

Student position available on:

Mechanism of sperm-egg fusion in mammals

We have an immediate opening for a gifted undergraduate or graduate student to investigate the molecular basis of sperm-egg fusion in mammals. We discovered that the glycoproteins from the fusexin superfamily mediate cell-cell fusion in *C. elegans*, plants and other organisms. We have recently identified proteins involved in this complex process during fertilization in mammals and we aim to study them and to determine whether they are authentic sperm-egg fusogens.

This multidisciplinary project involves the study of sperm and eggs from mice, reproductive techniques including in vitro fertilization, cell tissue culture, high-resolution microscopy as well as biochemical and structural studies.

We are seeking highly motivated and talented candidates from diverse scientific disciplines, including but not limited to biochemistry, molecular genetics and physiology. The successful candidate will enjoy a stimulating environment in the Faculty of Biology and access to our state-of-the-art facilities for cell culture, microscopy, structural and molecular biology.

To apply please send cover letter to:
Beni Podbilewicz: podbilew@technion.ac.il

Faculty of Biology, Technion - Israel Institute of Technology,
Haifa, 32000, Israel

<https://elegansfusion.net.technion.ac.il/>

Brukman, N. G., Uygur, B., Podbilewicz, B. & Chernomordik, L. V. How cells fuse. *J Cell Biol* **218**, 1436-1451 (2019).
Valansi, C., Moi, D., Leikina, E., Matveev, E., Grana, M., Chernomordik, L. V., Romero, H., Aguilar, P. S. & Podbilewicz, B. Arabidopsis HAP2/GCS1 is a gamete fusion protein homologous to somatic and viral fusogens. *J Cell Biol* **216**, 571-581, doi:10.1083/jcb.201610093 (2017).