

Primary Immunodeficiency Diseases: From Bench to Bedside

Overview

Primary immunodeficiency disease (PIDD) is a group of more than 150 rare hereditary disorders in which the common feature is a defect in a patient's immune system. Children with a PIDD are more prone to infections than are other kids and are at increased risk for certain autoimmune disorders. According to the leading experts in immunology, when part of the immune system is either absent or not functioning properly, it can result in an immune deficiency disease. In the most common PIDDs, different forms of immune cells or proteins are missing or do not function. This creates a pattern of repeated infections, severe infections and/or infections that are unusually hard to cure. These infections may attack the skin, respiratory system, the ears, the brain or spinal cord, or in the urinary or gastrointestinal tracts. Research in primary immunodeficiency is making great strides, improving treatment options and enhancing the quality of life for most people with these complex conditions. Treatment options are targeted toward the specific immune defects and can include transplantation (bone marrow, stem cell, thymus), immunoglobulin (antibody) replacement, preventative antibiotics and strategies to manage autoimmune disease.

Objectives

The major objective of the course is to introduce immune system and primary immunodeficiency diseases. The course will also provide details related to predominantly antibody deficiencies, structure and function of phagocytic cells and their defects, congenital neutropenia, common variable immunodeficiencies, combined immunodeficiencies, syndromic immunodeficiencies. Another objective is to introduce immunological screening tests and treatment of immunodeficiency diseases with clinical case studies. The role of Toll-Like Receptor (TLR) signaling in primary immune deficiencies or pattern recognition receptors in immunodeficiency disorders will also be discussed in details including mechanisms and pathways of innate immune activation and regulation in cancer, cancer immunotherapy and cancers in primary immunodeficiency diseases as well as TLRs as target for drug discovery.

Modules	A. Introduction to Immune System and Primary Immunodeficiency Diseases B. Predominantly Antibody Deficiencies, Phagocyte Defects C. Immunological Screening Tests and Treatment of Immunodeficiency Diseases D. TLRs as target for drug discovery and cancer immunotherapy February 18 – 22, 2019 Number of participants for the course will be limited to fifty.
You Should Attend If...	<ul style="list-style-type: none">▪ Executives, engineers and researchers from manufacturing, service and government organizations including R&D laboratories.▪ Students at all levels (MSc/MBBS/PhD) or Faculty from reputed academic institutions and technical institutions.
Fees	The participation fees for taking the course is as follows: Participants from abroad: US \$300 Participants from Industry: INR 3000 Participants from Govt. Organizations: INR 2000 The above fee includes all instructional materials and assignments and 24 hr free internet facility. The participants will be provided with accommodation on payment basis.

The Faculty



Nima Rezaei is distinguished Professor of clinical immunology and allergy at Tehran University of Medical Sciences, Associate Dean of International Affairs in the School of Medicine and the Director of Global Academic Program (GAP). Nima Rezaei is the mastermind, founder and current president of the Universal Scientific Education and Research Network (USERN). Rezaei is known

for his intellectual research in Primary Immunodeficiencies, characterization and treatment. He initiated the Iranian Primary Immunodeficiency Diseases Registry (IPIDR) in 1999, which earned him the best research project award in the 4th Avicenna festival. He has authored more than 700 publications, including several books to receive the 10th, 16th and 17th Avicenna Festival awards for best book of the year for; "Primary Immunodeficiency Diseases", "Immunology of Aging" and "Cancer Immunology" series. He has also won the prestigious 12th and 18th Razi Research Festival on Medical Sciences award as Distinctive Researcher in Basic Sciences. In 2013 he received the AAAAI (American Academy of Allergy, Asthma and Immunology) International Young Investigator Award. Since 2014, his name has been listed among the World top 1% scientists by the essential indicators of science the ESI. He has won a multitude of prestigious awards in his research and scientific areas as well as educational work.



Surjit Singh, MD; DCH (Lon.); FRCP (Lon.); FRCPCH (Lon.); FAMS; Fellowship in Pediatric Immunology (Lon.); FIAP; FICAAI, is a Professor of Pediatrics and In-charge Pediatric Allergy and Immunology Unit, Advanced Pediatrics Centre at Post Graduate Institute of Medical Education and Research, Chandigarh-160012, India. He was a

President of Indian Society for Primary Immune Deficiency (2013-2014) and Principal Investigator at the Centre for Advanced Research in Primary Immunodeficiency Diseases, Indian Council of Medical Research.



Deepak Salunke received PhD from CSIR-National Chemical Laboratory (NCL), Pune and also worked on a Indo-French Sandwich Thesis program at ICSN-CNRS France. Dr. Salunke worked at the Department of Applied Chemistry, NCTU Taiwan and Department of Medicinal Chemistry at the University of Kansas (KU), Lawrence, USA

and then promoted as Assistant Research Professor at Higuchi Biosciences Centre at KU. Before joining at the Panjab University, Chandigarh as Assistant Professor of Chemistry, he worked at the Advinus Therapeutics and SAI Life Sciences Pvt. Ltd. Pune.

Course Co-ordinators

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