CAREER HISTORY : Professor Benoit acquired a solid foundation in the domain of micro and nanoencapsulation. At the School of Pharmacy of Angers, he is teaching Pharmaceutics. In parallel, he created in 2001 a highly competitive research group at the international level, Mint (INSERM/CNRS), that he headed up until 2017.
He was recognized as an AAPS Fellow in 1994. He received the PSWC Research Achievement Award (Pharmaceutical Sciences World Congress) in 2010 in New Orleans, from the FIP (International Pharmaceutical Federation) and the Prize of Notoriety from the French National Academy of Pharmacy in 2011. He is currently President of the departmental committee of “La Ligue contre le Cancer”.

SUMMARY OF PRESENT WORK : His interest is directed towards therapeutic nanoparticle-based strategies that do not rely on the “Enhanced Permeability and Retention” effect. Among them, the design of various implants including intracerebral systems is currently achieved. In parallel, the targeting of a particular subset of immune cells, the monocytic myeloid-derived suppressor cells (M-MDSC), localized in the lymph nodes, is studied in order to propose new avenues in nano-immunotherapy. Two European projects from the EuroNanoMed program and coordinated by Prof. Benoit (NICHE and RESOLVE) are focusing on these aspects.

MAJOR PUBLICATIONS :

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SASSO M. STELLA, LOLLO G., PITORRE M., SOLITO S., PINTON L., VALPIONE S., BASTIAT G., MANDRUZZATO S., BRONTE V., MARIGO I., BENOÎT J. - P. « Low dose gemcitabine-loaded lipid nanocapsules target monocytic myeloid-derived suppressor cells and potentiate cancer immunotherapy ». Biomaterials. 2016. Vol. 96 p. 47-62

SIMONSSON C., BASTIAT G., PITORRE M., KLYMCHENKO A. S., BEJAUD J., MÉLY Y., BENOÎT J. - P. « Inter-nanocarrier and nanocarrier-to-cell transfer assays demonstrate the risk of an immediate unloading of dye from labeled lipid nanocapsules ». Eur J Pharm Biopharm. 2016. Vol. 98 p. 47-56

WAUTHOZ N., BASTIAT G., MOYSAN E., CIEŚLAK A., KONDO K., ZANDECKI M., MOAL V., ROUSSELET M. - C., HUREAUX J., BENOÎT J. - P. « Safe lipid nanocapsule-based gel technology to target lymph nodes and combat mediastinal metastases from an orthotopic non-small-cell lung cancer model in SCID-CB17 mice ». Nanomedicine: Nanotechnology, Biology and Medicine. 2015. Vol. 11 n°5 p. 1237-1245