

Dr. Benyamin Rosental

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PROFESSIONAL PREPARATION:

Ben-Gurion University, Israel, <i>Life Sciences</i> .	B.Sc., 2007
Ben-Gurion University, Israel, <i>Microbiology and Immunology</i> .	M.Med.Sc., 2010
Ben-Gurion University, Israel, <i>Immunology</i> .	Ph.D., 2013
Stanford University, CA, USA, <i>Stem Cells and Comparative Immunology</i> .	Postdoc., 2018

Head of Comparative Immunology and Stem Cells Transplantation Laboratory

Our laboratory research is focusing on tissue acceptance by the immune system, and stem cell transplantation. Our research is unique since we are working with non-classical model organisms to answer basic questions in immunology, for translating our findings to medical research.

Among our projects, is modulating immune system in blood forming stem cell transplantation (bone marrow transplantation), to make it a safer process. Additionally, we are looking for the immune system "tipping point" between tissue regeneration or inflammatory destruction.

While most of the work in the laboratory is focusing on improving transplantation and modulating the immune system in medical settings, due to the unique tools developed in the lab, we also translate our research to other fields. For instance, in a unique project we are attempting to characterize, isolate and transplant coral stem cells. The idea is to be able to isolate stem cell from heat resilient individuals and to transplant to sensitive corals, to enable resilience in the sensitive individuals in heat stress.