## **EMERSON CENTER LECTURESHIP AWARD SYMPOSIUM**

## Systems Biology: Molecules to Populations

Cherry L. Emerson Center for Scientific Computation,

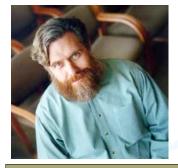
Co-sponsored by the Computational & Life Sciences Strategic Initiative



Dr. Cherry L. Emerson

# Friday, April 6, 2007 Room 208, Mathematics & Science Center, Emory University

## **AWARD WINNER & KEYNOTE SPEAKER:**



## George M. Church

Professor of Genetics, Harvard Medical School; MIT Health Sciences & Technology; Senior Associate of the Broad Inst. of Harvard & MIT; Director, DOE MIT-Harvard Genomes to Life Center; Director, NIH Center for Excellence in Genomic Science

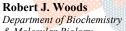
#### Presentation Title: Personal Genomics & Synthetic Biology

The challenge of systems biology for personalized medicine lies in connecting genetic inheritance and environment to specific traits and then deploying highly reliable methods for altering those relations. Some "basic enabling technologies" for analysis and synthesis have dropped cost by a few logs and are still dropping (faster than Moore's law). Tightly coupled with these are human practice issues like biosecurity and personal identity.

### **INVITED SPEAKERS:**

## **SCHEDULE OF EVENTS:**

	Dennis Liotta Department of Chemistry Emory University, Atlanta	9:00 - 9:20	OPENING CEREMONY & AWARD PRESENTATION
		9:20 - 10:30	<b>Prof. G. M. Church</b> (Harvard University and MIT): <i>Personal Genomics &amp; Synthetic Biology</i>
		10:30 – 11:20	Prof. D. Liotta (Emory University): New Therapies for Treating Viral Infections and Cancers
	Leslie Real Department of Biology Emory University, Atlanta	11:20 – 1:00	POSTER PRESENTATIONS
		1:00 - 2:00	LUNCH
		2:00 –2:50	<b>Prof. M. D. Wang</b> (Georgia Tech.): Translational Biomedical Informatics and Systems Biology: An Integrated Approach to Personalized and Predictive Health
	Eberhard O. Voit Dept. of Biomedical	2:50 – 3:40	<b>Prof. R. J. Woods</b> (University of Georgia,): Computational Simulations in Glycoscience: Predicting Carbohydrate Affinity and Antigenicity
	Engineering Georgia Tech, Atlanta	3:40 – 4:00	COFFEE BREAK
		4:00 – 4:50	<b>Prof. E. O. Voit</b> (Georgia Tech): Canonical Modeling: A Powerful Tool for the Analysis of Biological Systems
	May D. Wang Dept. of Biomedical Engineering Georgia Tech, Atlanta	4:50 – 5:40	<b>Prof. L. Real</b> (Emory University): Modeling the Emergence of Infectious Disease: from Rabies to Ebola
		5:40 -	CLOSING
		6:30 – 8:30	DINNER (by invitation)
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& Molecular Biology University of Georgia, Athens

#### REGISTRATION AND CONTACT INFORMATION:

Email: clec@euch4e.chem.emory.edu
http://www.emerson.emory.edu/conferences/index.html
Abstracts of invited talks are available at the website.
Registration is free, but you must register to attend.



The Emerson Center Lectureship Award was established in the fall of 2003 to recognize distinguished achievements by scientists in computational sciences and to facilitate collaboration among different disciplines of computational sciences. On the board of the current Emerson Center Lectureship Award Selection Committee are Kurt Warncke (Physics, chair), Scott Devine (BioChemistry), James Kindt (Chemistry), Jamal Musaev (Emerson Center), James Nagy (Math & Computer Science) and Astrid Prinz (Biology) of Emory University.