iNOVA4Health

- Seminar -

11th February 2025, 14h30

ITQB Auditorium, Oeiras

Host: Ana Batista

A Patient Immune Journey: from Immune Memory to Target Identification and Biotherapeutic Design

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Abstract:

Human B lymphocytes play a central role in many autoimmune disorders due to their multiple functionalities such as antigen presentation, cytokines an antibodies secretion and immunological memory. Pathogenic B cells identification in autoimmune diseases, is becoming key to understand how current B cell modulation therapies are working and to design tailored therapy aimed at better targeting root causes of the disease.

We have been investigating the humoral and cellular memory autoreactive repertoire in idiopathic membranous nephropathy (iMN) to identify pathogenic B cell and their possible role in the disease course.

Short Bio:

Human Immunology and specifically the miracle of how the immune system is equipped with memory has been my major passion during the last 15 years. Our body can be considered a sophisticated antibody factory and understanding how these antibodies are generated against pathogen but also against our own self structures leading to potential pathological conditions is a key question of my group in NIBR.

I have been exploiting different ways to investigate human immunological memory using in vitro cellular system, which allowed us to develop expertise's and knowledge in all the classical immunological technologies. Basic immunology questions are relevant for any type of biotherapeutic modalities, ranging from monoclonal antibodies, gene therapy to CAR T cells therapy.

Areas of Interest:

Immunogenicity, immunological memory in autoimmunity, infectious diseases and oncology. Exploiting the immune system and learning from immune dysregulated patients which are the immunological mechanisms responsible for damage and/or protection.