

NYBCe RESEARCHER PROFILE



SARA LUSTIGMAN, PhD

Head, Laboratory of Molecular Parasitology

BACKGROUND

Degree Institution

- Hebrew University of Jerusalem – BSc, MSc, PhD (Immunoparasitology)

Postdoctoral Institution

- The Walter and Eliza Hall Institute of Medical Research

AREAS OF RESEARCH

- Onchocerciasis
- Lymphatic Filariasis
- Mechanisms of Action of Combinatory Adjuvants using Various Vaccine Models

NON-EXPIRED PATENTS

2010, 2015 Adjuvancy and immune potentiating properties of natural products of *Onchocerca volvulus*: MacDonald AJ and Lustigman S (U.S. Patent No. US 7,700,120 B2 and US 9,017,699 B2)

KEY PUBLICATIONS



CONTACT

To contact the lab, email Dr. Lustigman at SLustigman@nybc.org or the Office of Sponsored Programs at researchadmin@nybc.org.

For additional information on Dr. Lustigman's lab, visit: <https://www.nybce.org/our-research/meet-our-researchers/sara-lustigman-phd/>

To learn more about NYBCe patents and licensing, visit our webpage: <https://www.nybce.org/our-research/nybce-technology-discoveries/>.

NYBCe LAB DESCRIPTION

Laboratory of Molecular Parasitology works to:

- Develop novel tools (vaccines, drugs) to prevent and treat onchocerciasis, also known as river blindness, and lymphatic filariasis, also known as elephantiasis.
- Characterize helminth-derived immunopotentiators and immunomodulators using various vaccine and disease models.
- Study the ability of combinatory adjuvants to induce novel networks that bridge synergistically innate and adaptive protective immune responses.
- Study the influence of sex hormones and age on vaccine responsiveness.

INDUSTRY & ACADEMIC PARTNER COLLABORATIONS

- NIH/NIAID PTHE Study Section: Past Member (2023)
- ICEMR: Chair, Scientific Advisory Group Committee for East Africa, and Sub-Saharan Africa
- The Onchocerciasis Vaccine for Africa Initiative: Partner
- UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR): Previous Chairperson of Disease Reference Group on Helminth Infections (DRG4)
- Currently conducting studies with Thomas Jefferson University, University of Liverpool, Washington University, University of Colorado, Jackson Laboratories, Columbia University, University of Buea, PAI Life Sciences, Traverse Biotech, Baylor College of Medicine
- NIH collaborative grant with Washington University School of Medicine in St. Louis, "Innovative therapeutic strategies to support elimination of river blindness"

COLLABORATIONS OF INTEREST

- Supporting or co-developing novel R&D for onchocerciasis (river blindness) and lymphatic filariasis (elephantiasis) chemotherapeutic (drugs) or immunological (vaccines) to protect and treat the population in Africa
- Mechanisms of adjuvanticity using combinatory adjuvants and various vaccine models
- Translational therapeutic research in these areas.

