

Computational Biology Symposium

Thirty Years of Computational Biology @ USC

In honor of the 70th birthday of Professor Michael Waterman and the 60th birthday of Simon Tavaré

Location: Davidson Conference Center, University of Southern California, Los Angeles, CA

Date: March 30th-April 1st, 2012

Website: <http://www.cmb.usc.edu/30Years/>

Organization Committee: Ting Chen, Paul Majoriam

In 1982 Michael, one of the originators of computational biology, came to USC. During his career, Michael has made numerous significant contributions in computational biology, including the dynamic programming algorithm for finding sequence homology, the algorithmic approach to RNA structure prediction, statistical methods behind BLAST and related biological database search tools, statistics of genome sequencing, algorithms for genome assembly including the Eulerian graph method, mathematics of phylogeny, statistical distributions of words and motifs in sequences, and many other mathematical or computational solutions to biological problems.

Simon joined USC in 1989. He is widely recognized as an influential figure in developing the interface between the mathematical sciences and the biological and medical sciences. He has made significant contributions to methodology for the analysis and interpretation of DNA sequence and related genomic data, and to bioinformatics. His contributions to population genetics include probabilistic and statistical aspects of coalescent theory, including the first full likelihood-based methods for the analysis of sequence variation data, and methods for ancestral inference. He has pioneered the use of evolutionary approaches to cancer, and the use of approximate Bayesian computation for inference in complex stochastic processes.

Many prominent computational biologists have been trained at USC. including (in alphabetic order) [Gary Churchill](#), [Pavel Pevzner](#), [Sophie Schbath](#) and [Martin Vingron](#), etc. The full lists of former [postdocs](#) and [graduate students](#) are available on [our website](#).

KEYNOTE SPEAKERS: David Haussler (UCSC), Barry Honig (Columbia), Ron Shamir (Tel Aviv), and Wing H Wong (Stanford).

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