

## Curriculum Vitae

### Personal Data

Title	Dr.
First name	Michael
Name	Robson
Current position	Group Leader fixed term until 30.04.2027 followed by 2+3 year extension
Current institution(s)/site(s), country	MDC-BIMSB, Germany
Identifiers/ORCID	<a href="https://orcid.org/0000-0003-1126-3538">https://orcid.org/0000-0003-1126-3538</a>

### Qualifications and Career

Stages	Periods and Details
B.Sc.	Biochemistry, 2007 - 2010, Imperial College London, UK
M.Sc.	Molecular Cell Biology, 2010 - 2011, University of Edinburgh, UK
Doctorate	01.10.2011 - 25.11.2015, Eric Schirmer, University of Edinburgh, UK Topic: Nuclear envelope regulation of gene expression
Postdoctoral Fellow	2015 - 2016, Schirmer lab, University of Edinburgh, UK
Postdoctoral Fellow – EMBO LTF Fellowship	2016 - 2018, Mundlos lab, MPI for Molecular Genetics, Berlin, Germany Topic: The dynamics of regulatory chromatin in evolution and development
Postdoctoral Fellow – Henry Wellcome Fellowship	2019 - 2023, Mundlos lab, MPI for Molecular Genetics, Berlin, Germany
Group Leader	2023 - current, MDC-BIMSB, Berlin, Germany Topic: Chromatin (Dys)function - my lab examines how chromatin and its 3D structure control gene expression, focussing on embryonic development and disease. We combine developmental biology and <i>in vivo</i> and organoid models with genomics, single cell multi-omics, and bioinformatics

### Activities in the Research System

Activity	Period	Location
Committee Member	2024 - present	MDC PhD Exchange Program Committee, MDC
Committee Member	2023 - present	Laboratory Animal Committee, MDC
Organiser	2024	DFH workshop Chromatin dysfunction in Muscular Dystrophy, Sorbonne University, France
Lecturer - Genomic Medicine	2022	Clinical Geneticist Training Workshop,

		University of Bergen, Norway
Lecturer - Principles of gene regulation	2019	Masters in Bioinformatics, Freie Universität, Berlin
Co-founder & President	2018 - 2019	Postdoc Association, MPI for Molecular Genetics, Berlin
Lecturer - Foundations in Bio-Medicine	2018 - 2023	Masters in Bioinformatics, Freie Universität, Berlin

### Supervision of Researchers in Early Career Phases

Researcher	Period & Location	Dissertation Title	Current Position
<b>Katharine Vogt</b> , Master's thesis	01.02.2024-01.08.2024 MDC	Heterochromatin reorganization in limb development using single cell chromatin profiling	PhD Student, Robson lab, MDC
<b>Alessa Ringel</b> , PhD thesis	01.12.2017-01.02.2022 MPI Molgen	Mechanisms of Regulatory Adaptation in the Evolving Genome	Postdoc, Mundlos Lab
<b>Janina Jocks</b> , Master's thesis	01.04.2022-10.10.2022 MPI Molgen	Establishment of genetic tools to investigate gene regulation	PhD Student, Robert Koch Institute
<b>Konrad Chudzik</b> , Master's thesis.	01.06.2018-01.08.2019 MPI Molgen	Studying Genome Regulation with Knock-Ins	PhD Student, Robson lab, MDC

### Scientific Results

#### Category A

- Ringel, A.R. and Szabo, Q. and Chiariello, A.M. and Chudzik, K. and Schöpflin, R. and Rothe, P. and Mattei, A.L. and Zehnder, T. and Harnett, D. and Laupert, V. and Bianco, S. and Hetzel, S. and Glaser, J. and Phan, M.H.Q. and Schindler, M. and Ibrahim, D.M. and Paliou, C. and Esposito, A. and Prada-Medina, C.A. and Haas, S.A. and Giere, P. and Vingron, M. and Wittler, L. and Meissner, A. and Nicodemi, M. and Cavalli, G. and Bantignies, F. and Mundlos, S.\* and **Robson, M.I.\***: Repression and 3D-restructuring resolves regulatory conflicts in evolutionarily rearranged genomes. **Cell**, **2022**. DOI: [10.1016/j.cell.2022.09.006](https://doi.org/10.1016/j.cell.2022.09.006). \* co-corresponding authors.  
**Contribution:** *Conceived of project, recruited and mentored PhD & Master's students, performed many experiments, secured independent funding, wrote paper.*
- Gjaltema R. A. F., Schwämmle T., Kautz P., **Robson, M. I.**, Schöpflin R., Ravid Lustig L., Brandenburg L., Dunkel I., Vechiatto C., Ntini E., Mutzel V., Schmiedel V., Marsico A., Mundlos S., Schulz E. G. Distal and proximal cis-regulatory elements sense X chromosome dosage and developmental state at the Xist locus. **Molecular Cell**, **2022**. DOI: [10.1016/j.molcel.2021.11.023](https://doi.org/10.1016/j.molcel.2021.11.023).  
**Contribution:** *cHi-C experiment design, implementation and interpretation.*
- Lybæk, H., **Robson, M. I.**, de Leeuw, N., Hehir-Kwa, J. Y., Jeffries, A., Haukanes, B. I., Berland, S., de Bruijn, D., Mundlos, S., Spielmann, M., Houge G. LRFN5 locus structure is

associated with autism and influenced by the sex of the individual and locus conversions. **Autism Research** 2021. DOI: [10.1002/aur.2677](https://doi.org/10.1002/aur.2677).

**Contribution:** *cHi-C experiment design, implementation and interpretation.*

4. **Robson, M.I.**, Ringel, A.R., and Mundlos, S. Regulatory Landscaping: How Enhancer-Promoter Communication Is Sculpted in 3D. **Molecular Cell**, 2019. DOI: [10.1016/j.molcel.2019.05.032](https://doi.org/10.1016/j.molcel.2019.05.032)

**Contribution:** *Conceived of review, supervised figure production, wrote manuscript.*

5. **Robson, M. I.**, de las Heras, J. I., Czapiewski, R., Sivakumar, A., Kerr, A. R. W. and Schirmer, E. C. Constrained release of lamina-associated enhancers and genes from the nuclear envelope during T-cell activation facilitates their association in chromosome compartments. **Genome Research**, 2017. DOI: [10.1101/gr.212308.116](https://doi.org/10.1101/gr.212308.116)

**Contribution:** *Conceived of project, performed most experiments, wrote manuscript.*

6. **Robson, M. I.**, de las Heras, J. I., Czapiewski, R., Lê Thành, P., Booth, D. G., Kelly, D. A., Webb, S., Kerr, A. R. W. and Schirmer, E. C. Tissue-Specific Gene Repositioning by Muscle Nuclear Membrane Proteins Enhances Repression of Critical Developmental Genes during Myogenesis. **Molecular Cell**, 2016. [10.1016/j.molcel.2016.04.035](https://doi.org/10.1016/j.molcel.2016.04.035)

**Contribution:** *Aided project design, performed most experiments, jointly wrote paper.*

7. **Robson, M. I.** and Schirmer, E. C. The Application of DamID to Identify Peripheral Gene Sequences in Differentiated and Primary Cells. **Methods in Molecular Biology**, 2016. DOI: [10.1007/978-1-4939-3530-7\\_23](https://doi.org/10.1007/978-1-4939-3530-7_23)

**Contribution:** *Conceived of and wrote protocol.*

8. Czapiewski, R., **Robson, M. I.** and Schirmer, E. C. Anchoring a Leviathan: How the Nuclear Membrane Tethers the Genome. **Frontiers in Genetics**, 2016. DOI: [10.3389/fgene.2016.00082](https://doi.org/10.3389/fgene.2016.00082)

**Contribution:** *Figures and manuscript discussions.*

9. **Robson, M. I.**, Lê Thành, P., and Schirmer, E. C. NETs and cell cycle regulation. **Adv. Exp. Med. Biol.**, 2014. DOI: [10.1007/978-1-4899-8032-8\\_8](https://doi.org/10.1007/978-1-4899-8032-8_8)

**Contribution:** *Jointly wrote review and produced figures.*

## Category B

1. **Robson, M.I.**, and Mundlos, S. Jumping retroviruses nudge TADs apart. **Nature Genetics**, 2019. DOI: [10.1038/s41588-019-0491-y](https://doi.org/10.1038/s41588-019-0491-y)

**Contribution:** *Jointly peer reviewed paper and independently wrote comment.*

2. **Robson, M. I.**, Rizzotto, A. and Schirmer, E. C. Spatial Organization of the Nucleus Compartmentalizes and Regulates the Genome. **Nuclear Pore Complexes in Genome Organization**, 2018. DOI: [10.1007/978-3-319-71614-5\\_1](https://doi.org/10.1007/978-3-319-71614-5_1)

**Contribution:** *Wrote sections and produced figures for book chapter.*

## Academic Distinctions

Distinction	Year
Henry Wellcome Postdoctoral Fellowship	2018
Kickstarter Research Grant	2018

Einstein Center for Regenerative Therapies, Berlin	
EMBO LTF Postdoctoral Fellowship	2016
Wellcome Trust 4-year PhD Fellowship	2011
Society Junior Scientist Travel Grant Genetics Society, UK	2015
Nuffield Undergraduate Research Grant Nuffield Foundation, UK	2009

### Data protection and consent to the processing of optional data

If you provide voluntary information (marked as optional) in this CV, your consent is required. Please confirm your consent by checking the box below.

☒ **I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data”<sup>1</sup> in connection with the DFG’s review and decision-making process regarding my proposal.** This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG ([postmaster@dfg.de](mailto:postmaster@dfg.de)). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimization under data protection law exists (e.g. based on consent).

I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at [www.dfg.de/privacy\\_policy](http://www.dfg.de/privacy_policy) and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

<sup>1</sup> Special categories of personal data are those “revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and (...) genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person’s sex life or sexual orientation” (Article 9(1) GDPR).