

Postdoctoral Research Fellow in the Cell Cycle in Development Laboratory (Kimata group)

The 'Cell Cycle in Development' Laboratory (PI: Dr Yuu Kimata) is moving from the University of Cambridge to open a new laboratory at the School of Life Science and Technology (SLST) at the ShanghaiTech University in Shanghai, China. We are looking for an ambitious, highly-driven postdoctoral scientist to work with Dr Kimata to elucidate the functions of the cell cycle-regulating proteins in coupling cell cycle exit to cell fate determination and cellular differentiation during the metazoan development.

The Kimata lab aims to understand the molecular and cellular mechanisms by which the cell cycle is coordinated with developmental and homeostatic processes in the metazoan organism. We combine the model systems of *Drosophila melanogaster* and mammalian organoids with *in vitro* cell culture, biochemistry, proteomics and bioinformatics, and have been working with international collaborators including David Glover, Marc de la Roche (University of Cambridge), Renata Basto (Curie Institute), and Hiroyuki Yamano (UCL).

The focus of our research has been on the evolutionarily conserved multisubunit ubiquitin ligase, the anaphase promoting complex/cyclosome (APC/C). We have recently discovered:

- 1) APC/C regulates the transcriptional activity of one of the major extracellular signalling pathways, the Wnt signalling pathway, during the retinal development in *Drosophila* (**Martins et al., 2017 Developmental Cell**);
- 2) APC/C ensures cell fate determination of the neural stem cell and the oocyte through the regulation of the centrosome (**Meghini et al., 2016, Nature Communications, Braun et al., bioRxiv**).

For further information of our research, please visit the Kimata lab websites:

<https://www.gen.cam.ac.uk/research-groups/kimata> (University of Cambridge), or <http://www.kimatalab.com/> (the lab's own website).

The joined researcher will address fundamental biological questions centring around the cell cycle control in the multicellular organism such as:

- *How are cell cycle exit and cellular differentiation coupled, and what are the role of cell cycle-regulating proteins in this coupling?*
- *How are these coupling mechanisms or the uncoupling of these processes involved in human disease?*
- *How is cell proliferation regulated in vivo, and how can it be controlled at will?*

The specific projects for the researcher will be determined through discussions with Dr Kimata, depending on their skills and experience as well as the availability and the timeliness of the projects.

The successful candidate will have a strong track record and will demonstrate excellent interpersonal, organisational and time management skills and good English communication skills. An individual with a strong passion for science and collaborative and can-do attitudes will best fit to our lab. Applications from adventurous foreign individuals are also highly encouraged.

The research will be based in the modern open lab space in the SLST in ShanghaiTech University, situated in the heart of Zhangjiang Hi-Tech Park in the Pudong Science District in Shanghai. The initial term of this post is 24 months, but the term can be extended up to 4 years, with the possibility of the promotion to Research Assistant Professor. The annual salary will be decided based on the University salary scale, and the experience and qualification of the candidate. The typical salary for a newly graduated postdoc is 155,000 RMB. All postdocs in ShanghaiTech will have access to various social benefits provided by the university, including an in-campus accommodation and a contribution to the social security.

The detailed job description and the instruction of the application process are described below. Any informal enquiries regarding the role and the research project should be directed to Dr Kimata via e-mail: yk299@cam.ac.uk.

Key Responsibilities

<ul style="list-style-type: none"> To design the course of research projects under the guidance of Dr Kimata. To design experiments and conduct them accurately and reproducibly. To analyse and interpret data objectively and critically. To report and discuss results with Dr Kimata and other lab members. 	60%
<ul style="list-style-type: none"> To present the work at internal and external seminars and at national and international scientific conferences. To contribute to the preparation of publications and applications for funding. 	30%
<ul style="list-style-type: none"> To assist Dr Kimata with supervision of students and/or junior research staff working in support of the projects. To cooperate with Dr Kimata and lab members in organising lab regents and equipment and in maintaining high standard of the lab space. 	10%

Person's profile

Education & qualifications	<ul style="list-style-type: none"> A PhD or an equivalent degree in a biomedical science.
Scientific knowledge and skills (essential)	<ul style="list-style-type: none"> Basic knowledge in molecular cell biology, genetics, developmental biology, bioinformatics and statistics. Logical thinking and critical thinking. Experience and skills in molecular cell biology or biochemical experiments. Experience and skills in microscopy and quantitative image analysis.
Specialised knowledge & skills (desirable)	<ul style="list-style-type: none"> Knowledge on <i>Drosophila</i> biology and methodology. Knowledge on developmental biology and/or the cell cycle research. Experience and skills in experiments using <i>Drosophila</i>. Experience in confocal and light microscopy. Experience in any of the following areas: cell culture, mammalian organoid culture, biochemistry, advanced microscopic techniques (super-resolution microscopy, EM), bioinformatics/statistics.
Interpersonal & communication skills (essential)	<ul style="list-style-type: none"> Ability to present and discuss the work and research topics clearly in written and spoken English with the supervisor and academic co-workers. Ability to cooperate with and support colleagues and to maintain cohesive and collaborative relationships.
Relevant experience & skills (desirable)	<ul style="list-style-type: none"> Publications in the scientific literature Experience in presenting at international conferences Experience in supervising students or junior colleagues Experience in communicating and collaborating with scientists in relevant or different disciplines

Application process:

Qualified applicants are requested to provide the following items (in English):

1. A cover letter describing your interests and professional goals
2. Curriculum Vitae including academic background and work experience
3. List of publications and PDF files of three best papers (if applicable)
4. Contact details of two or three referees, one of which must be your most recent supervisor/line manager. References will be requested after the initial selection.

Applicants who are interested in this position should submit the above documents directly to Dr Yuu Kimata via e-mail: yk299@cam.ac.uk. At the same time, applicants should also complete the online application form using the Shanghai University of Science and Technology Talent Recruitment System (<http://jobs.shanghaitech.edu.cn/>) following the instruction. Shortlisted candidates will be contacted and interviewed by Dr Kimata.

The formal selection process will commence after **30th June 2018** and will continue until the position is filled.