

The Finnish Society for Immunology

IMMUNOTOLERANCE SYMPOSIUM



Time: September 9th, 2021 from 1 pm to 6 pm (EET)

Venue: Symposium will be held remotely on Zoom platform, link will be sent to registered participants

Registration: <https://elomake.helsinki.fi/lomakkeet/112768/lomake.html>

13:00 Opening words by Riitta Lahesmaa, president of the Finnish Society for Immunology

1st session: Autoimmune diseases and genetics (chair Outi Mäkitie)

13:05 prof. Eystein Husebye (University of Bergen) "Genetics of Addison's disease"

13:45 Dr. Martta Jokinen: "Interplay between autoimmunity and gut microbiome"

Break

2nd session: Autoantibodies and immune dysregulation (chair Saira Laakso)

14:00 prof. Pärt Peterson: "Interferon autoantibodies"

14:40 Dr. Eliisa Kekäläinen: "Novel immunodeficiency with signs of immune dysregulation caused by a loss-of-function mutation in *IKFZ2*"

15:00 Dr. Svetlana Vakkilainen: "Immune dysregulation in Cartilage hair hypoplasia"

15:20 Nora Pernaa (University of Oulu): "Kruppel-like-factor 2 (KLF2) and immune dysregulation"

15:30 Break

16:00 "The Best Finnish PhD Thesis on Immunology" awards and awardees' presentations (Riitta Lahesmaa)

3rd Session: Latest on the Autoimmune regulator (AIRE) and the thymus (chair Annamari Ranki)

16:45 Dr. Michail Lionakis (NIAID): "AIRE deficiency: Novel insights into mucosal immunity"

17:20 prof. Mark S. Anderson "The thymus and immune tolerance"

18:00 Closing words

INTRODUCING THE SPEAKERS



Prof. Eystein Husebye is professor of endocrinology at University of Bergen and senior consultant at Haukeland University Hospital. He leads a research group focusing on adrenal diseases, especially adrenal insufficiency and polyendocrine syndromes. His work includes studies of genetics and immunology of autoimmune adrenal insufficiency and he directs one of the world's largest registries and biobanks on adrenal insufficiency. Husebye has coordinated two EU-projects, FP7-Euradrenal and H2020-Ultradian, the latter to develop new diagnostic tools for endocrine diseases based on dynamic 24hour hormone profiling.

Web: <https://www.uib.no/rg/endocrine>

Prof. Pärt Peterson is Professor of Molecular Immunology at the University of Tartu, Faculty of Medicine, Institute of Biomedicine and Translational Medicine. He did his PhD at the University of Tampere on Addison's disease and other polyendocrine syndromes and have since continued to study the Autoimmune Regulator gene and other controllers of the immune tolerance. His research group combines molecular biology and immunology to understand the molecular aspects of immune system. Their main focus is to elucidate the transcriptional and epigenetic regulation in cells involved in immune tolerance and recognition. He has published over 150 publications and has been cited over 7300 times.



(photo: Andres Tennus/University of Tartu)

Web: <https://www.biomeditsiin.ut.ee/en/research-groups/molecular-pathology>



Dr. Eliisa Kekäläinen is a principal investigator at the Translational Immunology Research Program at University of Helsinki. She did her PhD on studying AIRE's role in peripheral tolerance and regulatory T cells. After her post-doctoral project on tissue-resident NK cell at Center for Infectious Diseases at Karolinska Institutet in Stockholm, she established her own research team in 2017 at University of Helsinki. Her research interests are focused on the thymus and germinal center reactions. She is currently coordinating an ERC funded European consortium called TARID (Thymic Abnormalities in Rare Immunological Diseases) that aims to understand how inborn (APECED) or acquired AIRE deficiency (myasthenia gravis) lead to autoimmunity.

Web: <https://www2.helsinki.fi/en/researchgroups/inborn-and-acquired-immunodeficiencies>

Dr. Michail Lionakis is a physician-scientist and Head of the Fungal Pathogenesis Section in NIAID's Laboratory of Clinical Immunology and Microbiology where he is Deputy Chief. He obtained his MD/ScD degrees from the University of Crete, Greece. He did postdoctoral research training at MD Anderson Cancer Center, Houston, followed by Internal Medicine Residency at Baylor College of Medicine, Houston, and Infectious Disease Fellowship at NIAID/NIH. Following research training at NIAID related to how chemotactic factors regulate the innate immune response in candidiasis under the mentorship of Dr. Murphy, he established his lab in 2012 and received tenure in 2017.



Dr. Lionakis' research focuses on understanding the genetic and immunological underpinnings of enhanced susceptibility to opportunistic fungal infections in humans. The lab's long-term goals are 1) to understand the pathogenesis of mucosal and invasive fungal infections, 2) to use this knowledge to identify patients at risk for developing these diseases and to improve their outcomes, 3) to improve care for patients with inherited and acquired susceptibility to fungal disease such as those suffering from APECED syndrome, CARD9 deficiency, ibrutinib-associated mold disease and others, and 4) to discover novel genetic and acquired predisposing factors for human fungal disease. To this end, the lab utilizes clinically relevant mouse models of fungal disease and enrolls patients with inherited and acquired susceptibility to fungal infections to study host-fungal interactions by using a variety of immunological, biological, and imaging approaches.

Web: <https://www.niaid.nih.gov/research/michail-s-lionakis-md-scd>

Prof. Mark Anderson, MD, PhD, is Robert Friend and Michelle M. Friend Endowed Chair in Diabetes Research, Interim Director of the Diabetes Center, and a leading expert in the understanding of autoimmune diseases and their underpinnings. His major scientific contributions involve unraveling the mechanisms by which a key transcription factor called Aire promotes immune tolerance. He continues to make significant contributions in this area of research and even has developed translational approaches to his findings that involve manipulating this key tolerance mechanism.



As a leader in the translation of Immunology to human health, Anderson is a co-founder of ImmunoX, a novel program to harness the immune system for human health at UCSF and he is also President of the Federation of Clinical Immunology Societies (FOCIS). He is a practicing Diabetologist and serves in an advisory capacity for the translation of immunology to autoimmunity including service as a mechanistic investigator/advisor to Trialnet, a NIH-sponsored multi-center clinical trial consortium whose focus is on preventing and reversing type 1 diabetes. He has also served as chair of the Hypersensitivity, Autoimmune and Immune-mediated Disease (HAI) study section for the National Institutes of Health. Anderson also serves as Director of the UCSF MD/PhD training program. In 2020, he was elected into the National Academy of Medicine.

Web: <https://andersonlab.ucsf.edu/>