Congratulations to the ILCA Fellowship 2020 Awardee Aveline Filliol!

Aveline Filliol, PhD, investigates mechanisms of liver cancer development, focusing on the contribution of hepatic stellate cells (HSC) and liver fibrosis to hepatocarcinogenesis. During her PhD, Dr. Filliol studied the mechanisms of hepatocyte death during hepatitis and focused on two different important cell pathways, which occur during liver diseases: apoptosis and necroptosis. During that time she became intrigued in the mechanism that regulate injury and repair in the liver, and how their failure may promote the development of liver cancer in advanced liver disease. After defending her PhD, she started a postdoc position in Robert Schwabe’s laboratory at Columbia University to better understand the mechanisms through which HSC and fibrosis affect epithelial cell behavior in the chronically injured liver. In the past 3 years, she used and developed different approaches to genetically manipulate the HSC and the extracellular matrix in different mouse models of hepatocellular carcinoma models. Her preliminary data reveals dual functions of HSC during hepatocarcinogenesis supporting the hypothesis that HSC promote and restrict tumor growth in a stage- and mediator-dependent manner. For the next year, her goal is to decipher the underlying mechanisms that link fibrosis to HCC development and establish HSC as potential therapeutic target.