

Zhijian Li

Institute for Computational Genomics
RWTH Aachen University
MTZ, Pauwelstr 19, 52074 Aachen
Email: zhijian.li@rwth-aachen.de
Website: <https://lzj1769.github.io/>

Education

2016 - 2022 Ph.D., Computational Biology, RWTH Aachen University, Germany
2014 - 2016 M.Sc., Computer Science, Central China Normal University, China
2008 - 2012 B.S., Computer Science, Jilin University, China

Awards

2022 Outstanding Self-financed Students Abroad, China
2021 Poster Award of e:Med Meeting on Systems Medicine 2021, Germany
2016 Outstanding Master Thesis of Central China Normal University
2015 National Scholarship of China

Presentations

2021 Flash Talk & Poster Presentation, e:Med Meeting on Systems Medicine 2021, Germany
2020 Regular Talk, ECCB 2020
2020 Poster Presentation, ISMB 2020
2019 Poster Presentation, ISMB/ECCB 2019
2018 Regular Talk, ISMB 2018
2018 Poster Presentation, RECOMB 2018

Publications

Co-first authors; * Co-corresponding authors

First/co-first author papers

1. C. Kuppe[#], **Z. Li[#]**, R. T. Levinson[#], P. B. Mompel[#], T. Lu, R. Flores, M. Halder, M. Cheng, X. Zhang, R. K. Schneider, R. Thadhani, S. Hayat, K. Lim, I. G. Costa^{*}, J. S. Rodriguez^{*}, R. Kramann^{*}. Integrative single-cell multi-omics analysis reveals traits associated with early heart failure. (2022). (In preparation)

2. **Z. Li**, J. Nagai, C. Kuppe, R. Kramann, I. G. Costa. scMEGA: Single-cell Multiomic Enhancer-based Gene Regulatory Network Inference. (2022). (Submitted)
3. C. Kuppe[#], R. O. R. Flores[#], **Z. Li**[#], S. Hayat, R. T. Levinson, X. Liao, M. T. Hannani, J. Tanevski, F. Wünnemann, J. S. Nagai, M. Halder, D. Schumacher, S. Menzel, G. Schäfer, K. Hoeft, M. Cheng, S. Ziegler, X. Zhang, F. Peisker, N. Kaesler, T. Saritas, Y. Xu, A. Kassner, J. Gummert, M. Morshuis, J. Amrute, R. J. A. Veltrop, P. Boor, K. Klingel, L. W. Van Laake, A. Vink, R. M. Hoogenboezem, E. M. J. Bindels, L. Schurgers, S. Sattler, D. Schapiro, R. K. Schneider, K. Lavine, H. Milting*, I. G. Costa*, J. Saez-Rodriguez* and R. Kramann*. Spatial multi-omic map of human myocardial infarction. **Nature** (2022). (In press)
4. **Z. Li**[#], C. Kuppe[#], S. Ziegler, M. Cheng, N. Kabgani, S. Menzel, M. Zenke, R. Kramann*, I. G. Costa*. Chromatin-accessibility estimation of single-cell ATAC-seq data with scOpen. **Nature Communications** (2021).
5. **Z. Li**, M. H. Schulz, T. Look, M. Begemann, M. Zenke, I. G. Costa. Identification of transcription factor binding sites using ATAC-seq. **Genome Biology** (2019).
6. **Z. Li**, J. Guo, S. Yang. Improving the JADE Algorithm by Clustering Successful Parameters. **International Journal of Wireless and Mobile Computing** (2016).

Contributed papers

1. E.F. Brandt, T.H. Wirtz, **Z. Li**, M.M. Ibrahim, P. Fischer, A. Beckers, A. Flabhove, I.G. Costa, R. Kramann, E.P.C. van der Vorst, C. Liedtke, H. Sahin, C. Trautwein, M.L. Berres. CXCR3-expressing macrophages regulate angiogenesis, tumor cell proliferation and immune evasion in hepatocellular carcinoma. (2022) (Submitted).
2. K. Ohl, J. Hriczko, S. Schulz, T. Look, T. Goodarzi, S.H. Subramanyam, T. Clarner, M. Scheld, M. Kipp, E. Verjans, S. Böll, I.G. Costa, **Z. Li**, L. Gan, B. Denecke, A. Schippers, S. Floess, J. Huehn, E. Schmitt, T. Bopp, R. Beyaert, B. Lambrecht, M. Zenke, N. Wagner, K. Tenbrock. Foxp3-specific deletion of CREB generates Th2 biased ST-2 positive regulatory T-cells with enhanced IL-10 production and suppressive capacity. (2022) (Submitted).
3. H. Xu, M. A. Karpinska, **Z. Li**, C. Kuo, K. Götz, T. Look, M. de Toledo, K. Seré, G.Z. Bensch, A. Oudelaar, I. G. Costa and M. Zenke. A lncRNA identifies IRF8 enhancer in feedback control of DC development. **Molecular Cell** (2022). (Submitted)
4. D. Schumacher[#], M. Cheng[#], C. Kuppe, E. M. Bindels, R. K. Schneider, **Z. Li**, I. G. Costa*, R. Kramann*. Single Nucleus ATAC Sequencing Reveals Epigenomic Regulation After Myocardial Infarction. **Nature Cardiovascular Research** (2022). (Submitted).
5. M.Cheng, **Z.Li**, I.G.Costa. MOJITOO: a fast and universal method for integration of multi-modal single cell data. **Bioinformatics** (2022).
6. S. Heller, **Z. Li**, Q. Lin, R. Geusz, M. Breunig, M. Hohwieler, X. Zhang, G. Nair, T. Seufferlein, M. Hebrok, M. Sander, C. Julier, A. Kleger*, I. G. Costa*. Transcriptional changes and the role of ONECUT1 in hPSC pancreatic differentiation. **Communications Biology** (2021)
7. A. Philipp[#], S. Heller[#], I.G. Costa[#], V. Senée[#], M. Breunig, **Z. Li**, G. Kwon, R. Russell, A. Illing, Q. Lin, M. Hohwieler, A. Degavre, P. Zalloua, S. Liebau, M. Schuster, J. Krumm, X.

- Zhang, R. Geusz, J.R. Benthuisen, A. Wang, J. Chiou, K. Gaulton, H. Neubauer, E. Simon, T. Klein, M. Wagner, G. Nair, C. Besse, C. Dandine-Roulland, R. Olaso, J. Deleuze, B. Kuster, M. Hebrok, T. Seufferlein, M. Sander, B.O. Boehm, F. Oswald, M. Nicolino*, C. Julier*, A. Kleger*. Mutations and variants of ONECUT1 in diabetes. **Nature Medicine** (2021).
8. J. Guo, **Z. Li**, S. Yang. Accelerating differential evolution based on a subset-to-subset survivor selection operator. **Soft Computing** (2019).
 9. J. Guo, W. Xie, **Z. Li**. Enhancing JADE utilizing distance of best solutions. **Computer Engineering and Design** (2018).
 10. J. Guo, **Z. Li**, W. Xie, H. Wang. Dissipative differential evolution with self-adaptive control parameters. **IEEE Congress on Evolutionary Computation** (2015).