The Graduate Training Grant

A graduate training grant from the National Institutes of Health has contributed to training several outstanding graduate students, annually since 1987. This fellowship is offered for 2-year periods to candidates typically within their first 4 years of training. The candidates are nominated by their faculty mentors, all of whom are members of the Program. The successful students are selected by the Executive Committee of the Program. The Training Program has strongly facilitated our recruiting and educational strategies. A supportive and stimulating scientific environment has allowed us to attract and recruit a critical mass of excellent students with a committed interest in biomedical research.

Administrative mechanisms are in place to allow students to have one or more mentors who are located at either UMDNJ, or Rutgers University. The trainees acquire the background, scientific knowledge and experimental expertise to prepare them for productive research career and the majority pursues an academic track upon completion of their graduate studies. Recent graduate student trainees have accepted postdoctoral appointments at top ranking academic institutions, including Harvard, Stanford, Johns Hopkins, and Columbia, as well as corporate settings that include SmithKline Beecham, Bristol Myer Squibb, Colgate-Palmolive and Amgen.

Graduate studies in the Program trains individuals with baccalaureate degrees in biology, biochemistry, chemistry, mathematics, physics and other related areas. Training toward the PhD degree in Biological Sciences is directed by the faculty listed in the previous section. This multidisciplinary approach is particularly suited to the study of molecular biology, a field in which answers to fundamental questions require physiochemical, biochemical, physiological and genetic approaches.

The faculty in the Program offers opportunities for training in the areas of gene structure and organization, protein and nucleic acid biosynthesis, molecular genetics, membrane structure and function, and the structural and biochemical characterization of macromolecules. Thus, a wide spectrum of experimental approaches is available to examine the molecular basis of cellular phenomena. Graduate training includes formal course instruction, participation in seminar courses, and extensive laboratory research experience. The progress of the students is extensively supervised, to insure high quality and successful completion of the studies.

Program Administration

The administrative structure of the Program follows the Guidelines for the Graduate Program in Biochemistry and Molecular Biology. An Executive Committee plays the primary role in determining general academic policies, rules and regulations for the Program, and in advising the Director of the Program on matters related to Program policy. The Executive Committee is chaired by the Director of the Graduate Program (K. Madura) and consists of four additional faculty members, and one graduate student. Members of the committee are selected from the pool of participating program members. The four additional faculty members (other than the Chair) are selected by the faculty of the Program and serve a two-year term. Two of the four Executive Committee members are selected from outside the Department of Biochemistry (RWJMS). The student representative is selected by fellow students and serves a one-year term. The student representative serves as a liaison between the Program and the students who are enrolled in laboratories affiliated with the Program. The Executive Committee actively solicits the
opinion of the student representative, who monitors and participates in the proceedings of the Committee. While the student is encouraged to freely disseminate the nature of the proceedings, they are encouraged to protect the confidentiality of the specific remarks and comments. The Executive Committee meets as often as required by the administrative demands of the Program (approximately 3-5 times per year).

The Executive Committee operates with a considerable degree of flexibility, to respond to special circumstances. Specific concerns that are addressed include review of academic transcripts from students who transfer into the Program, evaluation of faculty who wish to join the Program, oversight of contributions and participation of faculty members in the Program, and reviewing student’s research and academic accomplishment, prior to submission for the PhD thesis. The Executive Committee, in consultation with additional academic committees and advisory groups, reviews the progress of all students each semester.