

Partnerships in Teaching and Learning in RPg Education

The Graduate School has always been committed to offering the best training to our RPg students to prepare them for future careers. An important component of the training is teaching experience. In top overseas universities, graduate programmes increasingly integrate a partnership model of learning and teaching, where RPg students will be involved in designing, developing, conducting and evaluating their own teaching.

In line with this development, the Graduate School has been working with our RPg students in offering summer workshops. Please find below the details of the forthcoming workshop offered by a team of three RPg students from the LKS Faculty of Medicine:

Genome Editing in Mammalian Cells with CRISPR/Cas9 **Jiayin Yang, Xinru Ran, and Rui Wei – LKS Faculty of Medicine**

Date:

June 6, 2018, Wednesday

Time and Venue:

1:00 pm to 3:30 pm (Lecture and Discussion) - Seminar Room 7, LG1, Laboratory Block, 21 Sassoon Road

3:45 pm to 5:15 pm (Hands-on Practice) - L801 and/or L836, Laboratory Block, 21 Sassoon Road

Designed engineered nucleases (ZFNs, TALENs, CRISPR/Cas9 etc.) facilitate genome editing in all kinds of cell lines, embryos and animals. Among them, CRISPR/Cas9 has generated considerable excitement. It is cost-effective and time-efficient for targeted-genome editing. In this workshop, we will share our experience in engineering the genome of human induced pluripotent cells (hiPSCs). hiPSCs have the potential to differentiate into all kinds of cell types in our body. By combining both technologies, multiple human diseases can be modeled comprehensively, and autologous cell transplantation therapies can also be tested.

The workshop outline is available [here](#). There are 3 parts in the workshop: (1) *Lectures*: Introduction to the technologies; (2) *Group discussions*: design of sgRNAs, ssODNs and donor plasmids; and (3) *Hands-on experiments*.

Registration is needed for the workshop. Students who are interested please complete the “[Application Form for Workshop Registration](#)” and submit it to the Graduate School preferably before **May 30, 2018**.

About the workshop leader:

Jiayin Yang is a 4th year PhD candidate in Department of Medicine in the LKS Faculty of Medicine. He has worked on human iPSCs fields for 10 years and has rich experience in the genome editing of human iPSC, including gene knockout, gene correction using ssODNs and *piggyBac*, and generation of reporter cell lines.