



The **Max Planck Institute for Developmental Biology** in Tübingen is part of the Max Planck Society. We conduct basic research on the development and evolution of animals and plants at all organizational levels.

The research group **Colour pattern formation**, group leader Prof. Christiane Nüsslein-Volhard, project leader Dr. Uwe Irion, offers a position for a:

Postdoctoral researcher (f/m/d) in Molecular/Developmental Genetics

Our group studies colour pattern formation in zebrafish and the molecular basis for the evolution of colour patterns in vertebrates. We have established breeding colonies of several *Danio* species with diverse colour patterns in the laboratory, and apply a broad range of modern techniques, from confocal microscopy to genetic engineering and next generation sequencing, to address questions of pattern formation and evolution. In particular we focus on the interactions between pigment cells and the communications with their environment, which lead to the wide variety of pigmentation patterns in closely related *Danio* species. Our aim is to understand the genetic basis for the rapid evolution of colour patterns leading to the biodiversity we observe.

Requirements:

We are looking for a highly motivated team player who is interested in joining a small team of researchers focussed on understanding the development and evolution of pigmentation patterns in vertebrates. The successful candidate will have solid training in genetics and molecular biology with an interest in the design and implementation of modern gene-editing techniques (e.g. CRISPR/Cas). Experience with (confocal) microscopy or with next generation sequencing would be an asset. Previous work with zebrafish would be beneficial but is not essential.

Recent publications:

- Singh, A.P. and Nüsslein-Volhard, C. (2015): Zebrafish stripes as a model for vertebrate colour pattern formation. **Curr Biol** **25**: R81-R92. doi: 10.1016/j.cub.2014.11.013
- Irion, U., Krauss, J. and Nüsslein-Volhard, C. (2014): Precise and efficient genome editing in zebrafish using the CRISPR/Cas9 system. **Development** **141(24)**: 4827-4830. doi: 10.1242/dev.115584
- Eskova, A., Chauvigné, F., Maischein, H.-M., Ammelburg, M., Cerdà, J., Nüsslein Volhard, C. and Irion, U. (2017): Gain-of-function mutations of *mau/DrAqp3a* influence zebrafish pigment pattern formation through the tissue environment. **Development** **144(11)**: 2059-2069. doi: 10.1242/dev.143495

Contract:

The position is available from November 1st onwards with a fixed term contract ending April 2021. Salary and benefits are based on the German TVöD guidelines (TVöD Bund).

Applicants should submit all documents as one single PDF including a cover letter describing their interest in this position, a CV, certificates, etc. through our application portal <https://jobs.eb.tue.mpg.de/jobs/72> by October 15th, 2018.

Applications should be written in English. Please note that we can only accept applications submitted electronically through the application portal.



The Max-Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals.

The Max-Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore encourages women to apply.

For inquiries please contact Heike Heth:

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For more information about our group and the institute please visit:

<http://www.eb.tuebingen.mpg.de>

<http://www.eb.tuebingen.mpg.de/de/emeriti/research-group-colour-pattern-formation/>