



Organ Morphodynamics Laboratory

**THE
FRANCIS
CRICK
INSTITUTE**

We are looking for a postdoctoral fellow (4+2 years) interested in combining interdisciplinary approaches with excellent tractability of zebrafish heart to study a fundamental problem – how organ form and function emerge during development. The suitable candidate will use advanced microscopic techniques, image analysis, genetic manipulations, biophysical approaches and collaborate with theoreticians to address this fundamental problem. The successful candidate should be keen on pursuing collaborative research and should be an excellent team player.

The overarching goal of our lab is to study how functional organs are built to sustain life during embryonic development. Combining the excellent tractability of zebrafish with interdisciplinary approaches, some of the fundamental questions we seek to address include:

- Feedback between mechanics, cell fate and geometry driving tissue patterning.
- How 3D topological meshworks are shaped, constrained, and canalized.
- How nuclear integrity is sustained in a developing, beating heart.
- Morphogenesis and Mechanics of organ scaling and regeneration.
- Bioelectricity of Morphogenesis.

The specific details and aims of the project will be driven by the candidate's interest and training. Candidates with a strong background in advanced imaging approaches, image analysis techniques, tissue morphogenesis/mechanics are encouraged to apply.

We have access to state-of-the-art facilities and technology platforms including advanced light microscopy, high throughput sequencing, bioinformatics and Image analysis. The Crick is a world-class biomedical research institute in central London, offering a dynamic, collaborative, and diverse research environment. It provides an outstanding postdoctoral training program, focused on equipping postdocs with extensive training and career development resources to support their future career.

For further details about the project and how to apply, use this link https://crick.wd3.myworkdayjobs.com/External/job/London/Postdoctoral-Fellow_R1957-1 or simply get in touch – rashmi.priya@crick.ac.uk.