

Does aneuploidy increase cellular evolvability?

Aneuploidy, the state of having an imbalanced chromosome copy number, is a hallmark of cancer cells. While aneuploidy has been proposed to foster cancer evolution towards drug resistance and aggressive phenotypes, we still miss a platform to rigorously test this idea. To this end, we have constructed a collection of isogenic aneuploid and euploid yeast cell lines. Using robotic-assisted high-throughput evolution experiments, we will test if aneuploid lines evolve faster compared to euploid lines when challenged with a wide array of chemical (presence of chemotherapy or antifungal drugs) or environmental (osmotic, temperature, etc) perturbations.

We are looking for an intern with a B.Sc. in biology or a related subject who could commit to work full time in our lab in IMB (A*STAR campus) for a minimum period of 8 months. During this time, the intern will work under the supervision of a PhD student and will learn to work with liquid-handling robots, programming to manage large datasets, multi-plate readers, high-throughput flow cytometry, microscopy, qPCR, genomics and microbiology.

If interested please contact:

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