

DEPARTMENT OF EXERCISE AND NUTRITION SCIENCES

Strategic Plan 2007 - 2010

The Department of Exercise and Nutrition Sciences (ENS) has a long and distinguished history that traces back to the Sport and Exercise Studies (SES) Program in the School of Education and the Nutrition Program in the School of Health Related Professions. In 1985, SES was renamed the Department of Physical Therapy and Exercise Science, and it began to change emphasis from pedagogy to scientific research. In 1998, the Department of Physical Therapy and Exercise Science and the Nutrition Program merged to form a novel Department of Physical Therapy, Exercise and Nutrition Sciences.

The current form of Exercise and Nutrition Sciences (ENS) was created in 2001, when the Physical Therapy program was merged with Occupational Therapy to become the Department of Rehabilitation Science. Subsequently, in 2003, ENS became a department of the new University at Buffalo (UB) School of Public Health and Health Professions (SPHHP).

ENS is an integral part of the University at Buffalo (UB). As one of two public members in New York and New England of the prestigious Association of American Universities, UB stands in the first rank among the nation's research-intensive public universities. Consequently, UB is New York's premier public center for graduate and professional education. UB is an ideal home for our recently created Department, because it is a large and comprehensive university that offers a broad array of schools and programs in health and health-affiliated fields. UB also has sought to integrate into the surrounding community by developing a strong commitment to public service. Within UB, SPHHP is a rapidly growing academic unit that has attracted major funding, internationally renowned researchers, and an expanding cadre of students and academic

partners. ENS is thus strongly positioned to interact with a range of collaborators and establish powerful synergies in order to successfully accomplish its mission.

ENS, SPHHP and UB are pursuing complementary strategies based on integration and collaboration. ENS is an interdisciplinary department that is advancing science and educating future leaders. It is a community of creative people with a strong track record in research, undergraduate and graduate education, and service.

Rationale

There is a growing demand for Nutrition and Exercise Science professionals who can help meet the changing health care requirements of Western New York. Driving factors include the demand to strengthen the scientific basis of professional practice, an aging population, and a heightened recognition that prevention must become a major focus of policies for improving health and controlling health care costs. Synergies between Exercise Science, Nutrition and other Health-Related professions will provide further impetus for developing outstanding research and educational programs.

ENS will conduct basic health science research that translates into the development of new interventions to improve human health. ENS faculty will report their research findings by appropriate means to benefit the community. We will use this vital information to better equip government, health care agencies and others to initiate strategies for the prevention and control of chronic diseases that impair health over the lifespan. ENS will continue to be sensitive to meeting the needs of those who can benefit from our research and expertise. We will be seen as a leader in the community by providing vital education and sharing knowledge about health and wellness.

Our increasing emphasis on research fits well with the direction in which the disciplines of Nutrition and Exercise Science are moving. The emphasis on research is also an outstanding way for faculty to train students, while improving the health, culture and wealth-generating capacity of Western New York.

The Department's proposed strategic plan for academic excellence builds on previous plans and arises from a day-long retreat and many meetings aimed at consensus. A major component of our plan is the recruitment, evaluation and selective retention of faculty members who are productive, interdisciplinary, and have appropriate expertise to interact with current faculty and realize the integrated missions of the Department, School and University. Enactment of this plan will increase collaborative partnerships and foster interdisciplinary research and education, while bolstering the Department's existing research strengths. Maintaining the Department's credibility as a center for advanced education requires offering courses and research opportunities for graduate students who are attracted from near and far. Sustaining a high level of international enrollment will further strengthen the Department's reputation and contribute to UB's emphasis on this achievement. It is also vital that ENS have outstanding facilities that are conducive to research, teaching and service. These realities will require continuing investment.

Western New York ranks among the top areas in the country for its high incidence of obesity, heart disease, cancer, and other potentially disabling and deadly health conditions. Many of these conditions are the consequence of behavioral factors, environmental exposure and their interaction with individual genetic susceptibility. A radical approach to prevent these major causes of death and disability must prioritize the promotion of wellness and a concept of health,

defined by the World Health Organization as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. The focus must include nutrition and physical activity. It is our conviction that integration of Exercise and Nutrition Sciences is vital to this approach. ENS is poised to engage the community by educating future leaders, providing evidence-based training to future caregivers, and collaborating on projects such as combating obesity and promoting a healthy workforce.

ENS will work cooperatively with other members of our School and University. The Department will continue to serve as an integral part of UB's strategic planning process, UB 2020, and will create a coalition of interdisciplinary leadership and expertise to facilitate improvements in health and wellness across the lifespan. The Department will be an active participant with other departments in the SPHHP in the future development of novel, interdisciplinary training programs that will serve the needs of our students and community.

Vision: The health and well-being of society will have improved because of our scientific discoveries, education of researchers and professionals, and commitment to outreach and community education.

Mission: The Department's mission is to educate undergraduate and graduate students in Exercise and Nutrition Sciences, and to maintain active, basic and clinical research programs, in an environment that emphasizes scientific inquiry and discovery. As an integral part of the UB School of Public Health and Health Professions, the Department is committed to excellence in scholarship, interdisciplinary collaboration, community impact, and furthering the scientific and clinical professions represented by our faculty and students.

Strategic Intent: Advance to the upper echelon of peer departments. Achieve national recognition for our research accomplishments and become a magnet for the best students and faculty, especially those attracted by the interdisciplinary synergy of the Exercise and Nutrition Sciences within the Department.

STRATEGIC GOALS

1. Scholarly productivity, as evidenced by extramural grants and publications, will increase.
2. We will provide high quality education and research opportunities within a highly productive scholastic enterprise.
3. The Department will actively engage in the promotion of health in our communities, thereby increasing our visibility and relevance in supporting the goals of the SPHHP.
4. The Department will have active alumni who are positively impacting their chosen professions.
5. We will be increasingly more selective in our undergraduate and graduate admissions standards.
6. Achieve a level of at least 1 Ph.D. student per graduate faculty member.
7. Faculty members will be productive and interactive, and will actively seek out research opportunities that support the Departmental vision.

PRIMARY OBJECTIVES AND OUTCOME MEASURES BY GOAL AND DATE

Goal 1: Increase Scholarly Productivity as Evidenced by Extramural Grants and Publications

First Year: 7/1/2007-6/30/2008

- 1) Initiate national search for a tenure-track faculty to replace the vacant line in the ENS department.
 - a) Develop an Authorization To Recruit consistent with the ENS Department, School of Public Health and Health Professions, and UB 2020 strategic plans.
- 2) Set department goals for number of grant submissions and dollar value of grant applications.
 - a) Chair establishes a relationship with a minimum of 6 similar departments at peer universities for bench-marking.
 - b) Chair reviews department grant submissions over the past 3 years to establish baseline data.
 - c) Chair or ad hoc committee proposes a 3-year department plan with progressive targets set to increase the number and dollar value of grant submissions.
- 3) Set department expectations/standards for peer reviewed publications.
 - a) Chair establishes relationship with a minimum of 6 similar departments at peer universities for bench-marking.
 - b) Chair reviews annual reports over the past 3 years to establish baseline data for department publication record.
 - c) Chair or ad hoc committee proposes a 3-year department plan with progressive targets set to increase the number of publications and impact factor of publications.

Second Year: 7/1/2008-6/30/2009

- 1) Annual review is used to evaluate the performance of faculty relative to expectations/standards set by the department.
 - a) Chair or ad hoc committee re-evaluates department expectation/standards for grant submissions, dollar value of grant applications, peer reviewed publications and impact factor of publications.
 - b) Chair proposes quantifiable goals for department and individual faculty.
- 2) Chair or ad hoc committee proposes and presents to the department a strategic plan for optimizing departmental resources to increase scholarly productivity.
- 3) Fill vacant faculty lines if available with tenure-track faculty members consistent with goal 1.1.a.

Third Year: 7/1/2009-6/30/2010

- 1) Chair evaluates faculty performance relative to expectations/standards set by the department.
 - a) Compare expectation/standards for grant submissions, dollar value of applications, peer-reviewed publications and impact factor of publications to peer universities and baseline data.
- 2) Chair or ad hoc committee proposes and presents to the department a strategy for optimizing departmental resources to increase scholarly productivity.
 - a) Review workload distribution.

- b) Plan for faculty sabbatical opportunities.
- c) Invest IFR funds to improve department success rate for grant submissions.
- 3) Fill vacant faculty lines if available with tenure-track faculty members consistent with goal 1.1.a.

Goal 2: Provide High Quality Education and Research Opportunities Within a Highly Productive Scholastic Enterprise

First Year: 7/1/2007-6/30/2008

- 1) Review all graduate and undergraduate teaching programs.
 - a) Chair will outline expectations and standards that UB will use to evaluate the department's programs. Where there is not an explicit expectation from the University, the Chair will establish basic requirements to be met in all educational facets.
 - b) Chair or Ad Hoc committee will evaluate all programmatic teaching in light of the standards described in 2.1.a. and provide a written report to the department.
- 2) Maintain overall graduate and undergraduate enrollment numbers while increasing efforts to recruit doctoral students.
 - a) Program directors will actively participate in organized SPHHP student recruitment activities including; Parent's Weekend, UB Open House, SPHHP Open House.
 - b) Enroll additional graduate students to replace those lost by the phase-out of the BS/MS Program in Athletic Training in order to maintain overall head count.
 - c) Chair or Ad Hoc committee will develop a list of undergraduate and graduate programs that will be targeted for recruitment of doctoral students.
 - d) Faculty will collectively recruit two of the most promising current ENS Master level students to pursue their Ph.D. in our department.
- 3) Increase quality of the graduate students enrolled in the department.
 - a) Graduate Affairs Committee (GAC) will evaluate the GRE scores of current ENS Masters and PhD students to establish a baseline of student achievement.
 - b) GAC will evaluate the Undergraduate GPAs of current ENS Masters and PhD students to establish a baseline of student achievement.
 - c) GAC will evaluate the Graduate GPAs of current ENS Masters and PhD students to establish a baseline of student achievement.
 - d) Use the above evaluated scores to establish recommendations for admission as a graduate student in the department.
- 4) Begin preparation for the Department to obtain American College of Sports Medicine (ACSM) endorsement.
 - a) A committee including the ENS Undergraduate Program Director will be formed to identify a formal timeline for application.
 - b) The committee will identify areas of deficiency for obtaining ACSM endorsement.
 - c) Undergraduate Program Director becomes the certification coordinator for students in the department and focuses on ensuring adequate educational outcomes to achieve selected certification requirements and preparedness of students.
- 5) Continue to provide successful outcomes relative to ACSM certification as gauged by student success on national level examinations.

- a) Have 25% of the ENS senior undergraduate students sit for a national certification as offered by ACSM.
- b) Have at minimum, an 80% passing rate for students taking their exam for the initial time.

Second Year: 7/1/2008-6/30/2009

- 1) Address any academic deficiencies in all graduate and undergraduate teaching programs.
 - a) Chair will outline a plan as well as identify and secure resources for addressing academic enhancement as reported by the Ad Hoc committee in the first year plan.
 - b) New Ad Hoc committee will implement the strategic plan developed in 2.1.a. and correct any deficiencies in departmental academic performance.
- 2) Continue to plan for enhancement of undergraduate and graduate programs.
 - a) Program directors will continue to participate in organized SPHHP student recruitment activities.
 - b) Enroll additional graduate students to replace those lost by the phase-out of the BS/MS Program in Athletic Training in order to maintain overall head count.
 - c) Chair will target the identified institutions for recruitment of doctoral students and increase advertisement and recruitment efforts to graduating students from these programs.
 - d) Chair or Ad Hoc committee will identify additional departments from within UB to target for recruitment of doctoral students.
- 3) Increase the quality of graduate students enrolled in the department.
 - a) Graduate Director will evaluate graduate applicants against the current minimal standards in GRE, Undergraduate and Graduate GPAs.
 - b) Increase the average scores (GRE, GPAs) of applicants selected for admission into ENS graduate programs.
- 4) Prepare for the ENS department application to obtain American College of Sports Medicine (ACSM) endorsement.
 - a) Ad Hoc committee will provide a plan for meeting minimal qualifications for application for endorsement by ACSM.
 - b) All programmatic deficiencies will be addressed and corrected.
 - c) Application for ACSM endorsement will be completed.
- 5) Continue to provide successful outcomes relative to ACSM certification as gauged by student success on national level examinations.
 - a) Have 40% of the ENS senior undergraduate students sit for a national certification as offered by ACSM.
 - b) Have at minimum, an 85% passing rate for students taking their exam for the initial time.

Third Year: 7/1/2009-6/30/2010

- 1) Review all changes made in graduate and undergraduate academic programs following the implementation of the strategic plan.
 - a) Chair will assess academic programs within the department and provide a report on the overall academic consistency, achievement of goals, addressing of remaining deficiencies.

- b) Chair will investigate and report on a timeline when departmental academic programs will be evaluated internally by UB.
- 2) Continue to maintain overall graduate and undergraduate enrollment numbers while increasing efforts to recruit doctoral students.
 - a) Program directors will continue to participate in organized SPHHP student recruitment activities.
 - b) Enroll additional graduate students to replace those lost by the phase-out of the BS/MS Program in Athletic Training in order to maintain overall head count.
 - c) Continue to increase advertisement and recruitment efforts to graduating students from the previously identified programs.
 - d) Faculty will collectively recruit four of the most promising current ENS Master level students to pursue their Ph.D. in our department.
 - e) Chair will establish new targets for graduate and undergraduate enrollment based on achievement of strategic goals.
- 3) Increase quality of the graduate students enrolled in the department.
 - a) Graduate Director will evaluate graduate applicants against the current minimal standards in GRE, Undergraduate and Graduate GPAs.
 - b) Increase average scores (GRE, GPAs) of applicants selected for admission into ENS graduate programs.
- 4) Apply to and receive American College of Sports Medicine (ACSM) endorsement and pursue affiliations with other certification organizations as appropriate.
- 5) Continue to provide successful outcomes relative to ACSM certification as gauged by student success on national level examinations.
 - a) Have >50% of the ENS senior undergraduate students sit for a national certification as offered by ACSM.
 - b) Have at minimum, a 90% passing rate for students taking their exam for the initial time.

Goal 3: Engage in the Promotion of Health in our Communities, Thereby Increasing Our Visibility and Relevance in Supporting the Goals of the SPHHP

First Year: 7/1/2007-6/30/2008

- 1) The Chair will make a list of the community and professional activities of faculty from their Annual Reports.
- 2) Faculty will review this list for completeness and accuracy. Faculty will furnish descriptions of their activities – highlighting the relevancy to UB 2020 and the missions of the School and Department.
- 3) This set of community and professional activities will be posted on our department website by the website manager with input from the Chair.

Second Year: 7/1/2008-6/30/2009

- 1) The review process of new and continuing activities will be repeated.
- 2) The Chair will establish an ad hoc committee to make recommendations on which community activities to emphasize and give greater departmental support.

- 3) Professional activities of the faculty and staff that are determined to be most supportive of UB 2020, and the school and department mission will be supported by
 - a) Small travel funds.
 - b) Nominations to professional society committees, and other activities.
 - c) Consideration in workload issues.

Third Year: 7/1/2009-6/30/2010

- 1) The Chair with input from the ad hoc committee established in the second year will develop a Community Advisory Board.
- 2) The Community Advisory Board will work with the Chair to maximize the impact of the department's activities.
- 3) Professional activities will continue to be reviewed and supported with new activities being considered by the ad hoc committee on service.

Goal 4: Have Alumni Who Are Positively Impacting Their Chosen Professions

First Year: 7/1/2007-6/30/2008

- 1) Create a "culture" with current students that makes them feel that they belong to something special.
 - a) Encourage faculty involvement with student activities, such as incoming student orientation and ES club activities at the undergraduate and graduate levels.
 - b) Encourage faculty support, in concert with students, of school and department community outreach/service programs.
 - c) Encourage alumni support of careers day and homecoming. Invite alumni to speak to students at information sessions and orientation.
- 2) Foster a relationship with the SPHHP Development Officer and the UB Associate Vice-Provost of Alumni Affairs to develop a system to track and contact alumni.

Second Year: 7/1/2008-6/30/2009

- 1) Offer services to alumni - e.g. health risk assessment, health and wellness and nutrition information. Develop a web-site to post the ENS newsletter and other departmental info.
- 2) Support or establish undergraduate and graduate scholarship funds.

Third Year: 7/1/2009-6/30/2010

- 1) Feature alumni milestones in the ENS newsletter and post on web-site.

Goal 5: Become Increasingly More Selective in Undergraduate and Graduate Admission Standards

First Year: 7/1/2007-6/30/2008

- 1) Initiate meetings and conversations with the Associate Dean of Academic Affairs about Pre-Admission procedures to UB for the B.S. program.
 - a) Evaluate the current program and develop a strategic plan to further develop an attractive academic program while maintaining student enrollment.

- 2) Review departmental goals for the number of admitted students in the undergraduate and graduate programs based on benchmarking data and input from UB Central Administration.
- 3) Review departmental recommendations for entrance into all academic programs.
 - a) The Graduate Affairs Committee will review the current admission procedures for all applicants to the M.S. and Ph.D. programs each semester, to ensure that the most talented students are admitted into the program.
 - b) The Undergraduate Admissions Committee will review current admission procedures to maintain student numbers while increasing selectivity.
 - c) Respective committees will review performance of each admitted class to set higher standards for admittance, while maintaining student numbers.

Second Year: 7/1/2008-6/30/2009

- 1) An annual review will be conducted to evaluate the academic performance of the class admitted the previous year.
 - a) Chair or ad hoc committee re-evaluates departmental expectations/standards for admission into the program.
 - b) Chair proposes quantifiable goals for enrollment.
- 2) Chair or ad hoc committee proposes and presents to the department a strategic plan for optimizing departmental resources to maintain enrollment numbers.

Third Year: 7/1/2009-6/30/2010

- 1) Chair or ad hoc committee evaluates student performance relative to expectations/standards set by the department.
 - a) Current expectations and standards for admission to all academic programs will be compared to peer universities with similar program formats.

Goal 6: Achieve an Average of 1 Ph.D. Student Per Graduate Faculty Member

First Year: 7/01/2007 – 6/30/2008

- 1) The Chair will explore avenues for increasing funds for assistantships.
 - a) The Chair will provide a departmental policy regarding Graduate Research Assistant support on extramural grants.
 - b) The Chair will benchmark financial assistance available to ENS Ph.D. candidates to that provided in other UB departments and at peer institutions.
- 2) The Graduate Affairs Committee (GAC) will review departmental policies regarding Teaching Assistantship selection and workload and compare these to peer institutions.
 - a) The GAC will review the current Ph.D. program and make recommendations for enhancement. New course offerings may also be proposed.
 - b) The impact of developing new Ph.D. programs on existing programs will be explored.
- 3) The Director of Graduate Studies will solicit input from previous Ph.D. applicants who elected to study elsewhere, as a means of gauging our success.
 - a) A report will be provided to faculty.

- b) The Director of Graduate Studies will develop an historical overview of the numbers of ENS Ph.D. candidates to establish baseline data. Former student's current positions, publication records and funding histories will also be compiled.

Second Year: 7/01/2008 – 6/30/2009

- 1) The Chair will avail departmental resources to actively recruit Ph.D. applicants and provide support to Ph.D. candidates for presentation of scientific findings at Regional and National meetings.
 - a) PhD students will apply for intramural funding support and will actively participate in regional meetings.
- 2) The Chair will identify new resources of revenue that will be made available for strengthening existing programs and potentially for development of a new Ph.D. program.
- 3) The number and quality of Ph.D. applicants and candidates will increase over historic levels, to attain a ratio of .75 enrolled Ph.D. students per graduate faculty member.

Third Year: 7/01/2009 – 6/30/2010

- 1) Increase the number of ENS Ph.D. candidates to achieve a ratio of 1 Ph.D. student per graduate faculty member.
- 2) Increase the number of abstracts and manuscripts authored by ENS Ph.D. candidates.
- 3) Continue active recruitment efforts of Ph.D. candidates. Ph.D. students will be encouraged to seek out leadership roles on the Graduate Student Association council and in regional chapters of national organizations. These leadership roles will be in turn used for recruitment purposes.
- 4) If warranted and approved, the department will move forward with expansion of Ph.D. programs.

Goal 7: Have Faculty Who Are Productive, Interactive and Seeking Research Opportunities That Support the Departmental Vision

First Year: 7/01/2007 – 6/30/2008

- 1) New tenure-track faculty member will be hired to strengthen the departmental research mission, to integrate with existing departmental research focus groups (described below), and to improve the interdisciplinary nature of existing graduate programs.
- 2) The faculty will identify and organize into strategic research groups focused on common goals that support the SPHHP and the UB 2020 mission.
 - a) Two or more strategic groups will be formed and recognized.
 - b) Groups will outline potential collaborative research and identify technical/personnel deficiencies that, if addressed, would strengthen research competitiveness.
- 3) Departmental research focus groups will identify key projects, collaborators from other departments, and will target intramural funding opportunities for the completion of pilot studies.
- 4) The Chair will initiate a review process of all ENS faculty members, identify potential mentors for junior faculty and pinpoint individual barriers to scholarly success and career advancement.

- a) The Chair will be actively engaged in the advancement and promotion of all clinical, research, non-tenured and tenured faculty.
- 5) The Chair will set a standard for faculty research involvement and expectations for scholarly productivity, and will meet with faculty and delineate expectations for the upcoming year.
- 6) The Chair (or subcommittee) will annually review all faculty members, and make recommendations for promotion as appropriate.

Second Year: 7/01/2008 – 6/30/2009

- 1) The research focus groups will collect data, and identify external funding agencies and set target dates for submission.
- 2) The Chair will review all non-tenured faculty members, and make recommendations for promotion when appropriate.
 - a) The Chair (or subcommittee of outside professors) will initiate a review of tenured faculty at rank of Associate Professor and make recommendations for promotion.
- 3) The Chair will meet with and review all non-tenured, tenured, and research and clinical faculty and set expectations that are consistent with departmental goals.
 - a) The Chair will meet with all faculty and review progress on attaining goals and set goals for the following year.

Third Year: 7/01/2009 – 6/30/2010

- 1) New tenure-track faculty member will be hired to strengthen the departmental research mission, to integrate with existing departmental research focus groups, and to improve the interdisciplinary nature of existing graduate programs.
- 2) The Chair will review all non-tenured faculty members, and make recommendations for promotion. The Chair (or subcommittee of outside professors) will review the progress of tenured faculty and initiate promotion recommendations where appropriate.
- 3) The Chair will meet with and review all non-tenured, tenured, and research and clinical faculty.