### Main Scientific Publications (See footnotes at end of the publication section)

### -- 2017 --

BC Carlyle, RR Kitchen, JE Kanyo, EZ Voss, M Pletikos, AMM Sousa, TT Lam, MB Gerstein, N Sestan, AC Nairn (2017). "A multiregional proteomic survey of the postnatal human brain." *Nat Neurosci* 20: 1787-1795.

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L Lochovsky, J Zhang, M Gerstein (2017). "MOAT: Efficient Detection of Highly Mutated Regions with the Mutations Overburdening Annotations Tool." *Bioinformatics*.

Q Cao, C Anyansi, X Hu, L Xu, L Xiong, W Tang, MTS Mok, C Cheng, X Fan, M Gerstein, ASL Cheng, KY Yip (2017). "Reconstruction of enhancer-target networks in 935 samples of human primary cells, tissues and cell lines." *Nat Genet* 49: 1428-1436.

S Balasubramanian, Y Fu, M Pawashe, P McGillivray, M Jin, J Liu, KJ Karczewski, DG MacArthur, M Gerstein (2017). "Using ALoFT to determine the impact of putative loss-of-function variants in protein-coding genes." *Nat Commun* 8: 382.

KK Yan, S Lou, M Gerstein (2017). "MrTADFinder: A network modularity based approach to identify topologically associating domains in multiple resolutions." *PLoS Comput Biol* 13: e1005647.

SME Sahraeian, M Mohiyuddin, R Sebra, H Tilgner, PT Afshar, KF Au, N Bani Asadi, MB Gerstein, WH Wong, MP Snyder, E Schadt, HYK Lam (2017). "Gaining comprehensive biological insight into the transcriptome by performing a broad-spectrum RNA-seq analysis." *Nat Commun* 8: 59.

Y Zhang, S Li, A Abyzov, MB Gerstein (2017). "Landscape and variation of novel retroduplications in 26 human populations." *PLoS Comput Biol* 13: e1005567.

S Kumar, M Gerstein (2017). "Cancer genomics: Less is more in the hunt for driver mutations." *Nature* 547: 40-41.

P Dhingra, Y Fu, M Gerstein, E Khurana (2017). "Using FunSeq2 for Coding and Non-Coding Variant Annotation and Prioritization." *Curr Protoc Bioinformatics* 57: 15111-151117.

P Alves, S Liu, D Wang, M Gerstein (2017). "Multiple-Swarm Ensembles: Improving the Predictive Power and Robustness of Predictive Models and Its Use in Computational Biology." *IEEE/ACM Trans Comput Biol Bioinform*.

V Despic, M Dejung, M Gu, J Krishnan, J Zhang, L Herzel, K Straube, MB Gerstein, F Butter, KM Neugebauer (2017). "Dynamic RNA-protein interactions underlie the zebrafish maternal-to-zygotic transition." *Genome Res* 27: 1184-1194.

D Greenbaum, J Rozowsky, V Stodden, M Gerstein (2017). "Structuring supplemental materials in support of reproducibility." *Genome Biol* 18: 64.

KK Yan, GG Yardimci, C Yan, WS Noble, M Gerstein (2017). "HiC-spector: a matrix library for spectral and reproducibility analysis of Hi-C contact maps." *Bioinformatics* 33: 2199-2201.

S Li, BM Shuch, MB Gerstein (2017). "Whole-genome analysis of papillary kidney cancer finds significant noncoding alterations." *PLoS Genet* 13: e1006685.

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E Mick, R Shah, K Tanriverdi, V Murthy, M Gerstein, J Rozowsky, R Kitchen, MG Larson, D Levy, JE Freedman (2017). "Stroke and Circulating Extracellular RNAs." *Stroke* 48: 828-834.

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J Chen, B Wang, L Regan, M Gerstein (2016). *Intensification: A Resource for Amplifying Population-Genetic Signals with Protein Repeats.* *J Mol Biol* 429: 435-445.

S Kumar, D Clarke, M Gerstein (2016). " Localized structural frustration for evaluating the impact of sequence variants," *Nuc. Acids Res.* doi:10.1093/nar/gkw927

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CC Yang, EH Andrews, MH Chen, WY Wang, JJ Chen, M Gerstein, CC Liu, C Cheng (2016). "iTAR: a web server for identifying target genes of transcription factors using ChIP-seq or ChIP-chip data," *BMC Genomics* 17: 632.

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KH Cheung, S Keerthikumar, P Roncaglia, SL Subramanian, ME Roth, M Samuel, S Anand, L Gangoda, S Gould, R Alexander, D Galas, MB Gerstein, AF Hill, RR Kitchen, J Lotvall, T Patel, DC Procaccini, P Quesenberry, J Rozowsky, RL Raffai, A Shypitsyna, AI Su, C Thery, K Vickers, MH Wauben, S Mathivanan, A Milosavljevic, LC Laurent (2016). "Extending gene ontology in the context of extracellular RNA and vesicle communication," *J Biomed Semantics* 7: 19.

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A Harmanci, M Gerstein (2016). "Quantification of private information leakage from phenotype-genotype data: linking attacks," *Nat Methods* 13: 251-6.

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### Notes on Scientific Publications (As of 1 Dec. 2016)

a) 511 scientific publications in total.   
Not including in press or submitted articles or popular pieces such as Op-Eds.

b) H-index for M Gerstein is 138   
(according to Google Scholar, scholar.google.com/citations?user=YvjuUugAAAAJ)

c) On Thomson Reuters Highly Cited Researchers (HCR) List in '14, 2015 & 2016

d) 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\*, Korbel\* (2015). *Nature*492: 438-42

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

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MacArthur... 1000 Genomes Project... **Gerstein\***, Tyler-Smith\* (2012). *Science*335: 823.

Mills... Eichler\*, **Gerstein\***, Hurles\*, Lee\*, McCarroll\*, Korbel\*, 1000 Genomes Project   
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Bertone... **Gerstein\***, Snyder\* (2004). *Science* 306: 2242.