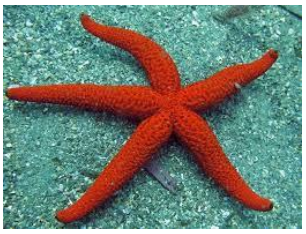
MSc and PhD positions in the lab of genetic and cellular regulation of development and evolution at the University of Haifa



Dr. Smadar Ben-Tabou de-Leon

The sea urchin embryonic skeleton and vertebrates' blood vessels are quite distinct in their function. Yet, both organs have a tubular structure and a common set of genes regulate the specification of sea urchin skeletogenic cells and vertebrates' endothelial cells. In our lab we test the hypothesis **that the skeletogenic control network is a conserved program for vascularization that was adapted during echinoderm evolution to incorporate biomineralization.** We specifically study:

1. The effect of environmental stress, such as hypoxia (low oxygen) or mechanical rigidity, on this process.
2. The cellular machinery that constructs the skeleton with a major focus on the interaction between the cytoskeleton and the gene regulatory network.

We are seeking excellent MSc and PhD students to tackle this major cellular, developmental and evolutionary questions. The projects involve advanced embryology, molecular biology, imaging and bioinformatics analyses.

Scholarships are available for the selected candidates.

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