

# The George W. Woodruff School of Mechanical Engineering at Georgia Tech Presents The Annual Harold W. Gegenheimer Lecture Series on Innovation

## Featuring:

Dr. Steven L. Stice  
Professor and Georgia Research Alliance Eminent Scholar,  
University of Georgia

## Speaking About:

*Cloning Technology at a Crossroad: Raelians or Real Science?*

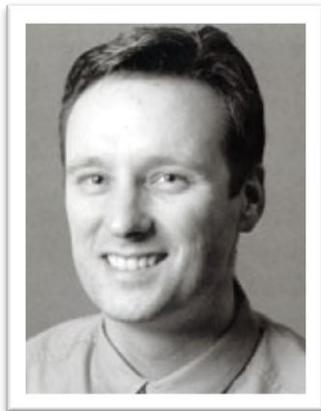
**Thursday, October 16, 2003, 3:30 P.M.**

Van Lee (ECE) Auditorium  
Georgia Tech Campus, Atlanta

(Reception after the lecture on the George P. Burdell Plaza)

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## Biographical Sketch



Dr. Steven L. Stice has more than sixteen years of research and development experience in biotechnology and is a co-founder of five biotechnology companies. He produced the first cloned rabbit in 1987 and the first cloned transgenic calves, George and Charlie, in 1988. In 1997 his group produced the first genetically modified embryonic stem cell derived pigs and cattle. This research led to publications in Science and Nature journals, national news coverage from CBS, NBC, ABC, and CNN, and the first U. S. patents on cloning animals and cattle embryonic stem cells. Dr. Stice holds fourteen patents with six pending, all dealing with stem cells or cloning. In 2001, Dr. Stice announced a breakthrough in the cloning process and the first cloned animal (calf) from an animal that was dead for 48 hours. Throughout his career he has published and lectured on cloning and stem cell technologies. Prior to joining the University of Georgia, Dr. Stice was a cofounder and Chief Scientific Officer at Advanced Cell Technology, a company developing cloning and stem cell technology. Dr. Stice is a Professor and has a Georgia Research Alliance Eminent Scholar endowed chair at the University of Georgia. His research focuses on developing innovative animal cloning and stem cell technologies. He cofounded CytoGenesis, Inc, which was later purchased by BresaGen. Dr. Stice helped BresaGen develop four of the human embryonic stem cell lines approved for NIH funding. Dr. Stice was named one of the 100 Most Influential Georgians in 2002 by Georgia Trend magazine. In 2000, he was named one of the top forty entrepreneurs under forty years old in Georgia, and he received the AGR grand president's award for leadership in agriculture and the Outstanding Young Alumni Award from the University of Illinois. Dr. Stice received a B.S. degree

in agricultural science from the University of Illinois in 1983, an M.S. degree in 1985 from Iowa State University, and a Ph.D. in 1989 from the University of Massachusetts in Amherst.

## Synopsis of the 2003 Gegenheimer Lecture

Fifty years ago Briggs and King cloned the first frog embryo, and since that time, there has been tremendous interest and concern about how the science will be used. Cloning advances have been a boon for many groups, including the movie industry, press, experts, both ethical and scientific, that have hit the speech and book selling tours, and finally, the religious cults like the Raelians who claimed they cloned the first human last year. Once we get past the hype and the fiction, where have cloning innovations taken us and where is it going? Today, pharmaceutical companies are producing lifesaving drugs cheaper and safer through cloned animals. Cloning is being used to produce farm animal using less natural resources to produce the same amount of protein. In the future, cloning technology may improve the quality life for people suffering from diabetes, Parkinson's, and other debilitating diseases. Cloning is a scientific phenomenon that turns old cells into young cells, thus providing insight into the aging process and cancer. But someday, someone may clone another human being. As is the case with any technological advance, there has been setbacks, and we will need to decide whether the potential benefits outweigh the risks. We certainly have not seen the last of the Raelians either.

## 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	<b>Dr. Jerry M. Woodall</b>	Distinguished Professor of Microelectronics at Purdue University	<i>Necessity Is the Mother of Invention, But Curiosity and Persistence Make It Happen</i>
1996	<b>Mr. Burt Rutan</b>	President and CEO of Scaled Composites, Inc.	<i>Innovation: Use It or Lose It</i>
1997	<b>Dr. Jim Adams</b>	Professor at Stanford University	<i>Creativity Versus Control: Their Impact on Innovation</i>
1998	<b>Dr. George N. Hatsopoulos</b>	Founder of Thermo-Electron Corporation	<i>Thermo Electron and the Spin-Out Business Design</i>
1999	<b>Mr. Richard Teerlink</b>	Retired President and CEO of Harley Davidson, Inc.	<i>Our Learning Journey</i>
2000	<b>Dr. Woodie Flowers</b>	Pappalardo Professor of Mechanical Engineering at MIT	<i>Innovator, Innovatee, or Somewhere Between?</i>
2001	<b>Dr. Leo Beranek</b>	Co-Founder, Past President, and CEO of BBN	<i>Concert Halls of the World and Their Design</i>

2002 **Dr. Roger L. McCarthy**

Chairman of Exponent,  
Incorporated

*Engineering Disasters: Those  
who cannot remember  
[innovation's] past are  
condemned to repeat it.*

### **About the Woodruff School**

The Woodruff School of Mechanical Engineering is the oldest and second largest of the ten divisions in the College of Engineering at Georgia Tech. The School offers academic and research programs in mechanical engineering, nuclear and radiological engineering/medical physics, paper science and engineering, and bioengineering. The enrollment includes 1674 undergraduates and 696 graduate students. Studies are directed by a full-time staff of 72 professors, ten joint faculty, 23 research faculty, and five academic professionals, who are supported by 43 staff members. The George W. Woodruff School of Mechanical Engineering is the only educational institution to be designated a Mechanical Engineering Heritage Site by the American Society of Mechanical Engineers. For more information about the Woodruff School contact:

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