Pelican Grant for two PhD students in colorectal cancer

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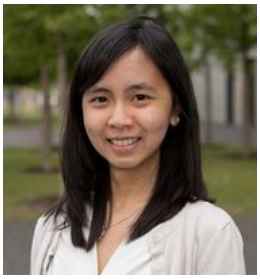
Jessica Karta and Dominik Ternes, two PhD students from the Life Sciences Research Unit (LSRU) at the University of Luxembourg, have recently been awarded the Pelican Grant from the Fondation du Pélican de Mie et Pierre Hippert-Faber. They both received 5.000 euros to finance part of their research activities during their PhD studies.



Jessica Karta

Dominik Ternes

The Fondation du Pélican yearly awards a number of doctoral candidates affiliated with the programme in systems and molecular biomedicine of the Doctoral School in Science and Engineering (DSSE) at the University of Luxembourg with the "Pelican Grant". This grant could be used for research expenses such as costs for additional experiments or travel expenses to participate in conferences and training workshops as well as to finance short-term stays abroad in the frame of research collaborations.

Two projects in colorectal cancer

Jessica Karta and Dominik Ternes are both working with Dr. Elisabeth Lettelier in the field of colorectal cancer (CRC). Jessica and Dominik will use the grant to learn new knowledge and techniques in better carrying their PhD project.

In her PhD project, **Jessica Karta** is trying to understand the **role of CRC-associated bacteria within the tumor microenvironment**, particularly the role of *Fusobacterium nucleatum* on cancer-associated fibroblasts. Several studies have shown *F.nucleatum* to be involved in the initiation and progression of colorectal cancer (CRC). Yet, so far most studies have focused on the effect of *F.nucleatum* on tumor cells. However, over the past years, cancer-associated fibroblasts (CAFs) have been shown to significantly participate in the tumorigenesis of CRC. As her PhD is funded by the University of Luxembourg without an allocated travel budget, **she will use the grant to go to conferences and perform short research stays abroad, especially to learn how metabolic interaction between *F.nucleatum* and cancer-associated fibroblast influences CRC progression**.

Dominik Ternes is combining ***in silico* and *in vitro* experiments to get a better view of the microbiome role in colorectal cancer**. He is currently trying to understand the molecular mechanisms which underlie the dysbiosis observed in CRC patients. Therefore, he

is characterizing an in house CRC collection which covers more than 150 patients with all kind of samples. Recently, especially the stool samples have been screened for the presence of differentially abundant bacterial species. **Dominik will use this grant to spend 2 weeks at the Mucosal Infection Biology group of the Universitätsklinikum Erlangen to learn how to inject bacteria into 3D patient derived organoids**.

About the Fondation du Pélican

The **Fondation du Pélican de Mie et Pierre Hippert-Faber** was founded in 2010 by Pierre Hippert and is managed by the Fondation de Luxembourg. The foundation seeks to provide long-term support in the field of scientific and academic research, as well as in the area of the arts and letters. In particular, the foundation finances research projects at the University of Luxembourg by giving scholarships and/or purchasing equipment in biomedicine in order to promote research activities in Luxembourg and develop the reputation of the University in this field.