A new research group “Meiosis in Crops” will be established in the Department of Chromosome biology at the Max Planck Institute for Plant Breeding Research (Cologne, Germany). The group will start up from September 1st 2019. The group’s major focus will be the genetic and epigenetic control of meiotic recombination in crop species, and will use Tomato and related wild species as a model.

Wild species are important genetic resources for the improvement of crops, because they are sources of novel traits and disease resistances. The *Lycopersicum* section, of which *S. lycopersicum* (the cultivated tomato) is a member, contains thirteen species and approximately 3 million years of divergent evolution separates some of the species. Despite this, hybrids between the cultivated tomato and wild relatives are viable. However, these hybrids often have reduced fertility due to the suppression of genetic exchange during meiosis. Our group will employ genomics, genome editing and super resolution microscopy to read, rearrange and image chromosomes during tomato meiosis, with the ultimate aim to understand and manipulate recombination in tomato.

In the context of this project we are looking for a Postdoc and a PhD candidate to spearhead these efforts.

Our offer:

- a supportive and international working environment
- access to cutting edge genomics, computing, microscopy and greenhouse research facilities
- the chance to pursue fundamental research on plant chromosomes, meiotic recombination and meiosis

Your interests:

- an interest in how genetic material is exchanged between related plant species
- an appetite to develop novel approaches using genome editing and DNA sequencing to manipulate and detect meiotic recombination
- a passion for fundamental research in the field of genomics, evolutionary biology and breeding
Postdoc position (36 months)

Your experience/background:

- a PhD in genomics, bioinformatics, plant reproduction or plant biology
- a strong track record in scientific research demonstrated by a first-author publication or pre-print
- a willingness to apply for fellowships where appropriate (e.g. EMBO, Marie-Curie, DFG)

The salary will be according to German civil service conditions (TVöD Bund) and includes social security benefits.

PhD position (36 months)

Your experience/background:

- a Master's degree in genomics, bioinformatics, plant reproduction, plant biology, cell biology, genetics or biochemistry
- experience in at least two laboratory settings demonstrated by references

Salary and working hours are in accordance with the funding guidelines of the Max Planck Society for junior scientists. Working hours are fulltime; salary is 50 % of E13 TVöD-Bund.

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

Please send a CV (including the contact details of two or three references) and a letter of motivation to Dr. Charles Underwood (charles.j.underwood@gmail.com) with the subject title ‘MPIPZ Postdoc’ or ‘MPIPZ PhD’.

Applications will be gladly accepted before May 13th 2019.