

February 10, 2020

Dear Colleagues,

We have a newly funded Research Fellow (Postdoc) position in the Gan lab. Our lab is based in the Centre for BioImaging Sciences, Department of Biological Sciences at the National University of Singapore. Our website (www.anaphase.org) has additional details about our group.

The candidate will investigate how the synaptonemal complex and chromatin reorganize during meiosis, inside the cell nucleus. This project will take advantage of the yeast meiosis program and its well-characterized cytology and genetics. It will exploit state-of-the-art technologies such as cryo-FIB milling, cryosectioning, electron cryotomography (cryo-ET), correlative cryo-EM/LM (cryo-CLEM), 3-D classification, and subtomogram averaging.

Please see our first study of the yeast synaptonemal complex:
<https://www.biorxiv.org/content/10.1101/746982v1>

Our other studies on chromatin and the kinetochore are linked here:
www.anaphase.org/papers

To see how structural cell-biology is the future, see our recent review:
<https://www.molbiolcell.org/doi/10.1091/mbc.E18-05-0329>

The Centre for BioImaging Sciences operates state-of-the-art cryo-EM equipment, including a Titan Krios cryo-TEM with a Falcon II direct-detection camera and Volta phase plate, a T12 cryo-TEM, a Vitrobot plunge freezer, a high-pressure freezer, a UC7/FC7 cryomicrotome, and a Helios FIB-SEM. Proteomics, light microscopy, and cell-culture facilities are also available. Training in the theory and operation of key equipment and software is provided by dedicated staff. We run our own cluster of high-core-count CPU servers and the GPU servers.

A K3-GIF camera has been ordered. In the interim, we have recently gained access to a K2-GIF-equipped Krios and light cryomicroscopes (for cryo-CLEM) at our neighboring university, NTU, which is also in Singapore. Furthermore, we have just started collaborations with international centers that operate prototype cryo-EM/LM instruments.

The candidate must have a strong publication record in the broad areas of biology, chemistry, computer science, engineering or physics.

Interested candidates should send the following to Lu Gan:

- 1) cover letter
- 2) one-page project proposal
- 3) CV
- 4) contact info of three references

--Lu