Course on basic immunology (spring 2022)

<u>General description:</u> An elective course of immunology on a basic level covering also some methodological and clinical aspects.

<u>Eligibility:</u> Students in medicine, dentistry, biochemistry, biology, biomedicine, biomedical imaging and drug discovery -programs. PhD -students of doctoral programs.

Course description: Lectures (15 x 60min).

ECTS points: Two (2) ECTS points. Earned by attending lectures.

<u>Time and place:</u> 3.3.-28.4. (Tuesdays and Thursdays; except14.4.) at 14.30.

Place: Lecture hall Säätiö (and Lauren 1, see *), MedD, Kiinamyllynkatu 10

Course organizers: Institute of Biomedicine and InFlames Flagship (Arno Hänninen, Marko Salmi, Kati Elima)

Registration: (https://opas.peppi.utu.fi/fi/opintojakso/PGS_2198/12445)

Lectures (14:30 - 15:30)

- 3.3. Introduction of the course (Course organizers)
- 8.3. Flow and mass cytometry in immune cell analysis (Pia Rantakari)
- 10.3. Lymphoid organs (Akira Takeda)
- 15.3. Innate immunity 1: Complement and its functions (Jukka Hytönen)
- 17.3. Innate immunity 2: Myeloid leukocytes, pattern recognition (Maija Hollmen)
- 22.3. B-cell activation, effector mechanisms and therapeutic antibodies (Pieta Mattila)
- 24.3. B-cells and humoral immunity (Jukka Alinikula)
- 29.3. Antigen presentation and HLA/MHC (Roger De Figueiredo)
- 31.3. T lymphocytes and cytokines (Ubaid Kalim)
 - 5.4. Immunological tolerance (Sakari Pöysti)
 - 7.4. Leukocyte trafficking and inflammatory reaction (Sirpa Jalkanen)
- 12.4. * Inborn errors of immune system (Johanna Lempainen)
- 19.4. * Immunity in microbial infections and vaccine immunology (Ilkka Julkunen)
- 21.4. Cancer immunology (Marko Salmi)
- 26.4. Autoimmune diseases (Arno Hänninen)
- 28.4. extra time for cancellations
- *) NOTE: Lectures marked with * are held in lecture hall Lauren 1.