

Sarah Shalaby

Project title: *Circulating microvesicles as disease specific biomarkers and predictors of portal vein thrombosis in patients with porto-sinusoidal vascular disorder*

Duration	6 months
Short Bio	I am a specialist in Gastroenterology and Hepatology. After earning a first degree in Health Biotechnologies, I transitioned to Medicine and completed an internship Multivisceral Transplant Unit and a specialization in Gastroenterology at the University of Padua, where I focused on the study of endothelial damage of the portal vein in cirrhosis. Currently, I am advancing my PhD on hepatocellular carcinoma's impact on portal vein thrombosis and enhancing my skills as a Fellow at the Hepatic Hemodynamics Laboratory of the Hospital Clínic of Barcelona, specializing in interventional hepatology and contributing to research in portal hypertension, portal vein thrombosis and vascular liver diseases.
Home Institution	Padua University-Hospital
Host institution	Hospital Clínic of Barcelona
Project description	Porto-sinusoidal vascular disorder (PSVD) is a rare liver disease characterized by damage to small portal vein branches, potentially causing portal hypertension (PHT) and portal vein thrombosis (PVT). Its diagnosis is complex, relying on excluding other causes of PHT and is not fully understood. The study focuses on large extracellular vesicles (IEV), which are produced in response to cellular damage and play roles in inflammation, coagulation, and disease progression. These IEVs are hypothesized to be key in understanding PSVD, as they could provide insights into the disease's pathophysiology and might be markers of vascular dysfunction. This research aims to investigate the unique IEV profiles in PSVD patients' blood and the portal system, which could reveal underlying disease mechanisms and identify patients at risk of developing PVT.

In collaboration with :

Personal statement

This Fellowship provided me specialized training in rare liver vascular diseases and advanced techniques like hepatic venous pressure gradient measurement, transjugular liver biopsies and Transjugular Intrahepatic Portosystemic Shunts (TIPS) creation, under the mentorship of experts like Professor García-Pagán and his high-level team. This experience enhanced my clinical and research skills, culminating in the in the filing of two patents and the award of a national research bursary which will allow me to extend further the fellowship. Additionally, we successfully secured a collaborative grant which will facilitate a three-year partnership between my home institution and the host institution, focusing on the study of portosinusoidal vascular disorder.

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