



Metabolic rewiring of tumor cells and sensitivity to immune effector cells

Friday, may 3rd, 2024 at 12:30 PM (ONLINE, Zoom)

Brief summary of the seminar:

Natural killer cells are powerful effectors of innate immunity that constitute a first line of defense against cancer. However, those cells are often impaired in cancer patients. In our laboratory we expand NK cells and analyze their cytotoxic effects on cancer cells. Cancer cell metabolism can be modified by metabolic drugs, and we demonstrated that this can make them more sensitive towards NK cell effects. We also associate NK cells with antibodies towards specific targets, to perform antibody dependent cell death (or ADCC). During this seminar we will focus on the specific target, CD36, a lipid transporter that is overexpressed in metastatic cancers. We will show how we are currently developing two models of metastasis, induced by a modification of metabolism (in vitro in 3D and in vivo in a zebrafish model) to test NK cell effects associated with the anti-CD36 antibody.

Speaker: Delphine Gitenay (PhD). Institute for Regenerative Medicine and Biotherapy (Montpellier, France).

Brief summary of the speaker's CV:

After a PhD in Nutrition (Clermont-Ferrand, France) where I studied the effects of tomato against cancer, I moved to the USA for a first post-doctoral fellowship at the Sidney Kimmel Cancer Center in San Diego (Tumor biology) for a year and a half. Then I returned to France (2009), to the Cancer Research Center in Lyon where I continued in the field of oncogene-induced senescence for 3 years. I obtained my assistant professor position in Montpellier as an external candidate in 2012. Since 2016 I work in Martin Villalba's Laboratory (INSERM U1183, Montpellier). There, my work focuses on the metabolism of cancer cells and more precisely how metabolic modifications linked to the metastatic process can sensitize natural killer (NK) cells for therapeutic purposes. To do this, I supervise 2-4 employees (engineers, technicians, students) each year. I am the author of 22 articles (h-index 15).

Organizers:

Máster Universitario en Inmunología Tumoral e Inmunoterapia del Cáncer (ITIC)
Programa Inmunidad, Cáncer y Enfermedades de Origen Infeccioso o Base Molecular
Instituto de Investigación Sanitaria Aragón (IIS Aragón)
Facultad de Medicina, Universidad de Zaragoza

Coordinador: Julián Pardo, CIBERINFECT, IS Carlos III.

Inscripción ONLINE:

https://us02web.zoom.us/webinar/register/WN_Bz6npbPZRSGAZagpJXLVxQ



Place: ONLINE (Zoom)



Date: may 3rd 2024

