Jill P. Mesirov

Professional Preparation

University of Pennsylvania	Mathematics	A.B.	1970
Brandeis University	Mathematics	M.A.	1971
Brandeis University	Mathematics	Ph.D.	1974

Appointments

11/2003-Present	**The Eli and Edythe L. Broad Institute, Massachusetts Institute of Technology and Harvard University,** Associate Director and Chief Informatics Officer, Director, Bioinformatics and Computational Biology
6/1997-11/2003	**Whitehead Institute Center for Genome Research,** Associate Director and Chief Informatics Officer, Director, Bioinformatics and Computational Biology Program
2001-Present	**Boston University,** Adjunct Professor of Bioinformatics
1995-1997	**International Business Machines Corporation,** Manager, Computational Biology and Bioinformatics
1985-1995	**Thinking Machines Corporation,** Director of Research, Senior Scientist
1983-1987	**1986 International Congress of Mathematicians,** Executive Director
1982-1985	**American Mathematical Society,** Associate Executive Director
1980 and 1982	**Princeton University** Visiting Lecturer
1978	**Australian National University,** Visiting Fellow
1976-1982	**Institute of Defense Analyses,** Research Staff
1974-1976	**University of California at Berkeley,** Instructor, Department of Mathematics

Five relevant papers:

1. Golub TR, Slonim DK, Tamayo P, Huard C, Gaasenbeek M, **Mesirov JP**, Coller H, Loh ML, Downing JR, Caligiuri MA, Bloomfield CD, Lander ES. Molecular classification of cancer: class discovery and class prediction by gene expression monitoring. Science. 1999 Oct 15;286(5439):531-7.
2. Mootha VK, Lindgren CM, Eriksson KF, Subramanian A, Sihag S, Lehar J, Puigserver P, Carlsson E, Ridderstrale M, Laurila E, Houstis N, Daly MJ, Patterson N, **Mesirov JP**, Golub TR, Tamayo P, Spiegelman B, Lander ES, Hirschhorn JN, Altshuler D, Groop LC. PGC-1alpha-responsive genes involved in oxidative phosphorylation are coordinately downregulated in human diabetes. Nat Genet. 2003 Jul;34(3):267-73.
3. Brunet J-P, Tamayo P, Golub T, **Mesirov JP**. Metagenes and Molecular Pattern Discovery Using Matrix Factorization, Proc. Natl. Acad. Sci. USA. 2004;101(12):4164-4169.
4. Monti S, Tamayo P, **Mesirov JP**, Golub T. Consensus Clustering. A resampling-based method for class discovery and visualization of gene-expression microarray data. Functional Genomics special issue, Machine Learning. 2003;52:91-118.
5. Subramanian A, Tamayo P, Mootha V, Mukherjee S, Ebert BL, Gillette MA, Pomeroy S, Golub TR, Lander ES, **Mesirov JP**. Gene Set Enrichment Analysis: A Knowledge-Based Approach for Interpreting Genome-wide Expression Profiles. (submitted, Proc. Natl. Acad. Sci.).

Five other papers:

1. Sweet-Cordero A, Mukherjee S, Subramanian A, You H, Roix J, Ladd C, **Mesirov JP**, Golub T, Jacks T. An oncogenic KRAS2 expression signature identified by cross-species gene-expression analysis. Nature Genetics. 2005 Jan;37(1):48-55.

2. Reich M, Ohm K, Tamayo P, **Mesirov JP**. GeneCluster 2: advanced tools for bioarray analysis. Bioinformatics. 2004 Jul 22;20(11):1797-8.
3. Liefeld T, Reich M, Lerner J, Gould J, Zhang P, Tamayo P, **Mesirov JP**. GeneCruiser: A web service for the annotation of microarray data. (in press, Bioinformatics).
4. International Human Genome Sequencing Consortium. Initial sequencing and analysis of the human genome. Nature. 2001 Feb 15;409(6822):860-921. Erratum in: Nature 2001 Aug 2;412(6846):565. Nature 2001 Jun 7;411(6838):720.
5. Mouse Genome Sequencing Consortium. Initial sequencing and comparative analysis of the mouse genome. Nature. 2002 Dec 5;420(6915):520-62.

Synergistic Activities (*selected current activities)*

Department of Energy: Argonne National Laboratory, MCS Review Committee
International Society for Computational Biology: Board of Directors
Los Alamos National Laboratory: Bioscience Division Review Committee
Pittsburgh Super Computer Center: NIH Research Resource Advisory Committee
Industrial Scientific Advisory Boards: Bristol-Myers Squibb, Infinity Pharmaceuticals Inc., Charles River Laboratory

Collaborators & Other Affiliations

(a) Collaborators and Co-Editors
Bonnie Berger, Massachusetts Institute of Technology
Serafim Batzoglou, Stanford University
Andrea Califano, First Genetic Trust
Leif C. Groop, Lund University, Sweden
Cecilia M. Lindgren, Lund University, Sweden
Hongjun Lu, Hong Kong University of Science and Technology
Dimitris Meretakis, Hong Kong University of Science and Technology
Lior Pachter, University of California, Berkeley
Tomaso Poggio, Massachusetts Institute of Technology
Scott Pomeroy, Harvard Medical School
Pere Puigserver, Dana-Farber Cancer Institute
Ryan Rifkin, Massachusetts Institute of Technology
Margaret Shipp, Dana-Farber Cancer Institute
Donna Slonim, Genetics Institute
Bruce Spiegelman, Dana-Farber Cancer Institute
Gustavo Stolovitsky, IBM
John Weinstein, National Cancer Institute
Beat Wüthrich, Hong Kong University of Science and Technology
Chen-Hsiang Yeang, Massachusetts Institute of Technology

(b) Graduate and Post Doctoral Advisors
Richard S. Palais, Brandeis University

(c) Thesis Advisor and Postgraduate-Scholar Sponsor
Pablo Tamayo
Serafim Batzoglou
Jean-Philippe Brunet
Elinor Karlsson
Tarjei Mikkelsen
Sayan Mukherjee
Cynthia Phillips
Aravind Subramanian
Xiru Zhang
Total number of graduate students – 6
Total number of post-docs – 3