

Symposium Hosts

Manuel C. Peitsch, Ph.D.

VP, Biological Systems Research, Philip Morris International (PMI), Research & Development



Before joining PMI, Manuel Peitsch worked in the pharmaceutical industry for over fifteen years, following seven years in academia. His work has mainly been in the areas of Computational Life Sciences (incl. bioinformatics) and Experimental Biology (incl. genomics and proteomics) in Drug Discovery.

He holds several patents related to proteomics, genomics and computer science and has published over 120 articles, booked titles and technical notes (cited over 10000 times). Manuel has done pioneering work in the area of molecular modeling, cell biology and computational text analytics.

Manuel was a founder of several initiatives, including two start-up companies and the Swiss Institute of Bioinformatics. He has served as a member of the Swiss National Research Council, is the Chairman of the Executive Board of the Swiss Institute of Bioinformatics and an active scientific advisor to several academic and commercial entities. Manuel is a ComputerWorld Honors Laureate and a recipient of several awards including the New England Business and Technology Award and the UnitedDevices Grid Visionary Award. Manuel holds a BAsC in Life Sciences, a MASc in Physical Chemistry and a PhD in Biochemistry; he is also a Professor for Bioinformatics at the University of Basel.

Ajay K. Royyuru, Ph.D.

Senior Manager, Computational Biology Center, IBM Research



Ajay Royyuru heads the Computational Biology Center at IBM Research, with research groups engaged in various projects including bioinformatics, protein science, functional genomics, systems biology, and computational neuroscience. Ajay joined IBM Research in 1998, initiating research in structural biology.

He obtained his Ph.D. in Molecular Biology from Tata Institute of Fundamental Research, Mumbai and B. Sc. (Hons.) in Human Biology and M. Sc. in Biophysics from All India Institute of Medical Sciences, New Delhi. Ajay did post-doctoral work in structural biology at Memorial Sloan-Kettering Cancer Center, New York.

Working with biologists and institutions around the world, he is engaged in research that will advance personalized, information-based medicine. Ajay leads the IBM Research team working with National Geographic Society on the Genographic Project. Ajay has authored numerous research publications and several patents in structural and computational biology.

Gustavo Stolovitzky, Ph.D.

Manager, Functional Genomics and Systems Biology, IBM Computational Biology Center



Gustavo Stolovitzky received his M.Sc. in Physics, from the University of Buenos Aires (1987) and his Ph.D. in Mechanical Engineering from Yale University (1994). He was awarded the Henry Prentiss Becton Prize, for Excellence in Engineering and Applied Sciences. In 1998 he joined the IBM Computational Biology Center at IBM Research.

His most recent interests are in the field of high-throughput biological-data analysis, reverse engineering biological circuits, the mathematical modeling of biological processes and new generation technologies for DNA sequencing.

Gustavo leads the DREAM project on assessment of systems biology models, has co-authored more than 90 scientific publications, edited 2 books, is co-inventor in 10 issued patents. His work has been highlighted in The New York Times, The Scientist, Technology Review and Scientific American (where his DNA transistor project was chosen as one of the 10 world changing ideas of 2010) among other media. Gustavo has been elected Fellow of the NY Academy of Sciences, Fellow of the World Technology Network, Fellow of the American Physical Society and Fellow of the American Association for the Advancement of Sciences. He is currently an adjunct Associate Professor at Columbia University and the Manager of the IBM Functional Genomics & Systems Biology Group.