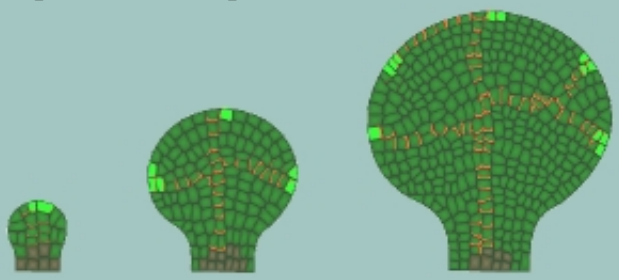
MAX PLANCK INSTITUTE
FOR PLANT BREEDING RESEARCH

The new department of Comparative Development and Genetics at the Max Planck Institute of Plant Breeding Research (MPIPZ) is inviting applications for postdoctoral positions in the areas of:

Computer Science and Simulation Modeling



The successful applicants will develop mechanistic models of plant morphogenesis. Working in a collaborative inter-disciplinary environment within the department, you will develop state-of-the-art tools to analyze growth and gene expression in developing leaves. You will use this information to develop computer simulation models of plant development. The work applies techniques from computer graphics and computer animation to developmental biology. Physically-based modeling, scientific computing, advanced image processing, and spatial statistics are some of the skills you will develop, leaving you well positioned for a career in the rapidly growing field of computational morphodynamics. For examples of our work in this field see Smith et al. 2006 PNAS 103:5, Bilsborough et al. 2011 PNAS 108:8, Kierzkowski et al 2012 Science 335.

Requirements

We are looking for a highly motivated candidates with good programming skills, and an interest in applying those skills to research problems in developmental biology. A computational background with good math skills is required. Experience in C++ is an asset, as is experience in graphics programming, GPU programming, physically-based modeling, FEM methods, computer animation, or other types of scientific programming. The ability to work as part of a team, managing the development of larger in-house softwares is required.

Our Offer

The Max Planck Institute for Plant Breeding Research provides excellent scientific support and state-of-the-art equipment and facilities. We offer a friendly, multi-disciplinary environment giving the opportunity to acquire skills in biology, modeling, image analysis and biomechanics.

Application

Please send your application including (i) a cover letter summarizing your qualifications and your motivation for joining the department, (ii) a CV with a full publication list, and (iii) names and contacts of two referees. The application should be submitted electronically as one file to Christiane Wojtera **wojtera@mpipz.mpg.de**. Only shortlisted candidates will be contacted. The Max Planck Society is committed to employing more handicapped individuals and especially encourages them to apply. 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.

For informal inquiries please contact:

Richard S. Smith: smith@mpipz.mpg.de http://www.mpipz.mpg.de/smith
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