

# Learning Agreement on Academic Mobility Programme

**ACADEMIC YEAR:** 2022 / 2023 – 2024 / 2025

**STUDY PERIOD:** from 01.11.2022 to 31.10.2025

**FORM OF ACADEMIC MOBILITY** research

**FINANCIAL TERMS OF PARTICIPATION IN THE PROGRAMME** full

**DOCUMENT RECEIVED AFTER STUDY** (Diploma/ Certificate/ Transcript of Records etc.)

Student's name, surname: Anastasiia DANSHYNA

Address of residence: 39 rue Claude Debussy, Villeneuve d'Ascq, France

Student's e-mail: anastasiadanshyna@gmail.com

Contact phone: +380633904453, +33780760595

Education level: PhD student 2<sup>nd</sup> year

Supervisor: PhD, Professor Natalia PREVARSKAYA

Department: Laboratory of Cell Physiology, INSERM U1003

**Home Institution:** O.O. Bogomoletz Institute of Physiology, NASU, Bogomoletz str 4, Kviv, Ukraine, 01024

**Departmental coordinator's contacts:** acad. Yaroslav SHUBA, +380677774556, yshuba@biph.kiev.ua

**Host Institution:** Laboratory of Cell Physiology, INSERM U1003, Université de Lille, Bat. SN 3, Avenue Paul Langevin, Villeneuve d'Ascq, France

**Country:** France

**Departmental coordinator's contacts:** PhD, Prof. Natalia PREVARSKAYA, +33 320 33 64 23, natacha.prevarskaya@univ-lille.fr

## TRAINING COURSE PROGRAMME

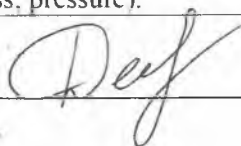
Research topic: "Mechanosensitive ion channels as determinants of pancreatic carcinogenesis"

Research plan (briefly): The major objective of the proposed study is to define the role of Piezo1 and Piezo2 channels in microenvironmental mechanical stress-induced PDAC cell migration and invasion, and PSCs secretion, and to determine the molecular mechanism by which these channels regulate the mechanosensitive properties of pancreatic cancer cells.

This major objective is split into the following specific aims:

- 1) Determine the expression profile of Piezo1 and Piezo2 in pancreatic cancer and PSCs in response to stress-induced environmental stimuli (ECM stiffness, pressure).
- 2) Define membrane currents and the Ca<sup>2+</sup> signaling in pancreatic cancer and PSCs in response to Piezo1- and Piezo2-activating stimuli.
- 3) Define the role of Piezo1 and Piezo2 in pancreatic cancer cell and PSC proliferation, migration, invasion, and cell phenotype modifications in response to microenvironmental stress-induced conditions (ECM stiffness, pressure).

Student's signature



Date 01.11.2022

**HOME INSTITUTION**

O.O. Bogomoletz Institute of Physiology, NASU

**We confirm that the Learning Agreement is approved**Date 01.11.2022

Departmental coordinator

Yaroslav SHUBA

Date 01.11.2022

Deputy Director for Scientific Affairs

Olena LUKIANETS

**Stamp of Institution****HOST INSTITUTION**

Laboratory of Cell Physiology, INSERM U1003

**We confirm that the Learning Agreement is approved**Date 01.11.2022

Departmental coordinator

Roman SKRYMA

Date 01.11.2022

Institution's coordinator

Natalia PREVARSKAYA

**Stamp of Institution Inserm U1003**

Laboratoire de Physiologie Cellulaire  
Université Lille 1 - Sciences et Technologies  
UFR de Biologie - Bâtiment SN3 - 2<sup>ème</sup> étage  
59655 Villeneuve d'Ascq Cedex  
Téléphone +33 (0)3 20 33 64 23  
Télécopie +33 (0)3 20 43 40 66