

**Report of the Graduate School Committee Assigned to Review the Interdisciplinary Nutritional  
Sciences Program  
University of Washington, Seattle Washington  
April 29, 2005**

The Review Structure and Process

A review committee was formed to provide recommendations regarding the continuation of the MS and PhD degree programs in the Interdisciplinary Nutritional Sciences Program, to assess the quality and health of the Program, and advise as to how it might be improved. Among the issues to be considered were program structure and location, strategic vision and plan, curriculum, research endeavors, faculty, staff, and student experiences.

The committee consisted of three members internal to the University of Washington and two external members:

Deborah Ward, committee chair,

Associate Professor, Psychosocial and Community Health Department.

Deborah Bowen

Professor, Health Services Department.

Daniel Bowen-Pope

Professor, Pathology Department.

Benjamin Caballero,

Professor, Departments of International Health and Human Nutrition, and Director, Center for Human Nutrition, Johns Hopkins University

Johanna Dwyer,

Professor of Medicine, School of Nutrition Science and Policy and School of Medicine, Tufts University, and Senior Scientist, Office of Dietary Supplements, National Institutes of Health (NIH).

The internal members of the committee met once on March 30, 2005 to receive their charge, and conducted further group consultation by email. Two members of the committee (Bowen-Pope and Ward) met with the chair of the Epidemiology department, and departmental head of the Nutrition Sciences program, on April 25, 2005. All subsequent interviews took place during the two-day site visit – April 28 and 29, 2005 -- which included the external members of the committee.

The Charge letter, and an additional set of questions sent to the Nutrition Sciences Program in advance of the site visit are included in the appendix

The Committee drafted an initial report on the spot. The draft was subsequently reviewed and modified by all.

All opinions expressed here represent the collective view of the committee.

Summary:

The strengths of the Program are an excellently trained, productive, and dedicated faculty with a charismatic director. The Program displays and implements an interdisciplinary vision of nutrition at the University with emphasis on nutrition as a biological science and with attention to its health, social, and policy outcomes and implications. The Program is a major focus of nutrition at the University, and it relates to the other large group of medical nutrition scientists at the Medical School. The Program encompasses numerous aspects of public health, fundamental sciences affecting nutrition, clinical medicine and dietetics. These include nutritional epidemiology (observational, interventional, and metabolic epidemiology), public health practice in nutrition, nutrition policy and administration, psychophysics, dietetics, and public health. The Program is now nationally visible and well regarded by other faculties and funding agencies. Intellectually it is well situated to engage high quality faculty and recruit top students but it does not have the funds to do this, nor are the bureaucratic/administrative infrastructure arrangements within the School and University supportive of retention of high quality faculty in this multidisciplinary program.

The quality of the Program, faculty degree programs and students was found to be excellent. The Program is now mentioned among the top quartile and probably top ten programs in the USA. The nearest competitor in the Northwest is the University of Oregon Health Sciences Center. National competitors include Harvard School of Public Health, Johns Hopkins School of Public Health, University of North Carolina School of Public Health, Tufts University School of Nutrition and Public Health, and the Public Health nutrition programs at the Universities of Minnesota, Michigan, California at Davis and California at Los Angeles. These competitor programs have an advantage in that they are structured and governed with more autonomy, more focused and greater resources, and in more appropriate and effective infrastructures that provide a more efficient use of resources and a clearer strategic vision on the part of the larger University than this Program enjoys.

Changes in science toward a systems biology approach and large-scale interdisciplinary projects are increasingly commonplace in American universities. Funding mechanisms are helping to drive this trend. The old RO1 mentality of a single investigator working independently is not adequate for the challenges nutrition science, in particular, faces in the years to come. A more collaborative structure that interdigitates more tightly and provides incentives rather than barriers for interdisciplinary research and practice will be needed to continue to be competitive in this decade. The new “roadmap” P20 grants of NIH are one example; other similar interdisciplinary research is now being called for by NIH as systems biology becomes a reality. However NIH is not alone in requiring such interdisciplinary approaches; they are also increasingly being used by the CDC, and the USDA. New models of infrastructure within universities will be needed in order to stay competitive in research, to train students for tomorrow, and to function in health services and public health practice. At the level of the universities, commitment must not only be voiced but also mirrored in budgetary and organizational program realities in order for a multidisciplinary Program such as the one reviewed to be sustainable.

### Recommendations:

1. **Continue the degree programs, with re-review in five years.**
2. **Choose or appoint a co-director of the program responsible for academic issues (teaching, students) within the program. The Director should retain overall authority, but will focus on expanding research opportunities and external funding for the program.**
3. **Create an effective student home. Maintain an active student email list, advising of opportunities and events. Create a physical space for students to sit and interact with others in Raitt Hall.**
4. **Make nutrition a core competency in the UW School of Public Health and Community Medicine to emphasize the unique “signature” of this flagship School of Public Health. A nutrition course should be core for all public health students with appropriate support in terms of resources to do this.**
5. **Modify the funding stream to the program.**
  - a. **The program should be allocated a defined portion of the indirect costs generated by research grants that are clearly identified with the Nutrition Sciences program, irrespective of the PI’s home department. These recovered indirect costs should be administered by the NS program Director and his designee**
  - b. **The University should decide whether an undergraduate nutrition course is an important educational goal. If so, additional support for undergraduate teaching should be made available from University sources.**
6. **The responsibility/effort of advising master’s students should be more broadly distributed and better compensated. One method would be to assign an average value for effort per mentee and provide the mentor with this equivalent in teaching compensation.**

### Findings

#### Nutrition and the School of Public Health and Community Medicine (SPHCM) Mission

Nutrition training should be a strategic mission component of the School of Public Health and Community Medicine (SPHCM), and receive the authority and resources commensurate with its role. Diet and nutritional status are major determinants of health status and disease risk, and there is an increasing emphasis on diet-based prevention interventions. Thus, a nutrition program within a school of public health should play a key role in the training of Public Health professionals. A number of the better schools of Public Health include nutrition as a required subject of their curriculum. Given its strong program and the strong intervention focus of this School the committee concludes that nutrition training should be a strategic component of the UW SPHCM. In addition, several components of the UW nutrition program go beyond Public Health and enhance the greater University and health sciences community, including clinical dietetics, basic science, etc, giving the nutrition program a university-wide mission as well. To fulfill this broad mission, the nutrition program must have the ability to define its research agenda and its curriculum, and have control of the resources commensurate to its mission. For a number of reasons, this is not happening at the moment, and steps need to be taken to correct the situation.

#### Curriculum

Curriculum priorities must be carefully defined, to avoid commitment to unfunded teaching obligations and/or dilution of the main teaching mission of the program by duties outside of the SPHCM.

After moving to the SPHCM, and particularly since Dr. Drewnowski assumed its leadership, the Nutrition Program has focused on graduate training and on enhancing its research base. In addition, because of the limited state salary lines, faculty needs to focus on and obtain substantial portion of their salary from research grants. This puts significant pressure on faculty time, and if the program faculty want to maintain the quality of teaching, priorities must be defined for curriculum initiatives.

#### Leadership

The director has done an outstanding job, but it is important to develop mechanisms to insure faculty participation and continuity of leadership as the program continues to grow. The first of these is to appoint a co-director. The committee also felt that it is time in the program's development to create the internal structure that allows for regular faculty feedback and sharing and delegation of responsibilities. As the program grows, this issue will become increasingly important. An initial mechanism could be simply to create an "executive" faculty group, which meets frequently to discuss the management of the program, scientifically and administratively. Members of this committee could rotate, and represent all ranks of faculty.

#### Consequences of the current structure

The program is being asked to assume, and has assumed the responsibility for implementing a strategic plan of research and teaching in nutrition but does not have the independence and fiscal authority to do so. Without changes in the current structure, the committee views the Program as unsustainable.

1. Duties and responsibilities of the faculty are to the program, but it is at the department level that the faculty's promotion is reviewed. Who is truly in charge of faculty development? Who can ensure that departments recognize and fairly evaluate the faculty who work at remote locations?
2. Faculty mentoring is confused. We found that some faculty were confused about the APT process and just what was to be expected of them. It was not clear that annual reviews were consistently occurring either at the program or dept level. One faculty member reported that she had never met with the chair of the department to which she was appointed.
3. Administrative difficulties are myriad in this arrangement. Program staff have to deal with at least 3 separate departments in the school of public health, each of which provide different and insufficient levels of support for grant preparation and management.
4. A major issue is that the program does not receive any usable fraction of the indirect costs generated by the program faculty but channeled through departments. And furthermore, the departments do not supply the level of support for which the indirect costs are meant. For example, program staff, which are supported 100% by state lines meant for teaching support, are in fact doing grant administration. The program has had to hire a fiscal specialist for budget monitoring, and she is paid from direct cost money, rather than from the indirects that should cover that service. Nutrition Science Program faculty virtually to a person reported that they found this practice unfair and burdensome. The departments are not providing the services that indirect costs are intended to enable. This practice, if it does not do so now, will eventually suppress initiative. And it raises both budgetary and regulatory questions. As the research

component of the program increases, the need for this indirect cost support for faculty will increase, and the problem will become more acute.

There are a variety of structures that could serve the functions of this group of people: center, institute, department, or program with increased authority and a greater degree of match between it and responsibility the Program is asked to assume. The program must have the resources it needs to complete its strategic objectives

#### Space

Although described as problematic, space is in our view quite good, although renovations are clearly in order now that the animal cages have been removed from the basement and this space is potentially available for conversion into student space. That they have lab space is a blessing. The Raitt Hall location has pluses (lovely building) and minuses (remote from classes and Health Sciences). Another plus is that it is distinguished upper campus property, with great meaning to alums. If current students could identify it as home, it would have great future meaning to them as well. However, all of the students' classes are in the Health Sciences Building and few students from any Public Health program have easy space to call their own in that system. But when they are not in classes, students should be encouraged and should feel attracted to coming to Raitt Hall to be in a place that is their own.

#### Student issues

The committee interviewed two groups of students, including a group of PhD students and a group of MS/MPH students. One group of alumni was scheduled but did not come to the interview.

Several strengths were identified that emerged consistently through this process. Students get solid, high quality training in research skills, as well as in basic nutrition science. All of the students interviewed felt that they were getting good training from expert faculty in the program. Students appear to be involved in major decisions about how the program functions, including holding membership on key committees (e.g., curriculum committee, admissions committee).

The core classes were reported by students to be well taught. This is in contrast to some of the relatively low teaching ratings, as reported on earlier surveys in the self-study. The current curriculum changes appear to be a positive move, and responsive to student feedback. There was some concern about the "weakening" of the basic nutrition knowledge through reducing the core coursework from three to two courses by the PhD students, but most of the feedback about the revision process was positive. The core courses provide the basic knowledge for advanced knowledge and experience students must go to other departments and faculty.

One of the major issues reported by students was the lack of a physical home (see Space, above). When students are taking classes in the Health Sciences building, they have nowhere to sit between classes and interact with other nutrition or public health students. There is a library space in Raitt Hall that is open to students during the day, but it is not seen as attractive space and is not widely used, according to the students. Students saw this lack as contributing to limited cohesion among the student group. However, the recent additions to the MPH student group are holding a support/journal group in the near future, a sign

that this might be an important need among students. Several programs in the Department of Health Services hold seminars for all MPH students and require attendance throughout the student's graduate career to address the problem of student cohesion.

The lack of student financial support was mentioned by both students and faculty as a considerable problem and a barrier to recruiting the best PhD candidates. Often only one year of support is provided to PhD students, and then the student is encouraged and helped to write a supplement or other grant to support training for the rest of the period. Many PhD candidates ultimately went elsewhere this year and in past years, because of the lack of funds. The program leader did negotiate for the opening of two funded training grants to support doctoral candidates, one in Epidemiology and one in Health Services. However, the long-term viability of the training program depends on graduate student support, and this problem must be addressed with either a training grant or other support for trainees.

Finally, mentoring of students was reported to be mixed. On the one hand, the PhD students were attached to their mentors and felt that they got good mentoring from their primary mentors. The master's students did not feel so attended to by their mentors, and mentioned getting time with faculty as difficult. Faculty mentioned the lack of time for master's student mentoring as a problem and a burden, and as a barrier to performing the other duties of a faculty position. All students felt that they had to use their own initiative to obtain mentors, professional news, and opportunities. This problem seems to be a structural issue, as both students and faculty lose out in the opportunity.

#### Other issues

MPH thesis. The external reviewers in particular felt most strongly that the MPH thesis was not a sensible use of faculty or student time, being neither productive for faculty in generating peer reviewed papers necessary for the dissemination of new knowledge. Research could be written up in papers and submitted to journals with more yield from the same amount of effort, and the same emphasis on independent research and synthesis of learning experiences.

Would faculty join a new department of nutrition if this were the direction the School took to deal with infrastructure problems? Although many faculty volunteered the idea of a separate department, or expressed support for such an idea, when asked if they would join such a new unit, very few indicated that they would.

A gap between the program for PhD and masters' students and that for the Registered Dietitians was clear. Faculty teaching the latter felt under-appreciated and over-committed. The faculty position leading the R D program has had massive turnover in a very short time. This is serious since this is one of the few and best programs in the Northwest and a fertile ground for sustained alumni loyalty building for the future. The committee recommends steps to allow both faculty and students to bridge this gap.

Progress since the last Review

The last ad hoc review was completed in September 1998. Its major findings and progress since that time on the basis of the current committee's review are described below in Table 1.

Issue	1998 Review	2005 Review Conclusions	Recommendations and Next Steps
Faculty	Caring core faculty who work hard to support Masters and PhD students in program, in spite of dwindling resources	Core faculty continues to be exceptionally dedicated and caring. A laudable innovation is that a new MPH/RD program has been added, other Masters and PhD tracks have expanded, in spite of dwindling resources and exceptional growth of research. Core faculty are extremely impressive, dedicated, and bring great strengths to the program; they are well respected in the scientific community, the public health and health services community, and within the state in educational circles.	CONTINUE TO BUILD FACULTY, WITH ALLIANCES FROM RELEVANT DEPARTMENTS. WORK ON PROMOTION AND ADVANCEDMENT OF CURRENT FACULTY, BY CLOSER COMMUNICATION WITH DEPARTMENT CHAIRS, ETC
Courses	Courses well taught and meet the students' needs	Curriculum has been reviewed to eliminate overduplication in 2005 and new curriculum will go in place mid 2005	TRY NEW SYSTEM AND EVALUATE; ENSURE RESOURCES PRECEED COMMITMENTS TO ADDITIONAL COURSES
Space	Excellent lab and office space	No communal or study space for students in facilities in Health Sciences where most classes are taught, but space is available in upper campus at Riatt Hall. Space now tight in Riatt hall due to influx of new grants. Monies to renovate now-empty animal facilities are not available	USE SPACE IN RAI TT HALL EFFICIENTLY TO CREATE MORE OPTIONS FOR STUDENTS.
Interdisciplinary ties	Ties in the greater university community	Interdisciplinary ties remain strong, but	WORK TOWARDS RECOGNITION OF

	are many; there are multiple departments and clinical programs with nutrition as a focus who benefit from teaching and research done by the program	infrastructure for interdisciplinary research and teaching is outdated and cumbersome, and likely unsustainable with additional pressures for research, teaching and university and community service. The belief that nutrition is integral to education of all health care professionals remains strong as does concern about meeting community nutrition related needs. Nutrition is not, however, a core competency for the School in which the program is housed. Nor are funds available for realizing all aspects of this mission	NUTRITION AS CORE COMPETENCY IN PUBLIC HEALTH.
Marketability of Students Produced by Program	Meets a regional need	MS RD program and PhD remain strong and graduates are highly employable; now MPH RD program has developed and it is strong	IMPROVE MSRD FACULTY WORKING CONDITIONS AND ADDRESS FACULTY AND STUDENT CONCERNS EFFECTIVELY; STOP TURNOVER
Administration	Nutrition sciences executive committee meets quarterly to monitor and discuss student progress	Unclear what current organization is in this regard	INCREASE INFRASTRUCTURE AS THE PROGRAM MATURES.
Weaknesses			
Vision	Apparent lack of a vision for a unified mission for programs in nutritional sciences due to lack of leadership within the program, and atrophy of the program in terms of faculty commitment lack of integration of nutrition sciences into departments within the School of Public Health and Community Medicine	The program by all accounts is stronger, more unified, and vigorous with a vision for a unified program. However, the vision at present is opportunistic rather than strategic, and unsustainable in the by current administrative infrastructure, monetary resources, and incentives. The program is now housed in the School of Public Health and welcomed at the	HOLD STRATEGIC PLANNING MEETING, DECIDE ON FUTURE DIRECTIONS, HIRE FACULTY AND SUPPORT STAFF AND BUILD RESEARCH IN THOSE DIRECTIONS.



	<p>The committee reported that the lack of a clearly articulated vision was due to the confusion of placing the MS RD and PhD Programs in the School of Public Health as opposed to another School, such as the School of Medicine</p> <p>The committee viewed the university as having a piecemeal approach to nutrition education and research, that, if aggregated could better serve students and establish a national presence in nutrition.</p>	<p>highest levels (Dean) but housed rather than integrated in several departments of the school.</p> <p>The prior committee viewed the traditional focus on dietetics as hindering articulation of the nutrition research science program with other schools in the health sciences. The new focus has been expanded and much new research as well as a number of other programs (MPH RD) has been instituted. The dietetic internship director has changed several times, because of low pay and 50% time that is not adequate. The position appears to take 100% time, and there is no likelihood a successor would do this amount of overtime. The dietetic internship was reported to be poorly understood and viewed as less prestigious or desirable than other tracks within the departments and within the School, and faculty and students associated with this track resent this.</p> <p>The problem persists. A clearly articulated vision of a strategic nature rather than an opportunistic nature is needed. There continues to be confusion and lack of integration in the departments in which faculty are placed in the School of Public Health</p>	
Director	Lack of a director seriously limited the	An excellent director was found, existing	SUPPORT DIRECTOR AS HE CONTINUES

	integration of the program into the School of Public Health	contacts have been nurtured and new contacts have been expanded. The director is highly visible.	DEVELOPING PROGRAM IN CONCERT WITH FACULTY
Models	The PhD program needed to examine models integrating research education and practice	The program at the PhD level now firmly integrates research education and practice and the PhD program has expanded	CONTINUE DEVELOPING PROGRAM
MPH Program	Students were not satisfied by this program, which was new	MPH students, and particularly MPHRC students were pleased with their program, the courses, although they were looking forward to the new revision of the curriculum in mid 2005. They expressed feelings of isolation from their departments in the School of Public Health but felt strong connections with the nutrition program	SAME
Morale	Morale was low but there was a general feeling of hope	Morale is good although there is deep concern about the infrastructure and its cumbersomeness and of the difficulties interdisciplinary programs experience at the institution	CONTINUE TO WORK FOR MORE RESOURCES, WHICH WILL RELIEVE BURDENED FACULTY
Mentoring of PhD students	Lack of consistent mentoring of some doctoral students was a problem	PhD students were pleased with their mentoring optimistic, and felt they had faculty support, although they had to seek it out on their own.	CONTINUE TO ATTRACT STRONG STUDENTS AND TRAINEES. CONSIDER TRAINING GRANT OR TRAINING FUNDS APPLICATIONS
Training grants	No training grants	Training grant is not available. There are some funding opportunities but this remains a problem	SAME
	Mentoring of junior faculty was viewed as a problem	University has no commitment to them, with no promise of salary now or ever. Mentoring of junior faculty by parent departments seems	SET UP MENTORING PROGRAM TO USE BROAD RANGE OF CORE AND OTHER FACULTY TO HELP JUNIOR FACULTY MAKE DECISIONS

		sketchy if it is even existent. Unclear what the division of responsibility is for this between program director and department heads	AND GET PROMOTED.
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