

APPENDIX L

September 26, 2002

MEMORANDUM

To: Committee on Educational Planning, Policies and Programs
From: Molly Corbett Broad
Subject: Establishment of the Center for the Biology of Nematode Parasitism at North Carolina State University.

Request to Establish

In February 2000, North Carolina State University received authorization to plan the Center for the Biology of Nematode Parasitism. The planning is now complete, and NCSU has submitted a request to establish this unit as an institutional research center. The following sections briefly summarize the information provided by NCSU to satisfy the requirements of Chapter 1200.6[R] in the *University of North Carolina Policy Manual*.

Goals and Objectives

Nematodes (unsegmented round worms) are the world's most important and ubiquitous parasites, attacking humans, domesticated animals, and cultivated crops. Nematodes account for approximately four of every five animals in the world. They cause untold levels of economic damage and suffering worldwide, and are responsible for many severe human diseases, affecting up to half the world's population. Recent advances in genome sequencing and biology have created unprecedented opportunities to understand the basic biology of nematode parasites. Thus, with the goal of revealing and understanding basic biological mechanisms of parasitism by nematodes, the center will integrate nematode research from historically distinct fields, including plant nematology, helminthology, and studies of free-living (i.e., non parasitic) nematodes. This improved understanding will help researchers devise new strategies to manage parasitic nematodes.

Relevance to Institutional Mission; Relationship with Existing Academic Units

The center's core faculty members are from the College of Agriculture and Life Sciences and the College of Veterinary Medicine. Additional faculty members in other colleges, as well as other universities, also are affiliated with the center. As part of a broader collaborative activity in genomic sciences and parasite management at NCSU, the center will have links with both private and public institutions supporting programs related to nematode parasitism.

Anticipated Effects on Instructional Programs

The center will engage in diverse instructional activities, including teacher training, school classroom science project development and support, training of graduate students and international scholars (especially from developing nations), and outreach to rural communities. These efforts will be undertaken in the context of the cutting-edge research and technology-development environment of the center. To maximize the center's instructional impact, each of these activities will be coordinated with facilities and programs already in place at NCSU and at other universities across the state. A key post at the center will be that of Education Coordinator.

Administrative Structure

The center's Director will be Dr. Charles H. Opperman, Associate Professor of Plant Pathology. The Director will report to the Dean of the College of Agriculture and Life Sciences. An Administrative Committee, composed of department heads from the participating departments, will set internal policy for the center. An external Scientific Advisory Board, composed of five academic and industry experts in nematode biology, genetics, parasitism, and computational biology, will provide advice, guidance, and direction to the center. An Industrial Advisory Board, constituted from the center's industrial members, will provide advice and the corporate component of the center. This group also will fund technology development and enhancement, tool development, and other research to further nematode management and control.

Budget and Anticipated Sources of Funding

The center's first-year budget is expected to be approximately \$100,000, including operating costs, programmatic support, and a full-time administrative officer. The budget's funding will derive from several sources, including the North Carolina Agricultural Research Service, the National Science Foundation, and corporate entities. Funding is currently in hand and available for each of the subsequent four years. Corporate memberships will begin in the first year and will provide increased funding for the center's operations. No additional state funding is requested with this establishment.

Space and Capital Needs

The College of Agriculture and Life Sciences has allocated 5,000 square feet of space in the Partners II building on the Centennial Campus. The College will pay the rental costs for the center's duration. Funds have been secured to upfit the new center laboratories. Additional funds to equip the laboratories will come from major instrumentation proposals to external agencies.

Recommendation

It is recommended that North Carolina State University be authorized to establish the Center for the Biology of Nematode Parasitism.

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