

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2.
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NAME Michael Snyder	POSITION TITLE Stanford B. Ascherman Professor and Chair of Genetics and Director of Center for Genomics and Personalized Medicine		
eRA COMMONS USER NAME (credential, e.g., agency login) mpsnyder			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
University of Rochester, Rochester, NY	B.A.	05/77	Chemistry/Biology
California Institute of Technology	Ph.D.	09/82	Biology
Stanford University, Palo Alto, CA	Postdoc	01/86	Molecular Genetics

A. PERSONAL STATEMENT

I have run an independent lab for twenty-four years and trained approximately 75 postdoctoral fellows and 50 graduate students. Nearly all (>95%) these individuals have gone onto successful research careers in academia or industry. The remainder has used their experience successfully in related fields (law, medicine or pharmaceutical industry).

B. POSITIONS AND HONORS**Research and Professional Experience**

1978-1982 Graduate Student, California Institute of Technology, CA Advisor: Dr. Norman Davidson
 1982-1986 Postdoctoral Fellow, Dept. Biochemistry, Stanford Univ, Advisor: Dr. Ronald Davis,
 1986-2009 Assistant, Associate Full Professor, Department of (MCD) Biology, Yale University, CT
 1998-2004 Chair, MCDB Yale University
 2002-2009 Director, Yale Center for Genomics and Proteomics
 2009- Chairman of Genetics and Director of Center of Genomics and Personalized Medicine, Stanford University School of Medicine

Fellowships and Honors

1982-1985 Helen Hay Whitney Postdoctoral Fellowship
 1987-1991 Pew Scholar Award
 1989 Yale Junior Faculty Fellowship
 2000 Burroughs Wellcome Scholar Award
 2002 Named Lewis B. Cullman Professor
 2007 CT Medal of Science
 2009 Pioneer Award (HUPO)

Recent Selected Keynote/Invited Speaker

International Meeting On Arabidopsis, Penn. State Graduate Student Symposium (2005); Keystone Conference on Plant Signaling, NYU Genomics Symposium: Genomes in Action, Chip to Hits, Systems Biology Meeting (2006) AGCT Genomics Meeting (2006) Genomes to Biology Meeting Manchester UK, Keystone Conf. Plant Abiotic Stress, CHI Genes to Targets (2007) Dream II, (2008) CHI Mining the Plasma Proteome, (2008) Vanderbilt Genetics Retreat, (2008) Genetics Day, Univ. Rochester, (2009) Lorne Genomics Meeting, (2009) RECOMB2009, (2009) Stanford Clinical Genomics Retreat, (2009) Univ. of Toronto Genomic Symposium, (2009) Biomedical Engineering Conference, (2009) International Yeast Genetics and Molecular Biology Meeting, (2009) International Conference of Systems Biology, Buck Symposia on Aging (2009), Proteomics 2010, Human Genome Meeting (2010), 3rd Annual Joint Conference of Systems Biology (2010), Annual International Conference on Computational Systems Bioinformatics (2010), J Craig Venter Institute: Human Genomics: The next 10 years (2011)

Selected Recent Advisory Committees

2000, 02, 04, 06 Yeast Genetics Meeting Program Committee, CoOrganizer (2004), Organizer (2006)
2001-2009 Member Institute of Genetics Advisory Board, CIHR Canada
2001-present Northeast Structural Genomics Consortium Scientific Advisory Committee
2001-present P.I. Yale Center of Excellence in Genome Sciences
2008-present Member & Chair, NIH MABS study section
2011-present EMBL, Scientific Advisory Committee
Presently Editor: Genes & Devel., Mol. Cell. Proteomics, PloS Genetics, Drug Discov., Mol. Systems Biol., Proteomics, Clinical Proteomics etc.

C. PUBLICATIONS (297 Total; ~277 Refereed; Last five years 123 total; ~100 Refereed)

Five Relevant Publications

- 1) Zheng W, Zhao H, Mancera E, Steinmetz LM, Snyder M. (2010). Genetic Analysis of Variation in Transcription Factor Binding in Yeast. *Nature*. 2010 Apr 22;464(7292):1187-91. Epub 2010 Mar 17. PMID: 20237471. PMCID not available.
- 2) Kasowski M, ... Snyder M. (2010). Variation in Transcription Factor Binding Among Humans. *Science*. 2010 Apr 9;328(5975):232-5. Epub 2010 Mar 18. PMID: 20299548. PMCID not available.
- 3) Wu J, Habegger L, Noisa P, Szekely A, Qiu C, Hutchison S, Raha D, Egholm M, Lin H, Weissman S, Cui W, Gerstein M, Snyder M. (2010). Dynamic transcriptomes during neural differentiation of human embryonic stem cells revealed by short, long, and paired-end sequencing. *Proc Natl Acad Sci U S A*. 2010 Mar 16;107(11):5254-9. Epub 2010 Mar 1. PMID: 20194744. PMCID: 2841935.
- 4) Hudson ME, Pozdnyakova I, Haines K, Mor G, Snyder M. (2007). Identification of differentially expressed proteins in ovarian cancer using high-density protein microarrays. *Proc Natl Acad Sci*. Oct 30;104(44):17494-9. Epub 2007 Oct 22. PMID: 17954908. PMCID: 2077284
- 5) Nagalakshmi U, Wang Z, Waern K, Shou C, Raha D, Gerstein M, Snyder M. The Transcriptional Landscape of the Yeast Genome Defined by RNA Sequencing. *Science*. 2008 Jun 6;320(5881):1344-9. Epub 2008 May 1 PMID: 18451266. PMCID not available.

Ten Other Recent Related Publications

- 1) Zhong M... Snyder M. Genome-wide identification of binding sites defines distinct functions for *Caenorhabditis elegans* PHA-4/FOXA in development and environmental response. *PLoS Genet*. 2010 Feb 19;6(2):e1000848. PMID: 20174564. PMCID: 2824807.
- 2) Camarena L... Snyder M. Molecular mechanisms of ethanol-induced pathogenesis revealed by RNA-sequencing. *PLoS Pathog*. 2010 Apr 1;6(4):e1000834. PMID: 2036896. PMCID not available.
- 3) Snyder M, Du J, Gerstein M. Personal genome sequencing: current approaches and challenges. *Genes Dev*. 2010 Mar 1;24(5):423-31. PMID: 20194435. PMCID: 2827837.
- 4) Popescu SC, ... Dinesh-Kumar SP*. (2008) MAPK target networks in *Arabidopsis thaliana* revealed using functional protein microarrays. *Genes Dev*. Dec 18. PMID: 19095804. PMCID: 2632172
- 5) Ni L, Bruce C, Hart C, Leigh-Bell J, Gelperin D, Umansky L, Gerstein MB, Snyder M. Dynamic and complex transcription factor binding during an inducible response in yeast. *Genes Dev*. 2009 Jun 1;23(11):1351-63. PMID: 19487574. PMCID: 2701586.
- 6) Theodorou E, Dalembert G, Heffelfinger C, Weissman, S, White E Corcoran L, Snyder M. A High Throughput Embryonic Stem Cell Screen Identifies Oct-2 as a Bifunctional Regulator of Neuronal Differentiation. *Genes Dev*. 2009 Mar 1;23(5):575-88. PMID: 19270158. PMCID: 2658525.
- 7) Theodorou E... Snyder M. A High Throughput Embryonic Stem Cell Screen Identifies Oct-2 as a Bifunctional Regulator of Neuronal Differentiation. *Genes Dev*. 2009 Mar 1;23(5):575-88. PMID: 19270158.
- 8) Mok J, ... Turk BE. Deciphering protein kinase specificity through large-scale analysis of yeast phosphorylation site motifs. *Sci Signal*. 2010 Feb 16;3(109):ra12. PMID: 20159853
- 9) Korbel JO ... Snyder M. Paired-end mapping reveals extensive structural variation in the human genome. *Science*. 2007;318: 420-6. PMID: 17901297. PMCID: 2674581.
- 10) Raha D... Snyder M. (2010). Close association of RNA polymerase II and many transcription factors with Pol III genes. *Proc Natl Acad Sci U S A*. 2010 Feb 23;107(8):3639-44. Epub 2010 Feb 5. PMID: 20139302. PMCID: 2840497.