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11 place Marcelin Berthelot, 75005 Paris, France
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ACADEMIC DEGREES

2010 - 2017 **PhD in Biology (Molecular Genetics)** Faculty of Life Sciences, Humboldt University of Berlin, Germany

2004 - 2010 **Engineer of Molecular Biology (Equivalent to Joint Bachelor and Master of Science)** Faculty of Science, University of Zagreb, Croatia

SCIENTIFIC RESEARCH EXPERIENCE

Mar 2024 – **Postdoctoral Fellowship** Research Group Developmental Gene Regulation, College de France, CNRS, INSERM and PSL, Paris, France
Project Title Gene Expression and Chromatin Dynamics in Early Development

Dec 2017 – Jun 2023 **Postdoctoral Fellowship** Research Group Chromatin and Cell Biology, Institute for Human Genetics, CNRS and UM, Montpellier, France
Project Title A Scaffolding Element Rewires Local 3D Chromatin Architecture During Differentiation

Oct 2010 – Apr 2017 **Doctoral Thesis** Research group: Development & Disease, Max-Planck-Institute for Molecular Genetics, Berlin, Germany
Project Title Genome-wide binding of posterior HOXA/D transcription factors reveals subgrouping and association with CTCF

Sep 2009 – Oct 2010 **Master Thesis** Research group: Laboratory of molecular virology and bacteriology, Ruder Boskovic Institute, Zagreb, Croatia
Project Title Production of human papilloma virus E6 and E7 oncoproteins in Escherichia coli

Oct 2008 – Jan 2009 **Research Intern** Research group: Wuertz Group, Department of Civil and Environmental Engineering, UC Davis, CA, USA

AWARDS

Dec 2018	EMBO Long-term Fellowship , European Molecular Biology Organization
Jun 2016	BSRT Travel Grant for Cell Symposium - Transcription Development and Disease, Chicago, IL, USA
Oct 2015	BSRT Travel Grant for EMBO meeting - Transcriptional control in Development and Evolution, Pasteur Institute, Paris, France
Sep 2014	BSRT Travel Grant for Epigenetics & Chromatin at the CSHL, New York, USA
Sep 2013	Grant for Joint Research Project , Berlin-Brandenburg School for Regenerative Therapies, Berlin, Germany
Aug 2010	Doctoral Scholarship , Berlin-Brandenburg School for Regenerative Therapies, Berlin, Germany
Sep 2008	IAESTE Placement , Paid Student Exchange Placement to UC Davis, Davis, California, USA
Jul 2005	Croatian Ministry of Education , 4-Year State Scholarship for Gifted Students, Zagreb, Croatia

MENTORSHIP, RESPONSIBILITIES & ACTIVITIES

2024 – 2026	Selected to Organize Chromatin Structure and Function Gordon Research Seminar https://www.grc.org/chromatin-structure-and-function-grs-conference/2026/
2025 Jun	Participation in the mock committee for the master students at CIRB for master thesis defence and PhD school applications
2024 Nov –	Supervision of a PhD student – Cecilia Carmignoto (wet-lab training, supervision both conceptual and on a day-to-day basis, thesis supervision, paper writing and mentoring)
2023 Jun	Invited to write a viewpoint article for FEBS website: “Is (very) early career success based on merit or access?” https://bit.ly/3CNFM5u
2021 Jan – 2023 Jul	Member of the ‘ Comité Qualité de Vie au Travail ’ - working on projects to improve workplace wellbeing. Responsible for establishing a protocol for harassment reporting within the IGH with approval of CNRS. Full protocol available on IGH intranet.
2020 Oct– 2024 Jan	Supervision of PhD student – Michael Florian Szalay – Now an ITA at the Quantitative biology of cells and embryos, Institute Cochin, Paris (wet-lab training, supervision both conceptual and on a day-to-day basis, thesis supervision, paper writing and mentoring)
2018 –	F1000 (previously) and H1 Opinions (currently) - Associate Faculty Member – Article recommendations
2018 Jan– 2023 Jul	Responsible for Cavalli lab cell culture (ESC, primary, and differentiation) and full training of all members: Axelle Donjon (ITA), Micheal F. Szalay (PhD student), Flora Paldi (postdoc), Hadrian Reboul (PhD student), Frederic Bantignies (DR2), Davide Normanno (ITA), Solene Dufau (ITA)

ACADEMIC PUBLICATIONS

Oligopaint FISH to Study Chromosomal Architecture and Structural Variations

Reboul H., Normanno D., Szabo Q., [Jerković I.](#), Cavalli G., Bantignies F.; Chromoanagenesis: Methods and Protocols (2025); doi:10.1007/978-1-0716-4750-9_28

A Scaffolding Element Rewires Local 3D Chromatin Architecture During Differentiation

[Jerković I.](#), Di Stefano M., Reboul H., Szalay M.F., Normanno D., Papadopoulos G.L., Bantignies F., Cavalli G.; bioRxiv (2024), Nature Communications (in revision, see attachment for a revised version); doi:10.1101/2024.05.23.595561

Evolution and function of chromatin domains across the tree of life

Szalay M.F., Majchrzycka B., [Jerković I.](#), Cavalli G. ¥, Ibrahim D.M. ¥; Nature Structural & Molecular Biology (2024); doi:10.1038/s41594-024-01427-y.

Understanding 3D genome organization by multidisciplinary methods

[Jerković I.](#), Cavalli G.; Nature Reviews Molecular Cell Biology (2021); doi:10.1038/s41580-021-00362-w

Regulation of single-cell genome organization into TADs and chromatin nanodomains

Szabo Q., Donjon A. #, [Jerković I.](#) #, Papadopoulos G.L. #, Cheutin T., Bonev B., Nora E.P., Bruneau B.G., Bantignies F., Cavalli G.; Nature Genetics (2020); doi:10.1038/s41588-020-00716-8

Unblending of transcriptional condensates in human repeat expansion disease

Basu S. #, Mackowiak S.D. #, Niskanen H.Š, Knezevic D.Š, Asimi V., Grosswendt S., Geertsema H., Ali S., [Jerković I.](#), Ewers H., Mundlos S., Meissner A., Ibrahim D.M. ¥, Hnisz D. ¥; Cell (2020); doi:10.1016/j.cell.2020.04.018

Higher-order chromosomal structures mediate genome function

[Jerković I.](#) #, Szabo Q. #, Bantignies F. ¥, Cavalli G. ¥; Journal of molecular biology (2019); doi:10.1016/j.jmb.2019.10.014

Functional dissection of the Sox9–Kcnj2 locus identifies nonessential and instructive roles of TAD architecture

Despang A., Schöpflin R., Franke M., Ali S., [Jerković I.](#), Paliou C., Chan W.L., Timmermann B., Wittler L., Vingron M., Mundlos S. ¥, Ibrahim D.M. ¥; Nature Genetics (2019); doi:10.1038/s41588-019-0466-z

Preformed chromatin topology assists transcriptional robustness of Shh during limb development

Paliou C., Guckelberger P., Schöpflin R., Heinrich V., Esposito A., Chiariello A. M., Bianco S., Annunziatella C., Helmuth J., Haas S., [Jerković I.](#), Brieske N., Wittler L., Timmermann B., Nicodemi M., Vingron M., Mundlos S. ¥, Andrey G. ¥; PNAS (2019); doi:10.1073/pnas.1900672116

Dynamic 3D Chromatin Architecture Determines Enhancer Specificity and Morphogenetic Identity in Limb Development

Kragestein K.B. #, Spielmann M. #, Paliou C., Heinrich V., Schoepflin R., Esposito A., Annunziatella C., Bianco S., Chiariello A.M., [Jerković I.](#), Harabula I., Guckelberger P., Pechstein M., Wittler L., Chan W.L., Franke M., Lupiáñez D.G., Kraft K., Timmermann B., Vingron M., Visel A., Nicodemi M., Mundlos S. ¥, Andrey G. ¥; Nature Genetics (2018); doi:10.1038/s41588-018-0221-x

Genome-wide binding of posterior HOXA/D transcription factors reveals subgrouping and association with CTCF

[Jerković I.](#), Ibrahim D.M., Andrey G., Haas S., Hansen P., Janetzki C., Navarrete I.G., Robinson P.N., Hecht J., Mundlos S.; Plos Genetics (2017); doi:10.1371/journal.pgen.1006567

Characterization of hundreds of regulatory landscapes in developing limbs reveals two regimes of chromatin folding

Andrey G.#, Schöpflin R.#, [Jerković I.](#), Heinrich V., Ibrahim D.M., Paliou C., Hochradel M., Timmermann B., Vingron M. and Mundlos S.; Genome Research (2016); doi: 10.1101/gr.213066.116

Formation of novel chromatin domains determines pathogenicity of genomic duplications

Franke M. #, Ibrahim D.M. #, Andrey G., Schwarzer W., Heinrich V., Schöpflin R., Kraft K., Kempfer R., [Jerković I.](#), Chan W.L., Spielmann M., Timmermann B., Wittler L., I Kurth., Cambiaso P., Zuffardi O., Houg G., Lambie L., Brancati F., Pombo A., Vingron M., Spitz F., Mundlos S.; Nature (2016); doi:10.1038/nature19800

ACADEMIC REVIEWS & PUBLICATION RECOMMENDATIONS

H1 Connect Recommendation of [Batut PJ et al., Science 2022 375(6580:566-570)]

Cavalli G and [Jerkovic I.](#); H1 Connect (2022); doi:10.3410/f.741558284.793592827

H1 Connect Recommendation of [Davidson IF et al., Science 2020 366(6471:1338-1345)]

Cavalli G and [Jerkovic I.](#); H1 Connect (2020); doi:10.3410/f.736952840.793571322

H1 Connect Recommendation of [Kim Y et al., Science 2020 366(6471:1345-1349)]

Cavalli G and [Jerkovic I.](#); H1 Connect (2020); doi:10.3410/f.737001350.793571323

H1 Connect Recommendation of [Yamada T et al., Nature 2019 569(7758:708-713)]

Cavalli G and [Jerkovic I.](#); H1 Connect (2019); doi:10.3410/f.735710643.793561466

H1 Connect Recommendation of [Monahan K et al., Nature 2019 565(7740:448-453)]

Cavalli G and [Jerkovic I.](#); H1 Connect, (2019); doi:10.3410/f.734827932.793558655

H1 Connect Recommendation of [Lim B et al., Mol Cell 2018 70(2:287-296.e6)]

Cavalli G and [Jerkovic I.](#); H1 Connect, (2018); doi:10.3410/f.732951478.793546335