. It provides practical strategies that enhance the teaching of effective economic decision-making by K-12 in-service and pre-service teachers in urban, suburban, and rural constituencies of Northern Illinois. The Center offers resources and services such as teacher workshops, student contests, pre-service events, and activities delivered online and face-toface." The objectives are to enable individuals to participate effectively in the economy as competent decision-makers; responsible and knowledgeable consumers; discerning savers and investors; and productive employees, employers, and entrepreneurs.
- <u>Major findings and recommendations</u>: The program review found the Center successfully embraces educators and students in collaborative efforts to promote economic literacy. The internal peer reviewers recommended that the Center identify how it will raise adequate revenue to support its current expenses and eliminate its reliance on general revenue funds and, in doing so, develop a plan for becoming as financially self-sufficient as possible. It was also recommended that the Center identify its deliverables (i.e., measurable outcomes) to better demonstrate its effectiveness in meeting its purpose and objectives and, as much as possible, integrate active recruiting efforts for NIU into Center activities.
- <u>Actions taken since the last review</u>: The 2016 Program Prioritization Administrative Task Force placed the Center for Economic Education in Category 4, requires transformation. This placement was due, in part, to the Center being combined with several other programs within a single narrative which made it difficult for the Task Force to evaluate the Center alone. In 2010, the Center was functioning with minimal activity, and Econ Illinois was delivering professional development for the Center. The Center has turned itself around in the past seven years and is now widely recognized for its effectiveness across the region and at the state level. In June 2016, the Center received a commendation from the national Council of Economic Education for its growth and achievement. Planning for growth in three areas are underway: (1) workshops in schools and communities, (2) student competitions, and (3) Center leadership development.

• <u>Actions taken as a result of this review</u>: In response to the 2016-2017 Program Review dialogue and findings, the Center reported that several actions were to be taken including: (1) the creation of a plan to support current activities and future growth, eventually eliminating reliance on general revenue funds; (2) the development and implementation of a set of metrics linked to the Center's goals and deliverables that will result in an annual summary report; (3) the publication of an annual report with detailed records to highlight the Center's effectiveness; and (4) increased engagement with the Division of Enrollment Management, Marketing and Communications to develop targeted recruitment and retention efforts that can be measured going forward.

## Outcome

• <u>Decision</u>:

\_\_\_x\_\_\_ Program in good standing (review in eight years).

<u>Explanation</u>: The Center for Economic Education provides a unique service to NIU and the surrounding community. The Center has been growing it its scope of activities and has plans for increased self-sufficiency.

**Program**: Plant Molecular Biology Center (90.2604)

- <u>Major changes in the program</u>: The Plant Molecular Biology Center (PMBC) was initiated in 1985 by the Illinois Board of Regents as an autonomous Center of Excellence to propagate the research and training in plant sciences. The primary purpose of the Center is to conduct and promote research in Plant Science. The Center was questioned in the 2008-2009 internal Program Review and External Review about the ongoing purpose and usefulness of the Center's long-term viability.
- <u>Major findings and recommendations</u>: PMBC was found to have productive faculty. Half of the PMBC members had external funding and, on average, the faculty produced more publications than other faculty in the Department of Biology. PMBC members had authored collaborative papers in *Nature* and *Science*, premier journals for scientific research and had worked extensively with graduate students on peer-reviewed publications. That said, the Center was recommended to consider developing a comprehensive fundraising plan and budget for a five year period to maintain viability.
- <u>Actions taken since the last review</u>: The 2016 Program Prioritization Academic Task Force had concerns about the sustainability of PMBC and recommended that the Center be further

reviewed for possible elimination. Action planning that emerged from the College of Liberal Arts and Sciences, following Program Prioritization, recommended that the Center be eliminated. The Program Review in 2016-2017 resulted in a recommendation that PMBC consider the pros and cons of sustaining or ceasing operations.

• <u>Actions taken as a result of this review</u>: The PMBC underwent a thoughtful analysis of the pros and cons of sustain or ceasing operations and has requested to maintain the Center's status. A comprehensive review process for all research Centers has recently been put in place at NIU by the Division of Research and Innovations Partnerships (RIPs) and the PMBC will undergo this review in fall 2017.

# Outcome

• <u>Decision</u>:

\_\_\_x\_\_\_ Program in good standing (review in eight years pending the review by RIPs).

<u>Explanation</u>: The Plant Molecular Biology Center has faculty members who have been productive and have engaged students in research and scholarly publication. However, funding is an issue for the ongoing viability of the Center. Further review will be undertaken by RIPs to determine if and how the Center fits into NIU's overall research framework.

Program: Northern Illinois Center for Accelerator Detector Development (90.4001)

- <u>Major changes in the program</u>: The Northern Illinois Center for Accelerator and Detector Development (NICADD) was founded in 2001. The Center's three objectives are: (1) the advancement of accelerator research and development, (2) the advancement of detector research and development, and (3) the provision of educational opportunities in science and technology that broaden the research tradition established by the local national laboratories to help ensure that NIU remains an internationally recognized center of research and education. NICADD personnel collaborate closely with Fermilab and Argonne National Laboratory on accelerator physics, particle physics, medical physics, and astrophysics.
- <u>Major findings and recommendations</u>: NICADD was found to have productive faculty with multiple grants. The Center was commended for its engagement of students in research, at both the undergraduate and graduate levels including undergraduate "research rookies" projects and graduate level research fellowships.
- <u>Actions taken since the last review</u>: The 2016 Program Prioritization Academic Task Force categorized NICADD as a candidate for unchanged resources. Action planning from the

College of Liberal Arts and Sciences in November 2016 included the planned joint hire with Fermilab for an individual in the field of accelerator physics. The 2016-2017 Program Review resulted in a recommendation for continued support for NICADD as it was seen as an integral link to resources in the areas of beam and accelerator physics, medical physics, high energy physics, and detector development groups, especially with local national laboratories.

• <u>Actions taken as a result of this review</u>: NICADD submitted a request for additional ongoing funding for the Center to the Office of the Provost in March 2017. A comprehensive review process for all research Centers has recently been put in place at NIU by the Division of Research and Innovations Partnerships (RIPs) and NICADD will undergo this review in fall 2017.

# Outcome

• <u>Decision</u>:

\_\_\_x\_\_\_ Program in good standing (review in eight years pending the review by RIPs).

<u>Explanation</u>: The Northern Illinois Center for Accelerator and Detector Development has faculty members who have been productive and have engaged students in meaningful research activities at both the undergraduate and graduate levels.

**Program**: Center for Biochemical and Biophysical Studies (90.2602)

# Outcome

• <u>Decision</u>:

\_\_\_x\_\_\_ Center to be eliminated in fall 2017.

<u>Explanation</u>: The 2016 Program Prioritization Academic Task Force placed the Center for Biochemical and Biophysical Studies in Category 3, candidate for reduction of resources. Following Program Prioritization, the Center underwent Program Review where it was suggested that the Center would need to develop a comprehensive fundraising plan and budget for the next five-year period to remain viable. Following this review, and upon further reflection of the Center's goals and scope, the Center faculty requested that the Center be eliminated in fall 2017.

Program: Institute for Nano Science, Engineering and Technology (90.3099)

## Outcome

- <u>Decision</u>:
  - \_\_\_x\_\_\_ Center to be eliminated in fall 2017.

<u>Explanation</u>: The 2016 Program Prioritization Academic Task Force placed the Institute for Nano Science, Engineering and Technology in Category 3, candidate for reduction of resources. Following Program Prioritization, the Center underwent Program Review where it was suggested that the Center review the ongoing need for the Center as most faculty linked to the Center appeared to be conducting research on their own and the Center no longer was serving a critical function. Following this review, the Center faculty requested that the Center be eliminated in fall 2017.