MEMORANDUM

To: Board of Regents

From: Board Office

Subject: Proposal for an Undergraduate Minor in Emerging Global Diseases at Iowa State University

Date: August 30, 2001

Recommended Action:

Approve the Iowa State University proposal to establish an undergraduate minor in Emerging Global Diseases.

Executive Summary:

Iowa State University is requesting approval for an undergraduate minor in Emerging Global Diseases in the Departments of Entomology and Zoology/Genetics in the Colleges of Agriculture and Liberal Arts and Sciences.

The Emerging Global Diseases minor is designed for undergraduate students interested in emerging infectious diseases, the international control of human and animal parasitic disease, and the underlying biology and ecology of the disease agents. This area of study provides undergraduates an opportunity to focus on the critical and topical areas of international health and agriculture.

The minor will strengthen the undergraduate experience in diversity and international education, serve as a new programmatic linkage between undergraduate curriculum and faculty research, and promote interdisciplinary collaboration for undergraduate curriculum. Students in biological and social sciences, especially those planning to continue their studies in advanced degree programs in the sciences or in professional health care, will benefit from the program. In addition, students interested in cultures and practices in developing countries, in global cultural and biological diversity, or in a career with international businesses/government agencies will be potential candidates for the program.

There is a recognized need for increased opportunities for student learning about global issues and ethics. Emerging Global Diseases is an ideal subject area about which to develop a learning experience in international cultural/biological diversity. Furthermore, a minor in Emerging Global Diseases provides an excellent forum for promoting discussion on ethics applied to global situations, as questions are evaluated about national funding of research areas important to international health and equal access to medicine and technology-based solutions to health problems of humans and agriculturally important animals.

The Board Office and the Interinstitutional Committee on Educational Coordination (ICEC) have reviewed the University's proposal and recommend approval.

The University's responses to the Board of Regents questions for new program approval are attached on pages 3-5.

Diana Gonzalez
New programs/Sept01 ISU GD3b

Approved:

Robert J. Barak

B. REGENTS PROGRAM REVIEW QUESTIONS (Minor in Emerging Global Diseases)

1. Need

a) How will this proposed program further the education and curriculum needs of the students in this discipline?

The Emerging Global Diseases minor is designed for undergraduate students interested in emerging infectious diseases, the international control of human and animal parasitic disease, and the underlying biology and ecology of the disease agents. This area of study presents undergraduates the opportunity to focus on the critical and topical area of international health and agriculture. Likely candidates for the program include students in the biological and social sciences, especially those planning to continue studies in advanced degree programs in professional health-care or in the biological sciences. In addition, students with greater focus in the humanities who are interested in cultures and practices in developing countries, in global cultural and biological diversity, or in a career with international business/government agencies will be candidate participants in the program.

b) How does it further the educational and curriculum needs of other units in the college or university?

The global nature of the proposed minor addresses a targeted need in our present undergraduate program, a need to globalize the curriculum. Emerging Global Diseases builds on strengths across college boundaries, as courses from departments in Liberal Arts and Sciences (Anthropology, Zoology/Genetics), Agriculture (Entomology, Microbiology, Zoology/Genetics), and Veterinary Medicine are combined within a curriculum to create an intense undergraduate experience in this critical issue of health and agriculture. We have designed the Emerging Global Diseases minor to (1) strengthen the undergraduate experience in diversity and international education, (2) serve as a new programmatic linkage between undergraduate curriculum and faculty research, and (3) promote interdisciplinary collaboration for undergraduate curriculum.

2. a. What programs in this field of study are available in other colleges and universities in Iowa?

No Regents university in Iowa offers this type of program. Some, but not all, courses within the curriculum are offered at most universities and college in Iowa.

b) With what representatives of these programs have you consulted in developing this proposal? Provide a summary of the reactions of each institution consulted as well as the complete text of the responses.

We have been in contact with Dr. Barbara Hetrick, Professor and Chair, Department of Biology, University of Northern Iowa, and with Dr. George Cain, Professor, Department of Biological Sciences and the only resident parasitologist at the University of Iowa. Both felt the program (in Dr. Hetrick's words) "*will provide an excellent opportunity for student.*" Dr. Hetrick also sees potential opportunities for faculty interactions; a recent hire at UNI has a research background in mosquitoes that vector disease agents. Complete responses are in Appendix 1.

c) In what ways is this proposed program similar to those mentioned in 2a? In what ways is it different or does it have a different emphasis?

This is a new program that is unique in its focus on global parasitology.

d) How does the proposed program supplement the current programs available?

Emerging Global Diseases consists of an interdisciplinary curriculum that draws from across college boundaries and, as a minor, can supplement programs in any department on campus. There is a recognized need for increased opportunities for student learning about global issues and ethics. Emerging Global Diseases is an ideal subject area about which to develop a learning experience in international cultural/biological diversity. Furthermore, emerging disease provides an excellent forum for promoting discussion on ethics applied to global situations, as questions are evaluated about (i) national funding of research areas important to international health and (ii) equal access to medicine and technology-based solutions to health problems of humans and agriculturally important animals.

e) Has the possibility of some kind of interinstitutional program or other cooperative effort been explored? What are the results of this study?

As the program develops, we plan to pursue interinstitutional interactions. We have identified two faculty at UNI that have experience with insect vectors and leishmania (a protozoan parasite of major importance to human health), and several faculty at the UI (including Dr. Cain, Dr. Donelson, Dr. Kirchoff, and Dr. Wilson) that are experts in protozoan parasites of man and animals.

f) List the Iowa institutions in which articulation agreements are being developed for the proposed program.

None.

g) Provide the Classification of Instructional Program (CIP) code for the proposed program.

26.0610

3. Are there accreditation standards for this program? If so, please provide a copy of the accreditation standards.

There are no such standards.

a) What is the accreditation organization?

b) What accreditation timetable is anticipated?

4. Does the proposed program meet minimal national standards for the program, e.g., Council of Graduate Schools or other such bodies?

There are no national standards for this type of program.

5. Please report any additional resources required.

No significant additional resources are required.

6. Please report any reactions of the Iowa Coordinating Council for Post-High School Education.

This program has not been reviewed by the Council.