

Faculty & Friends

WSBS 2011 Honorary Degrees

At the May 1 Commencement Convocation of the Watson School of Biological Sciences, honorary degrees were conferred upon Professor James R. Lupski, M.D., Ph.D., Department of Molecular and Human Genetics, Baylor College of Medicine, and James Simons, Ph.D., founder of Renaissance Technologies LLC.

Dr. Lupski was honored for his work on the consequences of genomic alterations in human disease. He is an alumnus of the CSHL Undergraduate Research Program and is a role model for students. According to Dr. Lupski, "central to our understanding of human biology, evolution, and disease is an answer to the following questions: What is the frequency of *de novo* structural genomic changes in the human genome? What are the molecular mechanisms for genomic rearrangements? And what is the genomic code?" In 2010, as a result of pursuing these questions, Dr. Lupski published the successful outcome of using whole-genome sequencing to find the mutations responsible for a disease from which he himself suffers—a neurological condition called Charcot-Marie-Tooth (CMT) disease—which results in muscle weakness and wasting.



Dr. James Simons was honored for his contributions to mathematics, science and human health. CSHL is grateful for the tremendous support that he has provided to establish the Simons Center for Quantitative Biology at CSHL and for Dr. Simons' ongoing facilitation of collaborative science on Long Island. Dr. Simons is currently President of Euclidian Capital and Board Chair of Renaissance

Technologies, a highly quantitative investment firm. He has also been chairman of the Mathematics Department at Stony Brook University and a cryptanalyst at the Institute of Defense Analyses in Princeton. His scientific research was in the area of geometry and topology, in discovering and applying certain geometric measurements, now called the Chern-Simons invariants, which have wide use, particularly in theoretical physics.

Stillman honored with Louisa Gross Horwitz Prize



On February 17, CSHL President Bruce Stillman accepted the Louisa Gross Horwitz Prize for seminal work in which he and his colleagues have elucidated mechanisms involved in the process by which DNA, the genetic material contained within the nucleus of nearly all our cells, replicates itself. He shared the prize with Thomas J. Kelly, M.D., Ph.D., director of the Sloan-Kettering Institute at Memorial Sloan-Kettering Cancer Center.

"These two investigators, more than any others, are responsible for discovering the key molecular players in and the principles that govern the process of genetic replication," said Wayne A. Hendrickson, Ph.D., chair of the Horwitz Prize Committee and professor of physiology and cellular biophysics at Columbia University. Hendrickson added that Stillman and Kelly have given science a much needed understanding of the way cells work in humans, in so doing shedding light not only on the duplication of normal cells but also how the process goes awry in cancer.

The Louisa Gross Horwitz Prize has been awarded annually since 1967 by Columbia University, for outstanding basic research in biology and biochemistry. Forty-two of the 82 awardees, to date, have gone on to win the Nobel Prize.

Genome Technology's Annual "Young Investigator" List



CSHL Assistant Professor Michael Shatz, 2010 WSBS graduate Yaniv Erlich, and Nick Navin, who completed his graduate work in Mike Wigler's laboratory at CSHL, were judged by leaders in Systems Biology as three of the brightest young minds in that field today. *Genome*

Technology magazine's 5th annual Young Investigator competition recognized Dr. Shatz for his work on Genome Assembly and the Cloud. Dr. Erlich, who is now a Fellow at the Whitehead Institute for Biomedical Research, was recognized for his work in Fast-Paced Bioinformatics. Dr. Navin, now Assistant Professor at MD Anderson Cancer Center in Texas, made the list for his work on The Evolution of Cancer Tumors.