Present: Bond, Ciufetti, Collins, Feller, Fisk (Acting Chair), Francis, Pedersen, Prucha, Rettig, Sanchez, Selker, Watrous

Absent: Bird, Brauner, Markle

Guests: Stephen Giovannoni, Sherman Bloomer, Wayne Kradjan

I. Approval of Council Minutes

The motion to accept the minutes from January 9, 2003 passed.

II. Category I Proposal for a Master of Science in Molecular and Cellular Biology

Stephen Giovannoni, (Director, Molecular and Cellular Biology Program [MCB]) introduced a proposal for a Master of Science degree in Molecular and Cellular Biology with a brief history of the MCB graduate program. Because MCB is an interdisciplinary program, which draws on faculty in many academic departments at OSU, and because master of science disciplinary degrees also are available in the departments that participate in the MCB program, the faculty members who developed the proposal for a PhD degree in MCB did not anticipate the need for the MS degree. MCB faculty have since concluded that it was a mistake to start a doctoral degree program without a master's degree option. Students whose career plans changed after entry into the PhD program were not able to cut their studies short by switching to the MS degree as is done in other programs.

The proposal before the Council provides for future participation in the professional science master’s degree project, which was discussed by the Graduate Council on January 9, 2003. Giovannoni chose to include a discussion of the professional master’s degree project in the current proposal with the understanding that the MS in MCB will comply with Graduate Council requirements that affect all professional science master’s degree programs. Sherman Bloomer (Dean of the College of Science) said that 10 years ago MCB master’s degree holders may not have been able to find work, but this is no longer the case. The professional science master’s degree programs at Oregon State University are being funded in part by a grant from the Sloan Foundation and are often referred to as “Sloan masters.” The College of Science would be exploring this type of initiative even if the Sloan program did not exist. Lynda Ciufetti (Science) explained that the idea of adding the MS to the current PhD in MCB has been under discussion for a long time and that the need for a master’s degree has become increasingly apparent in recent years. John Selker (Engineering) asked whether any conflicts with graduate programs in other departments existed, whether liaison had been established with other departments and, if so, what the response was. Giovannoni replied that no negative responses were received after he
sent a letter to all departments involved. He also reported that, in private conversations, the other departments in the College of Science supported this proposal. Letters of support are attached to the proposal.

Barbara Bond (Forestry) asked whether the requirements for the professional master's degree outlined in this Category I proposal are equivalent to the professional master’s degree described by Don Armstrong at the January 9, 2003, Council meeting. Martin Fisk (Oceanic and Atmospheric Sciences) summarized the motion concerning professional master’s degrees adopted at the January 9 meeting. (Fisk had moved to approve the use of internships as capstone experiences for specified areas of concentration in existing degree programs, with a minimum of 6 credits of internship and a maximum of 12 credits of internship allowed on a 45 credit non-thesis MS degree, conditional upon submission to the Council of: 1) a description of the internship outlining a) who will be supervising the students, b) how the internship will be evaluated and c) the nature of the final defense/exam and 2) a Category 1 proposal for a new professional masters degree submitted to the Graduate Council prior to the end of the Sloan Foundation grant.)

Giovannoni pointed out that MCB was submitting a proposal with both thesis and non-thesis options. David Gobeli (Business) asked how many students will participate in the program and how they will be supervised. Giovannoni said there are approximately 30 PhD students in the program now; adding 4 to 10 MS students would not crowd the current classes, with the exception of MCB 525. Selker asked what kind of experiences would be required if non-thesis students participate in internships. Giovannoni said that a research component, which would fulfill the capstone requirement for all master’s degrees, would still be required. Selker asked whether non-thesis students must fulfill a writing requirement. Giovannoni said that non-thesis students would still be required to present the results of their research to their advisory committees and would still be required to write a research paper as a part of the final examination.

Fisk asked whether the proposal contained one degree or two. Giovannoni said that this Category I proposal asked for one degree, but allowed either a thesis or non-thesis option for the master’s degree. Giovannoni added that this proposal would enable the students to meet degree requirements until a separate professional master's degree is approved. Bond did not see any differentiation in learning outcomes between the thesis and non-thesis options. Sally Francis (Graduate School) pointed out that many programs throughout the university offer both thesis and non-thesis options for the Master of Science. She added that the Council should treat the part of this proposal that will be the vehicle for the professional degree the same way it had treated other professional master’s degrees on January 9, 2003. Bloomer argued that it is not appropriate for someone in a master’s degree to be expected to submit a mini-PhD dissertation. Rather, faculty should recognize that there are important differences between the two degrees. Bruce Rettig (Graduate School) pointed out that some departments choose not to have a non-thesis option in their MS degree, relying instead on other non-thesis master’s degrees such as the Master of Agriculture. The creation of a master of applied science degree would provide an alternative for those departments that did not wish to offer non-thesis MS degrees. Bloomer
shared his views on what he saw as a debate on applied science. He argued that “applied science” implies a distinction between applied science and so-called “hard science” that does not exist.

Wayne Kradjan (Dean of the College of Pharmacy) said that the relationships and collaborative efforts that occur in internship situations could be of great benefit to graduate students. After noting that he has been working very closely with industry recently, Giovannoni argued that a new breed of biotechnology industrialist is at work today. Although universities have not been doing a good job of training people to fill the jobs in industry, this proposal would allow OSU to contribute to this vital and expanding sector and to train students for biotechnology jobs.

In response to a question from Barbara Watrous (Veterinary Medicine) about statistical requirements for MCB MS students, Giovannoni identified a current class in bioinformatics that would fulfill that need. Bloomer said that bioinformatics might constitute a specialization area within MCB.

Selker, noting that many universities differentiate between thesis and non-thesis requirements, argued that the Council should examine these distinctions, not only in regard to this proposal, but also with respect to other degree programs at OSU. Fisk, recalling the passage just two weeks ago of a motion concerning the professional master's degree and the use of internship to fulfill capstone requirements, suggested that the Council was being asked to act on the same issue, but in a slightly different fashion. David Gobeli (Business) and Bond added their concern about the need for advising by OSU faculty, not just by researchers in industry.

Giovannoni said that he was willing to revise his proposal in light of new information from the planning group working on the Sloan project and from the Graduate Council. He also described his agreement with a draft of material that Don Armstrong was circulating among the professional master’s degree program planners in anticipation of his return visit to the Graduate Council. Martin Fisk (Oceanic and Atmospheric Sciences) said the Council’s concerns are with the description of the internships, especially who will supervise them.

Ciufetti pointed out that two issues are being considered at one time. What Giovannoni is presenting is a Master of Science in MCB and what was presented two weeks ago was a professional degree with internship used to fulfill capstone requirements. Francis delineated the differences between the earlier motion and this proposal. Internships would not be used to fulfill capstone requirements as this proposal is worded, but this master's degree would be used to fulfill Sloan requirements. She also pointed out that the degree program would be subject to all subsequent decisions by the Council.

Bloomer said that, if the Sloan program did not exist, Giovannoni would be coming forward with both a thesis and a non-thesis option; if the non-thesis option used internship to fulfill capstone requirements, the Council would be right to have legitimate concerns about internships. Fisk argued that spending 6 to 12 weeks in a research lab is not equivalent to writing a research paper. Bond added that non-thesis requirements should be consistent across the campus. Bloomer
pointed out again the snobbism inherent in the “thesis equals better” versus “non-thesis equals worse” distinction.

Wende Feller (student) asked for clarification about the projected number of students. Giovannoni answered that if the Sloan grant was successful, 10 additional students would be added to the program; he added that the program has generated a great deal of interest already.

The issue of appropriate mentoring was discussed and a suggestion that every student should have a faculty advisor resulted. Giovannoni said that he believes a mid-term report by the internship advisor should be required for each student in order to prevent any problems at the site of the internship. Selker pointed out that every master’s degree requires a major professor.

Discussion revolved around the use of a major professor versus an internship supervisor. While every master’s degree student at OSU must have a major professor, the presentation at the January 9, 2003 meeting suggested that only an internship supervisor would be advising students. Differing interpretations were offered about Armstrong’s concern about the difficulty in gaining wide involvement in Botany and Plant Pathology if faculty working with the professional master’s degree program were also required to supervise a directed research project.

A motion was passed to approve the Category I proposal to establish a Master of Science in MCB conditional upon the addition of a paragraph describing the oversight of the non-thesis option prior to forwarding the proposal to the Curriculum Council.

III. Graduate Level Learning

On November 14, 2002, the Graduate Council approved a new policy requiring that 50% of all credit hours on a graduate program of study (not including capstone activities such as thesis, research-in-lieu-of-thesis or internship) be stand-alone graduate credits. Some Council members interpreted this motion as allowing the remaining credits to include upper division undergraduate courses, but other Council members argued that permitting the use of undergraduate credit on a graduate program of study was not part of the November 14 action. It was agreed that if the Council wished to permit the use of 400 or 300 level courses on a graduate program of study, a new action to that effect would be needed.

Fisk said that he was in favor of allowing 300 and 400 level courses on programs of study, subject to the approval of the student’s advisory committee. Ciuffetti said that she would have voted against the policy change approved on November 14, 2002, if it had included an allowance of 300 or 400 level coursework. Selker, observing that the whole conversation on slash courses came forward as a result of concerns raised during the accreditation review, asked whether the request to allow undergraduate courses on a program of study would resolve a problem that does not exist. Fisk said that students pursuing interdisciplinary programs are at a disadvantage because, although they have a strong background in one discipline, they need to take undergraduate courses in a different discipline before they are able to work across disciplinary lines.
Alex Sanchez (Education) pointed out that allowing some undergraduate courses would provide flexibility, but that the student’s advisory committee is the final arbiter on the program content. Rettig pointed out that, in the case of master’s degree programs, there often is no complete committee prior to the final examination. Unless a student declares a minor, the only signatures required on a program of study for a master’s degree are those of a major professor and the head of the department or program.

Bond reminded the Council that this discussion grew out of need to limit the number of slash courses on graduate programs. Believing that most graduate students have some deficiencies in their background, she argued for allowing a small number of 400 level courses on programs of study to help students overcome those deficiencies. Ciuffetti, who was uncomfortable in solving problems that do not exist, asked whether proper 400/500 level courses would meet the need identified by Bond. Fisk noted that the National Science Foundation, which is funding an IGERT (Integrative Graduate Education and Research Traineeship) program at OSU, has asked whether any institutional changes have come about due to the interdisciplinary nature of graduate education. NSF, having observed many barriers to interdisciplinary education, is encouraging changes that would allow new types of education to evolve. Ciuffetti said that a PhD student, even on an NSF grant, should have at least 50% graduate-only credits on his/her program. Gobeli suggested that flexibility in coursework could be achieved several ways. Bond reminded the Council that offering more courses would not be an option for most departments. Feller observed that allowing 300 and 400 level courses diminishes the rigor of graduate programs. Selker said that another solution to the problem would be to require fewer graduate level credits in total. Fisk said that students who must take an undergraduate course as a prerequisite and who cannot place those courses on a graduate program of study, face substantial challenges. The cost of education in those circumstances could hinder the ability of students to finish their degrees. Selker pointed out that, because 12 credit hours per term is an average course load at OSU, 45 credit hours is not that difficult to achieve during the two years common to most master’s studies.

Francis reminded the Council of the creation three years ago of a task force on graduate level learning to investigate the concerns about 500 level courses at OSU. In the past two years, exit surveys conducted by the Graduate School have identified concerns about the quality of graduate instruction, although there is no way for us to identify the source of this concern. Regardless of criteria put in place by Graduate Council, no one is present in classrooms to enforce requirements that 500 level courses meet requirements set for graduate level learning. Francis also observed that, in a survey of our peers, we are the only institution that does not allow undergraduate course work on graduate programs; some allow as many as 22 credit hours. Rettig pointed out that those institutions do not have slash courses. Fisk suggested that a number of slash courses might be eliminated as a result of the requirement that graduate programs require 50% of stand-alone graduate course work. Bond observed that slash courses often are used to increase the number of students enrolled in the course. The problem arises when the instructor does not offer an adequate graduate level learning experience.

Bond stated her frustration that a Council action to eliminate slash courses last year was cancelled by lack of support from the Curriculum Council. Selker suggested that another way to
eliminate the problem with slash courses is to adequately police the requirements for a 500 level component.

Ciuffetti argued that use of 300 and 400 level course work on PhD programs of study would water down that degree. Elaine Pedersen (Health and Human Sciences) observed that, because master’s level work can be used on a PhD program of study, allowing 300 or 400 level course work for master’s degrees would imply that they could be permitted on PhD programs.

A motion was offered that a committee craft a resolution for consideration, that the Council consult with all academic departments in the university regarding this issue and that the Assistant to the Dean work to provide the feedback from the departments to the Council. This motion and any further action were delayed to a future Council meeting. Bond suggested that slash courses and the number of credits of 400-level courses should be considered together at that time.

Ciuffetti asked Bond whether the Task Force on Graduate Level Learning had polled departments to determine the economic impact of eliminating slash courses. She added that problems could be created for graduate education at OSU if 500 level courses are eliminated because of lack of resources.

IV. Category I Proposals from Public Health

Anna Harding (Chair, Department of Public Health) presented two Category I proposals. That department has been looking for ways to streamline their efforts; the prospect of a graduate program review helped to focus and accelerate their thinking. The MS degree in Health and Safety Administration degree was created several years ago—before the creation of the Master of Public Health in Health Care Administration. The Occupational Safety option can better be served by use of the Environmental Health Management degree.

A motion was offered to approve the elimination of the Health and Safety Administration degree. In response to Feller’s question about students in the program, Harding said that students will be allowed to graduate with the degree in which they are currently enrolled, but she added that new students would not be admitted. The proposal to eliminate the Health and Safety Administration degree is related to a separate proposal to change the name of the Environmental Health Management degree to Environmental Health and Occupational Safety Management. Harding reported that, in her conversations with students, she learned that they believe the new degree name will better serve their needs.

The motion to approve the elimination of the Health and Safety Administration degree was unanimously approved. A second motion—to rename MS in Environmental Health Management to Environmental Health and Occupational Safety Management—was unanimously approved.