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Scilifelab PULSE: matchmaking portfolio with associated partners

Application round 1 (Jan-March 2025)

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Introduction

For each PULSE project, a 3-6 month secondment is mandatory with one of the PULSE partner organisations. Also, shorter, non-mandatory research visits can be considered for the project.

This portfolio has been compiled to assist candidates applying for the PULSE postdoc program in identifying suitable co-supervisor/s and secondment lab at a PULSE <u>Associated partner</u> for their proposed research project (the secondment host can also be affiliated to one of the <u>Imlementing partners</u>, except for the entrepreneurial track where all projects must have a PULSE industry secondment partner). The candidates can also browse the PULSE Associated partners to identify additional opportunties for secondments at

https://www.scilifelab.se/research/pulse/partners/#h-associated-partners.

Applicants are requested to suggest a secondment lab at the time of application. However, secondments can also be decided later, for the approved projects.

Applicants can contact prospective co-supervisor/s to discuss and secure support for the research proposal. The rationale for further communication during the application process should be clearly specified (e.g., seeking scientific advice, discussing the proposed research, visiting lab facilities, or meeting the research team). Note that the PI is not allowed to be involved in writing the proposal.

The PIs featured in this portfolio have submitted keywords summarizing their research areas. These keywords have been consolidated at the beginning of the portfolio to help candidates identify PIs in their field of interest. Candidates can easily locate relevant PIs by using the keywords and document's search function.

Keywords

| ACT |
|---|
| ADME/PK |
| advanced analytical techniques in drug delivery |
| aging |
| Al |
| Alzheimer's disease |
| AI/ML |
| ANCA vasculitis |
| animal behavior |
| animal model |
| antibiotic resistance |
| antibody biopharma inflammation development |
| antimicrobial resistance |
| antisense |
| Antiviral Drug Discovery |
| atherogenesis |
| autoimmunity |
| automation |
| bacteria |
| behavior (fear/aggression) |
| biobank |
| biocontainment |
| Biochemistry |
| (bio)conjugates |
| bioinformatics |
| biologics |
| biological drugs |
| Biomarkers |
| biophysics |
| biosensors |
| Biostatistics |
| Burkitt Lymphoma |
| cancer cell invasion |
| cancer genomics |
| Cancer microenvironment |
| cancer progression |
| Cancer therapy |
| cancer vaccin |
| CAR-T |
| CD4 T cells |
| CD40 |

| CD8 |
|------------------------------------|
| Cell & Molecular Biology |
| cell cycle |
| cell homeostasis |
| chemoinformatics |
| chromatin |
| chromosome instability |
| CLEM |
| cognition |
| comparative genomics |
| Computational Biology |
| computational models |
| conformal prediction |
| Critical care medicine |
| cryoEM |
| cryoET |
| data integration |
| data science |
| databases |
| |
| decision making dendritic cells |
| Disease models |
| |
| Disease Progression Modelling |
| DNA damage response |
| drug delivery |
| drug development |
| drug discovery |
| drug repurposing |
| drug resistance |
| Drug substances |
| emerging viruses |
| endolysosomal system |
| Energy metabolism |
| epigenetics |
| epigenomics |
| espiratory infections |
| evolutionary cell biology |
| exhaustion |
| fatty liver |
| Flaviviruses |
| fluorescence microscoy |
| formulation and charactarization |
| Fragment and ligand screening |
| Freeze-drying |

| functional genomics |
|-----------------------------------|
| gene expression |
| gene regulation |
| |
| |
| Human Immunology |
| hypothalamus |
| image analysis |
| imaging |
| Imaging&genomics |
| Immunetherapy |
| immunology |
| Inborn errors of metabolism (IEM) |
| infection |
| infectious disease |
| inflammation |
| Integrative -omics |
| Liver cancer biology |
| liver diseases |
| LNP |
| long non-coding RNA |
| long-read sequencing |
| lysosome dysfunction |
| machine learning |
| macrophage polarization |
| Mantle cell lymphoma |
| Mathematical Epidemiology |
| Medicinal chemistry |
| melanoma |
| Membrane trafficking |
| memory |
| metabolism |
| metabolomics |
| Metagenomics |
| metastasis |
| methods |
| microbial communities |
| microbiota |
| microscopy |
| Mitochondrial biogenesis |
| mitosis |
| ML |
| modelling |
| Molecular Biology |
| molecular mechanisms of disease |
| |

| Molecular mechanisms of retinal disease |
|---|
| Molecular virology |
| mouse |
| |
| mRNA biology |
| mRNA metabolism |
| MRSA |
| multidrug-resistant pathogens |
| multienzyem complexes with internal product/substrate transport |
| multimodal imaging |
| multi-omics |
| myasthenia gravis |
| neural circuit dynamics |
| neural tube development |
| neurons |
| neuroscience |
| Nucleic acid chemistry |
| obesity |
| oligonucleotides |
| oncogenic pioneer transcription factors |
| Oncology |
| optical instruments |
| organoids |
| ovarian carcinoma |
| oxidized lipids |
| particle technology |
| pathogenesis |
| peptide chemistry |
| pharmacometrics |
| Protein design |
| Protein expression |
| Protein purification |
| protein translocation including secretion |
| protein-RNA complexes |
| protein-small molecule interaction |
| proteomics |
| replication organelle biogenesis |
| respiratory diseases |
| Retinal organoids |
| reverse genetics |
| RNA |
| RNA biology |
| RNA modifications |
| SARS-CoV2 pathogenesis |
| schizophrenia |
| Johnzophronia |

| sex differences in immunity |
|---|
| shRNA |
| Skin cancer |
| skin pigmentation |
| SOX11 |
| spatial biology |
| spatial -omics |
| structural biology |
| Structural Cell Biology |
| structure elucidation |
| Support development (Base Matrix Magbeads resin membrane filters etc) |
| Surface- and colloidal chemistry |
| surveillance |
| synapses |
| systems biology |
| TCA cycle |
| tomography |
| tolerance |
| transcriptomics |
| translation |
| translational drug delivery and 3R methodologies |
| translational research |
| tumor microenvironment |
| Viral RNA replication |
| virion assembly |
| virology |
| virus-host interactions |
| VRE |
| working memory |

AstraZeneca

Thomas Lundbäck

Country

Sweden

Email address thomas.lundback@astrazeneca.com



Research key words

Drug discovery, machine learning, oligonucleotides

Interested to collaborate in

Broad submission representing multiple interest areas and therefore different AstraZeneca investigators: Therapeutic oligonucleotides and their targeting to specific cell types and tissues. Novel technologies and readouts in transcriptomics including single cell RNAseq and other means to achieve single cell resolution. Endosomal escape of oligonucleotides. Safety testing of therapeutic oligonucleotides coupled to omics profiling and the use of machine learning for safety/property predictions. Proximity-induced pharmacology including PROTACs and molecular glues. Generative AI for property predictions. Precise genome editing technologies. Miniaturized 3D cell models focused on primary cell types and use of imaging and other multiplex readouts..

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Senior Director AstraZeneca R&D Gothenburg. 25 years of drug discovery experience. Chairman Chemical Biology & Genome Engineering platform at SciLifeLab. <u>https://scholar.google.com/citations?user=mMIYx30AAAAJ</u>

CoVaRR-Net

Hélène Decaluwe

Organization CHU Sainte Justine

Country

Canada

Email address helene.decaluwe@umontreal.ca

Research key words CAR-T, shRNA, exhaustion, CD8, ACT

Interested to collaborate in

Immunology

Interested to host

Longer periods, 3-6 months

Bio

Pediatric immunologist with expertise in T cell exhaustion in chronic infections and cancer. Leading impactful, well-funded research, with active mentorship and roles in international immunology committees.

Angela Crawley

Organization

Ottawa Hospital Research Institute -CoVaRR-Net Biobank Canadian COVID-19 Biobank and Data Alliance



Alliance canadienne des **biobanques et données** COVID-19

Country

Canada

Email address

acrawley@ohri.ca

Research key words

immunology, biobank, infectious diseases, liver diseases, respiratory diseases

Interested to collaborate in

blood processing, flow and/or mass cytometry, multi-parameter bioassays, molecular biology OMICS

Interested to host

Longer periods, 3-6 months

Bio

The Biobank leads a national network, collecting, characterizing and sharing specimens and data. Adding knowledge-value to our resources is vital for collaborations with researchers and industry.

Louis Flamand

Organization Université Laval

Country Canada



Email address

louis.flamand@crchudequebec.ulaval.ca

Research key words

SARS-CoV2 pathogenesis, animal model, reverse genetics, inflammation

Interested to collaborate in

Generation of mutant viruses, assessing pathogenic determinants

Interested to host

Longer periods, 3-6 months

Bio

I am full professor and head of microbiology, infectious diseases and immunology department. I conduct fundamental research on SARS-CoV-2 to better understand the pathogenesis of this virus.

Francois Jean

Organization University of British Columbia

Country Canada

Email address

fjean@mail.ubc.ca



Drug Discovery & Development, Antiviral Drug Discovery, Virology, Emerging Human Viruses, Cell & Molecular Biology

Interested to collaborate in

Antiviral drug discovery; broad-spectrum antiviral drug discovery; antiviral drug screening; preclinical efficacy studies; Virological studies; in vitro models for studying human pathogenic viruses (coronavirus; mosquito-borne virus; influenza A virus)

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Jean is a Professor of Molecular Virology and an internationally recognized expert in antiviral drug discovery. He leads national and international research programs on host-directed antivirals (HDAs)



Angela Rasmussen

Organization Vaccine and Infectious Disease Organization

Country Canada

Email address angela.rasmussen@usask.ca



Research key words

virus-host interactions, transcriptomics, pathogenesis, emerging viruses

Interested to collaborate in

Virology, systems biology, vaccinology

Interested to host

Longer periods, 3-6 months

Bio

I am a virologist whose research focuses on the role of the host in determining susceptibility, pathogenicity, and disease outcome during infection with highly pathogenic emerging viruses

Selena Sagan

Organization University of British Columbia

Country Canada

Email address

selena.sagan@ubc.ca



Research key words

Molecular virology, Flaviviruses, Viral RNA replication, virion assembly, replication organelle biogenesis

Interested to collaborate in

Structural biology, molecular virology, RNA biology

Interested to host

Longer periods, 3-6 months

Bio

Dr. Sagan is a Professor in the Department of Microbiology & Immunology at the University of British Columbia. Her research program focuses on RNA-RNA and protein-RNA interactions at the host-virus interface.

Alex Wong

Organization

Carleton University (associated partner affiliation: CUBE Lab)

Country

Canada

Email address

AlexWong@cunet.carleton.ca

Research key words

Metagenomics, antimicrobial resistance, infectious disease, surveillance

Interested to collaborate in

metagenomics, molecular epidemiological methods for pathogen surveillance, nextgeneration sequencing, bioinformatics (more info: <u>https://cube-ontario.github.io/</u>)

Interested to host

Longer periods, 3-6 months

Bio

Alex Wong, PhD leads an internationally recognized program in microbial genomics. His group uses laboratory and computational approaches to study environmental microbes, including antimicrobial resistance, from both fundamental and applied perspectives.



Cytiva Sweden AB

Ronnie Palmgren

Organization

Vaccine and Infectious Disease Organization

Country

Sweden

Email address

ronnie.palmgren@cytiva.com

Research key words

Molecular Biology, Protein design, Protein expression, Protein purification, Support development (Base Matrix, Magbeads resin, membrane, filters etc)

Interested to collaborate in

Developility of new formats of drugs (proteins, viral vectors,mRNA etc) regarding design, expression and purification (In collaboration with Testa Center)

Interested to host

Longer periods, 3-6 months

Bio

Developability of protein drugs from research to a final therapeutic drug is a challenge. Details regarding expression, purification etc. is important to start early with in the development to be successful in the scale-up procedure.

EATRIS

Claudia Guimas Almeida

Organization

Nova Medical School

Country

Portugal

Email address

claudia.almeida@nms.unl.pt

Research key words

Neuroscience, Alzheimer's disease, Aging, endolysosomal system, synapses

Interested to collaborate in

Microscopy, AI-based Bioimaging, human neurons-derived from hIPCS, cellular and molecular mechanisms of synapse dysfunction, drug discovery

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Cláudia Guimas Almeida, Ph.D., neuroscientist with biochemistry and cell biology background, PI since 2013 at NMS in Lisbon, investigates endolysosomal trafficking in aging and Alzheimer's disease. Her lab focuses on synaptic dysfunction using advanced cellular models and quantitative bioimaging.



Anna Bagnato

Organization

IRCCS-IFO Regina Elena National Cancer Institute of Rome

Country

Italy

Email address

annateresa.bagnato@ifo.it

Research key words

ovarian carcinoma, drug resistance, drug repurposing, tumor microenvironment, metastasis

Interested to collaborate in

The ultimate goal of the Preclinical Models and New Therapeutic Agents Unit is to develop meaningful combinatorial strategies leading to rationally-designed (and potentially personalised) novel treatment regimens for specific cancers, exploring in pertinent preclinical models how cancer cells respond to perturbations of specific pathways and how resistance to therapies arises, being transformed into a set of mechanistic rules.

Interested to host

Longer periods, 3-6 months

Bio

Her research has been pointed to define the role of endothelin-1 (ET-1) axis in tumor, focusing on ovarian cancer, identifying ET-1 receptors (ET-1R) as a novel targets for anticancer therapy. In particular her group characterizes the pleiotropic effects exerted by ET-1R on tumor cells and on the tumor microenvironment, modulating tumor growth, metastasis progression and response to therapy. Recently she demonstrates that blockade of ET-1R, with the repurposing of dual ET-1R antagonists, reduces tumor growth and metastasis in patient-derived preclinical models



Duarte Barral

Organization

NOVA Medical School, NOVA University of Lisbon

Country

Portugal

Email address

duarte.barral@nms.unl.pt

Research key words

Membrane trafficking, skin pigmentation, cancer progression, organoids

Interested to collaborate in

Cutaneous melanoma progression and skin pigmentation cell and molecular mechanisms

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Duarte C. Barral has a PhD in cell biology and is a tenured Associate Professor. He is currently focused on understanding how cancer cells subvert membrane trafficking pathways

Giovanni Blandino

Organization

IRCCS-IFO Regina Elena National Cancer Institute of Rome

Country

Italy

Email address

giovanni.blandino@ifo.it

Research key words

Oncology, Translational, Biomarkers, RNA

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Graduated in Sicily as an oncologist, specialized in Milan in medical oncology, I approached research in Rome and then moved to Israel, New York and Oxford. I am now the director of the Oncological Translational Research Unit at the Istituto Nazionale dei Tumori Regina Elena.

Virginia Amador Espinosa

Organization

Fundació de Recerca Clínic Barcelona-Institut d'Investigacions Biomèdiques August Pi i Sunyer (FRCB-IDIBAPS)

Country

Spain

Email address

vamador@recerca.clinic.cat

Research key words

Mantle cell lymphoma, Burkitt Lymphoma, SOX11, oncogenic pioneer transcription factors, Immunetherapy

Interested to collaborate in

Cut&Run, CRISPR-Cas9, Malignant lymphomas, PROTAC-degraders

Interested to host

Longer periods, 3-6 months

Bio

I'm group leader at FRCB-IDIBAPS. My scientific career has been focused on the functional/mechanistic characterization of key transcription factors involved in cell proliferation, growth, and aggressive behavior of several cancers.



Jaime de la Rocha

Organization

Fundació de Recerca Clínic Barcelona-Institut d'Investigacions Biomèdiques August Pi i Sunyer (FRCB-IDIBAPS)

Country

Spain

Email address

jrochav@recerca.clinic.cat

Research key words

decision making, working memory, animal behavior, computational models, neural circuit dynamics

Interested to collaborate in

systems and computational neuroscience; electrophysiology and optogenetic experiments in behaving mice

Interested to host

Longer periods, 3-6 months

Bio

I'm the co-PI in the Brain Circuits and Behavior lab where we aim to understand the neuronal network mechanisms underlying cognitive functions such as perceptual decision making and working memory



Albert Compte

Organization

Fundació de Recerca Clínic Barcelona-Institut d'Investigacions Biomèdiques August Pi i Sunyer (FRCB-IDIBAPS)

Country

Spain

Email address

acompte@recerca.clinic.cat

Research key words

neuroscience, computational models, cognition, memory, schizophrenia

Interested to collaborate in

functional magnetic resonance imaging analysis, computational neuroscience

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

We are working to understand the mechanisms supporting robust working memory operation in the face of interferences and the mechanistic brain alterations that underlie cognitive dysfunctions in psychiatric disorders.



Antoni Torres

Organization

Fundació de Recerca Clínic Barcelona-Institut d'Investigacions Biomèdiques August Pi i Sunyer (FRCB-IDIBAPS)

Country

Spain

Email address

atorres@clinic.cat

Research key words

respiratory infections, Critical care medicine, translational research, animal models

Interested to collaborate in

systems and computational neuroscience; electrophysiology and optogenetic experiments in behaving mice

Interested to host

Longer periods, 3-6 months

Bio

Prof. Torres' research group (http://www.idibapsrespiratoryresearch.org/) comprises seven research lines, including:1) Nosocomial pneumonia, 2) Community-acquired pneumonia, 3) Chronic respiratory diseases, 4) Immunocompromised patients, 5) Invasive and non-invasive ventilation, 6) Animal experimentation division, 7) Basic lab for microbiology diagnosis and pathogen-host response



Mercedes Fernandez Lobato

Organization

Fundació de Recerca Clínic Barcelona-Institut d'Investigacions Biomèdiques August Pi i Sunyer (FRCB-IDIBAPS)

Country

Spain

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mlobato@recerca.clinic.cat

Research key words

Liver cancer biology, obesity, fatty liver, translation, aging

Interested to collaborate in

Cancer biology, translational control, bioinformatics, obesity-related fatty liver disease models and aging-related liver mechanisms.

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Senior Group Leader at IDIBAPS specializing in translational control in liver disease and cancer, with high-quality collaborations and networking with top researchers worldwide. Proven track record in securing competitive national and international funding.



Paulo Gameiro

Organization Nova Medical School - Nova University of Lisbon

Country

Portugal



Email address

paulo.gameiro@nms.unl.pt

Research key words

Energy metabolism; Mitochondrial biogenesis; Inborn errors of metabolism (IEM); TCA cycle; RNA biology

Interested to collaborate in

High-throughput screening (HTS); Mitochondrial physiology; Patient-derived cell models; CRISPR-based editing of mitochondrial DNA; Biophysical approaches to study molecular condensates.

Interested to host

Longer periods, 3-6 months

Bio

Our research focuses on mitochondrial energy metabolism. We harness omicsdriven biochemical methods in cell models, aiming to integrate the bioenergetic and signalling mechanisms that shape mitochondrial function in health and disease.

Sandra Tenreiro

Organization Nova Medical School - Nova University of Lisbon

Country

Portugal



Email address

stenreiro@nms.unl.pt

Research key words

Retinal organoids; Disease models; Molecular mechanisms of retinal disease

Interested to collaborate in

3D in vitro models; single cell omics; retinal diseases

Interested to host

Longer periods, 3-6 months

Bio

Focused on retinal disease mechanisms, I develop retinal organoid models (e.g. diabetic retinopathy) to support drug discovery. I collaborate on clinical studies and imaging analysis development for disease markers identification.

Helena Soares

Organization Nova Medical School - Nova University of Lisbon

Country

Portugal

Email address

Helena.soares@nms.unl.pt



Research key words

Human Immunology, CD4 T cells, infection, autoimmunity, sex differences in immunity

Interested to collaborate in

Bioinformatics, omics, T Cell development

Interested to host

Longer periods, 3-6 months

Bio

PhD in immune physiology at The Rockefeller University, postdoc in T cell Biology and signaling at Pasteur Institute. Group leader since 2014.

Otilia Vieira

Organization

Nova Medical School - Nova University of Lisbon

Country

Portugal

Email address

otilia.vieira@nms.unl.pt

Research key words

atherogenesis, molecular mechanisms of disease, lysosome dysfunction, cell homeostasis, oxidized lipids

Interested to collaborate in

We are interested in collaborating with laboratories that have microphysiological systems (human blood vessels) to test the biological activity of a new family of oxidized lipids identified by our group in plasma and human endarterectomy specimens.

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

I am the Principal Investigator of the group Lysosomes and Disease and Assistant Professor with Habilitation (Agregação) at NOVA MEDICAL SCHOOL (NMS), Universidade Nova de Lisboa. The primary goal of my research is to elucidate the biochemical and biological mechanisms driving the onset of atherosclerosis, and subsequently translate this knowledge through advanced analytical chemical techniques to predict cardiovascular disease (CVD) risk in clinical settings.

Jorge M. Mendes

Organization Nova Medical School - Nova University of Lisbon

Country

Portugal



Email address

jorge.mendes@nms.unl.pt

Research key words

Mathematical Epidemiology; Disease Progression Modelling; Biostatistics

Interested to collaborate in

Disease Progression Modelling; Medical Image Processing; Machine Learning in Healthcare; Early Diagnosis

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Currently Associate Professor at NOVA Medical School (NMS). His research interests range from environmental statistics, biostatistics and survey methodology to quantitative methods for social sciences. He is member of CHRC at NMS.

Dace Pjanova

Organization

Riga Stradiņš University, Institute of Microbiology and virology

Country

Latvia

Email address

dace.pjanova@rsu.lv

Research key words

Cancer microenvironment, dendritic cells, macrophage polarization, microbial communities

Interested to collaborate in

Cancer immunotherapy, flow cytometry

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

PhD degree in Molecular Biology, tenured professor at the Rīga Stradiņš University. Research directed towards cell biology with a particular respect to cancer treatment resistance and immunotherapies.



EMBL

Sebastian Eustermann

Organization EMBL

Country Germany



Email address

sebastian.eustermann@embl.de

Research key words

Structural Cell Biology, cryoEM, cryoET, biophysics, chromatin, gene expression, Epigenetics, DNA damage response, Cancer therapy

Interested to collaborate in

Structural biology, chromatin biology, structural cell biology, biochemistry

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

The overarching goal of my group is to understand fundamental principles by which the supra-molecular organization of chromatin governs eukaryotic genome regulation, and its impact on human health.

Eva Kowalinski

Organization

EMBL

Country France

Email address

kowalinski@embl.fr

Research key words

Biochemistry, RNA, RNA modifications, , protein-RNA complexes, cryoEM, structural biology

Bio

https://www.embl.org/groups/kowalinski/

Cornelius Gross

Country Italy

Email address gross@embl.it



Research key words

neuroscience mouse behavior fear aggression hypothalamus

Interested to collaborate in

human cohort data that links brain function to psychiatric disease risk

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

We study how territorial context and social experience modulate social threat responses in mice. We study the role of the medial hypothalamus in these behaviors and their adaptation to changing social environments. In humans electrical stimulation of these areas elicits aversive social emotions like shame and encode verbally elicited emotional states. We are also very intersted in the role of sexual dimorphism in these areas in sex differences in such emotinal behaviors and states.

Jan Korbel

Country Germany

Email address korbel@embl.de



Research key words

Imaging&genomics, cancer genomics, chromosome instability

Interested to collaborate in

Interested to host

Longer periods, 3-6 months

Bio

Our group investigates genomic structural variants, including complex chromosomal rearrangement events in normal tissues and in disease contexts. Our group's principal research objective is to understand genomic structural variations as a basis of phenotypic variation and cancer development.

Matthias Wilmanns

Country

Germany

Email address

matthias.wilmanns@embl-hamburg.de

Research key words

infection, protein translocation including secretion, multienzyem complexes with internal product/substrate transport

Interested to collaborate in

structural biology (X-ray based, EM, integrative modelling, computational), biophysical approaches, biochemistry, quantification of interactions

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Matthias Wilmanns was Head of the EMB Hamburg Unit from 1997 to 2024, and remains a Group Leader and Senior Scientist. He holds a professorship at the Medical Faculty of the University of Hamburg

Anna Kreshuk

Country Germany

Email address

anna.kreshuk@embl.de

Research key words

AI, ML, image analysis

Interested to host

Longer periods, 3-6 months

Maria Zimmermann-Kogadeeva

Country

Germany

Email address maria.zimmermann@embl.de

Research key words

microbiota, metabolism, modelling, multi-omics



Interested to collaborate in

Microbial ecosystems, computational biology, experimental microbiology, metabolic modelling

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

I am an interdisciplinary scientist investigating how the complex properties of a biological system emerge from the interactions of its parts. My lab combines multi-omics data integration and mathematical modelling to investigate molecular interactions within microbes and between microbes and their host.

Gautam Dey

Country

Germany

Email address

gautam.dey@embl.de

Research key words

evolutionary cell biology, cell cycle, mitosis, comparative genomics, imaging

Interested to collaborate in

Marine microbiology, functional genomics, phylogenetics, imaging

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Group Leader at EMBL since 2021, evolutionary cell biology of mitosis and nuclear remodelling. ERC Investigator.

Alvaro Crevenna

Country

Italy

Email address alvaro.crevenna@embl.it



Research key words

fluorescence microscoy, spatial -omics, optical instruments, image analysis, automation

Interested to collaborate in

microscope development, imaging-based spatial -omics, image analysis

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Jose Antonio Marquez

Country

France

Email address

marquez@embl.fr

Research key words

Structural Biology, Fragment and ligand screeing

Interested to collaborate in

Ligand/Fragment screeing, Translational biology

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Head of the HTX lab, my team has developed unique technology enabling high through approaches in structural biology and including automated pipelines for large scale X-ray based ligand and fragment screening .These pipelines, can be applied to the development of small molecule probes to investigate function in vivo and to establish proof for the therapeutic or biotechnology potential of novel molecular targets.



John Lees

Organization

EMBL-EBI (European Bioinformatics Institute)

Country

United Kingdom

Email address

jlees@ebi.ac.uk

Research key words

bacteria, genomics, methods, infection, modelling

Interested to collaborate in

Infectious disease epi, genetics or modelling. Evolutionary analysis. Sequencing technologies

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

I'm a research group leader at EMBL-EBI. I work on bioinformatics and software, statistical genetics and mathematical modelling – mostly on bacterial pathogens but sometimes on other microbes too.

Julio Saez-Rodriguez

Organization

EMBL-EBI (European Bioinformatics Institute)

Country

United Kingdom

Email address

saezlab@ebi.ac.uk

Research key words

systems biology, data integration

Interested to collaborate in

data analysis of single-cell, spatial, multi-omics

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Juan Antonio Vizcaino

Organization EMBL-EBI (European Bioinformatics Institute)

Country United Kingdom



Email address

<u>juan@ebi.ac.uk</u>

Research key words

bioinformatics, proteomics, metabolomics, data science, databases

Interested to collaborate in

bioinformatics, proteomics, metabolomics, data science

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

I am leading the Proteomics and Metabolomics team at EMBL-EBI. We work with mass spectrometry data at different levels: data management, data pipelines and data reanalysis, among others.

Fondazione Human Technopole (HTP)

Piero Carninci

Country Italy

Email address piero.carninci@fht.org



Research key words

gene regulation; functional genomics; epigenetics; transcriptomics; long non-coding RNA

Interested to collaborate in

functional genomics, long non-coding RNA function

Interested to host

Longer periods, 3-6 months

Bio

I am a geneticist, who has been conceiving, creating, and developing several technologies to map genes, their function, and regulation, including CAGE, RADICL-seq, and Full-length cDNA cloning (<u>https://humantechnopole.it/en/people/piero-carninci/</u>)

Ivano Legnini

Country

Italy

Email address ivano.legnini@fht.org

Research key words

RNA biology; mRNA metabolism; long-read sequencing; neural tube development; organoids

Interested to collaborate in

RNA biology; Neurodevelopmental biology

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Group Leader in Molecular and Systems Biology of RNA. We work on mRNA metabolism and homeostasis in Eukaryotic cells, as well as neurodevelopment with organoids.



Lorenzo Calviello

Country Italy

Email address Lorenzo.calviello@fht.org



Research key words

Translation, Computational Biology, Transcriptomics, mRNA biology, Integrative - omics

Interested to collaborate in

Translation regulation, functions of alternative transcripts, Proteogenomics methods, single-nucleotide dissection of protein/RNP binding.

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

PhD at MDC-BIMSB with Uwe Ohler in desining computational methods for translation and transcriptomics integration, Postdoc at UCSF studying RNA binding proteins regulating translation, Group Leader at HT since 2021 leading a mixed drywet lab studing the link between translation and other aspects of mRNA processing at -omics scale.

Magda Bienko

Country Italy

Email address magda.bienko@fht.rog

Research key words

3D genome organization, epigenomics

Interested to collaborate in

omics, FISH, tech dev

Interested to host

Longer periods, 3-6 months

Bio

Group leader at both SciLifeLab and Human Technopole focusing on the design principles of 3D genome organization using both NGS- and FISH-based methods.



Lipum AB

Ola Sandborgh

Country

Sweden

Email address

ola.sandborgh@lipum.se

Research key words

antibody biopharma inflammation development

Interested to collaborate in

Development projects within the field of immunology/inflammation and biopharmaceutical treatments

Interested to host

Shorter visits, up to 4 weeks

Bio

Lipum aims to develop safer and more effective treatments for chronic inflammatory diseases. The company's drug candidate, SOL-116, targets a novel target molecule: Bile Salt-Stimulated Lipase (BSSL), which plays a central role in the inflammatory process.

Malmö University

Tautgirdas Ruzgas

Country

Sweden

Email address

tautgirdas.ruzgas@mau.se

Research key words

spatial biology, PCR, biosensors, skin cancer, melanoma

Interested to collaborate in

non-invasive detection of skin cancer biomarkers using spatial biology methods, RNAscope, skin microbiota analysis

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Main research interests: electroanalysis, application of (electro)analytical chemistry for fundamental studies of enzymes, cells and biological barriers (e.g., skin, intestine), development of RFID (bio)sensors for non-invasive sensing, monitoring of drug delivery (e.g., topical drug delivery), characterisation of inflammatory and cancer relevant reaction (e.g. skin cancer).

Prosilico AB

Urban Fagerholm

Country Sweden



CEO, Assoc. Prof. Vice CEO, PhD Professor Pharmacokineticist Computational chemist Pharmaceut, Bloinform,

CTO. Software & system engineer

Email address urban.fagerholm@prosilico.com

Research key words

AI/ML – ADME/PK – conformal prediction – modelling – chemoinformatics

Interested to collaborate in

AI/ML – ADME/PK – toxicology – modelling – chemoinformatics

Interested to host

Longer periods, 3-6 months

Bio

PROSILICO is a Swedish company focusing on the research and development of innovative technologies to provide high quality estimates of human ADME/PK directly from chemical structure.

Qure Tech Bio AB

Hasan Tûkenmez

Country

Sweden

Email address hasan.tukenmez@quretech.com

Research key words

Drug development, antibiotic resistance, multidrug-resistant pathogens, VRE, MRSA

Interested to collaborate in

Medicinal chemistry, microbiology, bioinfomatics, high-throughput screening

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

QureTech Bio AB (QTB) is a biotechnology company in Umeå focused on developing a new class of antibiotics, GmPcides, that are effective against multidrug resistant Gram-positive bacteria.

Red Glead Discovery AB

Johan Wennerberg

Country

Sweden

Email address

johan.wennerberg@redglead.com

Research key words

Medicinal chemistry, peptide chemistry, drug discovery, structure elucidation, protein-small molecule interaction

Interested to collaborate in

Medicinal chemistry, peptide chemistry, ADME, computational chemistry, NMR, invitro screening

Interested to host

Longer periods, 3-6 months

Bio

Red Glead Discovery is a CRO working with integrated drug discovery within small molecules and peptides collaborating with both academia, biotech and big pharma.

RISE

Kristina Karalė

Name of department

Chemical Processes and Pharmaceuticals. Unit: Pharmaceutical Development

Country

Sweden



Email address

kristina.karale@ri.com

Research key words

Nucleic acid chemistry, oligonucleotides, (bio)conjugates

Interested to collaborate in

Development of modified oligonucleotides and oligonucleotide conjugates, oligonucleotide therapeutics. Also, can help with the preparation of larger amounts (up to kg) of small molecules for oligonucleotide synthesis (e.g. modified nucleotides, linkers)

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Dr. Karale is a research scientist and project leader at RISE with an expertise in nucleic acid chemistry, oligonucleotide synthesis, modification as well as linker and (bio)conjugation technologies.

Lina Nyström

Name of department

Chemical Processes and Pharmaceuticals. Unit: Chemical and Biological Formulation

Country

Sweden

Email address

lina.nystrom@ri.se



Research key words

Drug delivery, biological drugs, Infectious diseases, Antibiotic resistance, Surfaceand colloidal chemistry

Interested to collaborate in

Interested in collaboration within the fields of biological drug development, formulation development, drug delivery systems, vaccines and antimicrobial resistance. Has access to a large instrumentation park for particle and surface characterization techniques.

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Dr. Nyström has a background in biotechnology and a PhD in pharmaceutical physical chemistry. She is a scientist at RISE and PI in both national and international funded research programs.

Denny Mahlin

Country

Sweden

Email address

denny.mahlin@ri.se

Research key words

Freeze-drying, spray-drying, formulation and charactarization



Interested to collaborate in

Drying technologies for biologics. Formulation of biologics for stability and functionality

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Broad background in solid drug formulation processes and physical properties characterization, including drying of biologics, and storage conditions impact on product stability.

Nicolaas Schipper

Country Sweden

Email address Nicolaasschipper@ri.se



Research key words

Drug Development, oligonucleotides, LNP, Antimicrobial resistance

Interested to collaborate in

Drug delivery, formulation, sustainable drug development

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Nicolaas Schipper is an expert in early pharmaceutical development, drug absorption, drug delivery and pharmaceutical quality systems. He is head of clinical manufacture at RISE. https://orcid.org/0000-0003-3401-0728.

Esmail Yousefi

Name of department

Chemical Processes and Pharmaceuticals. Unit: Pharmaceutical Development

Country

Sweden



Email address

esmail.yousefi@ri.se

Research key words

Drug Development, oligonucleotides, peptide chemistry, drug substance

Interested to collaborate in

Route design and synthesis of pharmaceutical drug substance, organic chemistry, metal organic chemistry, enzymatic chemistry, design and synthesis of modified oligonucleotide and peptide as drug substance.

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Dr. Yousefi is head of pharmaceutical development unit, more than 20 years experience from pharmaceutical industry in the field of design and development of manufacturing processes for drug substances.

Strike Pharma

Tina Furebring

Country

Sweden

Email address

tina.furebring@strikepharma.com

Research key words

LNP; antisense; cancer vaccin; CD40

Interested to collaborate in

Precision medicine using our ADAC techonolgy for targeted deliery of oligos, peptides or LNPs. we have so far focused on cancer vaccine but we are also interseted in autominnuity.

Interested to host

Longer periods, 3-6 months

Bio

Tina Furebring has 25 years' experience in developing of monospecific and bispecific antibodies for cancer treatment Extensive experiences in management of discovery, preclinical as well as early clinical projects.

SweDeliver

Christel Bergström and Alexandra Teleki

Country

Sweden, Denmark, Belgium or Italy

Email address

alexandra.teleki@scilifelab.uu.se

Research key words

advanced drug delivery, biologics, particle technology, translational drug delivery and 3R methodologies, advanced analytical techniques in drug delivery

Interested to collaborate in

advanced drug delivery systems, formulation design, computational pharmaceutics, translational drug delivery, 3R methodologies in drug development

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

SweDeliver is a world leading research and competence centre in Drug Delivery hosted by Uppsala University and with 14 industrial partners in pharmaceutical industry. SweDeliver is prioritising to focus on outstanding research challenges within Parenteral, Oral and Aerosol Drug Delivery..

Toleranzia AB

Maria Fernandez

Country Sweden

Email address maria.fernandez@toleranzia.com



Research key words

autoimmunity, tolerance, myasthenia gravis, ANCA vasculitis, drug development

Interested to collaborate in

autoimmunity, immune tolerance, autoimmune animal models, immunoassays

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

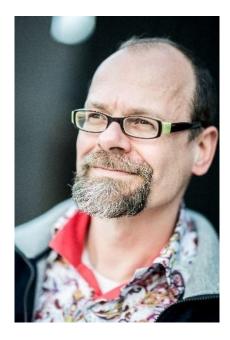
Maria Fernandez holds a PhD in Medical Science from the University of Gothenburg, specializing in immunology and inflammation. She currently leads the Pharmacology team at Toleranzia.

VIB

Sebastian Munck

Organization Bioimaging Core

Country Belgium



Email address Sebastian.Munck@kuleuven.be

Research key words

microscopy, tomography, image analysis, neurons, multimodal imaging, CLEM

Interested to collaborate in

image analysis, CLEM, smart microscopy, multimodal imaging, biophysics, amyloidosis, light sheet, super-resolution

Interested to host

Shorter visits, up to 4 weeks, and longer periods, 3-6 months

Bio

Ph.D.: BioImaging Center Ludwig-Maximilians-Universität München, Germany, 2003 Product Manager: Till Photonics, Germany, 2003/04 Postdoc: Medical University Innsbruck, Austria, 2004/06 since 2007 VIB, Belgium, currently Innovation Technologist Ass.-Professor Neuroscience KULeuven 2015.