

International Conference on **Innate Immunity**

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Metabolic and epigenetic reprogramming of Antiviral Immunity

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This lecture will introduce the emerging field of immunometabolism and will cover a range of topics addressing the role of metabolic networks in the regulation of antiviral immunity. The lecture will emphasize the function of central metabolic pathways in the epigenetic reprogramming of innate antiviral immunity and will discuss its contribution to the balance of beneficial effects and deleterious sequelae of the antiviral response. In addition, this lecture will present a variety of systems biology approaches and will highlight their importance as a powerful tool in the analysis of complex immune-metabolic interactions. Finally, attendees of this lecture will be familiarized with an application of the systems biology approach to the discovery of new drug targets for the therapeutic control of viral infections or autoimmune disease.

Biography

Litvak, assistant professor at UMMS, has studied immunology, metabolism and systems biology for 15+ years and published his research papers in high-profile peer-reviewed journals such as Nature, Nature Immunology, Nature Cell Biology and Molecular Cell. He is an editor for the Immunome Research Journal. Dr. Litvak is a member of the Educational Resource Cluster at UMass Center for Microbiome Research. He also serves on the review committee for the National Center for Complementary and Alternative Medicine (NCCAM/NIH).

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