

## Mark Gerstein

Williams Professor of Biomedical Informatics, Yale  
Full CV as of 30 Sep. 2015 (with some sections less current)

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### Education

Harvard College	AB	1989	Physics (& History of Science)
Cambridge University	PhD	1993	Biophysics/Chemistry
Stanford University	post-doc	1993-1996	Bioinformatics

### Positions

2006 -	AL Williams Prof. Biomedical Informatics, Yale U.
2002 -	co-director Yale Computational Biology and Bioinformatics Program
2006 -	Prof. Molecular Biophysics & Biochemistry, Yale U.
2006 -	Prof. of Computer Science, Yale U.
2001 - 2006	Assoc. Prof. Molecular Biophysics & Biochemistry and Computer Science, Yale U
1997 - 2001	Asst. Prof. Molecular Biophysics & Biochemistry, Yale U.

### Honors

2015	ISCB (Intl. Society of Computational Biology) Fellow
2009	AAAS Fellow
1997 - 2001	Young Investigator Awards from Navy & IBM, and PhRMA, Donaghue, & Keck foundations
1993 - 1996	Damon Runyon-Walter Winchell post-doctoral Fellowship
1989 - 1993	Herchel-Smith Scholarship funded PhD at Cambridge
1989	Graduated college <i>summa cum laude &amp; phi beta kappa</i>

### Editorial Boards

Genome Research, DATABASE, Molecular Systems Biology, PLoS Comp Bio, GenomeBiology, BMC Bioinformatics, Molecular & Cellular Proteomics, Molecular Biology & Evolution

### Professional Experience (beyond Yale, but not including for profits)

Analysis Working Group co-chair: NHGRI ModENCODE Project ('07-'14), Brainspan Project ('09-), 1000 Genomes Functional Interpretation Group ('11-'15), exRNA consortium ('13-), CMG [Centers for Mendelian Genomics] ('13-), PsychENCODE ('14-), PCAWG-2 [PanCancer Analysis Working Group, non-coding drivers] ('14-), ENCODE & cancer ('13-)

Member Toronto Integrative Biology SAB  
Member Cytoscape SAB  
Program Committee BIBM '09, '12, '15  
NIH Human Proteome Meeting Organizing Committee  
NSF Workshops on Knowledge Management and Visualization Tools, '08.

## Lab Personnel

[Name, Abbreviation, Role comment, Office, Start Date] (as of 28 Nov. 2014)

### Laboratory Staff

Mihali Felipe	MF	Systems Administrator	Gibbs 352	11/1/04
Lori Iannicelli	LI	Administrative Assistant	Bass 432	3/1/13

### Research Scientists

Suganthi Balasubramanian	SB		Bass 428	9/1/99
Joel Rozowsky	JR		Bass 428	9/1/03
Anurag Sethi	ANS		Bass 426	8/1/13
Koon-Kiu Yan	KKY		Bass 426	6/2/08

### Postdoctoral Associates and Fellows

Timur Galeev	TG		Bass 437	9/1/14
Arif Harmanci	AH		Bass 437	11/15/10
Robert Kitchen	RK	(jt. w. A. Nairn)	Bass 426	7/1/11
Sushant Kumar	SK		Bass 437	12/1/13
Fabio Navarro	FN		Bass 437	10/1/14
Baikang Pei	BP		Bass 437	9/15/10
Leonidas Salichos	LS		Bass 437	9/1/14
Cristina Sisu	CSDS		Bass 426	2/24/11
Dan Spakowicz	DS	(jt. w. George Weinstock)	--	10/1/14
Daifeng Wang	DW		Bass 426	1/16/12
Yan Zhang	YZ		Bass 437	10/1/12
Jing Zhang	JZ		Bass 437	2/1/14

### Graduate Students

Jason Bedford	JAS	CBB (NSF fellow)	Bass 437	7/1/13
Jieming Chen	JC	CBB (jt. w. L Regan)	Bass 437	6/8/11
Declan Clarke	DC	Chemistry	Bass 426	8/1/10
Yao Fu	YF	CBB	Bass 437	7/1/11
Mengting Gu	MTG	CBB	Bass 437	7/1/14
Shantao Li	STL	CBB	Bass 437	8/1/13
Lucas Lochovsky	LL	CBB	Bass 437	3/1/09
Paul Muir	PM	MCDB (jt. w. F Isaacs)	Bass 437	6/1/14
Michael R. Schoenberg	MRS	MBB (jt. w. M Simon)	Bass 437	7/1/13

### Undergrad Students

Ian Gonzalez	--		Bass 437	1/1/14
Daniel Kim	--		--	1/1/13
Jayanth Krishnan	--		--	6/1/14
Jeremy Liu	--		Bass 428	3/1/13
Jason Liu	--		--	5/1/14
Eric Pan	--		--	5/1/13

### Misc.

Pedro Alves	PA	CBB (in absence)	Bass 437	9/1/07
Donghoon Lee	--	Rotation Student	Bass 437	9/1/14
Xiaotong Li	--	Rotation Student	Bass 437	9/1/14
Patrick McGillivray	--	MD candidate	Bass 437	6/5/14
William Meyerson	--	MD candidate	Bass 437	8/1/14

## Past Postdoctoral Associates and Fellows (as of 31 Sep. 2014)

### Currently Holding a Faculty Position

Jiang Qian	1999 – 2002	Johns Hopkins	Assoc. Prof.
Paul Harrison	1999 – 2004	Biology Dept., McGill U	Tenured Assoc. Prof.
Yuval Kluger	1999 – 2002	Pathology Dept., Yale U.	Assoc. Prof.
Nicholas Luscombe	2000 – 2004	Univ. College London	Tenured Prof.
Zhaolei Zhang	2002 – 2004	CCBR, U of Toronto	Tenured Assoc. Prof.
John Karro	2003 – 2005	CS Dept., Miami U.	Asst. Prof.
Yu (Brandon) Xia	2003 – 2006	Bioengineering Dept., McGill U	Assoc. Prof.
Long Lu	2003 – 2006	Cincinnati Children's Hospital	Asst. Prof.
Olof Emanuelsson	2003 – 2005	Royal Inst. of Technology, Sweden	Asst. Prof.
Deyou Zheng	2003 – 2007	Albert Einstein College of Medicine	Asst. Prof.
Alberto Paccanaro	2003 – 2005	CS Dept. Royal Holloway, U of London	Reader (w/ Tenure)
Phillip Kim	2004 – 2008	CCBR, U of Toronto	Asst. Prof.
Zhengdong Zhang	2005 – 2010	Albert Einstein College of Medicine	Asst. Prof.
Jan Korbel	2005 – 2007	EMBL	Group Leader
Andrea Sboner	2006 – 2011	Cornell Medical School	Asst. Prof.
Zhi (John) Lu	2008 – 2011	Tsinghua University	Asst. Prof.
Chao Cheng	2008 – 2012	Dartmouth University	Asst. Prof.
Alexej Abyzov	2008 – 2014	Mayo Clinic/U of Minnesota	Asst. Prof.
Ekta Khurana	2008 – 2014	Weill Cornell Medical College	Asst Prof.
Gang Fang	2007 – 2014	NYU (Shanghai)	Asst Prof

### Working in Industry

Valery Trifonov	1998 – 2004	Goldman Sachs
Ning Lan	2000 – 2002	Incyte
Yang Liu	2000 – 2003	Sigma-Aldrich
Ian Laurenzi	2002 – 2004	ExxonMobil
Sambath Chung	2002 – 2004	Genelogic
Ursula Lehnert	2002 – 2004	McKinsey Consulting
Duncan Milburn	2002 – 2005	UCB Pharma
Zhiyun (Eric) Yu	2003 – 2006	McKinsey Consulting
Yongpan (Daniel) Yan	2005 – 2006	Glaxosmithkline
Thayalini Arinaminpathy	2005 – 2007	British Telecom
Anne Burba (Counterman)	2005 – 2009	freelance writing
Nitin Bhardwaj	2007 – 2011	BASF
Renqiang Min	2011 – 2012	NEC
Wyatt Clark	2013 – 2014	BioMarin Pharmaceutical

### Other

Hedi Hedyi	1998 – 2000	
Jochen Junker	2000 – 2002	
Chern-Sing Goh	2002 – 2006	
Rajkumar (Raj) Sasidharan	2004 – 2008	
Alexander Karpikov	2004 – 2007	
Can (John) Bruce	2005 – 2007	
Roger Alexander	2007 – 2013	Pacific NW Diabetes Research Inst

## Past PhD students (as of 31 Sep. 2014)

### Currently Holding a Faculty Position

Paul Bertone	1998 – 2005	EBI (Cambridge)	Group Leader
Haiyuan Yu	2000 – 2005	Biostat & Comp. Bio., Cornell U	Asst. Prof.
Samuel Flores	2004 – 2007	Cell & Mol. Biol., Uppsala U	Asst. Prof.
Kevin Yip	2004 – 2009	The Chinese University of Hong Kong	Asst. Prof.

### Elsewhere in academia

Xinmeng Mu	2007 – 2012	Broad Inst./Harvard Med.	Postdoc
Raymond Auerbach	2007 - 2012	Stanford U.	Postdoc

### Working in Industry

Werner Krebs	1996 – 2001	Bank of America
Ronald Jansen	1997 – 2002	Goldman Sachs
Vadim Alexandrov	1998 – 2003	Psychogenics
Dov Greenbaum	1999 – 2004	Pearl Cohen Zedek Latzer
Thomas Royce	2002 – 2007	Illumina
Andrew Smith	2002 – 2007	Bristol-Myers Squibb
Jiang Du	2004 – 2010	JP Morgan
Chong Shou	2005 – 2011	MF Global
Hugo (Yu Kor) Lam	2005 – 2010	23andme
William Grenawitzke	2006 – 2006	Merrill Lynch
Michael Seringhaus	2001 – 2007	Latham & Watkins
Lukas Habegger	2007 – 2012	LEK Consulting
Jing Leng	2009 – 2014	Illumina

### Other

Ted Johnson	1996 – 2003
Rajdeep Das	1998 – 2004
Tara Gianoulis	2003 – 2009
Prianka Patel	2004 – 2010

## **Teaching** (as of 28 Nov. 2014)

### **Bioinformatics: Practical Application of Simulation & Data Mining**

CBB752b, MBB752b, CS752b, MBB452, MBB753, MBB754  
Responsible for whole-semester course on fundamentals of bioinformatics taught to advanced undergraduates and graduate students (from Computational Biology, Biophysics, & CS).  
Course comprised of 25 lectures of 75' each with weekly section, graded homework and quizzes, midterm and final project.  
Taught course continuously for 18 iterations (since '98), usually in Spring.  
Course web site is [www.gersteinlab.org/courses/452](http://www.gersteinlab.org/courses/452)

### **Responsible Conduct of Research**

MBB676b in the Spring of '15  
Responsible for 1 lecture

### **Past Courses**

Parts of (~6 75' lectures)  
1) CS Course "Introduction to Data Mining"  
2) Molecular Biophysics course "Macromolecules"

## **Current Committee Work** (as of 30 Sep. 2015)

### **Departmental & Program Activities**

*Yale Computational Biology & Bioinformatics (CBB) Program*

co-DGS and co-director with H Zhao (fall '02-)  
(previous to this was member of the track committee)

Computational Biology admissions committee  
Thesis Research & Qualifying Exam committees (>5)  
Medical School Strategic Planning Committee on Biomedical Data Science (co-chair)

### **Other University Activities**

West Campus Systems Biology Institute Advisory Committee ('12-) and  
Computational Biology Search ('15)  
University Deputy CIO Search & Sr. Director Research Technologies ('12-)  
CT Biocompute Yale lead ('15)  
co-director Keck Bioinformatics Resource

## **Other Writings & Presentations** (as of 30 Sep. 2015)

### **Opinion Pieces**

D Greenbaum & M Gerstein (2008). "Danger: Sharing Gene Data", Hartford Courant, July 10, pg. A11 (Op-ed)

D Greenbaum & M Gerstein (2008). "Personal genomics requires redefining privacy -- The human blueprint: dangerous secrets", SF Chronicle, Nov. 2, Page 2 (Insight)

M Seringhaus & M Gerstein (2009). "Putting too much information online can erode individual privacy", Hartford Courant, June 5 (Op-ed)

D Greenbaum & M Gerstein (2010). "Exploring genetics of professional athletes", SF Chronicle, May 2, Page E-4 (Insight)

D Greenbaum & M Gerstein (2012). "The Age of Genetically Optimized Sports", Wall Street Journal, July 24, Page A13 (Opinion)

D Greenbaum & M Gerstein (2013). "Your DNA vulnerable to snooping, too?", USA Today, July 27 (Opinion)

D Greenbaum & M Gerstein (2013). "Proceed with Caution," The Scientist, Oct 1

D Greenbaum & M Gerstein (2015). "Too big to close down: Websites need regulation like utilities", SF Chronicle, April 24 (Opinion)

D Greenbaum & M Gerstein (2015). "Why can employers fingerprint, but not test workers' DNA?", SF Chronicle, July 10 (Opinion)

### **Recorded Panel Discussions & Interviews**

M Gerstein (2008). "A Great Historical Document - The Human Genome", Futures in Biotech 34 (podcast moderated by M Pelletier)

"A Closer Look at Personal Genomic Testing", Inforum Genomics Panel, at the Commonwealth Club of California, including L Avey, D Ballon, D Magnus, M Gerstein, J Rae-Dupree (2009)

"Whose DNA is it?", a panel discussion on Personal Genomics, on the Agenda with Steve Paikin, as part of the Quantum to Cosmos Festival (Q2C) in Waterloo, ON, 21 Oct. 2009

"Genomics, Proteomics, Cellular Immunity, and Anti-Matter", a panel discussion moderated by M Pelletier, including V Racaniello, A Nantel, M Gerstein, and G Farr. Futures in Biotech 71 (22 Nov. 2010)

M Gerstein (2011). "Bioinformatics: Essential Gene names Skewed in a Network of Blame", Futures in Biotech 83 (podcast moderated by M Pelletier)

"6 PhDs Piled High And Deep", a panel discussion moderated by M Pelletier, including G Farr, D Thomas, M Gerstein, S Melov, and J Sanchez. Futures in Biotech 91 (16 Dec. 2011)

M Gerstein (2014). "What in the World", Sirius XM Radio Canada, 60' on 20 Nov. (Interview by Richard Garner)

M Gerstein (2015). "What Now? Going Beyond the \$1,000 Genome", Mendelspod, 17 Sept. (podcast moderated by T Timpson)

## Main Scientific Publications

(As of 30 Sep. 2015, see footnotes at end of the publication section)

-- 2015 --

- The 1000 Genomes Project Consortium (2015). "A global reference for human genetic variation." *Nature* 526: 68–74.
- PH Sudmant, T Rausch, E Gardner, R Handsaker, A Abyzov, J Huddleston, Y Zhang, K Ye, G Jun, M Fritz, M Konkel, A Malhotra, A Stütz, X Shi, F Paolo Casale, J Chen, F Hormozdiari, G Dayama, K Chen, M Malig, M Chaisson, K Walter, S Meiers, S Kashin, E Garrison, A Auton, H Lam, XJ Mu, C Alkan, D Antaki, T Bae, E Cerveira, P Chines, Z Chong, L Clarke, E Dal, L Ding, S Emery, X Fan, M Gujral, F Kahveci, J Kidd, Y Kong, E Lameijer, S McCarthy, P Flicek, R Gibbs, G Marth, C Mason, A Menelaou, D Muzny, B Nelson, A Noor, N Parrish, M Pendleton, A Quitadamo, B Raeder, E Schadt, M Romanovitch, A Schlattl, R Sebra, A Shabalin, A Untergasser, J Walker, M Wang, F Yu, C Zhang, J Zhang, X Zheng-Bradley, W Zhou, T Zichner, J Sebat, M Batzer, S McCarroll, The 1000 Genomes Project Consortium, R Mills, M Gerstein, A Bashir, O Stegle, S Devine, C Lee, E Eichler, JO Korb (2015). "An integrated map of structural variation in 2,504 human genomes." *Nature* 526: 75–81.
- JC Mu, P Tootoonchi Afshar, M Mohiyuddin, X Chen, J Li, N Bani Asadi, MB Gerstein, WH Wong, HY Lam (2015). "Leveraging long read sequencing from a single individual to provide a comprehensive resource for benchmarking variant calling methods." *Sci Rep* 5: 14493.
- LT Fang, PT Afshar, A Chhibber, M Mohiyuddin, Y Fan, JC Mu, G Gibelung, S Barr, NB Asadi, MB Gerstein, DC Koboldt, W Wang, WH Wong, HY Lam (2015). "An ensemble approach to accurately detect somatic mutations using SomaticSeq." *Genome Biol* 16: 197.
- EE Duffy, M Rutenberg-Schoenberg, CD Stark, RR Kitchen, MB Gerstein, MD Simon (2015). "Tracking Distinct RNA Populations Using Efficient and Reversible Covalent Chemistry." *Mol Cell* 59: 858-66.
- L Lochovsky, J Zhang, Y Fu, E Khurana, M Gerstein (2015). "LARVA: an integrative framework for large-scale analysis of recurrent variants in noncoding annotations." *Nucleic Acids Res* .
- PP Kuksa, MR Min, R Dugar, M Gerstein (2015). "High-order neural networks and kernel methods for peptide-MHC binding prediction." *Bioinformatics* .
- J Mariani, G Coppola, P Zhang, A Abyzov, L Provini, L Tomasini, M Amenduni, A Szekeley, D Palejev, M Wilson, M Gerstein, EL Grigorenko, K Chawarska, KA Pelphey, JR Howe, FM Vaccarino. (2015) "FOXP1-Dependent Dysregulation of GABA/Glutamate Neuron Differentiation in Autism Spectrum Disorders." *Cell* Jul 16;162(2):375-90.
- A Abyzov, S Li, DR Kim, M Mohiyuddin, AM Stütz, NF Parrish, XJ Mu, W Clark, K Chen, M Hurles, JO Korb, HY Lam, C Lee, MB Gerstein (2015). "Analysis of deletion breakpoints from 1,092 humans reveals details of mutation mechanisms." *Nat Commun* 6: 7256.
- D Greenbaum, M Gerstein (2015). "The computer connection." *Science* 347: 956.
- M Mohiyuddin, JC Mu, J Li, N Bani Asadi, MB Gerstein, A Abyzov, WH Wong, HY Lam (2015). "MetaSV: an accurate and integrative structural-variant caller for next generation sequencing." *Bioinformatics* 31: 2741-4.
- D Wang, KK Yan, C Sisu, C Cheng, J Rozowsky, W Meyerson, MB Gerstein (2015). "Loregic: a method to characterize the cooperative logic of regulatory factors." *PLoS Comput Biol* 11: e1004132.

C Cheng, E Andrews, KK Yan, M Ung, D Wang, M Gerstein (2015). "An approach for determining and measuring network hierarchy applied to comparing the phosphorylome and the regulome." *Genome Biol* 16: 63.

-- 2014 --

JC Mu, M Mohiyuddin, J Li, N Bani Asadi, MB Gerstein, A Abyzov, WH Wong, HY Lam (2014). "VarSim: a high-fidelity simulation and validation framework for high-throughput genome sequencing with cancer applications." *Bioinformatics* 31: 1469-71.

RR Kitchen, JS Rozowsky, MB Gerstein, AC Nairn (2014). "Decoding neuroproteomics: integrating the genome, translome and functional anatomy." *Nat Neurosci* 17: 1491-9.

A Harmanci, J Rozowsky, M Gerstein (2014). "MUSIC: identification of enriched regions in ChIP-Seq experiments using a mappability-corrected multiscale signal processing framework." *Genome Biol* 15: 474.

Y Fu, Z Liu, S Lou, J Bedford, XJ Mu, KY Yip, E Khurana, M Gerstein (2014). "FunSeq2: a framework for prioritizing noncoding regulatory variants in cancer." *Genome Biol* 15: 480.

AP Boyle, CL Araya, C Brdlik, P Cayting, C Cheng, Y Cheng, K Gardner, LW Hillier, J Janette, L Jiang, D Kasper, T Kawli, P Kheradpour, A Kundaje, JJ Li, L Ma, W Niu, EJ Rehm, J Rozowsky, M Slattery, R Spokony, R Terrell, D Vafeados, D Wang, P Weisdepp, YC Wu, D Xie, KK Yan, EA Feingold, PJ Good, MJ Pazin, H Huang, PJ Bickel, SE Brenner, V Reinke, RH Waterston, M Gerstein, KP White, M Kellis, M Snyder (2014). "Comparative analysis of regulatory information and circuits across distant species." *Nature* 512: 453-6.

MB Gerstein, J Rozowsky, KK Yan, D Wang, C Cheng, JB Brown, CA Davis, L Hillier, C Sisu, JJ Li, B Pei, AO Harmanci, MO Duff, S Djebali, RP Alexander, BH Alver, R Auerbach, K Bell, PJ Bickel, ME Boeck, NP Boley, BW Booth, L Cherbas, P Cherbas, C Di, A Dobin, J Drenkow, B Ewing, G Fang, M Fastuca, EA Feingold, A Frankish, G Gao, PJ Good, R Guigó, A Hammonds, J Harrow, RA Hoskins, C Howald, L Hu, H Huang, TJ Hubbard, C Huynh, S Jha, D Kasper, M Kato, TC Kaufman, RR Kitchen, E Ladewig, J Lagarde, E Lai, J Leng, Z Lu, M MacCoss, G May, R McWhirter, G Merrihew, DM Miller, A Mortazavi, R Murad, B Oliver, S Olson, PJ Park, MJ Pazin, N Perrimon, D Pervouchine, V Reinke, A Reymond, G Robinson, A Samsonova, GI Saunders, F Schlesinger, A Sethi, FJ Slack, WC Spencer, MH Stoiber, P Strasbourger, A Tanzer, OA Thompson, KH Wan, G Wang, H Wang, KL Watkins, J Wen, K Wen, C Xue, L Yang, K Yip, C Zaleski, Y Zhang, H Zheng, SE Brenner, BR Graveley, SE Celniker, TR Gingeras, R Waterston (2014). "Comparative analysis of the transcriptome across distant species." *Nature* 512: 445-8.

C Sisu, B Pei, J Leng, A Frankish, Y Zhang, S Balasubramanian, R Harte, D Wang, M Rutenberg-Schoenberg, W Clark, M Diekhans, J Rozowsky, T Hubbard, J Harrow, MB Gerstein (2014). "Comparative analysis of pseudogenes across three phyla." *Proc Natl Acad Sci U S A* 111: 13361-6.

KK Yan, D Wang, J Rozowsky, H Zheng, C Cheng, M Gerstein (2014). "OrthoClust: an orthology-based network framework for clustering data across multiple species." *Genome Biol* 15: R100.

DG MacArthur, TA Manolio, DP Dimmock, HL Rehm, J Shendure, GR Abecasis, DR Adams, RB Altman, SE Antonarakis, EA Ashley, JC Barrett, LG Biesecker, DF Conrad, GM Cooper, NJ Cox, MJ Daly, MB Gerstein, DB Goldstein, JN Hirschhorn, SM Leal, LA Pennacchio, JA Stamatoyannopoulos, SR Sunyaev, D Valle, BF Voight, W Winckler, C Gunter (2014). "Guidelines for investigating causality of sequence variants in human disease." *Nature* 508: 469-76.

M Kellis, B Wold, MP Snyder, BE Bernstein, A Kundaje, GK Marinov, LD Ward, E Birney, GE Crawford, J Dekker, I Dunham, LL Elnitski, PJ Farnham, EA Feingold, M Gerstein, MC Giddings, DM Gilbert, TR Gingeras, ED Green, R Guigo, T Hubbard, J Kent, JD Lieb, RM Myers, MJ Pazin, B Ren, JA

Stamatoyannopoulos, Z Weng, KP White, RC Hardison (2014). "Defining functional DNA elements in the human genome." *Proc Natl Acad Sci U S A* 111: 6131-8.

JA Miller, SL Ding, SM Sunkin, KA Smith, L Ng, A Szafer, A Ebbert, ZL Riley, JJ Royall, K Aiona, JM Arnold, C Bennet, D Bertagnolli, K Brouner, S Butler, S Caldejon, A Carey, C Cuhacian, RA Dalley, N Dee, TA Dolbeare, BA Facer, D Feng, TP Fliss, G Gee, J Goldy, L Gourley, BW Gregor, G Gu, RE Howard, JM Jochim, CL Kuan, C Lau, CK Lee, F Lee, TA Lemon, P Lesnar, B McMurray, N Mastan, N Mosqueda, T Naluai-Cecchini, NK Ngo, J Nyhus, A Oldre, E Olson, J Parente, PD Parker, SE Parry, A Stevens, M Pletikos, M Reding, K Roll, D Sandman, M Sarreal, S Shapouri, NV Shapovalova, EH Shen, N Sjoquist, CR Slaughterbeck, M Smith, AJ Sodt, D Williams, L Zöllei, B Fischl, MB Gerstein, DH Geschwind, IA Glass, MJ Hawrylycz, RF Hevner, H Huang, AR Jones, JA Knowles, P Levitt, JW Phillips, N Sestan, P Wahnoutka, C Dang, A Bernard, JG Hohmann, ES Lein (2014). "Transcriptional landscape of the prenatal human brain." *Nature* 508: 199-206.

### -- 2013 --

KY Yip, C Cheng, M Gerstein (2013). "Machine learning and genome annotation: a match meant to be?" *Genome Biol* 14: 205.

E Khurana, Y Fu, J Chen, M Gerstein (2013). "Interpretation of genomic variants using a unified biological network approach." *PLoS Comput Biol* 9: e1002886. [PMCID: PMC3591262]

T Steijger, JF Abril, PG Engström, F Kokocinski, The RGASP Consortium, JF Abril, M Akerman, T Alioto, G Ambrosini, SE Antonarakis, J Behr, P Bertone, R Bohnert, P Bucher, N Cloonan, T Derrien, S Djebali, J Du, S Dudoit, PG Engström, M Gerstein, TR Gingeras, D Gonzalez, SM Grimmond, R Guigó, L Habegger, J Harrow, TJ Hubbard, C Iseli, G Jean, A Kahles, F Kokocinski, J Lagarde, J Leng, G Lefebvre, S Lewis, A Mortazavi, P Niermann, G Rätsch, A Reymond, P Ribeca, H Richard, J Rougemont, J Rozowsky, M Sammeth, A Sboner, MH Schulz, SM Searle, ND Solorzano, V Solovyev, M Stanke, T Steijger, BJ Stevenson, H Stockinger, A Valsesia, D Weese, S White, BJ Wold, J Wu, TD Wu, G Zeller, D Zerbino, MQ Zhang, TJ Hubbard, R Guigó, J Harrow, P Bertone (2013). "Assessment of transcript reconstruction methods for RNA-seq." *Nat Methods* 10:1177.

D Greenbaum, J Chen, M Gerstein (2013). "Deep Inside Champions, Just Genes?" *Science* 342: 560.

E Khurana, Y Fu, V Colonna, XJ Mu, HM Kang, T Lappalainen, A Sboner, L Lochovsky, J Chen, A Harmanci, J Das, A Abyzov, S Balasubramanian, K Beal, D Chakravarty, D Challis, Y Chen, D Clarke, L Clarke, F Cunningham, US Evani, P Flicek, R Fragoza, E Garrison, R Gibbs, ZH Gumus, J Herrero, N Kitabayashi, Y Kong, K Lage, V Liliushvili, SM Lipkin, DG MacArthur, G Marth, D Muzny, TH Pers, GR Ritchie, JA Rosenfeld, C Sisu, X Wei, M Wilson, Y Xue, F Yu, 1000 Genomes Project Consortium, ET Dermitzakis, H Yu, MA Rubin, C Tyler-Smith, M Gerstein (2013). "Integrative annotation of variants from 1092 humans: application to cancer genomics." *Science* 342: 1235587

A Abyzov, R Iskow, O Gokcumen, DW Radke, S Balasubramanian, B Pei, L Habegger, The 1000 Genomes Project Consortium, C Lee, M Gerstein (2013). "Analysis of variable retroduplications in human populations suggests coupling of retrotransposition to cell division." *Genome Res.* 12: 2042

C Cheng, Y Fu, L Shen, M Gerstein (2013). "Identification of yeast cell cycle regulated genes based on genomic features." *BMC Syst Biol* 7: 70.

Y Zhang, R Haraksingh, F Grubert, A Abyzov, M Gerstein, S Weissman, AE Urban (2013). "Child development and structural variation in the human genome." *Child Dev* 84: 34-48.

R Kittler, J Zhou, S Hua, L Ma, Y Liu, E Pendleton, C Cheng, M Gerstein, KP White (2013). "A comprehensive nuclear receptor network for breast cancer cells." *Cell Rep* 3: 538-51.

H Tilgner, D Raha, L Habegger, M Mohiuddin, M Gerstein, M Snyder (2013). "Accurate identification and analysis of human mRNA isoforms using deep long read sequencing." *G3* (Bethesda) 3: 387-97.

SB Montgomery, DL Goode, E Kvikstad, CA Albers, ZD Zhang, XJ Mu, G Ananda, B Howie, KJ Karczewski, KS Smith, V Anaya, R Richardson, J Davis, 1000 Genomes Project Consortium, DG MacArthur, A Sidow, L Duret, M Gerstein, KD Makova, J Marchini, G McVean, G Lunter (2013). "The origin, evolution, and functional impact of short insertion-deletion variants identified in 179 human genomes." *Genome Res* 23: 749-61.

WF Doolittle, P Fraser, MB Gerstein, BR Graveley, S Henikoff, C Huttenhower, A Oshlack, CP Ponting, JL Rinn, MC Schatz, J Ule, D Weigel, GM Weinstock (2013). "Sixty years of genome biology." *Genome Biol* 14: 113.

E Khurana, Y Fu, J Chen, M Gerstein (2013). "Interpretation of genomic variants using a unified biological network approach." *PLoS Comput Biol* 9: e1002886.

## -- 2012 --

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## Notes on Scientific Publications

(As of 30 Sept. 2015)

- a) 474 scientific publications in total. Not including in press or submitted articles.
- b) H-index for M Gerstein is 129  
(according to Google Scholar, [scholar.google.com/citations?user=YvjuUugAAAAJ](https://scholar.google.com/citations?user=YvjuUugAAAAJ))
- c) In the publication list, if M Gerstein is not a last or first author, he is not considered to be a "corresponding" or "senior" author except as noted by the asterisks (\*) in the list below:

Sudmant... 1000 Genomes Project, Mills\*, Gerstein\*, Bashir\*, Stegle\*, Devine\*, Lee\*, Eichler\*, Korbelt\* (2015). *Nature* 492: 438-42

Abyzov... Urban\*, Gerstein\*, Vaccarino\* (2012) *Nature* 492: 438-42

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Mills... Eichler\*, Gerstein\*, Hurles\*, Lee\*, McCarroll\*, Korbelt\*, 1000 Genomes Project (2011). *Nature* 470: 59.

Bertone... Gerstein\*, Snyder\* (2004). *Science* 306: 2242.