Postdoctoral Position in Plant-Microbe Interactions
School of Plant Sciences and Food Security, Tel Aviv University, Tel Aviv, Israel.

Postdoctoral position is available in the laboratory of Prof. Guido Sessa in the School of Plant Sciences and Food Security at Tel Aviv University, Tel Aviv, Israel (https://sessalab.wixsite.com/site).

Project
The role of type III secreted effectors in gall formation caused by the bacterium <i>Pantoea agglomerans</i> in beet roots.

Strains of the Gram-negative bacterium <i>Pantoea agglomerans</i> induce formation of galls in gypsophila and beet plants. Pathogenicity of this bacterium is dependent on the type III secretion system that delivers effector proteins into the plant cell. Once inside the cell, effectors subvert plant cellular processes to the benefit of the pathogen and contribute to the development of disease. We recently defined the pool of type III effectors of strains of <i>Pantoea agglomerans</i> by using draft genome sequences and a machine-learning approach. Main goal of the research project will be the molecular characterization of type III secreted effectors of this bacterium, the study of their mode of action and the identification of their plant targets. In our investigation we utilize molecular biology and microbiology techniques, biochemistry and genetic tools.

Location
We are physically located on Tel Aviv University campus (https://en-lifesci.tau.ac.il/) and have access to many of its resources in addition to our own. Tel Aviv excellent location and year-round sunny and warm climate offers a pleasant setting for work and home life. We are part of the School of Plant Sciences and Food Security (https://lifesci-english-cms.tau.ac.il/plant_sciences/?tab=0). Our department is one of the largest of its kind in Israel, offering a variety of courses and research opportunities aimed at furthering our understanding of plant biology and its implications in biotechnology and the environment.

Qualifications
1. A recent Ph.D. in biology or related disciplines.
2. Experience in plant molecular biology, biochemistry and microbiology.
3. Background in plant-pathogen interactions.
4. Strong communication skills, and fluency in written and spoken English.

To apply
Please, send to Prof. Guido Sessa (guidos@post.tau.ac.il) a letter of interest, CV, list of publications, and the names of three references.