

The George W. Woodruff School of Mechanical Engineering at Georgia Tech

Presents

The Annual

Harold W. Gegenheimer Lecture Series on Innovation



Featuring:

Mr. David Phelps (ME 1981)
President and CEO of CreoSalus, Inc.
Lexington, Kentucky

Speaking About:

***NO EXPERIENCE REQUIRED:
How Lack of Experience and
Knowledge of an Industry is an
Advantage to Developing Innovative
Next-Generation Products***

Thursday, November 5, 2009, 11:00 A.M.

Ferst Center for the Arts
Georgia Tech Campus, Atlanta, Georgia

There will be a reception after the lecture in the 2nd floor atrium of the Love Building.



To arrange for parking, please call (404) 894-3200 by Monday, November 2nd.

About the Lecture Series

The Lecture Series on Innovation was established in 1995 through an endowment from Mr. Harold W. Gegenheimer (Class of 1933) to support student programs that encourage creativity, innovation, and design. Through the lecture series and support of capstone design projects, students are exposed to processes that stimulate creativity and lead to inventions and patents. The previous Gegenheimer lecturers were:

- 1995 **Dr. Jerry M. Woodall**
Distinguished Professor of Microelectronics, Purdue University
- 1996 **Mr. Burt Rutan**
President and CEO, Scaled Composites, Inc.
- 1997 **Dr. Jim Adams**
Professor, Stanford University
- 1998 **Dr. George N. Hatsopoulos**
Founder, Thermo-Electron Corporation
- 1999 **Mr. Richard Teerlink**
Retired President and CEO, Harley Davidson, Inc.
- 2000 **Dr. Woodie Flowers**
Pappalardo Professor of Mechanical Engineering, MIT
- 2001 **Dr. Leo Beranek**
Co-Founder, Past President, and CEO, BBN
- 2002 **Dr. Roger L. McCarthy**
Chairman, Exponent, Incorporated
- 2003 **Dr. Steven L. Stice**
Professor and Eminent Scholar, University of Georgia
- 2004 **Dr. Malcolm Swinbanks**
Chief Scientist, Vibration and Sound Solutions, Ltd.
- 2005 **Dr. James DeLaurier**
Professor, University of Toronto Aerospace Studies
- 2006 **Mr. Mark Jenks**
Wing Team Leader, The Boeing Company
- 2007 **Mr. Chris Miller**
Director, *Shrek The Third*
- 2008 **Dr. James E. West**
Research Professor, Johns Hopkins University

Synopsis of the 2009 Gegenheimer Lecture

This lecture will discuss the story behind the development of our Multiple Peptide Synthesizer — Tetras —

The story starts with a small pharmaceutical company presented with the opportunity to purchase a supplier out of bankruptcy. What could go wrong with this? Post purchase, running the supplier becomes more work than expected, due to equipment issues. This causes a series of events that leads to the development of a new machine that not only solves the internal issues but creates a new division of the company.

What does a mechanical engineer leading a group of mechanical engineers know about chemistry and chemical engineering? Frustration rises while a skilled team cannot run, fix, or maintain equipment. A new perspective on the synthesis of peptides leads to better purity, throughput, speed, and flexibility at reduced costs.

Biographical Sketch

David Phelps has served as President and CEO of CreoSalus since 2002. CreoSalus is the world's most comprehensive peptide science company. For over 25 years, Mr. Phelps' career has included significant management roles with large life science (medical device, drug and bio tech) companies as well as starting life science firms and serving on the scientific advisory board of a number of medical device firms. He is the founder and managing partner of Pollen Venture, a venture firm focusing on early stage life science technologies with over fifty million dollars under management. He was also the founder of MedVenture Technology Corporation, a firm specializing in the development of medical devices. He has developed more than fifty medical devices and has more than twenty-five patents issued or pending.

Mr. Phelps earned a bachelor's degree in Mechanical Engineering from Georgia Tech in 1981. He is also a graduate of the Harvard Business School, and of the Leadership Louisville Program. Upon graduation from Georgia Tech, he worked at Baxter Healthcare in various positions including product development and manufacturing engineering. Mr. Phelps left Baxter to manage product development and engineering for Medi-Tech, which grew to become Boston Scientific Corporation (BSC). His responsibilities grew to include external product development, engineering and manufacturing.

Mr. Phelps has been recognized as an Ernst & Young Entrepreneur of the Year. In 1999 he served on the search committee to establish the biomedical engineering program at the University of Louisville. He served on the committee that formed the Greater Louisville Health Enterprises Network, whose purpose is to champion and foster the growth of the region's health-related economy. He serves on the board of industrial advisors for Speed Scientific School of the University of Louisville Engineering School, for the Louisville Research Technology Development Forum, the Downtown Development Corporation of Louisville, the Louisville Science Center & Museum, and of Kids Tech.

About the Woodruff School

Mechanical engineering was the first degree-granting program at Georgia Tech when classes began in 1888. Today, the George W. Woodruff School of Mechanical Engineering offers academic and research programs in mechanical engineering, nuclear and radiological engineering, medical physics, bioengineering, paper science and engineering, and robotics. Both the graduate and undergraduate programs in mechanical engineering are consistently ranked in the top ten in the nation by *U.S. News & World Report*. Our current enrollment includes 1875 undergraduates (including co-op students at work) and 773 graduate students. Studies are directed by a full-time faculty of 81 professors, as well as thirteen courtesy joint faculty appointments from other schools on campus. There are also 23 research faculty and six academic professionals. Support is provided by 55 staff members. The Woodruff School is the only educational institution to be designated a Mechanical Engineering Heritage Site by the American Society of Mechanical Engineers.

For additional information, contact Dr. William J. Wepfer, Eugene C. Gwaltney, Jr.
Chair of the Woodruff School at:

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