BACKGROUND AND REQUEST

UNIVERSITY OF CINCINNATI
Bachelor of Science in Neuroscience

EXECUTIVE SUMMARY/RECOMMEDATION

This program clearly meets Regents' standards for baccalaureate degree programs. There were no concerns identified in the review.

Request: University of Cincinnati requests approval for a Bachelor of Science in Neuroscience with curricular tracks in neurobiology, neuropsychology, and brain, mind and behavior studies. The program will be housed in the College of Arts and Sciences in collaboration with the College of Medicine. Neuroscience, the study of the brain and nervous system, is a rapidly growing area of science that spans a variety of research topics and methods, all aimed at understanding basic nervous system function and causes of brain and nervous system diseases.

Program Purpose/Mission: The Bachelor of Science in Neuroscience offers students the opportunity to immediately pursue research positions in pharmaceutical and biotechnological industries, careers in science journalism, preparation for biology teaching positions in secondary education, and further study in a variety of professions (graduate education, medical education, law, business education). Neuroscience is already an area of research strength and academic excellence in graduate/medical education at the University of Cincinnati. Neuroscience faculty are recognized bench researchers in cognitive/computational neuroscience, developmental neurobiology, functional brain imaging, studies of motivation and reward, neuroendocrinology, neuroplasticity and regeneration, sensory physiology, and sensation and perception. Leading clinical researchers are working on neurological and psychiatric disorders such as stroke, Parkinson's disease, epilepsy, substance abuse, biopolar disorder, and obesity. Undergraduate students will benefit from research opportunities that reflect a wide range of techniques and approaches, from traditional scientific collaborations to more applied opportunities.

Enrollments: The program will initially enroll students pursuing undergraduate tracks or courses in psychology and philosophy and other undergraduate science programs. It is anticipated that after five years, the program will grow to a size of approximately 60 students. An undergraduate program in neuroscience is not generally available in Ohio, and is not available in the Cincinnati region. Oberlin College has a neuroscience department with 7 faculty and 60 students in neuroscience and biopsychology.

Curriculum: The Bachelor of Science in Neuroscience is interdisciplinary with participation from neuroscientists in the College of Arts and Sciences (biology, psychology, and philosophy), the College of Medicine (cell biology, neurobiology

and anatomy, molecular and cellular physiology, molecular genetics, biochemistry, microbiology and psychiatry), the Biomedical Engineering Program, and Children's Hospital (Developmental Biology, Pediatrics). The curriculum of the proposed baccalaureate degree is designed to provide students the following: 1) a core background in neuroscience; 2) foundation research skills, including statistical analysis of experimental design and methodology, and basic laboratory techniques; 3) exposure to current research in neuroscience; and 4) an independent "capstone" research experience. Students will have the opportunity to pursue three tracks: 1) neurobiology, 2) neuropsychology, and 3) brain, mind and behavior studies.

Resource/Faculty Needs: No new faculty positions will be required for the proposed baccalaureate degree. Collaborating departments currently have graduate programs in neuroscience. Foundation curriculum is extensively drawn from existing programs in biology, chemistry, psychology and philosophy. Current needs of the program are met by existing facilities (including lab facilities). A multidepartment Steering Committee will provide academic direction for the program. A Program Director will be appointed and responsible for the day-to-day operation of the program. UC anticipates hiring a coordinator for laboratory and research experience. The undergraduate administrative structure of each department will administer the major. Additional lab facilities may needed as the program grows in enrollment.

End of Comment Period: December 3, 2007
No Comments Received, Recommend Approval

Approved:	12/6/07
Eric D. Fingerhut, Chancellor	Date