IUIS 2023 CAPE TOWN

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WHERE IMMUNOLOGISTS MEET

18th International Congress of Immunology

27 November - 2 December 2023 | Cape Town, South Africa

IUIS2023.org

WELCOME MESSAGE

Dear Global Immunology Community,

The 18th IUIS International Congress of Immunology, to be held in Cape Town from 27th November to 2nd December 2023, will be a landmark occasion for Cape Town, South Africa, Africa and the Global immunology community. This will be the first time the triennial meeting will be held in Africa and I think will represent a watershed moment for the immunology field. This is also the first such meeting that will be held since the COVID-19 pandemic hit, and where many of us are piecing together the immunology of SARS-CoV-2 infections. The rapidity of having an effective suit of vaccines and introduction of various treatment regimens is the exemplar of what can be achieved when immunology, drug and vaccine development come together. Our Congress needs to reflect this intersection and brings into focus our meeting theme: Turning Discoveries into Treatments.

As President of the 18th IUIS Congress, I will enthusiastically welcome you to South Africa and to beautiful Cape Town. Our sub-theme "from Basic to Translational Immunology and Back" will guide us in tapping into the global immunology dialogue to effectively translate basic immunological findings into actionable protocols to address the disease burden challenge in Africa. Notwithstanding the COVID-19 pandemic, the wide spectrum of communicable and non-communicable diseases that exist in Africa also represents an ecology of diseases that exist in many other parts of the World. Thus, the International Congress of Immunology being held in Africa will reflect the variety of global exceptional challenges for immunology. In turn, our theme further encompasses studies of human diseases, involving immune networks, microbiomes and genetic variation that can also inform basic immunology. By so doing, we aim to harness the connectivity between basic immunology and human health. We believe that this focus and theme, woven into the scientific programme, can provide new inspiration to the global immunology community.

We wish to be inclusive of immunology from all regional societies: FAIS, EFIS, FIMSA, ALACI and AAI. Our Scientific Program Committee, chaired by Mark Davis and Miriam Mered, comprises a mix of immunologists from across all national and regional societies and promises to put together an exciting cohesive and inspiring scientific agenda. Importantly, this is also an African meeting and there is incredible enthusiasm and exhilaration being generated across North, West, Central, East and Southern Africa. Both the South African Immunology Society and the Federation of African Immunology Societies are your hosts, and we will make this a memorable experience.

Now that the COVID-19 pandemic is under control, we look forward to warmly welcoming you in person to Cape Town. You will see from our scientific programme that we have devised a very exciting immunology feast over 6 days. We will also stimulate you with a mix of African, South African and Cape Town music and cuisine.

Sincerely yours,

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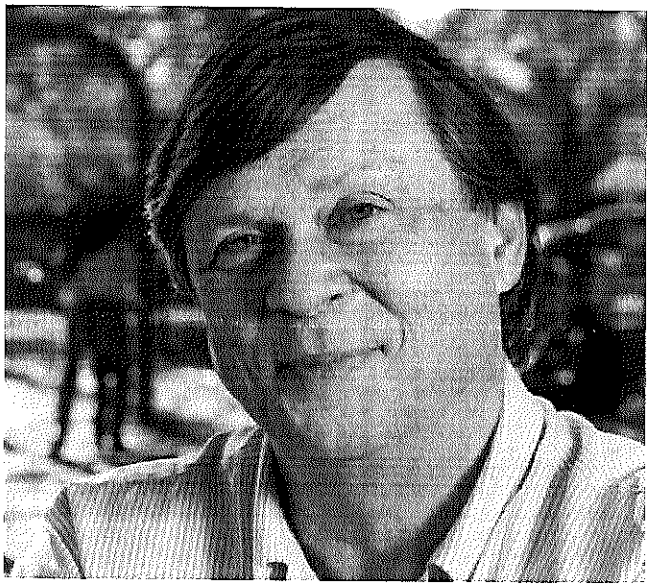
SCIENTIFIC PROGRAM COMMITTEE

The role of the Scientific Program Committee is to ensure the highest possible value of the scientific content of the IUIS Congress, broken into specific task forces.

IUIS President & Scientific Program Committee Co-Chair
Miriam Merad



Scientific Program Committee Chair
Mark Davis

Scientific Committee Members

Tomabu Adjobimey	Benin Immunology Society
Veronique Angeli	Singaporean Society for Immunology
Sunil K Arora	Indian Immunology Society
Mohamed Ridha Barbouche	Tunisian Society of Immunology
Xuetao Cao	Chinese Society for Immunology

Rita Carsetti	Italian Society of Immunology, Clinical Immunology & Allergology
Dong Chen	Chinese Society for Immunology
Dmitriy Chudakov	Russian Society of Immunology
Mark Davis	American Association of Immunologists
Deborah Dunn-Walters	British Society for Immunology
Christine Falk	German Society for Immunology
Jo-Ann Flynn	American Association of Immunologists
Ricardo Gazzinelli	Brazilian Society for Immunology
Clive Gray	South African Immunology Society
Susanne Heinzel	Australian and New Zealand Society for Immunology
Steffen Jung	Israeli Society for Immunology
Sylvia Knapp	Austrian Society for Allergology & Immunology
Miriam Merad	American Association of Immunologists & IUIS President
Kazuyo Moro	Japanese Society for Immunology
Henry Mwandumba	Immunology Society of Malawi
Pa Tamba Ngom	Federation of African Immunological Societies
Lucy Ochola	Kenyan Society of Immunology
Pamela Ohashi	Canadian Society of Immunology
Faith Osier	IUIS Past President
Rodrigo Pacheco	Asociación Chilena de Inmunología, ASOCHIN
Rosana Pelayo	Mexican Society of Immunology
Jonny Peter	South African Immunology Society
Gabriel Rabinovich	Argentinian Society of Immunology
Andreas Radbruch	European Federation of Immunological Societies – EFIS
Theresa Rossouw	South African Immunology Society
Melinda Suchard	South African Immunology Society
Eric Vivier	Société Francaise d'Immunologie
Bruce Walker	American Association of Immunologists

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ABOUT IUIS (Https://Iuis2023.Org/Iuis/)

[953] Restoring self-tolerance in autoimmunity - how Trichinella can help Autoimmune Diseases

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We reported the putative beneficial effect of *Trichinella spiralis* infection in autoimmune encephalomyelitis—EAE, as animal model of human chronic inflammatory disease – multiple sclerosis. However, it is clear that the use of live parasite to treat the disease poses a health risk and ethical issue that needs to be avoided. Excretory-secretory products (ES L1) of *T. spiralis* muscle larvae (ML), used purified or as a stimulus to generate tolerogenic DCs, were capable of inducing Th2 and regulatory responses and proved to be effective in ameliorating EAE in Dark Agouti rats. In aim to explore different routes of application, more appealing and efficient, we have designed two types of nanomedical approach for restoring self-tolerance in autoimmunity. Applied polymers were modified by sequential electrospinning to prepare multi-layer structural, biodegradable nanofibers in which ML components are successfully encapsulated. The first type of delivery system ensured steady slow release of ES L1 antigens resembling the that one from encapsulated ML which persist for months or years in the host. It proved to be very successful in mitigating the course of the disease. Mechanisms underlying the observed effect included, but were not limited to, reduced numbers of dendritic cells with lower capacity for antigen presentation and production of IL-12 cytokine compared to untreated, EAE-induced DA rats. The novel, second type, allows rapid, almost immediate release of ML components (like achieved with intra peritoneal injection of ES L1 that successfully shifted pro- into anti-inflammatory response). Effects of the novel delivery system and mechanisms of its action are in the focus of this study which aims to compare autoimmunity treatment efficacy between delivery of *Trichinella* components via nanoparticles and other kinds of parasitic antigen application.