

Stanford

Georgi Kolev Marinov

Postdoctoral Research Fellow, Genetics

Bio

PROFESSIONAL EDUCATION

- Bachelor of Science, Massachusetts Institute of Technology (2008)
- Doctor of Philosophy, California Institute of Technology (2014)

Research & Scholarship

LAB AFFILIATIONS

- Anshul Kundaje, Kundaje (5/1/2017)

Publications

PUBLICATIONS

- **Mitigation of off-target toxicity in CRISPR-Cas9 screens for essential non-coding elements.** *Nature communications*
Tycko, J., Wainberg, M., Marinov, G. K., Ursu, O., Hess, G. T., Ego, B. K., Li, A., Truong, A., Trevino, A. E., Spees, K., Yao, D., Kaplow, I. M., Greenside, et al
2019; 10 (1): 4063
- **Population Genetics of Paramecium Mitochondrial Genomes: Recombination, Mutation Spectrum, and Efficacy of Selection.** *Genome biology and evolution*
Johri, P., Marinov, G. K., Doak, T. G., Lynch, M.
2019; 11 (5): 1398–1416
- **Deciphering regulatory DNA sequences and noncoding genetic variants using neural network models of massively parallel reporter assays.** *PLoS one*
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- **Response to Martin and colleagues: mitochondria do not boost the bioenergetic capacity of eukaryotic cells** *BIOLOGY DIRECT*
Lynch, M., Marinov, G. K.
2018; 13
- **A decade of ChIP-seq** *BRIEFINGS IN FUNCTIONAL GENOMICS*
Marinov, G. K.
2018; 17 (2): 77–79
- **ChIP-ping the branches of the tree: functional genomics and the evolution of eukaryotic gene regulation** *BRIEFINGS IN FUNCTIONAL GENOMICS*
Marinov, G. K., Kundaje, A.
2018; 17 (2): 116–37
- **Response to Martin and colleagues: mitochondria do not boost the bioenergetic capacity of eukaryotic cells.** *Biology direct*
Lynch, M., Marinov, G. K.
2018; 13 (1): 26
- **Population Genomics of Paramecium Species** *MOLECULAR BIOLOGY AND EVOLUTION*
Johri, P., Krenek, S., Marinov, G. K., Doak, T. G., Berendonk, T. U., Lynch, M.
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- **Membranes, energetics, and evolution across the prokaryote-eukaryote divide** *ELIFE*
Lynch, M., Marinov, G. K.
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- **On the design and prospects of direct RNA sequencing.** *Briefings in functional genomics*
Marinov, G. K.
2017
- **ChIP-seq for the Identification of Functional Elements in the Human Genome.** *Methods in molecular biology (Clifton, N.J.)*
Marinov, G. K.
2017; 1543: 3-18
- **Transcriptomic analysis of the role of RasGEF1B circular RNA in the TLR4/LPS pathway.** *Scientific reports*
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2017; 7 (1): 12227
- **Identification of Candidate Functional Elements in the Genome from ChIP-seq Data.** *Methods in molecular biology (Clifton, N.J.)*
Marinov, G. K.
2017; 1543: 19-43
- **SLC7A11 Overexpression in Glioblastoma Is Associated with Increased Cancer Stem Cell-Like Properties.** *Stem cells and development*
Polewski, M. D., Reveron-Thornton, R. F., Cherryholmes, G. A., Marinov, G. K., Aboody, K. S.
2017; 26 (17): 1236-46
- **Increased Expression of System x(c)(-) in Glioblastoma Confers an Altered Metabolic State and Temozolomide Resistance** *MOLECULAR CANCER RESEARCH*
Polewski, M. D., Reveron-Thornton, R. F., Cherryholmes, G. A., Marinov, G. K., Cassady, K., Aboody, K. S.
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- **Conservation and divergence of the histone code in nucleomorphs** *BIOLOGY DIRECT*
Marinov, G. K., Lynch, M.
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- **Splicing-independent loading of TREX on nascent RNA is required for efficient expression of dual-strand piRNA clusters in Drosophila** *GENES & DEVELOPMENT*
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2016; 30 (7): 840-855
- **Reply to Lane and Martin: Mitochondria do not boost the bioenergetic capacity of eukaryotic cells.** *Proceedings of the National Academy of Sciences of the United States of America*
Lynch, M., Marinov, G. K.
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- **Draft Whole-Genome Sequence of Haemophilus ducreyi Strain AUSPNG1, Isolated from a Cutaneous Ulcer of a Child from Papua New Guinea.** *Genome announcements*
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2016; 13 (9): 861-871
- **The bioenergetic costs of a gene** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
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Marinov, G. K., Lynch, M.
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- **The MicroRNA-132 and MicroRNA-212 Cluster Regulates Hematopoietic Stem Cell Maintenance and Survival with Age by Buffering FOXO3 Expression** *IMMUNITY*
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- **Genome Sequence of Magnetospirillum magnetotacticum Strain MS-1.** *Genome announcements*
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- **The elephant in the room Advertising science as a driver of economic growth is a long-term losing strategy** *EMBO REPORTS*
Marinov, G. K.
2015; 16 (4): 399-403
- **Pitfalls of Mapping High-Throughput Sequencing Data to Repetitive Sequences: Piwi's Genomic Targets Still Not Identified** *DEVELOPMENTAL CELL*
Marinov, G. K., Wang, J., Handler, D., Wold, B. J., Weng, Z., Hannon, G. J., Aravin, A. A., Zamore, P. D., Brennecke, J., Toth, K. F.
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- **Single-Cell Transcriptome Analysis Reveals Dynamic Changes in lncRNA Expression during Reprogramming** *CELL STEM CELL*
Kim, D. H., Marinov, G. K., Pepke, S., Singer, Z. S., He, P., Williams, B., Schroth, G. P., Elowitz, M. B., Wold, B. J.
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- **Reply to Brunet and Doolittle: Both selected effect and causal role elements can influence human biology and disease** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
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Marinov, G. K., Wang, Y. E., Chan, D., Wold, B. J.
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- **Large-Scale Quality Analysis of Published ChIP-seq Data.** *G3 (Bethesda, Md.)*
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- **Integrating and mining the chromatin landscape of cell-type specificity using self-organizing maps** *GENOME RESEARCH*
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