ANEXO III – DESTINOS DE PRÁCTICAS OFERTADOS Y FORMULARIO DE PARTICIPACIÓN ASOCIACIONES DE CIENTÍFICOS ESPAÑOLES 2026

Formulario de participación en destinos de prácticas de las asociaciones de científicos españoles 2026, disponible en el siguiente enlace: Formulario de destinos para realizar prácticas en asociaciones de científicos españoles 2026.

El formulario deberá completarse y enviarse antes del 16 de marzo de 2026 a las 14:00 h.

Universidad de Castilla~La Mancha
Oficina de Relaciones Internacionales
Campus Tecnológico Fábrica de Armas Avda. Carlos III, s/n | 45071 Toledo
Tel.: (+34) 925 268 808 | Vic.Internacionalizacion@uclm.es

DESTINOS DE PRÁCTICAS OFERTADOS

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
CERFA 01

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email | Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Physiology I, University of Münster

TIPO DE ORGANIZACIÓN Organization type: Ente Público

ORGANISMO PUBLICO Public Body: [x] SI Yes [ ] NO

SIN ANIMO DE LUCRO Non-Profit: [ ] SI Yes [x]

TAMAÑO Size: >250 employees

WEB: https://www.medizin.uni-muenster.de/physiologiei/dasinstitut/mitarbeiterinnen/wissenschaftliche-mitarbeiterinnen/juengling-kay-dr-priv-doz.html

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?

SI

2. DESCRIPCION DEL PROYECTO Project description

FECHAS ORIENTATIVAS DE REALIZACION DEL PROYECTO
Wished/approximate dates for the mobility period: Mayo a Noviembre

FLEXIBILIDAD DE FECHAS
Flexibility in dates: [x] SI yes [ ] NO

TÍTULO DEL PROYECTO Project title: Quantitative Analysis of Behavioural Trajectories in a Mouse Model of Major Depressive Disorder

NUMERO DE HORAS DE TRABAJO POR SEMANA Number of working hours per week
35

PROGRAMA Detailed programme of the traineeship

This traineeship is embedded in a German Research Foundation (DFG) funded translational neuroscience project investigating behavioural trajectories associated with Major Depressive Disorder (MDD) using a genetically defined mouse model (CACNA1C). The project addresses how genetic vulnerability and stress exposure interact to induce gradual behavioural transitions, with a focus on identifying early inflection signals preceding depression-like states.
The trainee will join a research group specializing in behavioural neuroscience and psychiatric disorder modelling. Following an introduction to experimental design, animal research ethics, and the neurobiological background of MDD, the student will be trained in advanced behavioural phenotyping approaches used in mouse models of affective disorders.
The core of the traineeship focuses on quantitative analysis of longitudinal behavioural data. The trainee will work with high-resolution datasets obtained from automated home-cage monitoring and video-based behavioural tracking systems. Behavioural domains include locomotor activity, circadian rhythmicity, feeding patterns, sucrose preference (anhedonia), and anxiety-related behaviour assessed in the open field test. Emphasis will be placed on extracting behavioural features, structuring longitudinal datasets, and identifying time-dependent changes indicative of behavioural inflection points.
Under supervision, the trainee will perform data preprocessing, quality control, visualization, and statistical analysis, comparing behavioural trajectories across genotype, sex, and experimental conditions. Depending on the student's background, exposure to computational approaches for behavioural classification and time-series analysis will be provided.
The trainee will actively participate in lab meetings and data discussions, contributing to the interpretation of behavioural results in the context of psychiatric disease mechanisms. This traineeship is particularly suited for students interested in data-driven neuroscience, mental health research, and the use of animal models to study psychiatric disorders.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

The trainee will acquire advanced knowledge of mouse models of Major Depressive Disorder and gene × stress interactions involving CACNA1C. Technical skills include quantitative behavioural phenotyping, longitudinal data handling, and time-series analysis of behavioural data. The student will develop competencies in data preprocessing, statistical analysis, visualization, and interpretation of complex behavioural datasets. Additional skills include critical evaluation of translational relevance, experimental design, and scientific communication in psychiatric neuroscience

MONITORIZACION Monitoring plan

The student will conduct work in the laboratories of the Institute of Physiology I, under the constant supervision of the applicant, the principal investigator, and experienced laboratory technicians from the department.

EVALUACIÓN Evaluation plan

At the end of the stay, a short report is required. This report should include the background literature, the objective of the work, a description of the materials and methods used, the results, and the conclusions of the study. The student will present this work in front of fellow students and professors from the Department of Physiology. Additionally, the student should be prepared to explain the key points and answer questions from the audience.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

Students will benefit from the “Ayudas Traineeship CERFA” consisting of 500 € and a career development course.

OTRA INFORMACIÓN RELEVANTE Other relevant information

Students will benefit from the “Ayudas Traineeship CERFA” consisting of 500 € and a career development course.

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Máster Universitario en Investigación en Psicología Aplicada, Máster Universitario en Biomedicina Experimental, Computer Engineering, Biology, Biochemistry, Biotechnology, Pharmacy.

NIVEL DE ESTUDIO Level of studies

Last year of Bachelors degree or higher…

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

Previous lab experience will be favoured

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

English B1. German would be an advantage, although it is not strictly necessary

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
CERFA 02

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Institute for Science and Technology of Accelerating Systems (BE-IAS), Helmholz Zentrum Berlin

TIPO DE ORGANIZACIÓN Organization type: Sector Público

ORGANISMO PUBLICO Public Body [x] SI Yes [ ] NO SIN ANIMO DE LUCRO Non-Profit [ ] SI Yes [x] NO

TAMAÑO Size: >250 employees

WEB https://www.helmholtz-berlin.de/

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: 1/6/26 to 31/5/27

FLEXIBILIDAD DE FECHAS
Flexibility in dates [x] SI yes [ ] NO

TÍTULO DEL PROYECTO Project title: Development of reactive ferroelectric phase shifter for magnetron phase controlling

NUMERO DE HORAS DE TRABAJO POR SEMANA Number of working hours per week
35

PROGRAMA Detailed programme of the traineeship

Magnetron could represent a game changing technology as alternative to power amplifiers to be applied in particle accelerators if phase can be rapidly controlled. To this end HZB seeks to build fast reactive phase shifting components. As it has been demonstrated ferroelectric components can offer extremely fast responses with excellent figures of merit. The trainee will develop a model of a ferroelectric based fast reactive phase shifter to be applied to later magnetron phase control with application to power generation (superconducting cavities). These work will be done making use of 3D electromagnetic software tools (CST) . A proof of principle prototype is intended to be built and tested at HZB facilities.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

The trainee will increase the knowledge in electromagnetic theory as well as develop detailed skill in the use of 3D Electromagnetic software applied to microwave components design. This will be accompanied by gaining hands on experience through the design to prototype phase (models, purchase, testing equipment) and the participation in scientific collaboration.

MONITORIZACION Monitoring plan

Regular meetings and continuous follow up will be provided by the senior scientists involved in the project (2)

EVALUACIÓN Evaluation plan

The evaluation will be made on the basis of the designs steps results and the progress of the prototype as well as the trainees proactivity.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

Students will benefit from the “Ayudas Traineeship CERFA” consisting of 500 € and a career development course.

OTRA INFORMACIÓN RELEVANTE Other relevant information

Students will benefit from the “Ayudas Traineeship CERFA” consisting of 500 € and a career development course.

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Physics, Telecommunications or Electronic engineering

NIVEL DE ESTUDIO Level of studies

Last year of Bachelors degree

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

*Ideally the following are required but could be develop along the internship.

1- Electromagnetics & RF Basics – Understanding wave propagation, transmission lines, impedance matching, and microwave circuits.

2- Simulation & Modeling – Ability to use EM and circuit simulation tools (HFSS, CST ...) for design and optimization.

3- Measurement & Experimental Skills – Experience with network analyzers, phase shift measurements, and analyzing experimental data.

4- Problem-Solving & Analytical Thinking – Integrating material science, electronics, and RF concepts to troubleshoot and optimize designs.

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

English B1. German would be an advantage, although it is not strictly necessary

English B2

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

Provided that the trainee comes from the EU, they will only need to fill a form and read some documents. Eventually if the trainee needs a dosimeter, they will need a SSR Number: https://www.bfs.de/EN/topics/ion/radiation-protection/occupation/register/ssr-basic-information.html

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
CEBE 01

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email

Teléfono Phor

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Department of Bioscience Engineering Faculty of Science
University of Antwerp

TIPO DE ORGANIZACIÓN Organization type EPLUS-EDU-HEI

ORGANISMO PUBLICO Public Body ☑ Yes ☐

NO SIN ANIMO DE LUCRO Non-Profit ☑ SI Yes ☐ NO

TAMAÑO Size X>250

WEB https://www.uantwerpen.be/en/research-groups/sustain/

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?

YES

2. DESCRIPCION DEL PROYECTO Project description

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

from (day/month/year) 1/06/2026 to (day/month/year) 31/11/2026.
This period is flexible and can be adapted to fit your schedule.
A minimum of 3 months is preferred.

FLEXIBILIDAD DE FECHAS Flexibility in dates ☑ SI yes ☐ NO

TÍTULO DEL PROYECTO Project title Microbiome solutions for a more productive and nutrionally enhanced seaweed aquaculture

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

38

PROGRAMA Detailed programme of the traineeship

As global food demands rise and terrestrial agriculture faces several environmental constraints, marine resources
like seaweed might offer a promising alternative. Red macroalgae (Rhodophyta) are particularly valuable due to their
high protein, vitamin and bioactive compound content. Emerging evidence highlights the critical role of microbiomes in growth, shaping morphology and aid in nutrient acquisition. However, functional insights, especially for Rhodophyta, remain scarce.
Our research focuses on identifying and characterizing beneficial bacteria from the microbiomes of red macroalgae Palmaria palmata, with the long-term goal of developing a defined synthetic bacterial community that can promote
growth, improve nutritional value, and enhance stress tolerance of red macroalgae in land-based aquaculture systems.

During this thesis, there is a strong focus on wet lab work, specifically related to microbiology techniques such as isolation, cultivation, maintenance of marine bacterial strains under sterile conditions as well as several assays for characterizing their functional effects (e.g. auxin production, nitrogen fixation,…) towards a seaweed host.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

The internship will allow the student to gain valuable experience in a diverse and dynamic research team, enhancing skills such as collaborative work, communication and critical thinking. The student will gain knowledge in the functioning of seaweed microbiomes, as well as enhance wet-lab skills. Data processing will be done via Excel.

MONITORIZACION Monitoring plan

There will be daily supervision by the tutor and/or lab technician to monitor the student's general motivation, progress and achievements. There are weekly meetings with the tutor, as well as biweekly meetings with a group of colleagues working on topics related to microbial products and nutrition.

EVALUACIÓN Evaluation plan

- Laboratory rules test (at the start of the internship)
- Permanent evaluation in the lab
- Final report and possible presentation at the end of the stay

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

OTRA INFORMACIÓN RELEVANTE Other relevant information

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Biochemistry, Biology, Biomedical engineering, Environmental Sciences

NIVEL DE ESTUDIO Level of studies

Bachelor or Master

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

Knowledge on microbiology and/or aquaculture is a plus

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

ENGLISH B2

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

Vaccination certificate of Hepatitis & Tetanus. signing labrules and risk analysis. tegistry through Mobility online (University of Antwerp)

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
CEBE 02

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email

Teléfono Phor

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

University of Antwerp/Faculty of science/department of Bioscience engineering/ Bioclear group

TIPO DE ORGANIZACIÓN Organization type: EPLUS-EDU-HEI Higher education institution

ORGANISMO PUBLICO Public Body: ☑ Yes ☐

NO SIN ANIMO DE LUCRO Non-Profit: ☑ SI Yes ☐ NO

TAMAÑO Size: X>250

WEB: https://www.uantwerpen.be/nl/

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?

NO

2. DESCRIPCION DEL PROYECTO Project description

FECHAS ORIENTATIVAS DE REALIZACIÓN DEL PROYECTO
Wished/approximate dates for the mobility period: from 01-07-2026 to 1-11-2026

FLEXIBILIDAD DE FECHAS
Flexibility in dates: ☐ SI yes ☑ NO

TÍTULO DEL PROYECTO Project title: PaNDA for the Future: Energy-Smart Nitrogen Removal in Climate-Neutral Urban Water Cycle

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

37 hours

PROGRAMA Detailed programme of the traineeship

Cities worldwide are striving to become cleaner, greener, and climate-neutral. Wastewater treatment plays a crucial role in this transition, since conventional nitrogen-removal methods (nitrification and denitrification) still consume a lot of energy and require additional chemicals. In addition, organic matter is not always used efficiently, even though it could contribute more to energy production.
To build more sustainable urban water systems, innovative treatment strategies are needed —ones that are energy-efficient, robust, and aligned with future climate goals.
PaNDA (Partial Nitrification–Denitratation–Anammox) is a new nitrogen-removal concept developed for municipal wastewater, designed to reduce energy demand, lower operational costs, and significantly decrease the carbon footprint of treatment plants. By integrating microbial processes in a more efficient way, PaNDA contributes directly to climate-neutral and resource-efficient urban water cycles. This thesis is part of an active collaboration between VITO and the University of Antwerp, embedding the student in ongoing research on next-generation urban water treatment technologies.
In this project, the student will conduct laboratory-scale experiments using a dedicates bioreactor system and wastewater to support the development and optimization of the PaNDA process. This includes planning and running experiments, analyzing results, and interpreting findings within the framework of sustainable urban water management. The student will work hands-on with Anammox bacteria, gain deeper insight into advanced nitrogen-removal pathways, and learn essential laboratory techniques such as biomass characterisation, nitrogen-species analysis, and reactor operation. The project offers strong training in experimental design, data processing, and the critical evaluation of eco-technological solutions for urban water system

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

By the end of the traineeship, the student will gain practical competences in operating biological laboratory reactors and a solid understanding of bioprocesses. The student will acquire hands-on experience in sample preparation and analysis using ion and
gas chromatography, as well as sludge characterization (TSS/VSS). Skills in calculating removal rates, assessing process efficiency, and analyzing experimental data will be developed. In addition, the traineeship will strengthen abilities in experimental design and scientific presentation of results.

MONITORIZACION Monitoring plan

The trainee's progress will be monitored through continuous supervision and regular interactions. Biweekly nitrogen cluster meetings will serve as a platform for the trainee to present project updates, discuss results, and receive feedback from fellow scientists. In addition, regular meetings with supervisors from VITO and the University of Antwerp will be held to evaluate experimental progress, discuss challenges, and adjust the research plan when needed. Day-to-day guidance in the laboratory will ensure proper execution of experiments, data quality, and steady development of scientific and technical skills.

EVALUACIÓN Evaluation plan

The trainee will be evaluated based on their scientific engagement, quality of experimental work, data analysis, and ability to interpret and communicate results. Active participation in biweekly nitrogen cluster meetings and supervisor meetings will be assessed, including clarity of presentations and responsiveness to feedback. Progress will also be evaluated through achieved experimental milestones, accuracy of analyses, and critical thinking demonstrated during discussions. The final evaluation will consider the trainee's contribution to the PaNDA project, written reporting, and overall development of research and professional competences.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

OTRA INFORMACIÓN RELEVANTE Other relevant information

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Environmental Sciences

NIVEL DE ESTUDIO Level of studies

Bachlor's degree/Master's degree

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

Basic laboratory experience (academic lab courses are sufficient)
Accurate, hands-on, and willing to learn
Comfortable working in a laboratory setting with synthetic wastewater
Good working knowledge of Microsoft Excel
Experience Considered a Plus
Experience with biological reactor operation
Background in wastewater treatment processes
Familiarity with analytical techniques related to water quality

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
SRSI 01

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email | Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Flow Cytometry Core Technology. UCD Conway Institute. University College Dublin

TIPO DE ORGANIZACIÓN Organization type: Academia

ORGANISMO PUBLICO Public Body: ☑ SI Yes ☐ NO

SIN ANIMO DE LUCRO Non-Profit: ☑ SI Yes ☐ NO

TAMAÑO Size: 50,000

WEB: www.ucd.ie

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?

No

2. DESCRIPCION DEL PROYECTO Project description

FECHAS ORIENTATIVAS DE REALIZACION DEL PROYECTO
Wished/approximate dates for the mobility period: 01 Sep 2026 – 30 June 2027

FLEXIBILIDAD DE FECHAS
Flexibility in dates: ☑ SI yes ☐ NO

TÍTULO DEL PROYECTO Project title: Citometría de Flujo

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

35

PROGRAMA Detailed programme of the traineeship

Training in the usage and maintenance of flow cytometers and cell sorters: The trainee will be trained on the usage of multiple instrumentation from different brands, characteristics and complexities. To do so, the trainee will work instrument set up, instrument optimization, data analysis and data interpretation for the multiple applications of the facility. Trainee will be involved in the project, protocol and data discussion and it´s expected, by the end of the training period will be able to provide expert advice to novel users.
In order to provide a deeper knowledge of the full process, trainee will be involved in different projects. The trainee will process, prepare and analysis samples of cell culture, tissue and/or whole blood. Participant will be fully involved in the optimization of the method, data analysis, data reanalysis and reporting.
By the end of the traineeship, the trainee will prepare a summary report and present her job.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

The trainee will be familiar with the full cytometry technology and methodology, from sample collection, establishment of protocols, instrument optimization and maintenance, data acquisition, data analysis and reporting.
The trainee will be familiar with the full process of sample analysis by flow cytometry as will be highly exposed to multiple applications from several groups that are using the core facility, so he/she will increase communication and interpersonal skills.
The trainee will be working supervised, but must learn also to work alone, so it´s expected he/she will increase his/her capabilities of teamwork and self-supervision.
The trainee will be working with state-of-the-art instrumentation: the trainee might need to read, interpret, criticise, and take some responsibilities on board. Timing is crucial in these experiments, so the trainee will increase his/her ability to organise working plans and experiments.

MONITORIZACION Monitoring plan

The trainee will be working mostly of the time side by side with Dr. Blanco as well as users of the UCD Flow Cytometry Core Technology.

EVALUACIÓN Evaluation plan

It will be a continued evaluation process. The generation of good data and capabilities of reproducibility of certain patterns will be the best way to evaluate trainee's progression and knowledge.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

OTRA INFORMACIÓN RELEVANTE Other relevant information

N/A

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Bioquímica, Biotecnología, Ingeniería Biomédica, Química, Medicina

NIVEL DE ESTUDIO Level of studies

Grado en Bioquímica, Biotecnología, Ingeniería Biomédica, Química, Medicina
o áreas relacionadas

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

No necesariamente.

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

Inglés básico para sobrevivir en Irlanda

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

El estudiante debe estar asegurado

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
IENO 01

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact:

Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Department of Immunology, Oslo University Hospital (OUS).

TIPO DE ORGANIZACIÓN Organization type: Oslo University Hospital (OUS)

ORGANISMO PUBLICO Public Body: [X] SI Yes [ ] NO

SIN ANIMO DE LUCRO Non-Profit: [X] SI Yes [ ] NO

TAMAÑO Size: The largest hospital in Norway with a close collaboration with the University of Oslo.

WEB: Group webside: ous-research.no/rasmusiversen

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 our priority for the student to validate ECTS. We do not evaluate ECTS credits.

2. DESCRIPCION DEL PROYECTO Project description

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

FLEXIBILIDAD DE FECHAS
Flexibility in dates

[X] SI yes
[ ] NO

Flexible. The starting date can be arranged with the student. Ideally, the internship should last at least four months; however, if the student is not available for that duration, an alternative arrangement may be agreed upon.

TÍTULO DEL PROYECTO Project title: Deciphering the Role of Autoantibodies in Ulcerative Colitis

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

Number of working hours per week: according to Norwegian working hours/schedule (37.5 hours per week).

PROGRAMA Detailed programme of the traineeship

The internship will take place in the Autoimmunity and B Cell Biology group, led by Dr. Rasmus Iversen at the Department of Immunology, Oslo University Hospital (OUS). The project in which the student will participate is part of a Research Council of Norway (NFR) grant awarded to Dr. Rasmus Iversen, focused on study the role of antigen-specific immune cells and autoantibodies in ulcerative colitis.

Ulcerative colitis is a chronic inflammatory bowel disease characterized by inflammation of the mucosa of the colon and rectum. This causes severe abdominal pain, diarrhea, significant bleeding, and dehydration. If prolonged over time, it can increase the risk of anemia, cancer, osteoporosis, and colon damage, among others. It is a chronic disease with flares and remissions, and although it is currently controlled with medication, there is no available cure beyond a colectomy. The cause of the disease is not well understood; however, it is directly associated with dysregulation of the immune system, including innate and adaptative immune cells. Some of these dysregulated immune cells are B lymphocytes, which are responsible for the production of antibodies currently used as biomarkers. More specifically, it has recently been found that ulcerative colitis patients have autoantibodies against integrin $\alpha v\beta 6$, which is expressed on the surface of gut epithelial cells. However, the role of these autoantibodies remains unclear and requires further study.

The aim of this project is to study the role of antigen-specific B cells and autoantibodies in ulcerative colitis, with the ultimate goal of contributing to the development of future therapies. For this purpose, we obtain primary samples, including peripheral mononuclear cells (PBMCs) and intestinal tissue, from ulcerative colitis patients in collaboration with the hospital. Antigen-specific B cells and plasmablasts will be isolated using magnetic enrichment assays and/or following single-cell sorting by flow cytometry. Single B cells and plasmablasts will be characterized by single-cell RNA sequencing (RNAseq), including V(D)J sequencing (V(D)J-seq) and/or B cell receptor sequencing (BCR-seq). In parallel, autoantibodies isolated from patient serum will be characterized by mass spectrometry. Then, the identified immunoglobulin heavy- and light-chain sequences may be used for the production and characterization of novel monoclonal antibodies. These monoclonal antibodies will be recombinantly expressed in mammalian cells and subsequently purified to study their functional role in the disease. The functional role of autoantibodies will be studied *in vitro* through antibody–antigen binding assays and cell-based assays as well as *in vivo* using mouse models. Studying the functional role of antigen-specific B cells and autoantibodies in ulcerative colitis is essential for understanding the disease and ultimately contributing to the development of future therapies. The student will participate in different aspects of the project, depending on the time of joining the lab and the time available, contributing to the development and progress of the project.

In addition to the research activities described above, the trainee will:

- Participate in weekly group meetings and related activities.
- Attend weekly department meetings.
- Take part in core facility training sessions for the use of different instruments.
- Attend seminars and courses offered by Oslo University Hospital (OUS) and/or the University of Oslo (UiO).
- Develop presentation and public speaking skills, including presenting research results at scientific meetings.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

By the end of the internship, the student will be familiar with laboratory practices and will have developed a broad knowledge base in immunology and molecular techniques applicable to their future career.

- The student will be trained in basic laboratory routines.
- The student will acquire knowledge in immunological techniques, mainly working with B cell biology and antibodies.
- The student will acquire knowledge in molecular biology techniques, including molecular cloning, RNA/DNA isolation, gene knockout, and related methods.
- The student will receive training in protein-based techniques, such as flow cytometry, and protein-binding assays.
- The student will develop skills in cell culture and in handling primary samples.
- The student will improve their research communication skills.
- The student will learn how to perform basic statistical analyses.
- In addition to academic and technical skills, the student will gain experience in collaborative work, organizational skills, and exposure to a different society and cultural environment.

MONITORIZACION Monitoring plan

The student will be supervised throughout the entire internship period. The student will be assigned a laboratory mentor/supervisor, who will provide day-to-day guidance and training. The student will be provided with workspace and office facilities and will be included in meetings, activities, and the overall research environment of the group and the department, as any other member. Weekly meetings with the mentor/supervisor will give the student the opportunity to clarify any doubts, discuss challenges that may arise, and receive support for their training plan and learning goals.

EVALUACIÓN Evaluation plan

The evaluation will be conducted throughout the entire internship period by the supervisor(s), who will assess the student's development of research skills and knowledge. At the end of the period, the student will present the results in form of a PowerPoint presentation to the rest of the group.

As any other member of the group, the student will be required to keep an electronic laboratory notebook and/or report, which is owned by the research group and ultimately by Oslo University Hospital (OUS). The notebook/report must document the experiments performed, results obtained, and corresponding conclusions. This documentation will form part of the student's evaluation.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

The project will take place in the laboratory of the Autoimmunity and B-cell Biology Group, led by Dr. Rasmus Iversen at the Department of Immunology, Oslo University Hospital (OUS). Access to materials, facilities, and equipment will be provided through the current Research Council of Norway (NFR) grant awarded to Dr. Iversen. The student will be encouraged to participate in departmental and hospital research meetings. Throughout the internship, the student is expected to follow the guidelines, procedures, and regulations established by OUS.

OTRA INFORMACIÓN RELEVANTE Other relevant information

For further information please contact:

Group website: ous-research.no/rasmusiversen

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Biology, biotechnology, medicine, molecular biology.

NIVEL DE ESTUDIO Level of studies

Preferably students from the 3rd and/or 4rd year from the following Bachelor's and Master's degrees: Bachelor's Degree in Biochemistry, Bachelor's Degree in Pharmacy, Bachelor's Degree in Medicine, Bachelor's Degree in Biotechnology, Bachelor's Degree in Biomedical Engineering, Master's Degree in Experimental Biomedicine. Other degrees will be considered if there are interested students.

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

Basic knowledge of biology is required.

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

The student should be able to communicate orally and in writing in **English**. An English language certificate is not required.

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

We are looking for a motivated and committed student who is willing to learn new things and carry a project forward. The student should be organized and has the ability to work as part of a team, actively participating in the conduct of experiments and other group activities.

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
IENO 02

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email | Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Energy and Process Engineering/ Engineering/ NTNU

TIPO DE ORGANIZACIÓN Organization type: Universidad

ORGANISMO PUBLICO Public Body ☑ SI Yes ☐ NO | SIN ANIMO DE LUCRO Non-Profit ☐ SI Yes ☐ NO

TAMAÑO Size | WEB: Department of Energy and Process

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: Agosto 2026/ Junio 2027

FLEXIBILIDAD DE FECHAS
Flexibility in dates: X SI yes ☐ NO

TÍTULO DEL PROYECTO Project title: Evaluating Return Air Recirculation – Energy Savings and

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

37,5

PROGRAMA Detailed programme of the traineeship

Project and master thesis proposal: I have this description of a project: To reduce energy consumption in buildings, several countries recommend the use of return air recirculation to minimize the volume of air that must be conditioned. The research project "Recirculate It", launched in January 2025 and funded by the Norwegian Research Council, aims to investigate the potential of air recirculation to achieve energy savings without compromising IAQ. The project is coordinated by SINTEF Community As part of this project, you can explore how varying levels of air recirculation influence perceived air quality and work performance. Human participants will serve as evaluators, with a particular focus on odor perception and its impact on performance. The study will compare different strategies for maintaining consistent IAQ conditions, including: Variable recirculation rates, demand-controlled ventilation, and reduced constant ventilation rates. Experiments will be conducted in a controlled laboratory environment at EPT, using realistic office-like settings. This work will provide valuable insights into balancing energy efficiency and IAQ through innovative ventilation strategies. You will collaborate with other researchers working with the topic and you will also discuss the work results with the project partners.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

By the end of the traineeship, the student will have gained:

- Basic knowledge of ventilation systems, air recirculation, and indoor air quality
- Experience in conducting laboratory experiments with human participants
- Skills in data collection, analysis, and scientific reporting
- Competence in evaluating ventilation strategies with respect to energy efficiency and IAQ
- Experience in collaborative research and communication of results

MONITORIZACION Monitoring plan

The progress of the traineeship will be monitored through regular meetings between the student and the main supervisor, with the meeting frequency agreed upon by both parties at the start of the traineeship. These meetings will be used to review progress, address challenges, and plan upcoming tasks.
In addition, ad hoc discussions will take place as needed, and ongoing follow-up will be provided by the involved researchers to ensure scientific quality, guidance, and timely completion of the work.

EVALUACIÓN Evaluation plan

The traineeship will be evaluated through a review of the master's report and/or project thesis by an external reviewer who is not involved in the project in discussion with the main supervisor. The master thesis is evaluated by two external reviewers.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

OTRA INFORMACIÓN RELEVANTE Other relevant information

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Grado ing mecánica, industrial, grado de ciencias ambientales, grado/master en Ing minera , grado/master arquitectura, master ing industrial, grado en ing de la edificación, civil

NIVEL DE ESTUDIO Level of studies

Estudiante para realizar Trabajo Fin de Grado… duración 6 a 12 meses dependiendo si hace solo el master tesis o si incluye el Project thesis

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

Ventilación

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

B2 en Inglés. Las interacciones durante la estancia serán mayormente en ingles.

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
IENO 03

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email | Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Hybrid Technology Hub (HTH) Centre of Excellence, Institute of Basic Medical Science and Department of Immunology (Section for research), University of Oslo, Oslo University Hospital HF

TIPO DE ORGANIZACIÓN Organization type: Universidad publica

ORGANISMO PUBLICO Public Body: [X] SI Yes [ ] NO

SIN ANIMO DE LUCRO Non-Profit: [X] SI Yes [ ] NO

TAMAÑO Size: Approximately 27700 students

WEB: https://www.uio.no/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 priority

2. DESCRIPCION DEL PROYECTO Project description

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

From mid-August 2026 to May-June 2027 (min 4 months, take into account the ERASMUS grant)

FLEXIBILIDAD DE FECHAS
Flexibility in dates

[X] SI yes
[ ] NO

TÍTULO DEL PROYECTO Project title: Development of a tumor-on-a-chip platform for testing new cancer therapeutic drugs

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

37.5h

PROGRAMA Detailed programme of the traineeship

Nowadays, clinical trials still confront the challenges associated with melanoma, a highly lethal human tumor that affects approximately 1,500 individuals annually in Norway. While immune therapy, particularly PD-1 checkpoint inhibitors, has shown promising results (effect in 30-40% of cases), significant problems still remain. With a focus on the PD-L1/PD-1 axis, where the interaction between cancer cells and immune cells is delayed allowing tumor evasion, we propose the integration of the tumor-on-chip (ToC) technology in the new therapeutic studies. This type of advanced in vitro platform will allow a more realistic simulation of tumor microenvironments, immune cell circulation, vascularization, and extracellular matrix interactions. This model has the potential to accelerate drug testing and improve the predictivity or translation power of preclinical studies.
This project aims to integrate an "immune competent" ToC melanoma, enabling the detailed dissection of interactions among the tumor, extracellular matrix, immune system, and vascularization. Subsequently, the platform will be used to evaluate therapeutic strategies in a melanoma metastatic model with 3D liver tissue representation as a metastatic target.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

The student will acquire skills in chemistry, lab techniques like pippeting, cell culture (cancer lines, 2D and 3D), cell/disease modeling, molecular biology (qPCR, cell viability assays and protein measurements), cell staining and microscopy. You will also learn and develop presentations, writing and project planning skills.

MONITORIZACION Monitoring plan

You will be closely followed by the main supervisor and the leader project as well as the other members of the same cancer line. The project plan will be adapted depending on the progress and results.

EVALUACIÓN Evaluation plan

You will get to be part of an international research team with researchers at different stages of their careers, and frequent opportunities to get input on your data (weekly lab meetings). We have an ambitious environment where team members share their expertise to help each other improve their career prospects and intellectual enrichment.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

OTRA INFORMACIÓN RELEVANTE Other relevant information

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

investigación básica, nanociencia y nanotecnología molecular, biomedicina, biología, bioquímica, farmacia, medicina, biotecnología

NIVEL DE ESTUDIO Level of studies

Estudiante de ultimo ano de grado o estudiantes de master

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

Es una ventaja tener conocimientos sobre cultivo celular, técnicas de biología molecular, o cáncer.

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

Todo el trabajo, presentaciones e informes serán realizados en inglés, por lo que se espera/recomienda un buen nivel del mismo tanto oral como escrito (B2)

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
IENO 04

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email | Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Hybrid Technology Hub/Institute of Basic Medical Sciences/Faculty of Medicine/University of Oslo

TIPO DE ORGANIZACIÓN Organization type: University

ORGANISMO PUBLICO Public Body: [x] SI Yes [ ] NO

SIN ANIMO DE LUCRO Non-Profit: [x] SI Yes [ ] NO

TAMAÑO Size: About 20 persons in our research group

WEB: https://www.med.uio.no/hth/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?

No

2. DESCRIPCION DEL PROYECTO Project description

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

Mid August 2026-Mid February 2027
Or
February 2027-July 2027

FLEXIBILIDAD DE FECHAS
Flexibility in dates

[x] SI yes
[ ] NO

TÍTULO DEL PROYECTO Project title: Endometrium-Placenta-Embryo Interaction of Chip

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

35 por semana

PROGRAMA Detailed programme of the traineeship

Background: Recent discoveries in stem cell and developmental biology have introduced a new era marked by the generation of *in vitro* models that recapitulate early mammalian development, providing unprecedented opportunities for extensive research in embryogenesis. Gastruloids[1], aggregates of defined numbers of embryonic stem cells (ESCs), develop derivatives of all germ layers with spatiotemporal patterns characteristic of embryos even though they lack clear brain structures[2]. Gastruloids have proven useful tools to explore the consequences of gastrulation in the absence of extraembryonic tissues, such as formation of cardiac primordia[3] or somite-like structures[4],[5], but no organogenesis to date.
Challenge: Focusing on human organ morphogenesis, our group aims at enabling gastruloids vascularisation. However, two main challenges appeared: (1) vascularisation of such a complex structure requires the presence of an extracellular support that could maintain both its integrity and further development; (2) gastruloids undergo epithelial to mesenchymal transition (EMT) and are therefore not expressing any outer epithelial-like layer necessary to maintain its organisation in case of contact with other tissues.
Project overview: Recently, an explosion of new research has significantly expanded our knowledge of early human trophoblast development. The project will aim at (1) generating differentiated and undifferentiated trophoblast organoid (TBO) already established in our laboratory [6,7] (2) in co-culture with endometrial-like tissue and (3) with gastruloids. Ultimately, the interesting structures produced will be included in an in-house microfluidic platform to test vascularisation.[8] The project will therefore give the opportunity to the student to gain knowledge and experience in both stem cell biology and microfluidics/organ-on-chip.

References:
[1] S.C. van den Brink, P. Baillie-Johnson, T. Balayo, A.-K. Hadjantonakis, S. Nowotschin, D.A. Turner, A. Martinez Arias, Symmetry breaking, germ layer specification and axial organisation in aggregates of mouse embryonic stem cells, Development. 141 (2014) 4231–4242. https://doi.org/10.1242/dev.113001.
[2] L. Beccari, N. Moris, M. Girgin, D.A. Turner, P. Baillie-Johnson, A.-C. Cossy, M.P. Lutolf, D. Duboule, A.M. Arias, Multi-axial self-organization properties of mouse embryonic stem cells into gastruloids, Nature. 562 (2018) 272–276. https://doi.org/10.1038/s41586-018-0578-0.
[3] G. Rossi, S. Giger, T. Hübscher, M.P. Lutolf, Gastruloids as in vitro models of embryonic blood development with spatial and temporal resolution, Sci Rep. 12 (2022) 13380. https://doi.org/10.1038/s41598-022-17265-1.
[4] J.V. Veenvliet, A. Bolondi, H. Kretzmer, L. Haut, M. Scholze-Wittler, D. Schifferl, F. Koch, L. Guignard, A.S. Kumar, M. Pustet, S. Heimann, R. Buschow, L. Wittler, B. Timmermann, A. Meissner, B.G. Herrmann, Mouse embryonic stem cells self-organize into trunk-like structures with neural tube and somites, Science. 370 (2020) eaba4937. https://doi.org/10.1126/science.aba4937.
[5] S.C. van den Brink, A. van Oudenaarden, 3D gastruloids: a novel frontier in stem cell-based in vitro modeling of mammalian gastrulation, Trends Cell Biol. 31 (2021) 747–759. https://doi.org/10.1016/j.tcb.2021.06.007.
[6] K.G.V. Anderson, W.B. Hamilton, F.V. Roske, A. Azad, T.E. Knudsen, M.A. Canham, L.M. Forrester, J.M. Brickman, Insulin fine-tunes self-renewal pathways governing naive pluripotency and extra-embryonic endoderm, Nat Cell Biol. 19 (2017) 1164–1177. https://doi.org/10.1038/ncb3617.
[7] M. Linneberg-Agerholm, Y.F. Wong, J.A. Romero Herrera, R.S. Monteiro, K.G.V. Anderson, J.M. Brickman, Naive human pluripotent stem cells respond to Wnt, Nodal and LIF signalling to produce expandable naive extra-embryonic endoderm, Development. 146 (2019) dev180620. https://doi.org/10.1242/dev.180620.
[8] M. Busek, A. Aizenshtadt, T. Koch, A. Frank, L. Delon, M. Amirola Martinez, A. Golovin, C. Dumas, J. Stokowiec, S. Gruenzner, E. Melum, S. Krauss, Pump-less, recirculating organ-on-a-chip (rOoC) platform, Lab on a Chip. (2023). https://doi.org/10.1039/D2LC00913F.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

Cell Biology
Embryo Development
Cell Culture (Cell line and Stem Cell)
Molecular Biology assays (ELISA, qPCR, IHC…)
Microfluidic device handling and preparation

MONITORIZACION Monitoring plan

Regular meetings, Planning, Training..

EVALUACIÓN Evaluation plan

Presentation
Reports

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

NA

OTRA INFORMACIÓN RELEVANTE Other relevant information

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Biology, Biotechnology, Biomedical Engineering

NIVEL DE ESTUDIO Level of studies

Estudiante de Máster, Estudiante para realizar Trabajo Fin de Grado…

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

Cell culture, Working in a biochemistry lab

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

B2 en Inglés

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
IENO 05

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email

Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Departmet of Biomedicine / Faculty of Medicine / University of Bergen

TIPO DE ORGANIZACIÓN Organization type: University

ORGANISMO PUBLICO Public Body: [x] SI Yes [ ] NO

SIN ANIMO DE LUCRO Non-Profit: [x] SI Yes [ ] NO

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?

No

2. DESCRIPCION DEL PROYECTO Project description

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

June 2026 – September 2026
(Dates and project duration are flexible)

FLEXIBILIDAD DE FECHAS
Flexibility in dates

[x] SI yes
[ ] NO

TÍTULO DEL PROYECTO Project title: Investigating Tyrosine Hydroxylase-Peptide Interactions

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

20 hours (it can be adapted)

PROGRAMA Detailed programme of the traineeship

Tyrosine hydroxylase (TH) is the rate-limiting enzyme in dopamine (DA) synthesis, and mutations in TH lead to TH deficiency, a severe disorder characterized by reduced DA production, intellectual disability and parkinsonism. TH function (activity, stability, and localization) depends on interactions with regulatory proteins, including the 14-3-3 family, which are also linked to DA-related disorders. This project investigates how TH interacts with 14-3-3 proteins, particularly the γ-isoform, which binds TH with high affinity when TH is phosphorylated at Ser19. Recently, mutations in 14-3-3γ, especially the common and severe p.R132C variant, have been linked to symptoms similar to severe TH deficiency. Because the R132 residue is important for binding TH, the mutation is expected to reduce this interaction.
After characterizing the complexes formed by phosphorylated TH with both wild-type and mutant 14-3-3γ, the student will screen experimentally for small molecules that stabilize or rescue this the TH and 14-3-3 R132C interaction. Such stabilizers, known as molecular glues, can enhance protein–protein interactions and hold strong therapeutic potential.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

- Recombinant expression in E. coli and purification of TH and 14-3-3γ
- Biophysical investigations of protein-protein interactions: Binding studies by differential scanning fluorimetry (DSF)
- Functional investigations of protein-protein interactions: effect of 14-3-3 binding on enzyme activity and L-Dopa/dopamine levels.
- Search of molecular glues by high throughput screening (HTS) from a compound library of drugs by DSF.
- Testing of selected compounds that stabilize protein-protein interactions and increase dopamine synthesis by biophysical and functional investigation with purified proteins and in cells.

MONITORIZACION Monitoring plan

- The student will receive continuous supervision to:
- Make sure the project is progressing well, with short daily or weekly meetings to go over experiments, solve any problems, discuss the results and plan the work for the next days. There will also be monthly meetings to present results, check data quality and discuss the results and next steps.
- Provide scientific and technical help whenever needed.
- Detect any problems, whether they are experimental, methodological, or related to the project's approach.
- Help the student develop key scientific skills, such as planning experiments, troubleshooting and writing.

EVALUACIÓN Evaluation plan

- The student's progress and performance will be evaluated throughout the project based on the following elements:
- Ability to plan, carry out and complete experiments.
- Active participation in the daily work.
- Consistent updates and good maintenance of the lab notebook.
- Proper execution of laboratory techniques and protocols.
- Understanding of the experiments performed and their purpose.
- Ability to troubleshoot and improve experiments with guidance.
- Accuracy and reliability of the experimental data.
- Ability to interpret results and discuss possible explanations.
- Quality of progress presentations.
- Clarity, structure, and quality of written reports.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

OTRA INFORMACIÓN RELEVANTE Other relevant information

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Bioquímica, Biomedicina, Química

NIVEL DE ESTUDIO Level of studies

- Estudiante de 4º de Grado de Bioquímica o Quimica
- Estudiante de máster en en Nanociencia y Nanotecnología Molecular o en Química

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

B2-level English is recommended, even though the group's IP and the project supervisor speak spanish

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

Logo Universidad

Logo Asociación

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
IENO 06

1.INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email

Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Clinical Medicine (K1)

TIPO DE ORGANIZACIÓN Organization type Universidad/Hospital

ORGANISMO PUBLICO Public Body ☑ SI Yes ☐ NO

SIN ANIMO DE LUCRO Non-Profit ☑ SI Yes ☐ NO

TAMAÑO Size

WEB https://www.uib.no/

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?

Si, disponibilidad para evaluar los informes.

2.DESCRIPCION DEL PROYECTO Project description

FECHAS ORIENTATIVAS DE REALIZACION DEL PROYECTO Wished/approximate dates for the mobility period: Entre septiembre 2026 y junio de 2026

FLEXIBILIDAD DE FECHAS Flexibility in dates ☑ SI yes ☐ NO

TÍTULO DEL PROYECTO Project title: Caracterización proteómica a nivel estructural de nefropa

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

Máximo 37. A convenir con el estudiante

PROGRAMA Detailed programme of the traineeship

La estancia se realizaria principamente en el Grupo de Investigacion de Enfermedades Renales de la Universidad de Bergen (https://www4.uib.no/en/research/research-groups/the-renal-research-group).
La estancia se desarrollará en fases progresivas orientadas a la adquisición de competencias técnicas, analíticas y científicas en el ámbito de la proteómica renal y el análisis de tejido humano.
El/la estudiante recibirá formación en normas de bioseguridad, manejo de muestras biológicas humanas y protocolos de laboratorio. Posteriormente, se entrenará en técnicas de microdisección por captura láser (LCM) y preparación de muestras proteómicas.
También participará activamente en experimentos de espectrometría de masas, control de calidad de datos y análisis bioinformático básico de datasets proteómicos. También se introducirá en la interpretación biológica de resultados y en la integración de datos clínico-patológicos y en la escritura de artículos científicos y presentaciones.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

1. Conocimientos sobre fisiopatología de enfermedades renales y bases de la proteómica aplicada a investigación biomédica
2. Manejo práctico de técnicas de microdisección láser y preparación de muestras para espectrometría de masas.
3. Habilidades en análisis crítico de resultados científicos
4. Competencias en trabajo de laboratorio, organización experimental y documentación de procedimientos
5. Capacidad para comunicar resultados científicos de forma oral y escrita
6. Trabajo en equipo dentro de un entorno de investigación multidisciplinar

MONITORIZACION Monitoring plan

El progreso del estudiante estará supervisado de manera continua. Se realizarán reuniones periódicas para evaluar el avance de las tareas, resolver dificultades técnicas y ajustar los objetivos de aprendizaje.

EVALUACIÓN Evaluation plan

La evaluación del estudiante se basará en un seguimiento continuo durante la estancia. Se valorará la adquisición progresiva de competencias técnicas, la autonomía en el trabajo de laboratorio, la capacidad de resolución de problemas y la participación activa en las actividades del grupo de investigación.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

OTRA INFORMACIÓN RELEVANTE Other relevant information

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

ej. Química, Biología, Ingeniería Informática...
Preferiblemente Biología o bioquímica

NIVEL DE ESTUDIO Level of studies

Sea lo más específico posible
Ej. Estudiante de 3º de Grado, Estudiante de Máster, Estudiante para realizar Trabajo Fin de Grado...
Estudiante de máster o trabajo de final de grado.

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

Conocimientos básicos de trabajo en laboratorio (pipetear, preparación de diluciones...)
Nociones en análisis de datos ómicos o interés por aprender.

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

B2 en Inglés

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
IENO 07

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email | Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Institute of Basic Medical Science and Department of Immunology (Section for research), University of Oslo, Oslo University Hospital HF

TIPO DE ORGANIZACIÓN Organization type: University

ORGANISMO PUBLICO Public Body: [X] SI Yes [ ] NO

SIN ANIMO DE LUCRO Non-Profit: [x] SI Yes [ ] NO

TAMAÑO Size: Approximately 27700 students

WEB: https://www.uio.no/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

2. DESCRIPCION DEL PROYECTO Project description

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

From mid-August 2026 to May-June 2027

FLEXIBILIDAD DE FECHAS
Flexibility in dates

[X] SI yes
[ ] NO

TÍTULO DEL PROYECTO Project title

Sex, hormones and metabolism: how sex hormones dynamic affects liver metabolism

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

37,5h

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

The global rise in metabolic disorders—driven by aging populations and lifestyle changes—poses an increasing burden on healthcare systems worldwide. Sex-specific differences in liver metabolism play a critical role in diseases associated with metabolic syndrome, including metabolic dysfunction–associated steatotic liver disease (MASLD), sex-dependent drug responses, and the liver's ability to regenerate after injury. Despite their clear clinical importance, sex- and age-specific mechanisms in liver metabolism remain underrepresented in both basic research and therapeutic development.
In this project, students will contribute to an ongoing effort to develop and validate physiologically relevant liver organoid models that reflect biological sex and age. These three-dimensional models will be used to investigate how sex hormone receptor signaling influences hepatic metabolism and how hormonal dynamics may impact liver regeneration. By working with advanced organoid systems, students will explore how hormonal context shapes liver function under both physiological and stress conditions.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

Students will gain hands-on experience with complex 3D liver organoid models, including gene expression analysis using quantitative PCR (qPCR), drug metabolism assays, and toxicology testing. In addition, students will develop skills in data analysis and interpretation of multidimensional datasets. Through integration into the daily workflow of a multidisciplinary research team, students will also gain exposure to large-scale projects involving omics data generation, processing, and biological interpretation. **Learning outcome:**

- Understand sex- and age-dependent regulation of liver metabolism and regeneration
- Work with advanced 3D liver organoid models and appreciate their advantages and imitations
- Analyze gene expression changes using RNA isolation, cDNA synthesis, and qPCR
- Perform and interpret drug metabolism and toxicology assays
- Explore hormone receptor signaling pathways in a metabolic context
- Process and interpret complex biological datasets
- Gain insight into multidisciplinary research workflows, including omics data generation and analysis
- Develop critical thinking skills for experimental design and data interpretation in translational liver research

MONITORIZACION Monitoring plan

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

You will get input on your work from the supervisors and during the group lab meetings we arrange weekly.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

NO

OTRA INFORMACIÓN RELEVANTE Other relevant information

NO

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Biology, biotechnology, molecular science, biomedicine, medicine, pharmacy, lab engineer, biochemistry

NIVEL DE ESTUDIO Level of studies

Bachelor (undergraduate), graduate or master

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

It will be an advantage if the student has some skills in cell culture or molecular biology. Also if the student has knowledge in liver field.

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 institution

NO

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
IENO 08

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email | Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Institute of Basic Medical Science and Department of Immunology (Section for research), University of Oslo, Oslo University Hospital HF

TIPO DE ORGANIZACIÓN Organization type: University

ORGANISMO PUBLICO Public Body: [X] SI Yes [ ] NO

SIN ANIMO DE LUCRO Non-Profit: [x] SI Yes [ ] NO

TAMAÑO Size: Approximately 27700 students

WEB: https://www.uio.no/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

2. DESCRIPCION DEL PROYECTO Project description

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

From mid-August 2026 to May-June 2027

FLEXIBILIDAD DE FECHAS
Flexibility in dates

[X] SI yes
[ ] NO

TÍTULO DEL PROYECTO Project title

Illuminating the Invisible: exploring microvesicles and pore dynamics in endothelial cells with Tomocube imaging

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

37,5h

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

Endothelial cells (EC) form the selective barrier between blood and tissues, orchestrating exchange, signaling, and vascular homeostasis. In the liver, endothelial cells are represented by **liver sinusoidal endothelial cells (LSECs)** – a highly specialized phenotype distinguished by the presence of numerous **fenestrations**, nanoscale pores that facilitate the exchange of metabolites and signaling molecules between hepatocytes and the bloodstream. These delicate structures are essential for liver function, yet notoriously difficult to reproduce and study **in vitro**.
To address these challenges, this project aims to generate LSEC-like cells using a robust and widely used endothelial model, human umbilical vein endothelial cells (HUVECs). Students will test two complementary approaches: genetic induction through overexpression of the transcription factor c-Maf, and chemical induction using small molecules. By comparing these approaches, students will identify conditions that promote LSEC-like structural and molecular features. The optimized protocol will then be applied to cells grown as three-dimensional vascular networks in a microphysiological system that mimics blood vessels in the human body.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

Students will use Tomocube 3D holographic microscopy, an advanced label-free imaging technique, to visualize and measure microvesicles and pore-like structures on the endothelial cell surface under different experimental conditions. In addition to imaging, students will gain hands-on experience with core laboratory techniques, including sterile cell culture, RNA isolation, cDNA synthesis, and quantitative PCR (qPCR). Finally, students will work with state-of-art microphysiological, contributing to the development of physiologically relevant 3D liver models. **Learning outcome:**

- **Gain insight into vascular biology, bioengineering, and advanced imaging approaches**
- **Apply genetic and chemical approaches to induce cell type-specific phenotypes in endothelial cells**
- **Culture and manipulate endothelial cells in both 2D and 3D vascular models**
- **Use microphysiological systems to model tissue-specific vasculature**
- **Operate Tomocube 3D holographic microscopy for label-free live-cell imaging**
- **Compare and evaluate different experimental strategies based on morphological and molecular readouts**
- **Develop critical thinking skills for experimental design and data interpretation in translational liver research**

MONITORIZACION Monitoring plan

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

You will get input on your work from the supervisors and during the group lab meetings we arrange weekly.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

NO

OTRA INFORMACIÓN RELEVANTE Other relevant information

NO

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Biology, biotechnology, molecular science, biomedicine, medicine, pharmacy, lab engineer, biochemistry

NIVEL DE ESTUDIO Level of studies

Bachelor (undergraduate), graduate or master

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

It will be an advantage if the student has some skills in cell culture or molecular biology. Also if the student has knowledge in liver field.

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 institution

NO

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
IENO 09

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email | Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Institute of Basic Medical Science and Department of Immunology (Section for research), University of Oslo, Oslo University Hospital HF

TIPO DE ORGANIZACIÓN Organization type: University

ORGANISMO PUBLICO Public Body: [X] SI Yes [ ] NO

SIN ANIMO DE LUCRO Non-Profit: [x] SI Yes [ ] NO

TAMAÑO Size: Approximately 27700 students

WEB: https://www.uio.no/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

2. DESCRIPCION DEL PROYECTO Project description

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

From mid-August 2026 to May-June 2027

FLEXIBILIDAD DE FECHAS
Flexibility in dates

[X] SI yes
[ ] NO

TÍTULO DEL PROYECTO Project title: **Cell-to-cel Communication in a Lipid-Altered Liver microenvironment**

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

37,5h

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

Metabolic dysfunction-associated steatotic liver disease (MASLD) is the most common chronic liver disease worldwide, affecting about one in four people. The disease begins with fat accumulation in liver cells (steatosis) and can progress to inflammation, fibrosis, cirrhosis, and ultimately liver failure. Understanding how liver cells communicate during these early disease stages is essential for developing new treatments.
The liver contains a large population of immune cells called macrophages, which play key roles in both tissue maintenance and disease progression. These include resident macrophages (Kupffer cells) and macrophages that are recruited from blood during disease. As MASLD progresses, circulating monocytes enter the liver and differentiate into different macrophage types depending on signals from their environment. One important subtype is lipid-associated macrophages (LAMs), which are found near fat-loaded liver cells and increase in number in steatotic regions. LAMs are also linked to the formation of “crown-like structures,” where macrophages surround lipid-filled cells. Despite their clear association with disease, the exact role of LAMs in liver pathology remains poorly understood.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

In this project, students will investigate how monocyte-derived LAMs communicate with other key non-parenchymal liver cells: liver endothelial cells and hepatic stellate cells. These three cell types form a functional unit that strongly influences inflammation and fibrosis, yet their interactions—especially under steatotic conditions - are still unknown. Using stem cells- and tissue-derived cells student will establish co-culture systems to study how a fatty liver-like environment alters cell behavior, signaling, and function.
Methods and skills: This project offers students the opportunity to work at the interface of immunology, liver biology, and tissue engineering, while gaining practical skills highly relevant to biomedical research and translational medicine: Human cell culture, including 3D models and culture and differentiation of human pluripotent stem cells (hPSCs), advanced imaging techniques and molecular biology methods, as well as basics in flow cytometry. Student will work with data analysis and basic statistical methods.
Learning outcome:

- Understand the role of macrophage heterogeneity in liver homeostasis and metabolic liver disease
- Being able to work with advanced 3D liver organoid models and stem cells differentiation
- Analyze gene expression changes using RNA isolation, cDNA synthesis, and qPCR
- Analyze immune–stromal cell communication through cytokine profiling and functional assays
- Apply molecular biology techniques including RNA isolation, cDNA synthesis, and RT-qPCR
- Use flow cytometry to characterize immune cell phenotypes and activation states
- Develop critical thinking skills for experimental design and data interpretation in translational liver research

MONITORIZACION Monitoring plan

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

You will get input on your work from the supervisors and during the group lab meetings we arrange weekly.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

NO

OTRA INFORMACIÓN RELEVANTE Other relevant information

NO

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Biology, biotechnology, molecular science, biomedicine, medicine, pharmacy, lab engineer, biochemistry

NIVEL DE ESTUDIO Level of studies

Bachelor (undergraduate), graduate or master

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

It will be an advantage if the student has some skills in cell culture or molecular biology. Also if the student has knowledge in liver field.

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 institution

NO

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES CALL FOR INTERNATIONAL INTERNSHIP

IENO 10

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email

Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Bioscience department, IBV institute, Oslo University

TIPO DE ORGANIZACIÓN Organization type: University

ORGANISMO PUBLICO Public Body: [x] SI Yes

SIN ANIMO DE LUCRO Non-Profit: [x] SI Yes

TAMAÑO Size: Approximately 27700 students

WEB: https://www.uio.no/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 DEL PROYECTO Project description

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

2026-27 from September

[ ] SI yes

FLEXIBILIDAD DE FECHAS
Flexibility in dates
Minimum 4 months

TÍTULO DEL PROYECTO Project title: **Exploring METTL13 as a therapeutic target and biomarker for solid cancer**

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

37,5 hours per week

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

In recent decades, cancer therapy outcomes have improved significantly. However, aggressive and metastatic cancers still demand the development of novel, more targeted therapeutics. To address this, researchers and clinicians must focus on identifying alternative therapeutic targets with the ultimate goal of advancing effective anticancer treatments.

A hallmark of cancer cells is their ability to grow uncontrollably, which requires extensive protein synthesis. While protein synthesis is tightly regulated in normal cells, it is often dysregulated in cancer. As a result, targeting key components of the protein translation machinery and related signaling pathways holds great promise for cancer therapy.

We have identified a novel methyltransferase enzyme, METTL13, which methylates and modulates a critical component of the protein synthesis machinery—the eukaryotic elongation factor 1α (eEF1A). METTL13 is essential for efficient tumor growth in lung and pancreatic cancer. Our project, funded by the Norwegian Cancer Society, aims to:
i) explore the potential of METTL13 as a therapeutic target and identify METTL13 inhibitors, and
ii) evaluate METTL13 as a biomarker in solid cancers

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, adherent cancer cell lines; molecular biology such as western blotting, cell growth, and viability 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 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, biochemistry

NIVEL DE ESTUDIO Level of studies

Master student

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 instituti

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
CENL 01

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Molecular Cell Biology and Immunology at Amsterdam Vrije University Medical Center

TIPO DE ORGANIZACIÓN Organization type: University

ORGANISMO PUBLICO Public Body: [x] SI Yes [ ] NO

SIN ANIMO DE LUCRO Non-Profit: [x] SI Yes [ ] NO

TAMAÑO Size

WEB: https://www.amc.nl/web/home.htm

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?

No

2. DESCRIPCION DEL PROYECTO Project description

FECHAS ORIENTATIVAS DE REALIZACION DEL PROYECTO
Wished/approximate dates for the mobility period: 16 Junio 2026 – 16 February 2027

FLEXIBILIDAD DE FECHAS
Flexibility in dates: [x] SI yes [ ] NO

TÍTULO DEL PROYECTO Project title: Explorando interaciones de células immunes en cáncer

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

36

PROGRAMA Detailed programme of the traineeship

Immune cells such as T cells and APCs interact to promote an immune response against pathogens. However, they can also be the cause of immune diseases like cancer (lack of sufficient immune activation) or autoimmunity (excessive immune activation). Therefore, there is a need to understand by which mechanisms they trigger a beneficial or detrimental response. In this project we will study immune cell interactions with a new method using imaging-flow cytometry in patient samples and in vitro models.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

The trainee will be familiar with the full cytometry technology and methodology, from sample collection, establishment of protocols, instrument optimization and maintenance, data acquisition, data analysis and reporting.
The trainee will be familiar with immune cell culture of different cell types such as T cells and macrophages, as well as cancer cells.
The trainee will be working supervised, but must learn also to work alone, so it´s expected he/she will increase his/her capabilities of teamwork and self-supervision.
The trainee will be working with state-of-the-art instrumentation: the trainee might need to read, interpret, criticise, and take some responsibilities on board. Timing is crucial in these experiments, so the trainee will increase his/her ability to organise working plans and experiments.

MONITORIZACION Monitoring plan

The trainee will be working mostly of the time side by side with Dr. Ibáñez Molero as well as other team members.

EVALUACIÓN Evaluation plan

It will be a continued evaluation process, with weekly face-to-face meetings with supervisor. We will perform a midterm evaluation (filling a form) and a final evaluation (presentation of data with the rest of the group and written report)

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

Conocimientos (preferible a nivel de 3º o 4º curso) en Biología, Bioquímica, Biotecnología, Medicina
Conocimiento y fluidez en inglés

OTRA INFORMACIÓN RELEVANTE Other relevant information

Las prácticas tendrán una duración minima de 8 meses

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

ej. Bioquímica, Biología, Biotecnología, Biomedicina

NIVEL DE ESTUDIO Level of studies

Preferible estudiante de cuarto curso o Máster

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

Se valorará positivamente que el estudiante tenga algún conocimiento técnico, por ejemplo habiendo sido alumno interno en un departamento de ciencias experimentales

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

Inglés B2

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

El estudiante debe estar asegurado

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
CENL 02

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email

Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Dept. of Gastroenterology and Hepatology, Leiden University Medical Center

TIPO DE ORGANIZACIÓN Organization type: Affiliated to Leiden University

ORGANISMO PUBLICO Public Body: [X] SI Yes [ ] NO

SIN ANIMO DE LUCRO Non-Profit: [x] SI Yes [ ] NO

TAMAÑO Size: 7 000–8 500 workers

WEB: https://www.lumc.nl/en/

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?

No

2. DESCRIPCION DEL PROYECTO Project description

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

01 Sep 2026 – 15 Feb 2027
Estancia mínima 5 meses

FLEXIBILIDAD DE FECHAS
Flexibility in dates

[x] SI yes
[ ] NO

TÍTULO DEL PROYECTO Project title: Kinase activities of the tumour stroma

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

36

PROGRAMA Detailed programme of the traineeship

We are offering a student internship within an exciting translational research project focused on tumor–stroma interactions. The project explores how fibroblasts drive chemoresistance and how targeted therapies may be combined with clinically used chemotherapy, providing hands-on experience in 3D culture, drug-response research, and protein WBs/stainings.

The trainee will contribute to phosphoproteomic profiling of patient samples and help analyze kinase activity to define patient-specific kinase signatures by data analysis and data interpretation. These profiles will be used in multicellular, close-to-patient co-culture models to test FDA-approved kinase inhibitors, explore drug synergy, and investigate resistance mechanisms, including combination strategies with clinically applied chemotherapy. Participant will be fully involved in the optimization of the method, data analysis, and reporting. Supervision will be provided in a weekly or biweekly basis, and with student meetings. By the end of the traineeship, the trainee will prepare a summary report and present the work to a scientific and clinical audience.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

The trainee will be familiar with phosphoproteomics and kinase activity data, and with 3D cell culture, drug combinations and drug response assays. The trainee will learn from establishment of protocols, data analysis, problem solving, and reporting.
The trainee will be familiar with the full process of drug assays and imaging techniques, as well as protein identifications via immunological stainings and/or western blotting.
The trainee is expected to participate in department meetings with questions, as well as being able to report results and to ask for feedback to the rest of interns/researchers. This will provide the trainee with communication and scientific integrity skills.
The trainee will be supervised in weekly meetings, and it is expected to work independently after the learning period has passed. This will increase his/her capabilities of self-supervision, organization, and teamwork.
The trainee is motivated by the topic and will be up-to-date with literature and papers, being able to interpret and criticize the content of them accordingly.

MONITORIZACION Monitoring plan

The participant will be supervised and trained by Dr. Andrea Vallés Martí for the majority of the techniques, procedures and analyses. For specific tasks, laboratory technicians in the group will be also available. Weekly meetings will be mainly with Andrea, and others will include principal investigator Dr. Luuk Hawinkels. The participant will present the work in a ~20min talk format in two occasions: one interim presentation, and one final presentation.

EVALUACIÓN Evaluation plan

It will be a continued evaluation process. The generation of good data and capabilities of reproducibility of certain patterns will be the best way to evaluate trainee's progression and knowledge.

Upon completing 4-6 weeks, an interim evaluation will be planned to discuss the status of the internship from both sides, the supervisor, and the participant. Upon completion of the internship, an evaluation will be discussed together with the participant.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

Prior knowledge on biology, biochemistry, biotechnology, and any omics.

OTRA INFORMACIÓN RELEVANTE Other relevant information

N/A

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Bioquímica, Biomedicina, Biología, Biotecnología

NIVEL DE ESTUDIO Level of studies

Master student

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

Experience in cell culture and data analysis using R or Python is a plus.

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

English B2 o C1 is suggested

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

Student must be insured.

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
CENL 03

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name	
CARGO Position	

CONTACTO Contact:

Teléfono Phone
+

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Joint Institute for VLBI ERIC (JIVE)

JIVE is an European public-funded research institute based in Dwingeloo (The Netherlands) and focused on the development and running of the European VLBI Network (EVN), a radio observatory composed of antennas spread all over the globe. JIVE shares building with ASTRON, the largest Dutch radio astronomy institute, and together provide a suitable place for the development of radio astronomy. From the technical side to pure research, covering different fields from active galactic nuclei, Galactic binaries, pulsars, or fast radio bursts.

TIPO DE ORGANIZACIÓN Organization type: Research Institute

ORGANISMO PUBLICO Public Body: [x] SI Yes [ ] NO

SIN ANIMO DE LUCRO Non-Profit: [x] SI Yes [ ] NO

TAMAÑO Size: 25

WEB: www.jive.eu (JIVE)
astroflash-frb.github.io (research group)

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?

No

2. DESCRIPCION DEL PROYECTO Project description

FECHAS ORIENTATIVAS DE REALIZACION DEL PROYECTO
Wished/approximate dates for the mobility period: 01 Jun 2026– 15 Oct 2026

FLEXIBILIDAD DE FECHAS
Flexibility in dates: [x] SI yes [ ] NO

TÍTULO DEL PROYECTO Project title: Imaging high-energy stellar systems with radio observations

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

35

PROGRAMA Detailed programme of the traineeship

Training in radio interferometric data analysis for high-energy stellar systems: The trainee will receive comprehensive training in the preparation, processing, and analysis of radio astronomical observations using interferometric observatories. This training encompasses all stages of the process, from meticulous observation planning and data calibration to image reconstruction, analysis, and interpretation.
The trainee will work with real observational data from our ongoing research projects on high-energy astrophysical systems, including massive binary systems, compact objects, and magnetically active stars. The specific focus will be determined in consultation with the trainee based on their interests and the current status of active projects. Possible research directions include: analyzing radio variability in massive binaries to trace wind interactions, characterizing radio emission from magnetically active stars to understand stellar magnetic field properties, or investigating radio counterparts of compact object systems.
These projects will require hands-on analysis of different radio observations, the trainee will gain practical experience in interpreting radio data within the context of the physical processes occurring in these sources. They will actively participate in scientific discussions on data interpretation and results presentation, developing skills that will enable them to contribute effectively to future paths in astronomy, physics, or computational sciences.
By the end of the traineeship, the trainee will prepare a summary report documenting their analysis and findings, and present their work.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

The trainee will become familiar with the full process of radio astronomical observation and analysis, from planning and preparation of observations to data calibration, imaging, and interpretation of the scientific results. They will gain an understanding of how radio interferometric arrays operate, and how data from multiple antennas are processed to produce high-resolution images.

The trainee will develop skills in data analysis and programming, learning how to handle and process astronomical datasets using standard software packages, as well as through their own coding using languages like Python. They will acquire experience in identifying and addressing data-quality issues, interpreting results, and discussing the scientific implications of their analyses.

The trainee will work under supervision but will also learn to carry out tasks independently, reinforcing teamwork and self-management skills.

MONITORIZACION Monitoring plan

The trainee will be working mostly of the time side by side with Dr. Marcote as well as other members of the same international research group.

EVALUACIÓN Evaluation plan

It will be a continued evaluation process. The generation of good data and capabilities of reproducibility of certain patterns will be the best way to evaluate trainee's progression and knowledge.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

Knowledge of physics and programming (preferably at 4th-year level) and of mathematics.

OTRA INFORMACIÓN RELEVANTE Other relevant information

The trainee will join the Astroflash research group, composed of master and PhD students, postdocs, and permanent staff working at the forefront of radio astronomy research. Our group pursues diverse projects including machine learning searches for Fast Radio Bursts in radio data, analysis of very high-resolution radio imaging to localize transient phenomena, tracing stellar wind shocks and particle acceleration in massive binary systems, or imaging gamma-ray burst afterglows. The trainee will benefit from integration into this collaborative research environment from our group and and exposure to cutting-edge techniques across multiple areas of high-energy astrophysics.

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Physics, Mathematics, Computer Sciences

NIVEL DE ESTUDIO Level of studies

Fourth-year undergraduate student, master's student, student preparing to complete a Final Degree Project.

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

The student must feel comfortable programming in Python and have some basics of physics and mathematics. Degree-level astrophysical knowledge is recommended but not necessary.

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

The trainee is expected to have a good working knowledge of English, as the internship activities, supervision, and documentation will be conducted in this language. English is also the main language used in the host institute and in daily communication within the international research environment.

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

The trainee must come with health insurance from their home institution.

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
CENL 04

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

CONTACTO Contact: Email | Teléfono Phone

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Center for Proteomics and Metabolomics, Leiden University Medical Center

TIPO DE ORGANIZACIÓN Organization type: University Medical Center

ORGANISMO PUBLICO Public Body: [x] SI Yes [ ] NO

SIN ANIMO DE LUCRO Non-Profit: [X] SI Yes [ ] NO

TAMAÑO Size: 8,500

WEB: https://cpm.lumc.nl/

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?

I would like to obtain ECTS credits as a supervisor or an official recognition of the hours supervised

2. DESCRIPCION DEL PROYECTO Project description

FECHAS ORIENTATIVAS DE REALIZACION DEL PROYECTO
Wished/approximate dates for the mobility period: 01 Sep 2026 – 31 Dec 2026

FLEXIBILIDAD DE FECHAS
Flexibility in dates: [X] SI yes [ ] NO

TÍTULO DEL PROYECTO Project title: Liquid Chromatography and Mass Spectrometry for Glycoprotein Analysis

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

36

PROGRAMA Detailed programme of the traineeship

Training in liquid chromatography and mass spectrometry techniques for the analysis of glycoproteins:
The student will receive hands-on training in liquid chromatography and mass spectrometry (LC–MS) techniques applied to the analysis of glycoproteins of clinical and pharmaceutical interest, such as antibodies, apolipoproteins, or related molecules. The training will cover LC–MS platforms with different configurations, performance characteristics, and levels of complexity.

The specific glycoprotein studied will be selected according to the needs of the research group at the time the intern joins. Regardless of this choice, the student will gain the same core skills, including sample preparation and analysis of intact glycoprotein, enzymatic digestion for glycopeptide analysis, and/or released glycan studies. The training will encompass the complete analytical workflow, including sample preparation (i.e., preparation of the intact protein for analysis, enzymatic digestion of the glycoprotein using different specific enzymes and/or the release of glycans for its independent analysis), method setup and optimization, system troubleshooting, quality control, and data processing, analysis, and interpretation. The student will actively participate in experimental planning, protocol development, and data discussion, progressively gaining independence and confidence in glycoprotein analysis. By the end of the traineeship, the student will have contributed to method development and optimization, data evaluation, and the documentation and reporting of results. The training will conclude with the preparation of a summary report and an oral presentation outlining the work performed and the main outcomes.

The training will be carried out over a period of four months. During the first month, the student will review relevant literature related to the project and will be introduced to LC–MS instrumentation. The second and third months will focus on sample preparation and LC–MS analysis, alongside the initiation of data processing. During the final month, the student will complete data analysis, compile and report the results, and prepare and deliver the final presentation.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

The student will gain a comprehensive understanding of liquid chromatography and mass spectrometry workflows, covering all stages from sample handling and protocol design to instrument tuning, routine maintenance, data acquisition, and final data evaluation and reporting. Through continuous exposure to diverse analytical applications from multiple research groups using the facility, the student will become familiar with a broad range of LC–MS methodologies while strengthening communication and collaborative skills.

The student will initially work under close supervision but will progressively develop the ability to perform experiments independently. This approach is expected to foster both teamwork and self-management skills. The training will involve the use of state-of-the-art LC–MS instrumentation, requiring the student to read and critically assess technical documentation, make informed decisions, and assume increasing levels of responsibility. Given the time-sensitive nature of many sample preparations and LC–MS experiments, the student will also enhance their capacity to plan, prioritise, and efficiently organise experimental workflows.

MONITORIZACION Monitoring plan

The student will be trained and lead by Dr. Anabel Torrente López, who will be his/her supervisor during the complete development of this internship. The student will have weekly meetings with Dr. Anabel Torrente to discuss the progress and plan experiments. Every week, the student will meet with all the group members where she/he will present and discuss scientific results. In a bigger setting, every two weeks the student will attend to departmental work-discussion meetings.

EVALUACIÓN Evaluation plan

It will be a continued evaluation process. The student's performance in the laboratory, the generation of good and reproducible data and the capability of communicating the results both written and in the final oral presentation will be key aspects to be evaluated. Furthermore, proper documentation and maintenance of an accurate electronic lab journal during the internship will be evaluated. The student's attitude will also be evaluated, with particular attention to proactivity, motivation and a strong willingness to learn.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

Master's-level knowledge in Chemistry, Pharmacy, Biotechnology, Biology, Biochemistry, or related fields.

OTRA INFORMACIÓN RELEVANTE Other relevant information

The work carried out by the student will be conducted in the Center for Proteomics and Metabolomics of the Leiden University Medical Center (Leiden, the Netherlands). The department is specialized in mass spectrometry, comprising several research groups, including lipidomics, metabolomics, glycomics, and glycoproteomics. As a result, the student will work in a fully equipped laboratory with access to multiple high-resolution mass spectrometers and liquid chromatography systems required to perform the planned experiments.

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Chemistry, Pharmacy, Biotechnology, Biology, Biochemistry or related areas.

NIVEL DE ESTUDIO Level of studies

Master's student.

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

Basic experience/knowledge in analytical techniques. Liquid chromatography and mass spectrometry will be a plus.
Basic knowledge in glycoproteins and glycans would be evaluated positively.
Practical experience in a laboratory. Experience working with biomolecules will be a plus.

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

Fluent in English, both written and spoken (approx. level B2–C1). The interview will be conducted in English in order to assess this level.

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

The student must be insured.

CONVOCATORIA DE PRÁCTICAS INTERNACIONALES
CALL FOR INTERNATIONAL INTERNSHIP
CENL 05

1. INFORMACIÓN DEL SUPERVISOR Host applicant information

NOMBRE Name

CARGO Position

DEPARTAMENTO/FACULTAD/INSTITUCIÓN Departament/Faculty/Institution

Department of Internal Medicine, Erasmus MC, University Medical Center Rotterdam

TIPO DE ORGANIZACIÓN Organization type: University

ORGANISMO PUBLICO Public Body: [x] SI Yes [ ] NO

SIN ANIMO DE LUCRO Non-Profit: [x] SI Yes [ ] NO

TAMAÑO Size: 15,000

WEB: https://www.erasmusmc.nl/en/

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?

No

2. DESCRIPCION DEL PROYECTO Project description

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

01 Sep 2026 – 30 May 2027
Dates are flexible, with a minimum duration of 6 months

FLEXIBILIDAD DE FECHAS
Flexibility in dates

[x] SI yes
[ ] NO

TÍTULO DEL PROYECTO Project title: Sex differences in brown adipose tissue metabolism

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

36

PROGRAMA Detailed programme of the traineeship

Sexual dimorphism in metabolic regulation contributes to differences in energy balance and susceptibility to metabolic diseases between men and women. Brown adipose tissue (BAT) is a metabolically active organ that contributes to energy expenditure and metabolic health through adaptive thermogenesis. Increasing evidence indicates that BAT activity, distribution, and molecular regulation differ between females and males, pointing to an important role for sex and steroid hormones in shaping BAT function. Despite this, the sex-specific molecular mechanisms that influence brown adipocyte biology remain largely understood. This project will explore how sex differences and differences in steroid hormone levels shape brown adipocytes biology, combining molecular, cellular, and/or physiological approaches.

CONOCIMIENTOS, HABILIDADES Y COMPETENCIAS QUE HAN DE ADQUIRIR LOS ESTUDIANTES
Knowledge, skills and competences to be acquired by the end of the traineeship

By the end of the traineeship, the student will have acquired a solid theoretical and practical background in brown adipose tissue biology and sex-specific regulation of metabolic processes. The trainee will gain hands-on experience in general cell culture techniques and adipocyte differentiation, as well as in core molecular biology methods such as quantitative PCR and/or Western blot analysis.

In addition, the student will be trained in experimental design, data acquisition, and data analysis, developing critical thinking skills and good scientific practice. Participation in regular laboratory group meetings will allow the trainee to discuss experimental progress and present results, thereby improving scientific communication and presentation skills. Progressive increase in independence, self-organization, and responsibility as the traineeship advances is also expected.

MONITORIZACION Monitoring plan

The trainee will carry out the project in the Metabolism & Reproduction laboratory led by Dr. J.A. Visser, under the direct supervision of Dr. Sabate Perez, who will be responsible for guiding the scientific development of the work and ensuring appropriate training and progress throughout the traineeship. In addition, experienced technicians in the laboratory will provide hands-on training in the required experimental techniques and day-to-day laboratory practices.

The trainee will participate in the regular meetings of the research group twice a week. Furthermore, weekly meetings with the direct supervisor will be held to monitor progress, discuss results, and define short- and medium-term objectives. These meetings will ensure continuous feedback, proper supervision, and alignment between experimental work and the overall goals of the traineeship.

EVALUACIÓN Evaluation plan

The trainee's progress will be evaluated on a continuous basis throughout the traineeship. Particular emphasis will be placed on the student's acquisition of theoretical and practical knowledge of the experimental techniques, their ability to understand, interpret, and critically discuss the results obtained, and their engagement with the scientific background of the project. In addition, the quality and clarity of oral and/or written presentation of results during group meetings will be assessed, reflecting the development of scientific communication skills. Overall, the evaluation will focus on the student's progression in competence, autonomy, and scientific reasoning over the course of the traineeship.

ESPECIFICACIONES ADICIONALES EN LA INSTITUCIÓN DE ACOGIDA
Additional specifications of the host institution

The Metabolism & Reproduction laboratory, led by Dr. J.A. Visser, consists of three technicians, five PhD students, and two postdoctoral researchers. The laboratory is part of the Department of Internal Medicine at Erasmus MC. The student research project will be embedded within an ongoing project in the laboratory and carried out in close collaboration with a postdoctoral researcher (direct supervisor) and a PhD student.

OTRA INFORMACIÓN RELEVANTE Other relevant information

N/A

3. PERFIL Y REQUISITOS DEL ESTUDIANTE Student profile and requeriments

AREA/S DE ESTUDIO Research area/s

Biology, Biomedicine, Biochemistry, Biotechnology, or related life science areas.

NIVEL DE ESTUDIO Level of studies

Applicants should preferably be final-year Bachelor's or Master's students enrolled in Biology, Biomedicine, Biochemistry, Biotechnology, or related life science areas. Students enrolled in a Master's programme will be prioritized.

REQUISITOS PREVIOS DE CONOCIMIENTOS TECNICOS O EXPERIENCIA
Student required expertise and technical knowledge:

Knowledge in metabolism, cell biology, and experimental biomedical research. Previous experience in cell culture is an asset but not a requirement.

IDIOMA Y NIVEL MINIMO RECOMENDADO PARA REALIZAR LAS PRACTICAS
Language and minimum level recommended for internships

Fluency in spoken and written English is required (minimum B2 level).

REQUISITOS ADICIONALES DE LA INSTITUCION DE ACOGIDA
Additional requirements set by the host institution

The student needs to be insured through their home institution for the entire duration of the traineeship.