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

The 'Cell Cycle in Development' Laboratory (PI: Dr Yuu Kimata) has moved from the University of Cambridge, UK to open a new laboratory at the School of Life Science and Technology (SLST) at the ShanghaiTech University in Shanghai. We are looking for an ambitious, highly-driven postdoctoral scientist who will work with Dr Kimata to elucidate the mechanism integrating the cell cycle into the development and the homeostatic process of metazoan organisms at the new laboratory.

The Kimata lab combines the genetics and the *in vivo* imaging of *Drosophila melanogaster* with *in vitro* cell culture, biochemistry, proteomics and bioinformatics, working with international collaborators including David Glover, Marc de la Roche (University of Cambridge), Renata Basto (Curie Institute), and Hiroyuki Yamano (UCL). The current focus is on the function of the evolutionarily conserved multisubunit ubiquitin ligase, the anaphase promoting complex/cyclosome (APC/C) in the integration mechanism. We have recently discovered in *Drosophila* that the APC/C, in addition to its role in cell cycle regulation, has the developmental functions:

1) To regulate the transcriptional activity of one of the major extracellular signalling pathways, the Wnt signalling pathway, during the retinal development ***(Martins T et al., 2017 Developmental Cell)***;
2) To regulate the homeostasis of neural stem cells in the developing brain (***Meghini F et al., 2016, Nature Communications)***
3) To ensure oocyte maturation through the regulation of the centrosome (***Braun A et al., bioRxiv*)**.

We are further investigating the functions of the APC/C in coupling cell fate specification and differentiation to the cell cycle while extending our studies into other cell cycle regulators and mammalian models.

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).

Job descriptions:

We are currently recruiting one Postdoctoral Research Fellow. The joined postdoctoral 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 disease and organismal ageing?*
- *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, based upon their skills and experience as well as the availability and the timeliness of the projects.

Key Responsibilities:

• 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%**

• 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%**
• 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	• A PhD or an equivalent degree in biomedical science.
Scientific knowledge and skills (essential)	• 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)	• Knowledge on *Drosophila* biology and methodology. • Knowledge on developmental biology and/or the cell cycle research. • Experience and skills in experiments using *Drosophila.* • 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)	• 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)	• 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

The successful candidate will have a strong track record and will demonstrate excellent inter-personal, 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 laboratory focuses on the career development of the post and supports their career planning.

Conditions:

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. All postdocs in ShanghaiTech will have access to an in-campus accommodation and various social benefits provided by the university, including a contribution to the social security.

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 or yKimata@shanghaitech.edu.cn. 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 **31th August 2018** and will continue until the position is filled.

Any informal enquiries regarding the roles and the research projects should be directed to Dr Kimata via e-mail: yKimata@shanghaitech.edu.cn or yk299@cam.ac.uk.