



## Robin Meyers

Ph.D. Student in Genetics, admitted Autumn 2017

### Publications

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#### PUBLICATIONS

- **Interrogation of Mammalian Protein Complex Structure, Function, and Membership Using Genome-Scale Fitness Screens** *CELL SYSTEMS*  
Pan, J., Meyers, R. M., Michel, B. C., Mashtalir, N., Sizemore, A. E., Wells, J. N., Cassel, S. H., Vazquez, F., Weir, B. A., Hahn, W. C., Marsh, J. A., Tsherniak, A., Kadoch, et al  
2018; 6 (5): 555-+
- **Computational correction of copy number effect improves specificity of CRISPR-Cas9 essentiality screens in cancer cells.** *Nature genetics*  
Meyers, R. M., Bryan, J. G., McFarland, J. M., Weir, B. A., Sizemore, A. E., Xu, H., Dharia, N. V., Montgomery, P. G., Cowley, G. S., Pantel, S., Goodale, A., Lee, Y., Ali, et al  
2017; 49 (12): 1779-84
- **Genomic Copy Number Dictates a Gene-Independent Cell Response to CRISPR/Cas9 Targeting** *CANCER DISCOVERY*  
Aguirre, A. J., Meyers, R. M., Weir, B. A., Vazquez, F., Zhang, C., Ben-David, U., Cook, A., Ha, G., Harrington, W. F., Doshi, M. B., Kost-Alimova, M., Gill, S., Xu, et al  
2016; 6 (8): 914-929
- **Detecting DNA double-stranded breaks in mammalian genomes by linear amplification-mediated high-throughput genome-wide translocation sequencing** *NATURE PROTOCOLS*  
Hu, J., Meyers, R. M., Dong, J., Panchakshari, R. A., Alt, F. W., Frock, R. L.  
2016; 11 (5): 853-871
- **Genome-wide detection of DNA double-stranded breaks induced by engineered nucleases** *NATURE BIOTECHNOLOGY*  
Frock, R. L., Hu, J., Meyers, R. M., Ho, Y., Kii, E., Alt, F. W.  
2015; 33 (2): 179-186
- **Sequence intrinsic somatic mutation mechanisms contribute to affinity maturation of VRC01-class HIV-1 broadly neutralizing antibodies.** *Proceedings of the National Academy of Sciences of the United States of America*  
Hwang, J. K., Wang, C., Du, Z., Meyers, R. M., Kepler, T. B., Neuberg, D., Kwong, P. D., Mascola, J. R., Joyce, M. G., Bonsignori, M., Haynes, B. F., Yeap, L. S., Alt, et al  
2017; 114 (32): 8614-19
- **Defining a Cancer Dependency Map.** *Cell*  
Tsherniak, A., Vazquez, F., Montgomery, P. G., Weir, B. A., Kryukov, G., Cowley, G. S., Gill, S., Harrington, W. F., Pantel, S., Krill-Burger, J. M., Meyers, R. M., Ali, L., Goodale, et al  
2017; 170 (3): 564-76.e16
- **Transcription-associated processes cause DNA double-strand breaks and translocations in neural stem/progenitor cells** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Schwer, B., Wei, P., Chang, A. N., Kao, J., Du, Z., Meyers, R. M., Alt, F. W.  
2016; 113 (8): 2258-2263
- **Long Neural Genes Harbor Recurrent DNA Break Clusters in Neural Stem/Progenitor Cells** *CELL*  
Wei, P., Chang, A. N., Kao, J., Du, Z., Meyers, R. M., Alt, F. W., Schwer, B.

2016; 164 (4): 644-655

- **Sequence-Intrinsic Mechanisms that Target AID Mutational Outcomes on Antibody Genes** *CELL*  
Yeap, L., Hwang, J. K., Du, Z., Meyers, R. M., Meng, F., Jakubauskaite, A., Liu, M., Mani, V., Neuberg, D., Kepler, T. B., Wang, J. H., Alt, F. W.  
2015; 163 (5): 1124-1137
- **Chromosomal Loop Domains Direct the Recombination of Antigen Receptor Genes** *CELL*  
Hu, J., Zhang, Y., Zhao, L., Frock, R. L., Du, Z., Meyers, R. M., Meng, F., Schatz, D. G., Alt, F. W.  
2015; 163 (4): 947-959
- **Orientation-specific joining of AID-initiated DNA breaks promotes antibody class switching** *NATURE*  
Dong, J., Panchakshari, R. A., Zhang, T., Zhang, Y., Hu, J., Volpi, S. A., Meyers, R. M., Ho, Y., Du, Z., Robbani, D. F., Meng, F., Gostissa, M., Nussenzweig, et al  
2015; 525 (7567): 134-?
- **Convergent Transcription at Intragenic Super-Enhancers Targets AID-Initiated Genomic Instability** *CELL*  
Meng, F., Du, Z., Federation, A., Hu, J., Wang, Q., Kieffer-Kwon, K., Meyers, R. M., Amor, C., Wasserman, C. R., Neuberg, D., Casellas, R., Nussenzweig, M. C., Bradner, et al  
2014; 159 (7): 1538-1548
- **Developmental propagation of V(D)J recombination-associated DNA breaks and translocations in mature B cells via dicentric chromosomes** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Hu, J., Tepsuporn, S., Meyers, R. M., Gostissa, M., Alt, F. W.  
2014; 111 (28): 10269-10274
- **IgH class switching exploits a general property of two DNA breaks to be joined in cis over long chromosomal distances** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Gostissa, M., Schwer, B., Chang, A., Dong, J., Meyers, R. M., Marecki, G. T., Choi, V. W., Chiarle, R., Zarrin, A. A., Alt, F. W.  
2014; 111 (7): 2644-2649
- **Microbial colonization influences early B-lineage development in the gut lamina propria** *NATURE*  
Wesemann, D. R., Portuguese, A. J., Meyers, R. M., Gallagher, M. P., Cluff-Jones, K., Magee, J. M., Panchakshari, R. A., Rodig, S. J., Kepler, T. B., Alt, F. W.  
2013; 501 (7465)