Master of Biology and Health Lectures

Abstract from oncology
Thursday April 8, 2021 - 6:15 pm

Research in oncology - Predicting and preventing relapse in hematological malignancies

Hematological malignancies in adults are a family of cancers that frequently enter in remission after first line therapy with long-term prognosis mostly related to relapse. To optimize patient likelihood to reach cure or at least long-term remission, therapeutic strategy must be carefully defined, with more and more available options ranging from conventional chemotherapy, targeted drugs, allogeneic stem cell transplantation, CAR-T cell therapy, T-cell engager etc. To guide the clinician, we have to understand how cancer cells persist after treatment as minimal residual disease, sometimes for years or decades, define robust predictive biomarkers and translate them into routine, and investigate how new drugs or immune intervention may shift the balance between host and persistent cancer cells. These goals can be achieved using appropriate experimental models, high-throughput genomics, and biological ancillary studies on large prospective patient cohorts form clinical collaborative study groups.

See you on April 8, 2021 - 6:15 pm

Pr Bruno QUESNEL

Bruno Quesnel is 57 years old. Entered as a student at the school of medicine of Rouen in 1982, he became professor of hematology in 2003. Since 1998, he has headed a research group focused on acute leukemia and immune modulation, and since 2005 the team “Inserm UMR1277 CNRS UMR9020 – CANTHER, «Factor of persistence of leukemic cells», at Institut pour la Recherche sur le Cancer de Lille, part of the ONCOLILLE research institute. For 25 years, his research has focused on the understanding of mechanisms that drive long-term persistence of residual tumor cells and relapse in hematological malignancies, notably acute leukemia. He discovered the critical role of immune equilibrium during tumor dormancy (e.g PD-L1/PD-1, Stemness), and investigated possible therapeutic modulations, including gene therapy. More recently, his team has expanded its scope with new technologies and researchers to explore the impact of new drugs on cell metabolism and clonal evolution in acute leukemia and multiple myeloma. As a clinician, he also investigates numerous new drugs in early phase clinical trial at the Hematology Department of Lille Academic hospital. He authored nearly 200 publications and patents.