



# CONVOCATORIA DE PRÁCTICAS INTERNACIONALES CALL FOR INTERNATIONAL INTERNSHIP

1. INFORMACIÓN	DEL SUPERV	SOR Host applicant	information	on			
NOMBRE Name							
CARGO Position							
CONTACTO Contact: Email					Teléfono Phone		
DEPARTAMENTO/F	-acultad/in	STITUCIÓN Departar	ment/Facu	lty/Institu	tion		
Bioscience depa	rtment, IBV ir	nstitute, Oslo Univer	sity				
TIPO DE ORGANIZACIÓN Organization type  University							
ORGANISMO PUBI Public Body	LICO	▼ SI Yes		ANIMO D	PE LUCRO Y	SI Yes	
TAMAÑO Size	Approximately 27700 students		V	WEB	https://www.uio.n	o/english/	
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?							
It is not a priority; however, this project can be equivalent to 25-30 ECTS							
2. DESCRIPCION D	EL PROYECTO	Project description	1				
FECHAS ORIENTATIVAS DE REALIZACION DEL PROYECTO Wished/approximate dates for the mobility period					From June 2023		
FLEXIBILIDAD DE FECHAS Flexibility in dates					Very flexible		

TÍTULO DEL PROYECTO Project title

Evaluating the activity of a novel methyltransferase as a biomarker for pancreatic cancer

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





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

The prognosis for pancreatic cancer is still poor. The overall five-year survival rate is <10%. Only the earliest forms of the disease are curable but it has to be diagnosed before symptoms start. Unfortunately, no effective approach for early detection and no non-invasive biomarker test are available. Therefore, the development of non-invasive biomarkers test is crucial to detect early disease, before it has spread beyond the pancreas and can no longer be cured by surgical resection and to predict treatment response and toxicity.

We discovered a novel methyltransferase enzyme, called METTL13, that methylate two different residues of the eukaryotic elongation factor  $1\alpha$  (eEF1A), which is a key component of the cellular translation elongation machinery. We found that METTL13-mediated methylation of eEF1A is required for efficient protein synthesis. Several studies have demonstrated an important role of METTL13 in promoting pancreatic cancer growth and accumulating evidence has indicated that METTL13 has a great potential as a candidate for applications in early diagnosis and prevention.

One of the goals of our project funded by the Norwegian Cancer Society aims to evaluate METTL13 as a biomarker in pancreatic cancer. You will participate in quantifying and analyzing METTL13 activity in patient cancer samples by using specific antibodies that recognize the eEF1A methyl modification mediated by METTL13 (that we and our collaborators have developed) to assess whether such methylation may have potential as a biomarker.

#### 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 and biochemistry methods such as western blotting, ELISA, cell growth, methylation assays and enzymatic activity. You will also learn in the field of protein methylation in cancer as well as experience in high throughput technology.

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 woeds 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 requeriments

AREA/S DE ESTUDIO Research area/s

Biology, Biotechnology

**NIVEL DE ESTUDIO** Level of studies

Degree in Biochemist, Biotechnology, Farmacy 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



