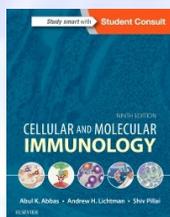


WORKSHOP

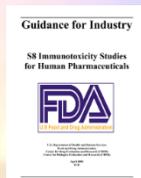
“MOLECULAR AND CELLULAR IMMUNOLOGY: FROM BASICS TO APPLICATIONS IN PRECLINICAL DEVELOPMENT OF NANOTECHNOLOGY-FORMULATED DRUGS”

This two-part on-line workshop includes lectures covering fundamental aspects of the immune system structure and function at both molecular and cellular levels, principles of immunotoxicology, regulatory requirements for assessing the immunotoxicity of new pharmaceutical products, methodology relevant to the immunotoxicity assessment of nanomaterials and case-studies focusing on the critical structure-activity relationship between nanoparticles and the immune system. The entire workshop spans nine (9) days and includes one 2-hour lecture per day. There will be two workshops per year – winter (12/2/2019-12/12/2019) and summer (6/15/2020-6/25/2020), from 11 am to 1 pm EST. Registration is free but participants must sign-up by sending an e-mail to ncl@mail.nih.gov no later than one week before the first day of each workshop (i.e., 11/25/2019 for the winter session and 6/8/2020 for the summer session).



The first five lectures constitute the Part I Workshop and cover the materials described in “Cellular and Molecular Immunology,” 9th edition, Abbas, A., Lichtman A., and Pillai, S. The purpose of these lectures is to create a strong foundation of basic immunology concepts. The Part I lectures are intended for students and researchers without prior training in immunology.

Lectures 6-9 comprise the Part II Workshop. These lectures are intended for attendees of Part I Workshop and researchers with a background in immunology who want to learn applied immunotoxicology aspects of preclinical nanoparticle characterization.



Lecture 6 covers the basic principles of immunotoxicology and reviews information summarized in the FDA guidance for industry documents.



Lectures 7 and 8 will review immunotoxicology of engineered nanomaterials and the aspects of preclinical characterization.

Lecture 9 will focus on practical applications of the current knowledge regarding nanoparticle immunotoxicity to translate nanomaterials from bench-to-bedside

*Questions??? Contact Dr. Marina A. Dobrovolskaia,
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