



## MEET OUR AMBASSADORS



### Tal Luzzatto Knaan

Assistant Professor

Department of Marine Biology,

*Charney School of Marine Sciences*

### Field of Research:

Metabolomics; Natural Products; Drug Discovery; BlueTech

### SHORT BIO

I earned my MSc in biotechnology and PhD in Biochemistry from the Hebrew University of Jerusalem. As a Vaadia-BARD postdoctoral fellow, I interned with Prof. Pieter C. Dorrestein at the Skaggs School of Pharmacy and Pharmacological Sciences at the University of California, San Diego (UCSD), and a second fellowship with Prof. Daniel Sher in Marine Biology at the University of Haifa.

My lab pioneers the field of 'functional metabolomics' by combining analytical chemistry with molecular biology to understand the expression patterns and functions of molecules. In exploring the diversity, distribution, and potential drug discovery we follow key questions: What molecules are produced? When and where are they expressed? What are their biological and ecological roles? and how can we benefit from them, as innovative drugs, bioremediates or nutrition substitutes? Thus, understanding the ecological context of marine natural products and utilities "from Seabed to Bedside". I am passionate about science, chemistry, and ocean life and eternally amazed by how a single molecule can make a huge impact on living organisms.

### FUNDRAISING NEEDS

**The Interdisciplinary Center for Metabolomics and Natural Products**, currently under establishment, was funded with the support of the Council of Higher Education and the University of Haifa. Its main goals are: 1) to facilitate the study of small molecules, peptides, and polymers that are fundamental for marine sciences, life sciences as well as for archeological and medicinal research. 2) to train young scientist in cutting-edge technologies. 3) to provide a platform for Industry-Academia collaborations, including services, consultations, and joint development, from basic research to product.

**To achieve the above goals and increase the center versatility, we need 5 years operational costs for methods development and setting standard operating procedures.**