Dr. Carl HERRMANN

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Scientific Career

since 2018	Head of Biomedical Genomics Group at Health Data Science Unit, Medical Faculty Heidelberg and BioQuant; Lecturer at Medical Faculty Heidelberg
2013-2018	Head of the *Cancer Regulatory Genomics Group*, Division of Theoretical Bioinformatics, German Cancer Research Center (DKFZ)
2012-2013	Visiting scientist, EMBL- Heidelberg
2003-2012	Assistant-professor in bioinformatics, Aix-Marseille University (F); research at the Institut *Technologies Avancées pour le Génome et la Clinique* (TAGC) – Inserm, Marseille (F)
2001 – 2003	Postdoc in theoretical physics, University of Turin (I)
1999 – 2001	Postdoc in theoretical physics, Universität Halle (D)

Education

1996 – 1999	PhD thesis in theoretical particle physics at University Marseille / CNRS
1994-1995	Masters in theoretical physics, Ecole normale supérieure, Paris (F)
1991-1994	Engineering degree, Ecole nationale des Ponts et Chaussées, Paris (F)

Scientific interests

- Transcriptional gene regulation in diseases
- Gene regulatory networks and single-cell omics
- Data integration through machine learning approaches

Scientific and teaching activities

- Member of the French society of bioinformatics (SFBI)
- Associate-editor at PLOS Computational Biology
- Teaching at University Heidelberg within the Molecular Biotechnology Bachelor and Masters program.
- Responsible for the bioinformatics curriculum in the Molecular Biotechnology Bachelor, University Heidelberg
- 5 PhD thesis supervised (Marseille and Heidelberg)

Selected Publications

- Jansky, S., Kumar Sharma, A., Kamp, V., Toprak, U. H., Wecht, E. M., Gartlgruber, M., … **Herrmann,C.**, Höfer, T., Westermann, F. (2021.). Single-cell transcriptomic analyses provide insights into the developmental origins of neuroblastoma. *Nature Genetics*.
- Gartlgruber, M., Sharma, AK., Quintero A., Dreidax D.,… , **Herrmann, C.*,** Westermann, F.* (2020) Super enhancers define regulatory subtypes and cell identity in neuroblastoma, *Nature Cancer*
- Wu, Y., Fletcher, M., Gu, Z., Wang, Q., Costa, B., Bertoni, A., …**Eils R.**, …, **Herrmann, C**.*, Radlwimmer, B.* (2020). Glioblastoma epigenome profiling identifies SOX10 as a master regulator of molecular tumour subtype. *Nature Communications*, *11*(1), 6434.

- Al-Ali, R., Bauer, K., Park, J.-W., Al Abdulla, R., Fermi, V., von Deimling, A., … **Herrmann, C**., Wick, W., Turcan, Ş. (2019). Single-nucleus chromatin accessibility reveals intratumoral epigenetic heterogeneity in IDH1 mutant gliomas. *Acta Neuropathologica Communications*, *7*(1), 201.
- Bauer T., Trump S., Ishaque N., Thürmann L., Gu L., Bauer M., … **Herrmann C.*,** Eils R.*, Lehmann I.* (2016). Environment-induced epigenetic reprogramming in genomic regulatory elements in smoking mothers and their children. *Molecular Systems Biology*, 12(3), 861–861.

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