Lemont B. Kier Fellowship for Graduate Studies in Computational Medicinal Chemistry

Purpose: To attract students interested in obtaining a Ph.D. in Medicinal Chemistry at VCU and specializing in computational studies.

Background: The Lemont B. Kier Fellowship for Graduate Studies in Computational Medicinal Chemistry was established to honor Professor Kier in anticipation of his 80th birthday in 2010. Monty Kier is a pioneer in computational studies for pharmaceutically important molecules: among his many achievements including 264 publications and seven books. He is the author of “Molecular Orbital Theory in Drug Research”, a textbook published in 1971 that is still available in numerous languages around the world; he, with longtime collaborator Lowell Hall of Eastern Nazarene College, invented most of the commonly used topological indices for Quantitative Structure-Activity Relationships (QSAR); he was credited by the Oxford English Dictionary with first using and defining the term ‘pharmacophore’ – a concept at the heart of modern drug discovery; and most recently he has been active in promoting cellular automata as a tool for understanding the complex phenomena of solubility, drug recognition, solvent partitioning, etc.

Professor Kier was recruited to VCU as the Chairman of what was then the Department of Pharmaceutical Chemistry in 1977. He stepped down as chair in 1987 and “retired” in 2004. Since then he has been deeply involved with the VCU Center for the Study of Biological Complexity and in teaching medicinal chemistry to Nurse Anesthesia students.

Eligibility: Students who have applied to the Department of Medicinal Chemistry Ph.D. program and that have expressed a strong interest in computational studies and/or who have experience in computational work will be eligible for the award. The candidates’ undergraduate record of achievement and applicable standardized test results should be in the upper half of students traditionally accepted into the Ph.D. program and offered support.

Selection: The Department of Medicinal Chemistry graduate faculty, will select, if any are deemed qualified, one student from those accepted into the program and receiving support offers. This student will be offered the “Lemont B. Kier Fellowship for Graduate Studies in Computational Medicinal Chemistry” which will consist of an enhanced stipend and recognition certificate. In the event the first candidate chooses not to accept the fellowship offer, the Graduate Operations Committee may choose to make a second offer if a suitably qualified candidate exists. However, as the core purpose is to attract a student that might have otherwise not chosen VCU, awarding the fellowship to a student who has already accepted a financial aid package from VCU is not really appropriate.
Funding: Funding will be obtained from the endowed “The Lemont B. Kier Fund” administered by the MCV Foundation plus, as necessary, supplementary funds from the School of Pharmacy Dean’s Office and/or the Department of Medicinal Chemistry. This funding is intended to raise the stipend normally offered by an additional 10-15%, e.g., in the offer levels of 2008-2009, $22,500 instead of $20,000. The fellowship awardee would continue to be eligible for his/her enhanced stipend throughout his/her graduate career as long as s/he maintains continuous good standing. In year 2 the stipend bonus would be paid by School and/or Department funds (50%) and research advisor (50%). Starting in year 3 the research advisor is responsible for the entire stipend bonus. It must be noted that all enhanced stipends are contingent on availability of funds from the advisor, Department and/or School.