

CRBM external seminar date 15:00 pm Salle Marcel Dorée

The central role of the PIM2 Ser/Thr kinase in the metamorphosis of B cells into antibody-secreting plasma cells.

Thierry FEST

MOBIDIC – (MicrOenvironment and B-cell: Immunopathology cell Differentiation and Cancer) UMR INSERM U1236 à Rennes



Thierry FEST, MD, PhD, is a Professor of Hematology, head of the Hematology Department of the University Hospital of Rennes. After a PhD at Besançon, and a postdoc at the National Cancer Institute, National Institute of Health, (Bethesda, USA) he was recruited MCUPH at the University Hospital of Besançon in 2003 and then PUPH at the University Hospital of Rennes. He is also the head of the team B_DEVIL in the INSERM U1236 at Rennes

Thierry's team works on the terminal differentiation of human B cells in the normal component and in the context of malignant lymphomas with a special focus on the transition from B cells to antibody-secreting cells, plasma cells. Based on an *in vitro* model of human primary B cell differentiation, transcriptome, genome accessibility and methylation analyses, his team defined molecular events involved in the final stage of terminal differentiation. Currently, his work focuses on the role of the Ser/Thr kinases PIM2 and PIM1 in this differentiation process.

Selected publications

Haas M, Caron G, Chatonnet F, Manenti S, Alaterre E, Devin J, Delaloy C, Bertolin G, Viel R, Pignarre A, Llamas-Gutierrez F, Marchalot A, Decaux O, Tarte K, Delpy L, Moreaux J, Fest T. PIM2 kinase has a pivotal role in plasmablast generation and plasma cell survival, opening up novel treatment options in myeloma. Blood. 2022 Apr 14;139(15):2316-2337.

Santamaria K, Desmots F, Leonard S, Caron G, Haas M, Delaloy C, Chatonnet F, Rossille D, Pignarre A, Monvoisin C, Seffals M, Lamaison C, Cogné M, Tarte K, Fest T. Committed Human CD23-Negative Light-Zone Germinal Center B Cells Delineate Transcriptional Program Supporting Plasma Cell Differentiation. Front Immunol. 2021 Dec 2;12:744573.

Dumontet E, Pangault C, Roulois D, Desoteux M, Léonard S, Marchand T, Latour M, Legoix P, Loew D, Dingli F, Dulong J, Flecher E, Coulouarn C, Cartron G, Fest T, Tarte K. Extracellular vesicles shed by follicular lymphoma B cells promote polarization of the bone marrow stromal cell niche. Blood. 2021 Jul 8;138(1):57-70.