Chu Lecture Scheduled for March 6

“Acyclonucleosides to Ziagen: A Journey” is the topic of this year’s Chu Lectureship at the University of Georgia College of Pharmacy. The lecture will be presented by Robert Vince, director of the Center for Drug Design Academic Health Center, Department of Medicinal Chemistry, College of Pharmacy at the University of Minnesota. It will be held on Wednesday, March 6, at 11 a.m. in Pharmacy South. A reception begins at 10 a.m. The public is invited.

Vince obtained a B.S. degree in Pharmacy in 1962 and a Ph.D. degree in Medicinal Chemistry in 1966, both from the College of Pharmacy at SUNY Buffalo. He was a faculty member at the University of Mississippi and at the University of Minnesota before accepting his current position in 2002. He has been honored for his work with a career development award from the National Institutes of Health (1972-1976), the 1979 University of Minnesota Scholar of the Year, and the Certificate of Commendation by the Minnesota Governor (1989) in recognition of achievements as an inventor. He was also honored for outstanding contributions to research and development by the Minnesota Medical Alley, was elected as Fellow of the AAAS (2000), and received the Outstanding Alumni Award of the New York Cayuga Community College (2002).

During President Bush’s 2002 visit to Minneapolis, Vince was one of two scientists who were selected to speak with him about his research and inventions. He was recognized on “Scholars Walk and Wall of Discovery” at the University of Minnesota in 2006. He was subsequently inducted into the Medicinal Chemistry Hall of Fame by the American Chemical Society (2007), and the Academy for Excellence in Health Research, by the Academic Health Center, University of Minnesota (2009). Vince received an Honorary Doctor of Science degree from SUNY at Buffalo (2010), the Imbach Townsend Award from the International Society of Nucleosides, Nucleotides and Nucleic Acids (2010), and was also inducted into the Minnesota Inventors Hall of Fame in 2010. In 2011, he was inducted into the Minnesota Science and Technology Hall of Fame.

His most notable achievement, however, is his design of the carbocyclic nucleosides termed “carbovirs”, agents that were later developed into the anti-HIV drug, Ziagen® that is marketed worldwide by GlaxoSmithKline for the treatment of AIDS in adults and children. The carbovirs were the first series of agents that showed significant activity against the human immunodeficiency virus (HIV) and Hepatitis B Virus. In 1987, the National Cancer Institute Decision Network Committee for Preclinical Development selected the carbovirs, the first of the anti-HIV compounds that were specifically designed for inhibiting the AIDS virus, for accelerated preclinical development. The University of Minnesota (UM) licensed the carbovir drugs to Glaxo Pharmaceutical Company in 1988 and the drug made it to market in 1998. This discovery has led to 16 U.S. patents and several foreign patents. Sales of the drug continue to rise and royalties to the University of Minnesota have exceeded $600 million. The starting chemical for the production of this drug and other carbocyclic nucleosides was developed by Vince’s laboratory in the late 1970’s. This material, referred to as “Vince’s Lactam” is produced in metric ton quantities by several chemical companies.

For 35 years Vince has taught medicinal chemistry to undergraduate pharmacy students, medicinal
chemistry graduate students and postdocs at the University of Minnesota. He served on various study sections of the National Institute of Health, serves on the editorial. The royalty income from his inventions has enabled the creation of a Center for Drug Design at the University of Minnesota that has already gained international reputation for excellence in medicinal chemistry research.

The Chu Lectureship was established to bring internationally recognized leaders in drug discovery to UGA, and to honor the outstanding accomplishments and contributions of David Chu, Distinguished Research Professor Emeritus of the College of Pharmacy.

As a medicinal chemist, Chu has been involved in drug discovery of anticancer and antiviral agents for more than 30 years. He has published more than 300 peer-reviewed research articles in major scientific journals, edited four books, and has more than 50 U.S. patents. During his academic career, he has discovered several clinical candidates for cancer and viral diseases.

Chu has trained more than 120 graduate students and postdoctoral fellows, and has maintained an active research program in drug design and synthesis, even after his retirement in 2008. His research program in drug discovery has been recognized as one of the top academic laboratories both nationally and internationally.