

Stanford



Fabian Mueller

Postdoctoral Research Fellow, Genetics

Bio

PROFESSIONAL EDUCATION

- Research Fellow, Harvard University , Computational epigenomics (2010)
- PhD, Max Planck Institute for Informatics , Computational epigenomics (2017)
- Doctor of Philosophy, Universitat Des Saarlandes (2017)
- Master of Science, Universitat Des Saarlandes (2009)
- Bachelor of Science, Universitat Des Saarlandes (2008)

Publications

PUBLICATIONS

- **DNA Methylation Dynamics of Human Hematopoietic Stem Cell Differentiation** *CELL STEM CELL*
Farlik, M., Halbritter, F., Mueller, F., Choudry, F. A., Ebert, P., Klughammer, J., Farrow, S., Santoro, A., Ciaurro, V., Mathur, A., Uppal, R., Stunnenberg, H. G., Ouwehand, et al
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- **Epigenomic Profiling of Human CD4(+) T Cells Supports a Linear Differentiation Model and Highlights Molecular Regulators of Memory Development** *IMMUNITY*
Durek, P., Nordstroem, K., Gasparoni, G., Salhab, A., Kressler, C., de Almeida, M., Bassler, K., Ulas, T., Schmidt, F., Xiong, J., Glazar, P., Klironomos, F., Sinha, et al
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- **Epigenetic Homogeneity Within Colorectal Tumors Predicts Shorter Relapse-Free and Overall Survival Times for Patients With Locoregional Cancer** *GASTROENTEROLOGY*
Martinez-Cardus, A., Moran, S., Musulen, E., Moutinho, C., Manzano, J. L., Martinez-Balibrea, E., Tierno, M., Elez, E., Landolfi, S., Lorden, P., Arribas, C., Mueller, F., Bock, et al
2016; 151 (5): 961-972
- **Epigenetic dynamics of monocyte-to-macrophage differentiation** *EPIGENETICS & CHROMATIN*
Wallner, S., Schroeder, C., Leitao, E., Berulava, T., Haak, C., Beisser, D., Rahmann, S., Richter, A. S., Manke, T., Boenisch, U., Arrigoni, L., Froehler, S., Klironomos, et al
2016; 9
- **A general concept for consistent documentation of computational analyses** *DATABASE-THE JOURNAL OF BIOLOGICAL DATABASES AND CURATION*
Ebert, P., Mueller, F., Nordstroem, K., Lengauer, T., Schulz, M. H.
2015
- **Dissecting the role of aberrant DNA methylation in human leukaemia** *NATURE COMMUNICATIONS*
Amabile, G., Di Ruscio, A., Mueller, F., Welner, R. S., Yang, H., Ebralidze, A. K., Zhang, H., Levantini, E., Qi, L., Martinelli, G., Brummelkamp, T., Le Beau, M. M., Figueroa, et al

2015; 6

- **Epigenetic Dysregulation in the Prefrontal Cortex of Suicide Completers** *CYTOGENETIC AND GENOME RESEARCH*
Schneider, E., El Hajj, N., Mueller, F., Navarro, B., Haaf, T.
2015; 146 (1): 19-27
- **Comprehensive analysis of DNA methylation data with RnBeads.** *Nature methods*
Assenov, Y., Müller, F., Lutsik, P., Walter, J., Lengauer, T., Bock, C.
2014; 11 (11): 1138-1140
- **DNA methylation signatures link prenatal famine exposure to growth and metabolism** *NATURE COMMUNICATIONS*
Tobi, E. W., Goeman, J. J., Monajemi, R., Gu, H., Putter, H., Zhang, Y., Sliker, R. C., Stok, A. P., Thijssen, P. E., Mueller, F., van Zwet, E. W., Bock, C., Meissner, et al
2014; 5
- **Regulation of DNA Methylation Patterns by CK2-Mediated Phosphorylation of Dnmt3a** *CELL REPORTS*
Deplus, R., Blanchon, L., Rajavelu, A., Boukaba, A., Defrance, M., Luciani, J., Rothe, F., Dedeurwaerder, S., Denis, H., Brinkman, A. B., Simmer, F., Mueller, F., Bertin, et al
2014; 8 (3): 743-753
- **Aberrant DNA methylation reprogramming during induced pluripotent stem cell generation is dependent on the choice of reprogramming factors.** *Cell regeneration (London, England)*
Planello, A. C., Ji, J., Sharma, V., Singhania, R., Mbabaali, F., Müller, F., Alfaro, J. A., Bock, C., De Carvalho, D. D., Batada, N. N.
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- **A Prognostic DNA Methylation Signature for Stage I Non-Small-Cell Lung Cancer** *JOURNAL OF CLINICAL ONCOLOGY*
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2013; 31 (32): 4140-?
- **Charting a dynamic DNA methylation landscape of the human genome** *NATURE*
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- **RRBSMAP: a fast, accurate and user-friendly alignment tool for reduced representation bisulfite sequencing** *BIOINFORMATICS*
Xi, Y., Bock, C., Mueller, F., Sun, D., Meissner, A., Li, W.
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- **Analyzing epigenome data in context of genome evolution and human diseases.** *Methods in molecular biology (Clifton, N.J.)*
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- **Genomic Distribution and Inter-Sample Variation of Non-CpG Methylation across Human Cell Types** *PLOS GENETICS*
Ziller, M. J., Mueller, F., Liao, J., Zhang, Y., Gu, H., Bock, C., Boyle, P., Epstein, C. B., Bernstein, B. E., Lengauer, T., Gnirke, A., Meissner, A.
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- **Learning from Past Treatments and Their Outcome Improves Prediction of In Vivo Response to Anti-HIV Therapy** *STATISTICAL APPLICATIONS IN GENETICS AND MOLECULAR BIOLOGY*
Saigo, H., Altmann, A., Bogojeska, J., Mueller, F., Nowozin, S., Lengauer, T.
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- **Quantitative comparison of genome-wide DNA methylation mapping technologies** *NATURE BIOTECHNOLOGY*
Bock, C., Tomazou, E. M., Brinkman, A. B., Mueller, F., Simmer, F., Gu, H., Jaeger, N., Gnirke, A., Stunnenberg, H. G., Meissner, A.
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