

11<sup>th</sup> Annual Congress on

# Immunology & Immunotechnology

September 13-14, 2018 | Zurich, Switzerland



## Nagwa Elkhafif

Theodor Bilharz Research Institute, Egypt

### Immuno electron microscopic study of the cellular changes in the granuloma formation in murine hepatic schistosomiasis

Schistosomiasis is the third most devastating tropical disease in the world, being a major source of morbidity and mortality for developing countries in Africa, South America, the Caribbean, the Middle East, and Asia. Schistosomiasis is due to immunologic reactions to *Schistosoma* eggs trapped in tissues. Antigens released from the egg stimulate a granulomatous reaction involving T cells, macrophages, and eosinophils that results in clinical disease. Symptoms and signs depend on the number and location of eggs trapped in the tissues. Initially, the inflammatory reaction is readily reversible. In the latter stages of the disease, the pathology is associated with collagen deposition and fibrosis, resulting in organ damage that may be only partially reversible. Complications of schistosomiasis include the following: gastrointestinal problems in case of *S. mansonii* and nephropathies in *S. heamatobium* which may end to hepatic or renal failure or even malignancies. Our study highlights the granuloma formation and modulation as an important sign of the immune response in murine hepatic schistosomiasis at the immunohistochemical and ultra-structural level aiming to understand and then find immunological approaches to prevent our stop complications of the disease at an early stage.

#### Biography

Nagwa Elkhafif is a Professor of Clinical and Chemical Pathology and the current Head of the Electron Microscopic Research Department in the Theodor Bilharz Research Institute, a medical research institution affiliated to the Egyptian Ministry of Higher Education and Scientific Research. She has completed her MD in the Faculty of Medicine at Cairo University. She focuses her research on the role of immune cells in combating hepatic diseases caused by helminthic (schistosomiasis), bacterial or viral infections (hepatitis virus) using electron microscopy and immunoelectron microscopy to visualize cellular changes accompanying such diseases. She was involved in scientific cooperative research with German and French institutions.

[nagwa\\_elkhafif@hotmail.com](mailto:nagwa_elkhafif@hotmail.com)