

OPEN POSITION

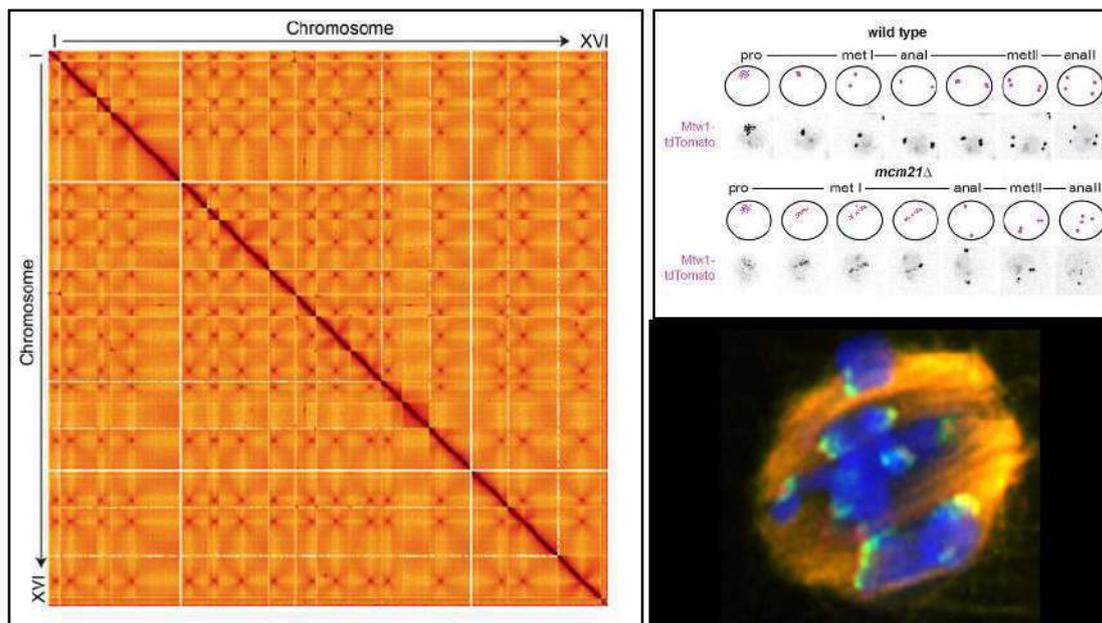


Postdoctoral Position in Meiotic Chromosome Segregation

A postdoctoral position is available in Adele Marston's lab at the Wellcome Centre for Cell Biology, University of Edinburgh, UK.

The Marston lab investigates fundamental mechanisms of chromosome segregation in mitosis and meiosis. The successful candidate will use yeast as a model to understand how chromosome segregation mechanisms are specialized to ensure the production of euploid gametes.

We are a friendly, multi-disciplinary group located in a state-of-the-art research Centre embedded within a diverse University in a vibrant city.



Position requirements

- PhD in biological sciences
- Strong interest in meiosis and chromosome biology
- Experience in molecular biology and/or biochemistry
- Ability to work independently or as part of team
- Willingness to develop innovative new approaches

Please address all enquiries to adele.marston@ed.ac.uk

An overview of the laboratory can be found at <http://marston.bio.ed.ac.uk/>.

For more details and to apply: [Marston lab postdoc](#)

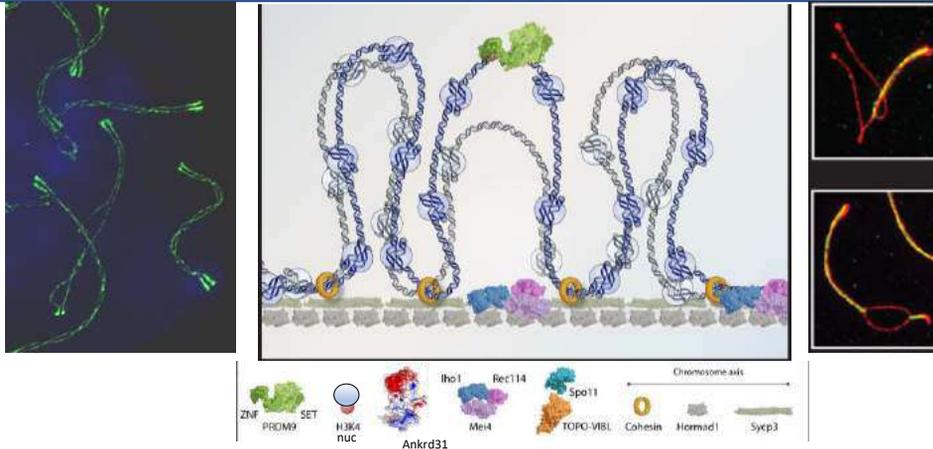
Recent publications

Borek WE, Vincenten N, Duro E, Makrantonis V, Spanos C, Sarangapani KK, de Lima Alves F, Kelly DA, Asbury CL, Rappsilber J and Marston AL†. (2021) The proteomic landscape of centromeric chromatin reveals an essential role for the Ctf19^{CCAN} complex in meiotic kinetochore assembly. *Current Biology* S0960-9822(20)31529-3.

Paldi F, Alver B, Robertson D, Schalbetter SA, Kerr A, Kelly D, Baxter J, Neale MJ and Marston AL† (2020). Convergent genes shape budding yeast pericentromeres. *Nature*, 582, 119-123.

Galander S, Barton RE*, Borek WE*, Spanos C, Kelly DA, Robertson D, Rappsilber J and Marston AL† (2019) Reductional meiosis I chromosome segregation is established by coordination of key meiotic kinases. *Developmental Cell* 49, 526-541

Postdoctoral Position on “Meiosis and Recombination” Institute of Human Genetics, Montpellier, France



A postdoctoral position funded by the ERC is available in the group “Meiosis and Recombination”.

Our group is interested in the mechanism and regulation of meiotic recombination using mouse as a model system and taking advantage of a large variety of experimental approaches. The research project will aim to understand molecular mechanisms mediating and regulating interactions between homologous chromosomes during meiotic prophase. Ambitious and pioneering approaches at the molecular and cytological levels will be developed to address these questions.

Qualification: We are seeking a highly qualified and motivated postdoc with strong skills in molecular and cellular biology, with previous research experience and knowledge in chromosome and genome biology, validated by high quality first-author publications.

Application: Please submit a CV, a statement of research interest, and names of at least two references as a single pdf file to: Bernard de Massy (bernard.de-massy@igh.cnrs.fr), starting date: 2021.

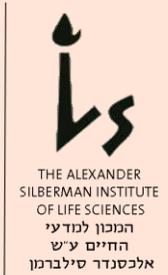
Team web site:

<https://www.igh.cnrs.fr/en/research/departments/genome-dynamics/5-meiosis-and-recombination>

Developmental biology lab

Recruits Graduate students / Postdocs

to study the molecular mechanisms of fertility

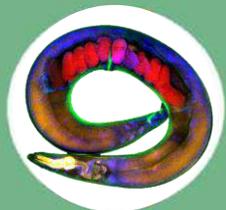


Using interdisciplinary approaches combining **genome engineering**, high-resolution **microscopy** and functional assays, we study **various biological questions**:



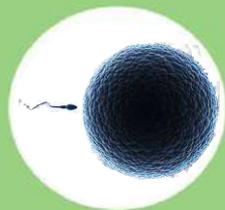
How

lincRNAs affect fertility?



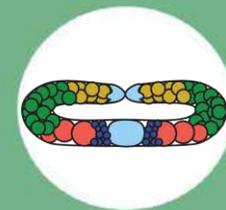
Which

signals control oocyte quality?



What

dictates oocyte aging?



HOW

are germ stem cells protected?

Talented and motivated candidates are encouraged to contact:



[@LabTzur](https://twitter.com/LabTzur)

[@GeneticsDept1](https://twitter.com/GeneticsDept1) of [@HebrewU](https://twitter.com/HebrewU)

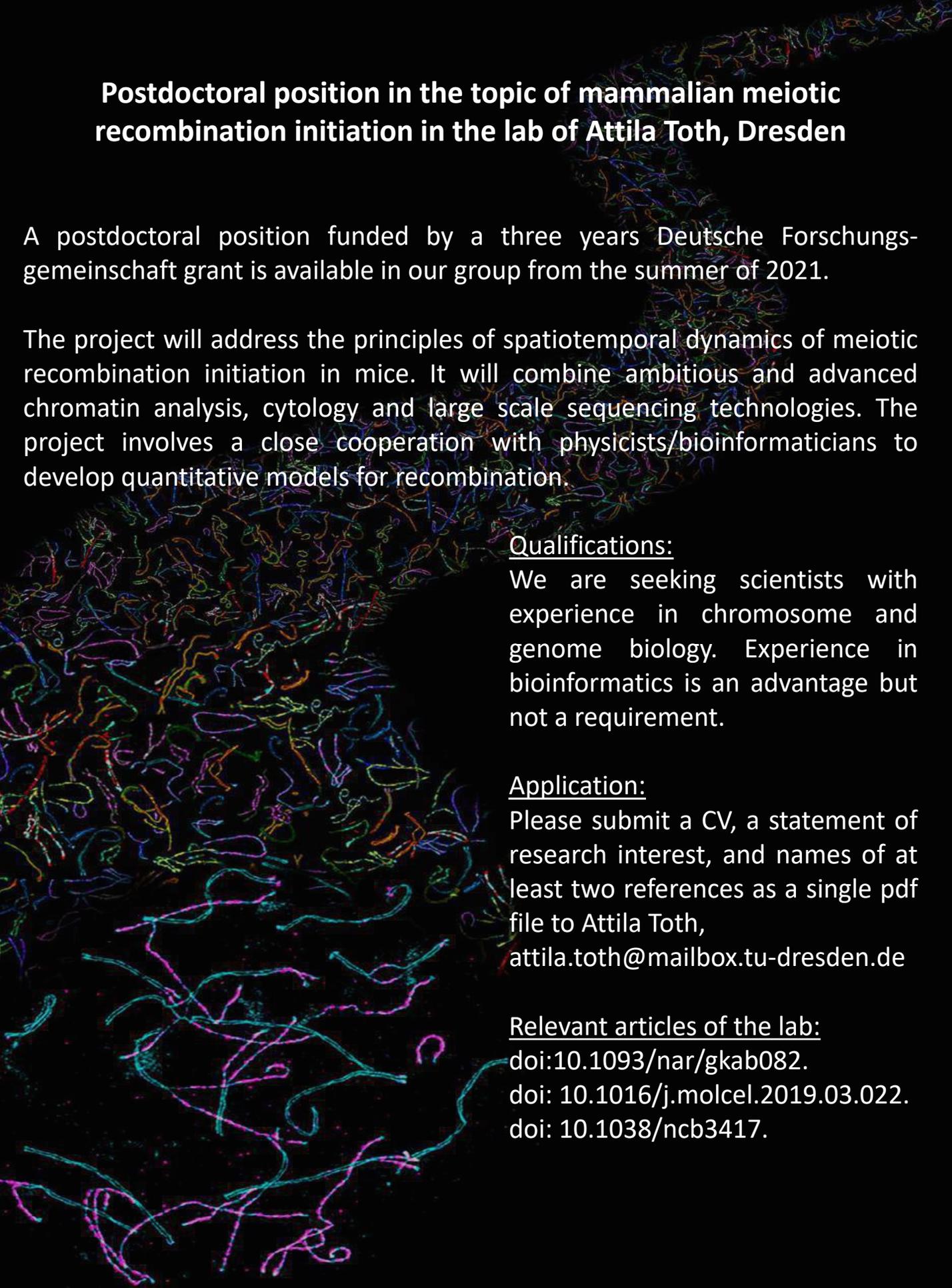


tzur@mail.huji.ac.il



goo.gl/9mnWUG





Postdoctoral position in the topic of mammalian meiotic recombination initiation in the lab of Attila Toth, Dresden

A postdoctoral position funded by a three years Deutsche Forschungsgemeinschaft grant is available in our group from the summer of 2021.

The project will address the principles of spatiotemporal dynamics of meiotic recombination initiation in mice. It will combine ambitious and advanced chromatin analysis, cytology and large scale sequencing technologies. The project involves a close cooperation with physicists/bioinformaticians to develop quantitative models for recombination.

Qualifications:

We are seeking scientists with experience in chromosome and genome biology. Experience in bioinformatics is an advantage but not a requirement.

Application:

Please submit a CV, a statement of research interest, and names of at least two references as a single pdf file to Attila Toth,
attila.toth@mailbox.tu-dresden.de

Relevant articles of the lab:

[doi:10.1093/nar/gkab082](https://doi.org/10.1093/nar/gkab082).

[doi: 10.1016/j.molcel.2019.03.022](https://doi.org/10.1016/j.molcel.2019.03.022).

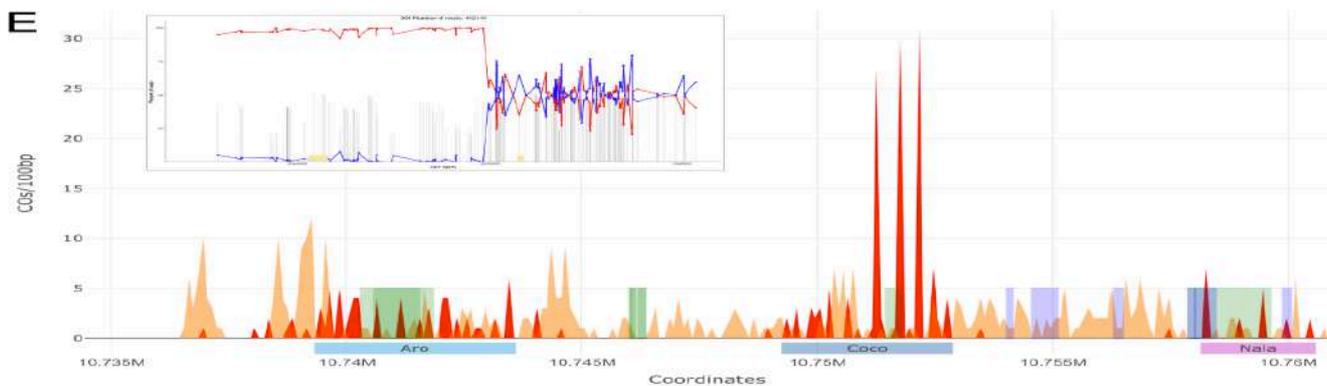
[doi: 10.1038/ncb3417](https://doi.org/10.1038/ncb3417).

Postdoctoral position in plant molecular biology and genetics in the Ziolkowski's Lab



We are seeking candidates to fill a postdoc position in the Laboratory of Genome Biology at the Adam Mickiewicz University, Poznan, Poland, to begin in spring 2021.

The postdoc will join a group seeking to characterize the chromatin factors controlling meiotic crossover (CO) in plant genomes. In the project we are applying a novel method for high resolution crossover mapping (>20 COs per 1kb), which is based on recombinant sorting. This method was only recently developed in our lab. Different chromatin states will be tested for their direct influence on CO formation in the selected regions. This will be achieved with the use of dCas9-targeted chromatin modifiers in different meiotic mutant background.



The position does not involve teaching duties however the researchers are expected to assist in training of undergraduate students.

The successful candidate will have PhD degree in biology, genetics or related field and a strong publication record. Candidates with a good background and hand-on experience on Arabidopsis molecular genetics, CRISPR/Cas9, NGS and/or ChIP-seq/Cut&Tag/Tag&Run are encouraged to apply. The project would significantly benefit from applying Arabidopsis meiotic cytology, therefore this expertise is considered an advantage.

Please submit the following documents with your application:

- CV which gives an overview of the academic/education history
- Letter of motivation
- Names and contact information of at least two academic referees

Application deadline: **15.05.2021**

Further details: <http://ibmib.amu.edu.pl/wp-content/uploads/2021/04/Postdoc-plant-meiotic-recombination-Piotr-Ziolkowski-lab.pdf>

Contact: Dr Piotr A. Ziolkowski, tel. +48 61 829 59 66, pzio@amu.edu.pl

<http://dgb.amu.edu.pl>

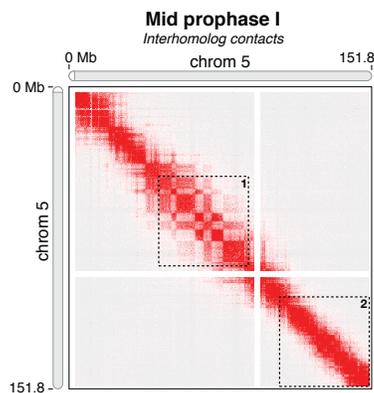
PI: Francesca Cole, PhD

<https://www.mdanderson.org/research/departments-labs-institutes/labs/cole-laboratory.html>

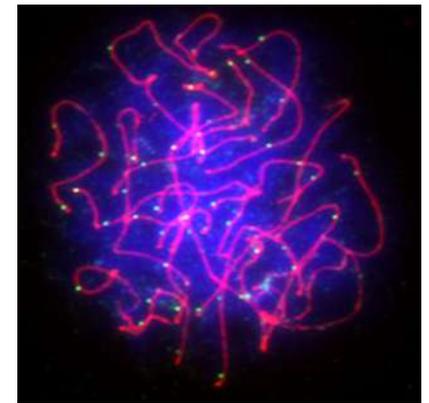
“Postdoctoral Position studying DNA repair and chromosome biology during meiosis”

Our lab studies the underlying mechanisms that ensure accurate pairing and segregation of homologous chromosomes during meiosis in mammals. We focus on systemic errors that arise in human meiosis such as mis-segregation due to age in spermatocytes and oocytes. Our work takes advantage of genetics in the mouse to determine the fundamental biology of meiotic chromosome segregation.

We have developed assays to provide high-resolution mapping of recombination outcomes on all four chromatids (Cole F, Baudat F et al **Nature Genetics** 2014) to determine the molecular nature of individual events and to biochemically and genetically delineate contributions from DNA repair pathways (Zelazowski M et al **Cell** 2017). We have developed methods to purify spermatocytes at specific stages to investigate the timing of recombination and chromosome organization during meiotic prophase (Patel L, Kang R et al **Nature Structural and Molecular Biology**, 2019). Finally, the lab couples these molecular approaches with advanced microscopy (Cole F et al **Nature Cell Biology** 2012) to provide a holistic view of recombination during mouse and human meiosis.



The first whole genome mapping of interhomolog interactions during meiosis in any organism shown by HiC analysis of mouse spermatocytes (Patel, Kang et al NSMB 2019)



Spermatocytes from young men (above) have reduced recombination leading to high risk of fathering children with Down syndrome (Zelazowski et al Cell 2017)

Our lab is moving to Houston in the summer 2021. Houston is the fourth largest city in the US is very cosmopolitan, but affordable with world class museums, restaurants, and a warm, tropical climate.

We have highly interactive lab meetings, scientific journal club, and equity and inclusion journal club that alternate each week. All trainees attend a national or international meeting each year. The lab currently has seven members: two postdocs, two graduate students, two techs, and a lab manager.

Our laboratory is well-funded and all postdoctoral fellows are encouraged to apply for prestigious fellowships.

If interested, please send a CV, cover letter, and list of three references to fc@mdanderson.org



 @ColeFrancesca

THE UNIVERSITY OF TEXAS
MD Anderson
Cancer Center

 Eunice Kennedy Shriver National Institute of Child Health and Human Development

