

## CONVOCATORIA DE PRÁCTICAS INTERNACIONALES CALL FOR INTERNATIONAL INTERNSHIP

### 1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email  Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Department/Faculty/Institution

TIPO DE ORGANIZACIÓN Organization type

ORGANISMO PUBLICO  SI Yes  
Public Body

SIN ANIMO DE LUCRO  SI Yes  
Non-Profit

TAMAÑO Size  WEB

DISPONIBILIDAD PARA EVALUAR INFORMES DE CONVALIDACION DE CREDITOS ECTS

¿Es una prioridad para el supervisor que el estudiante valide los créditos?

Availability to evaluate ECTS credit validation reports

Is it a priority for the supervisor that the student validates ECTS credits?

### 2. DESCRIPCION DEL PROYECTO Project description

FECHAS ORIENTATIVAS DE REALIZACION DEL PROYECTO   
Wished/approximate dates for the mobility period

FLEXIBILIDAD DE FECHAS  SI yes   
Flexibility in dates

TÍTULO DEL PROYECTO Project title

NUMERO DE HORAS DE TRABAJO POR SEMANA Number of working hours per week

#### PROGRAMA Detailed programme of the traineeship (100-200 words approx)

In recent decades, we have observed a significantly improved in therapy results in cancer patients. However, unfortunately, aggressive and metastatic cancers require the development of novel and more specific therapeutics. Hence, researchers and clinicians should direct efforts toward the identification of alternative therapeutical targets with the final goal of developing powerful anticancer therapies.

A common characteristic of cancer cells is their ability to grow in an uncontrolled manner, and this requires extensive synthesis of new protein. Protein synthesis, which is under tight control in normal cells, is frequently dysregulated in cancer. Therefore, targeting the core components of protein translation machinery and related signaling pathways represent a promise for cancer therapy.

We discovered a novel methyltransferase enzyme, called METTL13, which methylates and modulates a key component of the protein synthesis machinery, the eukaryotic elongation factor 1 $\alpha$  (eEF1A). METTL13 is essential for efficient tumor growth in lung and pancreatic cancer. One of the goals of our project funded by the Norwegian Cancer Society aims to explore the potential of METTL13 as a clinical target and identify METTL13 inhibitors.

We have recently identified a compound that inhibits METTL13 activity *in vitro* and in lung cancer cells. Since METTL13 has shown a role in other cancer types beside lung cancer, we hypothesis that our recently identified METTL13 inhibitor might also be active in other cancer types. You will participate in assessing the activity of our recently identified METTL13 inhibitor in pancreatic, breast and hematological cancer by using already generated METTL13 knock-out and isogenic cell lines as well as non-cancerogenic cell lines.

#### CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES

Knowledge, skills and competences to be acquired by the end of the traineeship (100 words approx)

You will learn cell culture techniques, both in suspension and adherent cancer cells; molecular biology such as western blotting, cell growth, viability and synergistic assays. You will also learn in the field of protein methylation in cancer as well as experience in studies on drug response in cells.

You will train in transferrable skills such as presentations, writing and project planning. You will get to be part of an international research team with researchers at different stages of their careers, frequent opportunities to get input on your data (weekly lab meetings) and to get updated on the most recent advances in our field of interest (“journal club” presentations). We have an ambitious environment where team members share their expertise to help each other to improve their career prospects and intellectual enrichment.

#### MONITORIZACION Monitoring plan (50 words approx)

You will be closely supervised by the project leader and the main supervisor based on progress and adjust the project plan if necessary.

#### EVALUACIÓN Evaluation plan (50 words approx)

You will get input on your work from the supervisors and during the group lab meetings we arrange weekly. The work performed in this project can be equivalent to 25-30 ECTS.

## ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA

Additional specifications of the host institution

OTRA INFORMACIÓN RELEVANTE Other relevant information

### 1. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requirements

AREA/S DE ESTUDIO Research area/s

Biology, Biotechnology

NIVEL DE ESTUDIO Level of studies

Degree in Biochemist, Biotechnology, Pharmacy or Medicine.  
Master in Experimental Biomedicine would be great, but it is not essential.

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA

Student required expertise and technical knowledge:

It will be an advantage if the student is familiar with the field of cancer.

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS

Language and minimum level recommended for internships

Language competence required: Good oral and written English skills.

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA

Additional requirements set by the host institutio



Spanske Forskere  
i Norge  
Investigadores Españoles  
en Noruega