**Postdoctoral Position in**

**Dr Malu Martinez-Chantar Lab (Liver Disease Lab) at CIC bioGUNE, Vizcaya**

Dr Malu Martinez-Chantar lab is looking for a **highly motivated and outstanding postdoctoral student** to apply for a Postdoctoral AECC 2023 Fellowships <https://www.contraelcancer.es/es/area-investigador/ayudas/talento>

in the Liver Disease lab at Centro de Excelencia Severo Ochoa CIC bioGUne

**Scientific-technical training capacity of the research team**

Dr Malu Martinez-Chantar is part of Ciberehd ISCIII (Centro de Investigacion Médica en Red de Enfermedades Hepáticas y Digestivas), which the main objective is to promote excellence research into liver and digestive diseases in an international context. Thus, the student will have the possibility to enroll the exchange program belong to Ciber for Liver Disease for learning new techniques, clinical approaches and translational research. Also, the involvement of the PI in the select European group of Woman in Hepatology will increase the possibilities of collaboration with internationally recognized laboratories. Finally, the network of the PI not only in the area of hepatology but also in molecular and cellular biology has been intensified through an extensive participation in different national and international networks like Hepamet Registry, MetaboCancer Excellence Network and different European COST actions PROTEOSTASIS, TRANSAUTOPHAGY and MITOEAGLE.

Based on available information and our preliminary data, we propose that impaired magnesium homeostasis is involved in determining several traits of malignancy that are characteristic of HCC, which accounts for the poor prognosis of this cancer.

The general objective of this project is to elucidate the role of the magnesium transporter “cyclin and CBS domain divalent metal cation transport mediator 1” (gene symbol CNNM1) in HCC biology and explore the usefulness of modulating magnesium content in cancer cells by pharmacological manipulation as a novel strategy to inhibit HCC development.

Recently publications related to the project;

* Restoring cellular magnesium balancea through Cyclin M4 protects against acetaminophen-induced liver damage. González-Recio, I., Simon, J., Goikoetxea-Usandizaga, N., Serrano-Maciá, M., Mercado-Gomez, M., …, Martínez-Chantar, M.L. 2022. *Nature Communications*. Accepted.
* Enhanced mitochondrial activity reshapes a gut microbiota profile that delays NASH progression. Juarez M\*, Goikoetxea-Usandizaga N\*, et al Martínez-Chantar ML. *Hepatology.* 2022 accepted.
* Mitochondrial bioenergetics boost macrophage activation, promoting liver regeneration in metabolically compromised animals. Goikoetxea-Usandizaga N, et al Martínez-Chantar ML. *Hepatology*. 2022 Mar; 75(3):550-566. doi: 10.1002/hep.32149.
* Magnesium accumulation via Cyclin M4 silencing activates microsomal triglyceride transfer protein to improve NASH. Simon J, Goikoetxea-Usandizaga N, Serrano-Maciá M, Martínez-Cruz LA, Martínez-Chantar ML. *Journal of Hepatology*. 2021 Jul; 75(1). doi.org/10.1016/j.jhep.2021.01.043
* Mitochondrial bioenergetics boost macrophages activation promoting liver regeneration in metabolically compromised animals. Goikoetxea-Usandizaga N, Martínez-Chantar ML. *Hepatology.* 2021 in press.
* Targeting Hepatic Glutaminase 1 Ameliorates Non-alcoholic Steatohepatitis by Restoring Very-Low-Density Lipoprotein Triglyceride Assembly. Simon J, Nuñez-García M, Fernández-Tussy P, Delgado TC, Martínez-Chantar ML. *Cell Metabolism*. 2020 Mar 3;31(3):605-622.e10.

**Required documents and deadline**

Applicants need a PhD in biology, biochemistry, or a related field. Candidates who have previous experience in liver are welcome.

Students should send a letter of presentation and update CV to

mlmartinez@cicbiogune.es