







Marie Skłodowska Curie Meet-Up 2019 USPC Call for proposals

You are a post-doc or experienced researcher and you would like to widen your experience with a stay in a French University. You are ready for a new challenge and an international career. You want to broaden your network and position yourself as an independent researcher. Then the Marie Skłodowska-Curie individual fellowships will be of interest to you.

The Marie Skłodowska-Curie fellowships provide funding for individual researchers, allowing them to diversify and broaden their scientific knowledge and skills. They are international fellowships, meaning you must move (or have moved) to a different country. The grant usually covers two years' salary, a mobility allowance, research costs and overheads for the host institution. Individual researchers submit proposals for funding in liaison with their planned host organisation. Proposals are evaluated on their research quality, the researcher's future career prospects, and the support offered by the host organisation.

For more information on MSCA IF: <u>https://ec.europa.eu/research/mariecurieactions/actions/individual-fellowships_en</u>

USPC launches a call to attract future MSCA Fellowship candidates and support them with their IF 2019 applications. Beneficiaries of the USPC call for proposals will be funded for two-day stay in Paris for meeting, training and support.

Please note that beneficiaries <u>have to submit</u> their application <u>with an USPC host institution</u> to obtain the grant. The grant will be paid after the projects are submitted.

What is the Marie Curie Meet-up?

A two-day event in Paris, 17 & 18 June 2019:

- Day 1: welcome by the USPC European Research Network, specialized training on how to write "Individual Fellowships" proposals and individual interviews with the Research manager of the host institution
- > Day 2: visit of the host laboratory and joint work with the supervisor

The grant will cover all the Marie Curie Meet Up event expenditures (travel, hotel and subsistence expenses for 2 days and 2 nights).





How to apply?

If you are interested in the thematic areas described below, please:

- 1. Identify in the list below the priority scientific field, supervisor and lab you are interested in
 - 2. Fill in the Manifestation of Interest form (attached to this document)
 - 3. Send the completed Manifestation of Interest form by email to:

packeuropeaccess@uspc.fr

The deadline for submission is 20 February 2019, 17h00 (Paris time).

No proposals will be accepted after this submission deadline.

Results will be announced in April 2019

Priority fields open to candidates

USPC includes world-class institutions with a wide scope of priority fields open to candidates. The institutions cover all fields including humanities, social sciences, health and life sciences, exact sciences and engineering. The priority fields are listed by institution below. The supervisor is named when he is known.

Click to access the page of the university of your choice.

- EHESP Ecole des Hautes Etudes en Santé Publique
- ✓ FMSH Fondation Maison des Sciences de l'Homme
- ✓ Inalco Institut national des langues et civilisations orientales
- ✓ Université Paris 13
- ✓ IPGP Institut de Physique du Globe
- ✓ Université Paris Descartes
- ✓ Université Paris Diderot
- ✓ Université Sorbonne Nouvelle
- Sciences Po

Université Sorbonne Paris Cité (USPC) is a world class comprehensive cluster of universities in and around Paris. It brings together 14 universities and research and higher education institutions, with more than 10 000 academics working in all fields of human knowledge. It combines first-rate research (more than 100 European Research Council grants over 251 research units) with quality teaching (30 doctoral schools, 115 Masters degrees).

For more information on USPC: http://www.sorbonne-paris-cite.fr/



EHESP - Ecole des Hautes Etudes en Santé Publique

The EHESP School of Public Health (www.ehesp.fr) is a public establishment with a dual role of education and research into public health and social welfare. It encourages synergy between the disparate cultures of public health and management. Research and teaching structured around 5 priority areas : Analysis of social and public health policies ; Organisation and management of health services ; Environment and Health ; Health safety ; Health promotion and disease prevention.

Lab LERES- Studying the human placenta metabolome and transcriptome to better understand the impact of environmental stressors on fetus

•Arthur DAVID : The aim of this project will be to characterize the metabolome and the transcriptome of the human placenta using cutting-edge omics techniques to better understand how environmental contaminants (i.e. the xeno-metabolites) are distributed, metabolized, and are changing gene expression patterns in the human placenta. (Life Sciences (LIF) L2 : genetic, genomics, bioinformatics and system biology, Descriptors : metabolomics)

FMSH - Fondation Maison des Sciences de l'Homme

As an international crossroads for Humanities and Social Sciences, the *Foundation Maison des Sciences de l'Homme* works in synergy with international scientific communities and networks, and fosters collaboration amongst scientific fields.

The FMSH hosts several scientific platforms whose themes seek to meet the major challenges of the contemporary world. The <u>Humanitarian Studies science platform</u> provides an environment for dialogue and debate between researchers from all disciplines and those working in the aid field, aimed at supporting and promoting research on humanitarian aid. It is an open platform and it encourages the decompartmentalizat ion of professional circles and the dialogue between researchers, NGOs, foundations and government bodies. The Humanitarian Studies platform has begun a series of research projects which in the long-term should help to establish an informal network of researchers on humanitarian aid and and to accompany the major issues and mutations of contemporary worlds.

By fostering discussion, debate, seminars, research projects and publications, the platform is acting as a stimulus for harnessing, producing and disseminating knowledge. FMSH Publications has already launched a collection of works, *Le (bien) commun* [The common (good)], largely devoted to the research and findings the platform is generating.

The platform is headed by two directors, both of whom propose to be the supervisor of a particular Marie Curie fellowship candidate :

•Laëtitia ATLANI-DUAULT is a social anthropologist. Her fields of research are : humanitarian aid ; philanthropy ; international action ; development aid.

• Jean-Pierre DOZON is an anthropologist, specialist in Africa. His fields of research are : West Africa ; ethnicity ; health ; religion.

Inalco - Institut national des langues et civilisations orientales

Founding member of Sorbonne Paris Cité University (USPC) association, Inalco offers research and training in civilizations and circa 100 languages that encompass various disciplines: sciences of the language, orality and literature, social sciences such as history, geography, sociology, social anthropology, economy, political science, international relations, art and history of religious thought... It is at the core of contemporary debates, dealing with politics, economics, religions, societies.





Since its creation in 1669, <u>Inalco</u>'s mission has been to teach foreign languages and civilizations from Central and Eastern Europe, Africa, Asia, the Americas and Oceania by seeking to spread knowledge and skills in order to foster understanding at the cultural, social and professional levels.

This rich and innovative approach that focuses on languages and civilizations have taken center stage and are at the heart of some of today's major global challenges.

The Institute enjoys currently a network of **200 international partners** while conducting research projects in over **100 countries**. It offers joint programs with foreign universities as well as distance courses via videoconferencing and online learning content.

Inalco brings to bear its unique perspective through its **15 research centers** (8 Inalco-specific and 7 mixed units in partnership with research institutions such as <u>CNRS</u>, <u>EHESS</u>, <u>Paris Diderot</u>). While being home to renowned research teams working at the junction between the social science disciplines and area studies, Inalco supervises all the joint research labs in areal linguistics in Paris. (For more information: <u>http://www.inalco.fr/</u>)

Research units by area :

- <u>ASIEs Research Center</u> is a multi-disciplinary research unit specialized in the social sciences and humanities covering Asia from East Asia to the Western Indian Ocean.
- <u>Southeast Asia Center (CASE)</u> leads interdisciplinary researches (history, anthropology, archaeology, geography, ethnomusicology, linguistics) covering all the countries of the Southeast Asia and some of its neighbors (mixed research unit).
- <u>Center for Japanese Studies (CEJ</u>) covers Japan from its origins to our times in literature, art, linguistics, law, political art, history, sociology and anthropology.
- <u>Europe-Eurasia Research Center (CREE</u>) focuses on Central Europe, the Balkans, Russia and Central Asia, covering different but complementary fields: literature, arts, languages, history, company, geopolitics, economy, law, and environment.
- <u>Middle East and Mediterranean Research Center (CERMOM</u>) offers research in linguistics, history, literature, dialectology bringing together the Center of Research on the Arab world, the Center of Hebraic Studies, the Interdisciplinary Research team on the Muslim Mediterranean Societies.
- <u>Center for Languages and Cultures of North Africa and Diasporas (LACNAD</u>) studies the languages and the local cultures of the North Africa (Berber, Maghrebi Arabic and Maghrebi Judeo-Arabic), particularly in the western Mediterranean Sea Region and in Europe.
- <u>Center for Iranian and Indian Worlds (MII</u>) is team of multidisciplinary research centered on the languages, the texts, the history, the cultures and the societies of the Iranian and Indian worlds, from the 6th century BC to our times (mixed research unit).

Research units by discipline :

- <u>Center for Language Structure and Dynamics (SeDYL</u>) is specialized in language sciences and focuses on the regions of the Americas and French overseas territories, the Baltic and Slavic areas, the Mediterranean, the Balkans, and Asia (mixed research unit).
- <u>Linguistics Research Center on East Asia (CRLAO</u>) offers studies in phonology, morphology, syntax and semantics of the languages of Eastern Asia, such as Sinitic, Tibeto-Burman, Japanese, Korean, Altaic, Austronesian or Austrasia languages (mixed research unit).
- <u>Center for Languages and Cultures of Sub-Saharan Africa (LLACAN</u>) focuses on parsing, typology, comparatism, reconstruction, language and pragmatics covering Sub-Saharan Africa (mixed research unit).
- <u>Center for Oral languages and cultures (LACITO</u>) is specialized in the description, documentation and analysis of under-documented languages of the world carrying out linguistic and anthropological fieldwork on all continents (mixed research unit).
- <u>Center for Texts, Computing, Multilingualism (ER-TIM</u>) carries out researches in linguistics engineering; semantics of texts, the development of methodology for the engineering of texts and multilingual digital documents, production of multilingual resources.



• <u>Language teaching and learning (PLIDAM</u>) has a multidisciplinary research area, from applied linguistics to language/culture teaching, pedagogy and education, social sciences, geopolitics and language policies, information and communication sciences, as well as educational technology.

• <u>Center for the world's written and oral literature (CERLOM</u>) possesses a unique research expertise on arts, oral and written literatures of five continents; thirty geocultural areas of Eastern Europe, the Near and the Middle East, Asia, America and Africa.

• <u>America, Africa and Asia Center for Social Sciences (CESSMA</u>) is multidisciplinary team gathering historians, geographers, sociologists, anthropologists, economists and demographers conducting researches on Central and South America, Africa, the Arab world, South Asia, the Southeast and Eastern Asia(mixed research unit).

Université Paris 13

The Université Paris 13 (UP13) is a multidisciplinary establishment, and a major player in higher education and research in the north of Paris. Its research community includes over 1 200 members and 600 PhD candidates with 25 research units. Their work covers a wide range of topics including mathematics, physics, IT, health, medicine, law, Economics, Management, Human and social sciences. This multidisciplinarity allows UP13 to offer competitive career-oriented courses and guarantees research excellence.

UP13 is a member of the Sorbonne Paris Cité (SPC) Community of Universities and Establishments. UP13 and SPC have a great experience in European research programmes, including European framework programmes and Marie Skłodowska-Curie actions. Moreover, UP13 and SPC provide administrative support and a staff of project managers dedicated to international projects. The Service d'Activités Industrielles et Commerciales (SAIC) of UP13 is the office dedicated to the management of National, European and International grants, which helps PIs in the implementation of research projects and takes care of the accounting (budget: over 9 million Euros each year). UP13 is currently the host institution of several Marie Skłodowska-Curie fellows and is implicating in several H2020 grants.

Research units (https://www.univ-paris13.fr/laboratoires/)

Law, Economics, Management :

•CEPN - Center of Economics of Paris Nord University, Research topics : Political economy, financialization globalization and employment, economic crisis and inequalities, migration, cultural and digital economy, health care management and economics, post-keynesian macroeconomics, finance analysis, science and innovation, strategic interaction, intellectual property, corporate social responsibility, development, global value chains, critical management studies and history of management (https://cepn.univ-paris13.fr/) •CERAL - Center for Public Policy Research, Research topics: Convergence of public policies, internationalization of political life, local governance, historical approach, comparison of political systems, environmental law (http://www.univ-paris13.fr/ceral) •CERAP - Center for Administrative and Political Study and Research, Research topics: Convergence of public policies, internationalization of political life, local governance, historical approach, comparison of political systems, environmental law (http://www.univ-paris13.fr/cerap) •IRDA : Research Institute for Legal Reform, Research topics: Corporate law, labor law, European and international private law, new technology law, environmental law, criminal sciences, intellectual property (http://www.univ-paris13.fr/irda)

Human and social sciences :

•UTRPP – Cross-disciplinary Research Unit: Psychogenesis and psychopathology, psychology, psychoanalysis, anthropology, <u>Research topics</u>: Linguistic cognitive processes, psychopathology in early childhood, occupational clinical psychology, psychological trauma, psychopathology in childhood and adolescence, trust and language, the masculine/feminine (<u>http://www.univ-paris13.fr/utrpp/</u>)





•EXPERICE – Center for Inter-university Research, Experience and Cultural Resources, <u>Research topics</u>: Education sciences, education services, infancy, professional training, learning spaces, games, etc. (www.univ-paris13.fr/experice/) •IRIS

- Institute for Interdisciplinary Research in Social Sciences, Politics and Health, <u>Research topics</u>: anthropology, sociology, public health, legal medicine, ethics, inequality, sociology, immigration (<u>http://iris.ehess.fr/</u>)

•LEPS - Laboratory of Health Education and Practice, <u>Research topics</u>: Therapeutic patient education, health education, health practice, public health (<u>https://www.univ-paris13.fr/leps</u>) •LABSIC – Laboratory of Information and Communication Sciences, <u>Research topics</u>: Studies of cultural structures, norms in communication acts, networking of health, interactivity in heritage, cultural and artistic practices, mobility through communication, communication and sustainable development (<u>https://www.univ-paris13.fr/labsic/</u>) •PLEIADE –

Multidisciplinary research center for Literature, Languages and Human and Social Sciences (<u>https://pleiade.univ-paris13.fr</u>)

Ethology :

•LEEC – Laboratory of Experimental and Comparative Ethology, <u>Research topics</u>: Study of the social behaviour of termites, bees, ants and rodents, biodiversity, human-animal relations (<u>www.leec.univ-paris13.fr</u>)

•CSPBAT - Laboratory for chemistry and the structures and properties of biomaterials and therapeutic

Health, Medecine :

agents, Research topics: Biomaterials, polymers, bioactive molecules, nanosensors, optical imaging, spectroscopy, nanomaterials, biological systems (https://cspbat.univ-paris13.fr) •EREN - Research team for nutritional epidemiology, Research topics: eating behavior, nutritional status of populations, the relationship between nutrition and health, epidemiology, chronic diseases (http//:www. univ-paris13.fr/eren/) •GISCOP93 -Scientific interest group for cancers of occupational origin in Seine-Saint-Denis, Research topics: public health, occupational health, cancer, social inequality, gender inequality, cancers of occupational origin, exposure to carcinogens in the workplace, compensation for occupational illness, etc. (https://giscop93.univparis13.fr/) LVTS – Laboratory of Translational Vascular Research, Cellular biochemistry, Research topics: biology, microscopy, animal experimentation, pharmacology, polymer synthesis, biomolecules, etc. (http://www.lvts.fr) •LI2P - Laboratory of Physiopathology and Rheumatoid Arthritis Targets and Therapies, Research topics: acute and chronic inflammation, immunopathology, biotherapies applied to joint diseases, chronic inflammatory diseases, rheumatoid arthritis. (http://www.univ-paris13.fr/li2p/) FGST Functional genomic of solid tumors, Research topics : Genomics of liver tumors, therapeutic targets, genomics of mesothelioma, genomics of renal cancers (zucmanlab.com) •LRPH - Laboratory of Hypoxia and Lung, Research topics : pulmonary fibrosis, hypoxia, lung inflammation, sarcoidosis, genetic, apoptosis, mesenchymal stem cells, reactive oxygen species. •IAME - Infection, Antimicrobials, Modelling, Evolution, Research topics : quantitative evolutionary microbiology, ecology, evolution and therapeutic of virulence and resistance in bacteria, antiretroviral resistance, genetic diversity and therapeutic strategies in HIV Infection (https://www.iame-research.center) Institute of Human Biomecanic Georges Charpark, Research topics : Modélisation musculo-squelettique et innovation clinique – Biomécanique, Sport, Santé et Sécurité – Biomécanique, Système nerveux : analyse et restauration du mouvement (biomecanique.ensam.eu) PROTECT Neuroprotection du cerveau en développement, Research topics : Physiopathologie et neuroprotection des atteintes du cerveau en développement, Physiopathologie et thérapie des maladies mitochondriales, Contrôle respiratoire néonatal et troubles du développement, The role of oxidative stress in white matter damage in the preterm newborn: an experimental and translational approach, molecular genetics and (http://www.idf.inserm.fr/rubriques/lesphysiology of the timing of the puberty. laboratoires/implantations/structures-de-recherche-paris-7/annexes2/umr-1141)





•BIOCANVAS – biomarkers and cardiac diseases, <u>Research topics</u> : physiopathology, diagnosis, therapy, prognosis, heart failure, cancer(<u>http://www.idf.inserm.fr/rubriques/les-laboratoires/implantations/structures-de-recherche-paris-7/annexes2/umr-942</u>)

•ASIH – Adaptateurs de signalisation en hématologie, <u>Research topics</u> : rôle(s) pathophysiologique(s) de complexes et de voies de signalisation clés impliqués dans certaines maladies chroniques d'origine hématologique (http://asih.univ-paris13.fr/index.php/13-inserm-umr-u978.html)

Mathematics, IT :

•LIPN - It laboratory of Paris-Nord, <u>Research topics</u>: Artificial learning, algorithms, logic, natural language, combinatorial optimization, automatic language processing, management of semantic resources, critical systems modeling. (<u>http://lipn.univ-paris13.fr/</u>)

•LIMICS – Laboratory in Medical Informatics and Knowledge Engineering in e-Health, <u>Research topics</u> : computer sciences, health, biomedical information, ontologies, terminologies, semantic annotation tools, decision support systems, translational bioinformatics and clinical research informatics. (<u>www.limics.fr/en</u>) •L2TI – Laboratory for Information Transport and Processing, <u>Research topics</u>: Image processing, networks, network security, data, social networks (<u>www.l2ti.univ-paris13.fr</u>) •LAGA

- Laboratory of Analysis, Geometry and Applications, <u>Research topics</u>: Mathematics, IT, signals, mathematics applied to biology, probability, statistics, electromagnetism, seismology, cryptography (<u>www.math.univ-paris13.fr/</u>)

Physics, materials, SPI :

•LPL – Laboratory of Laser Physics, <u>Research topics</u>: Nanotechnology, optics, lasers, photonics, molecules, etc. (www.lpl.univ-paris13.fr)

•LSPM – Laboratory of processes and Materials Science, <u>Research topics</u>: Plasmas (modeling, diagnostics, processes), nanostructuring of the diamond, nanostructures, nanomaterials (<u>www.lspm.cnrs.fr/</u>)

Université de Paris

Paris Descartes University with **University Paris Diderot** and **the Institut de Physique du Globe de Paris** are in the process of creating a new university to take effect mid-2019, called **"Université de Paris"**. The new university has the ambition of being a world-ranking intensive research university in the exact sciences, the life sciences and the human and social sciences, which will be the leading European academic institution in the field of health". All the laboratories and departments below will be part of the Université de Paris, organized in 4 different faculties.

IPGP - Institut de Physique du Globe

The Institut de Physique du Globe de Paris (<u>http://www.ipgp.fr</u>) is one of the very few institutions worldwide involved in intensive research in Earth, environment and planetary sciences. It hosts 16 research groups and a large computer facility, runs several networks of observatories (to monitor seismological, volcanic and magnetic activity, as well as erosion processes and the so-called critical zone, where interactions between mineral matter, life and human activity occurs), is involved in many campaigns at sea and on continents, and takes an active role in space missions. The array of research carried out is very broad and opportunities for young promising scientists are numerous. Current areas of priority, shared by all groups, involve four main themes : **Earth and planetary interiors, Natural hazards, Earth system science, Origins.** Applications relevant to any of these priority themes are particularly welcome.



Université Paris Descartes

With its nine Training and research departments (UFR) and its Institute of Technology (IUT), Paris Descartes University (https://www.parisdescartes.fr/) encompasses all the fields of knowledge of human and health sciences. It is the only university of the Ile-de-France region to offer medical, pharmaceutical and odontological studies; its health department is renowned in Europe and in the whole world for the high quality of its training and the excellence of its research. In 2017, Paris Descartes University has received the European Commission's Human Resources Strategy For Researchers (HRS4R) label. The University is thus recognised for its participation in the construction of the European Research Area, for the current quality of its human resources policy towards doctoral students, researchers and teacher-researchers and for its plan to improve this policy.

CANTHEL (Centre d'anthropologie culturelle) <u>http://canthel.shs.parisdescartes.fr/</u> •*Saskia COUSIN, Octabe DEBARY, Valérie ROBIN AZEVEDO, Marie SALAÜN* : This project articulates three complementary orientations on power dynamics and identity politics as dimensions for thinking about otherness and commonality in different intercultural contexts: "economies of otherness"; memory processes and patrimonialization; reconfiguration of power relations and new faces of resistance to domination in postcolonial contexts.

•Serena BINDI, Erwan DIANTEILL, Marie-Luce GÉLARD, Valérie ROBIN AZEVEDO : The field of anthropology of the body and disease is now the scene of a renewal. Understanding the issues surrounding the body, living or dead, intersects with various approaches to explore these new configurations. Among the axes pursued: the body as an object of power, within the framework of medical, political or religious practices, and the sensory universes defining uses and languages as substitutes for verbalizations.

COMETE (Chimie Organique, Médicinale et Extractive et Toxicologie Expérimentale) http://www.comete.cnrs.fr/

•Dr. Geoffroy SORIN : The project will be devoted to the exploration of unprecedented reactivities of metallic stable reaction intermediates or isolated titanium species through photochemistry and/or coupling reaction. Eco- friendly and naturally abundant titanium is envisionned regarding its ability to complex alkynes or alkenes. After subsequent trapping by an electrophile, the intermediates thus generated could be further involved in couplings or photochemical reactions.

•*Marie-Isabelle LANNOU :* Environmental concerns are of growing interest in pharmaceutical industry. Moreover, despite their scarcity, noble metals are still widely used as catalysts. Thus, the search for more eco-friendly catalytic processes is mandatory. In this field, nickel derivatives appear particularly attractive due to their ability to insert the C-O bond of oxygen-based electrophiles, readily available from biomass. Hence, we aim to develop new nickel based catalytic systems to promote cross-coupling reactions involving O-electrophiles in aqueous media.

Insitut Imagine (IHU Imagine-Institut des Maladies Génétiques) <u>http://www.institutimagine.org/fr/la-</u> <u>recherche/25-laboratoires-de-recherche/255-inflammatory-responses-and-transcriptomic-networks-in-</u> <u>diseases.html</u>

•*Mickaël MÉNAGER* : Our team, located at the Imagine Institute in Paris, intends to approach in a revolutionary way the complexity of innate immune responses and autoinflammatory syndromes, in the context of rare genetic diseases. We propose to perform state of the art single-cell transcriptomic analysis of peripheral mononuclear cells (PBMC) from patients suffering from interferonopathies, resulting from an excessive and uncontrolled type I Interferon (IFN) production. The postdoc will be integrating a team with already strong expertise in single-cell experiments and computational analysis. Network inference will help us to generate new and unbiased hypotheses, that will need further in vitro validation by the postdoc at the molecular level.



FETUS (Fédération pour la recherche en explorations thérapeutiques innovantes in utero) • *Julien STIRNEMANN* : Although efforts are made to develop prenatal therapies to reduce the burden of handicap in myelomeningoceles (MMC), the mechanisms and timing of spinal cord injury remains poorly understood.

Based on a unique postmortem population following termination of pregnancy, the study of europathological findings and amniotic fluid biomarkers will offer unique insight into the pathophysiology of this malformation, thus helping drive the research of new therapeutic targets and refine eligibility criteria for prenatal therapy.

INEM (Institut Necker-Enfants Malades - Centre de médecine moléculaire) <u>https://www.institut-necker-</u> enfants-malades.fr/index.php

•Xavier NASSIF & Mathieu COUREUIL : Neisseria meningitidis is an obligate human pathogen which has the ability to cross the blood brain barrier and to be responsible for meningitis (brain infection). Brain invasion is the consequence of bacterial adhesion and proliferation in blood microvessels, this vascular colonization leads to endothelial dysfunction and to vascular leakage associated with opening of the blood brain barrier. Our aim is to determine the endothelial cell factors which are involved in these processes and to decipher the underlying molecular mechanisms, using innovative cellular and humanized mice model.

•Alain CHARBIT : S. aureus adaptation to chronic infection has been shown to correlate with the accumulation of genomic modifications altering its metabolism, and the expression of multiple virulence genes. The overall aim of this program will be to decipher the mechanisms that drive the adaptation of S. aureus when submitted to strong selective pressure in vivo, using Cystic Fibrosis (CF) lungs as a model. This project will benefit from very solid preliminary data previously obtained by our team and its collaborators.

•Guillaume CANAUD : Our goal is to understand the physiopathology and to discover new treatments for rare disorders involving the PIK3CA/AKT/mTOR pathway. Our research is supported by the European Commission (European Research Council Starting grant acronym PAPA_Study and European Research Council Proof of Concept grant, acronym CureTheCloves) but also by several Foundations.

The laboratory is located at the Necker Hospital (Paris). The team belongs to the INEM (Institut Necker Enfants Malades) and the Renal division.

Guillaume Canaud's team aims at working on the discovery of new treatment for rare disorders involving the PIK3CA/AKT/mTOR pathway. Our goal is to offer to patients molecular targeted therapy.

To this aim we are using complementary in vivo and in vitro approaches, innovative new technology of bioengineering and we develop genetically modified mouse models.

The power of our Institution is to be located in the close vicinity of the clinical department allowing bed to benchside or vice et versa approaches. Using this method, we discovered promising treatment for other disorders such as mitochondrial diseases, antiphospholipid vasculopathy, CLOVES syndrome or other PIK3CA related overgrowth syndrome.

CRESS (Centre de recherche épidémiologies et biostatistique Sorbonne Paris Cité) www.cress-umr1153.fr

•*Raphaël PORCHER & Anna CHAIMANI*: Network meta-analysis (NMA), an innovative evidence synthesis approach, has yielded a paradigm shift in health care research. By considering evidence in the more realistic setting of all relevant information sources, it allows to best inform clinical practice and decision-making. However, several methodological issues, such as analysis of 'weak' networks, combination of different data types, definition of nodes, adaptation of results to personalized medicine, remain to be addressed to broaden NMA benefits and avoid misleading conclusions.

Institut Cochin https://www.institutcochin.fr/la-recherche/3i/equipe-niedergang

•*Florence NIEDERGANG* : Macrophages are central for pulmonary host defense. They regulate immunity and play a key role in airway homeostasis by clearing bacteria and debris. Respiratory viral infections, especially with human rhinovirus, are a major cause of exacerbations and bacterial superinfections.





The project is to better understand why, based on results obtained in the host laboratory showing that rhinovirus-infected macrophages have profound perturbations of their expression programs, and their phagocytic and activation capacities.

Centre de psychiatrie et neurosciences (Team Synaptic Plasticity and Neural Networks) <u>https://cpn.paris5.inserm.fr/recherche/equipes-et-projets/16-equipe-chevaleyre-piskorowski</u> •*Rebecca PISKOROWSKI :* The focus of my team's research is to better understand how the hippocampus processes different types of information, and how this process changes under conditions of psychiatric disorders. Specifically, we aim to better understand which hippocampal regions are specifically excited by social information and how this input alters hippocampal output. To do this, we plan to use a combination of techniques, including transgenic animal models, acute slice electrophysiological recordings and in vivo imaging and recording.

Université Paris Diderot

Université Paris Diderot is a leading public research multidisciplinary university in France. With its 29,000 students, its 2,500 scientists and its 87 research laboratories, the University has acquired an international reputation for the excellence of its standards of research in science, medicine, dentistry, humanities and social sciences. Created in 1970, according to the humanist principles of the encyclopaedist Denis Diderot, the university's ambition is to enlighten the 21st-century society by opening up new fields of study, renewing traditional disciplines, and connecting with the community at large. In 2017, Paris Diderot was ranked 1st in France in the CWTS Leiden's ranking of PPtop10% measuring citation impact. Since 2016, the university is part of The Guild of European Research-Intensive Universities, a group of 19 of Europe's most distinguished research-intensive universities in fourteen countries. In 2017, the University has obtained the European Commission's Human Resources Strategy For Researchers (HRS4R) label, showing its commitment to the principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers.

Institut Universitaire d'Hématologie (IUH) "Différenciation des lymphocytes et hémopathies lymphoïdes" <u>http://w3.univ-paris-diderot.fr/IUH/pg.php?np=102</u>

•*Michèle GOODHARDT*: The role of heterochromatin in hematopoietic stem cell aging: this project is focused on the molecular mechanisms underlying hematopoietic stem cell aging and loss of lymphoid potential. Based on previous findings of our lab, the impact of age on nuclear organization and heterochromatin compartments in human HSC and recently identified early lymphoid progenitor populations will be investigated using state-of-the art epigenomic and immunoFISH techniques. (Aging, Stem cells, Epigenetics, B lymphocytes)

Institut Universitaire d'Hématologie (IUH) - "Genetic Variation and Human Diseases" http://genestat.inserm.fr/en/

•*Florence DEMENAIS* : Our project aims at uncovering the molecular mechanisms underlying the effects and interactions of genetic and environmental factors on asthma (and asthma-related phenotypes) through integrated analyses of multi-omics data such as epigenomics, transcriptomics, and metabolomics in large datasets (several thousands of subjects with many clinical, phenotypic, environmental and genetic data) available in our lab and in the framework of European and International collaborations. (Statistical genetics, biostatistics, computational science, genomics, epigenetics, methabolomics, asthma)

Institut Universitaire d'Hématologie (IUH) - "Ecotaxie, Microenvironnement, et développement lymphocytaire" http://www.inserm-umrs1160.com/?lang=en

•Antoine TOUBERT : Genetic control of human thymopoiesis. The project is based on the recent discovery from our laboratory that a genetic variation in the T-cell receptor locus associates with marked differences in the levels of thymic function among healthy individuals.



Our objective is to define the mechanisms that govern such differences in T-cell development. Skills in Molecular Biology, Immunology and Bioinformatics will be appreciated. (Immunology, Molecular Biology, Bioinformatics)

Institut Jacques Monod –Team "Mechanotransduction: from cell surface to nucleus" http://www.ijm.fr/en/research/research-groups/mechanotransduction/

•*Nicolas BORGHI* : Mechanotransduction: from cell surface to nucleus. In multicellular organisms, cells generate and undergo mechanical forces that shape tissues and organs, and regulate genetic programs. Using novel genetically encoded biosensors and advanced microscopy and micromanipulation tools, we seek to understand the underlying mechanisms. (Mechanotransduction, Quantitative Microscopies, Cell Biophysics)

Institut Jacques Monod – Team "Regulation of Cell-Fate Specification in the Mouse" <u>https://www.ijm.fr/en/93/research-groups/cell-fate-specification.htm</u>

• Jérôme COLLIGNON : Having found that critical cell-fate decisions in the preimplantation mouse embryo and in human metastatic cancer cell lines are dependent on the gene Nodal but not on its usual signalling pathway, we want to elucidate its alternative modes of action in both contexts. (Proteomics, genome editing, live imaging, transcriptomics, exosomes, embryonic stem cells, antisense RNA, enhancers)

Institut Jacques Monod Team "Molecular Virology" <u>https://www.ijm.fr/en/117/researchgroups/molecular-virology.htm</u>

•Isabelle JUPIN : Assembly, membrane targeting and regulation of viral replication complexes. The close association of viral replication complexes with intracellular membranes is a universal feature of eukaryotic positive-strand RNA viruses. How virus infection induces severe reorganization of intracellular host membranes and organelle structure is a fascinating and so-far poorly documented question. In recent years, an avenue of investigation at the interface of molecular virology and cell biology has emerged, due to powerful reverse genetic tools and the development of novel cell imaging techniques. We aim to investigate those questions using a plant virus, TYMV, as a simple model system. (Viral replication complexes, membrane remodeling, cell imaging).

Institut Jacques Monod – Team "Membrane Trafficking, ubiquitin and signaling" https://www.ijm.fr/en/657/research-groups/leon.htm

•Sébastien LÉON: Endocytosis and the metabolic landscape of yeast colonies: Much like tumors, yeast colonies are very heterogenous. The local proliferation of cells creates sharp nutrient gradients, leading to metabolic adaptation/differentiation. We will investigate how the endocytosis of nutrient transporter contributes to this process and drives the evolution of a multicellular community (live cell/colony microscopy, microfluidics, proteomics, genomics, genetic screens)

Institut Jacques Monod – Team "Biogenesis and Genome Homeostasis" https://www.ijm.fr/en/975/equipes/rna-biogenesis-and-genome-homeostasis.htm

•*Benoît PALANCADE* : Dissecting the bases of transcription-associated genetic instability in eukaryotes: towards the identification of cis-acting elements and trans-acting factors modulating the formation of DNA:RNA hybrids. (Genome biology, genetic stability, gene expression, RNA biogenesis, DNA:RNA hybrids, epigenetics)

InstitutJacquesMonod–team"StemCells,DevelopmentandEvolution"https://www.ijm.fr/en/895/research-groups/stem-cells-development-and-evolution.htm•MichelVERVOORT :Study of the fundamental mechanisms underlying regenerative abilities in animals, using the•Michelemerging model species, Platynereis dumerilii, which can regenerate both various types of differentiatedstructures (e.g., limbs) and stem cells involved in growth. (Stem Cells, Regeneration, Cellular Reprogramming)





Laboratoire Matière et Systèmes Complexes (MSC) <u>http://www.msc.univ-paris-diderot.fr/~berret/jfb-main/Home.html</u>

•Jean-François BERRET : Microfluidics and microrheology of mucus and surfactant lung fluids in healthy and pathological conditions. In the lungs, the epithelium is lined with biological fluids, the mucus in the bronchi region and the surfactant in the alveoli region. In normal physiological conditions, these fluids are submitted to shear stresses and flow. The goal of this project is to study the interfacial and mechanical properties of lung fluids under healthy and pathological conditions. The results will allow predicting will help in determining new diagnosis and therapeutic procedures in cases of acute respiratory distress syndrome. Cases of impairment due to lung dysfunctions and inhaled nanoparticles will be studied.(Lung fluids, microfluidics, microfluid

Laboratoire Matière et Systèmes Complexes (MSC)

•Samuel BOTTANI : Theoretical approach and modeling of neuronal network cultures : towards neuronal devices and neuronal disease models. In strong collaboration with leading experimental groups our lab focuses on theoretical studies on neuronal cultures' activity and development on the following three main directions: 1) emergence of collective behaviors and organization in neuronal networks in culture; 2) information processing and learning in neuronal cultures; 3) robustness of neuronal networks against degenerative disease spreading and attacks (Alzheimer, Parkinson, tumors...) : theoretical support towards neuronal culture based disease models. (Theoretical, neurosciences, computational neurosciences, connectomics, neuronal devices, neuronal diseases, complexity science)

Laboratoire Matière et Systèmes Complexes (MSC) http://biother.net

•*Florence GAZEAU* : Engineering of clinical-grade fit-for-purpose extracellular vesicles as potent biogenic effectors for drug delivery and subcellular therapy in regenerative medicine. This multidisciplinary project will pave the way for the next generation of drug delivery vectors with intrinsic biological activities (nanomedicine, theranosis, cell therapy, nanoparticle, extracellular vesicle, exosome, personalized medicine, bioengineering)

Laboratory Matières et systèmes complexes (MSC) http://www.msc.univ-paris-diderot.fr/

•*Pascal HERSEN :* Cybergenetics: exploring, developping and using external feedback loop control to remotely pilot gene expression and cellular behaviour at the single cell level. The hosted researcher will take part in the development of this novel field of research, with a focus on optogenetic control of cellular functions and synthetic circuits. (Systems Biology, Synthetic Biology, Microfluidics, Single cell Microscopy, Optogenetics, Cybergenetics, Biophysics)

Matériaux et Phénomènes Quantiques (MPQ) <u>https://www.mpq.univ-paris-diderot.fr/?lang=en</u> •Yann GALLAIS : Quantum materials offers a wide array of fascinating phases of matter: from superconductivity to topological spin liquids. In this projets we will aim at probing and manipulating these exotic phases of matter in the time domain using tailored ultrafast light pulses combined with ultra-sensitive spectroscopic tools. The ultimate goal will be the quantum control of electronic phases and in order to reach materials' properties on-demand (Quantum materials, non-linear optics, ultrafast phenomena, time resolved spectroscopy, THz and Raman spectroscopy)

Matériaux et Phénomènes Quantiques (MPQ) <u>https://www.mpq.univ-paris-diderot.fr/?lang=en</u> •*Sara DUCCI* : On-chip generation and manipulation of quantum states of light. The goal of this project is to develop novel quantum devices based on AlGaAs and to experimentally engineer quantum states of light for various quantum information applications. The project can also include the development of hybrid devices combining the most promising material platforms.(Integrated quantum optics, Quantum information, Semiconductor devices)



Matériaux et Phénomènes Quantiques (MPQ) <u>https://www.mpq.univ-paris-diderot.fr/?lang=en</u> •*Giuseppe LEO :* We will study and control the quantum properties of nonclassical light generated in dielectric nonlinear metasurfaces by spontaneous parametric down-conversion. Depending on materials, geometry and position of the nanoresonators, we will both explore fundamental light-matter interaction at the nanoscale and demonstrate a quantum endoscope for quantum imaging.

Paris Center for Cosmological Physics http://pariscosmo.in2p3.fr/en

•*Matteo BARSUGLIA* : Cosmology and gravity with Gravitational waves. The first detections of gravitationalwaves by LIGO and Virgo opened a new observational window for astrophysics and cosmology. The subject of this work is to use future gravitational wave detections by LIGO/Virgo/KAGRA to constrain the Hubble constant, as well as other cosmological parameters such as the equation of state of dark energy, and even the nature of gravity itself. (Cosmology, gravitational-waves, LIGO, Virgo)

Centre for Nanoscience and Nanotechnology (C2N) <u>https://www.c2n.universite-paris-saclay.fr/en/</u> •*Rémy BRAIVE :* Optomechanics is about measuring Brownian motion of micro-nano object (eg. photonic crystal). In this frame, noise is seen as a disturbance. However we can take advantage of noise-aided processes in nonlinear regime to enhanced detection of weak signals for potential use and applications. (Optomechanics, nonlinear dynamics, photonic crystal, noise)

Laboratoire d'électrochimie moléculaire (LEM)

http://www.lemp7.cnrs.fr/directories/personal/M_Robert_en.htm

•*Marc ROBERT* : Artificial photosynthesis - From CO2 to fuels (designing new hybrid systems including molecular metal complexes connected to inorganic materials for the catalytic conversion of carbon dioxide into liquid or gaseous fuels (solar fuels, renewable fuels, artificial photosynthesis, molecular catalysts)

Interfaces Traitements Organisation et DYnamique des Systèmes (ITODYS) <u>https://www.itodys.univ-paris-diderot.fr/fr/</u>

•*Frédéric KANOUFI* : Operando benchmarking of nano-electrocatalysts. The project aims at making optical microscopies a unique tool for not only seeing but quantitatively benchmarking in real time and operando the electrocatalytic performances of the tiniest individual nanoparticles (Electrochemistry, optical microscopy, image analysis)

Laboratoire Interuniversitaire des Systèmes Atmosphériques (LISA) http://www.lisa.univ-paris12.fr/en

•*Paola FORMENTI* : The research aims at investigating the fundamental aerosol-cloud-radiation interactions which rule the effect of atmospheric aerosols on the Earth's climate, to understand and predict its evolution. It is based on laboratory simulation in the advanced smog chamber of LISA (UMR CNRS, University Paris Diderot), part of the Eurochamp-2020 research infrastructure, as well as field observations in southern Africa, where the LISA maintains a long-term observatory.(Climate change, atmospheric aerosols, field observations, southern Africa)

Laboratoire de linguistique formelle (LLF) http://www.llf.cnrs.fr/en

ABEILLE : Experimental syntax. Recent research has shown the relevance of a fine-grained view of graded acceptability. A degraded sentence may not be part of our grammar, challenge our processing capacity, or be inappropriate in the current discourse. Our aim will be to determine the respective weight of these factors for phenomena central to syntactic theories from a cross-linguistic perspective using corpus analyses and experimental data. The project will be co-supervised by Barbara Hemforth, in collaboration with Ted Gibson (MIT). (Syntax, experimental linguistics, graded acceptability)

Laboratoire de linguistique formelle (LLF) http://www.llf.cnrs.fr/en

• *Ewan DUNBAR* : Empirical studies of linguistic discrimination in France. We invite international candidates with a background in linguistic variation to develop a research project studying linguistic variation and linguistic discrimination in France. Projects based on large-scale corpus phonetics, and/or on performing

•Anne





empirical work (psycholinguistic or other) quantifying the effects of linguistic discrimination would be particularly welcome. Candidate would be co-supervised by Heather Burnett and work in close collaboration with other members the Parisian linguistic research community. (Sociolinguistics, French, linguistic discrimination)

Laboratoire de linguistique formelle (LLF) http://www.llf.cnrs.fr/en

•Jonathan GINZBURG : Integrating dialogue and probabilistic semantics. Recent work has shown how vagueness, modality, and a variety of pragmatic inferences can be captured rigorously and subject to experimental testing using probabilistic meanings. This project will address the challenge, so far unmet, of integrating such work with contemporary dialogue semantics, that offers detailed models of context and serves as the theoretical basis for spoken dialogue systems. (Dialogue, probabilistic semantics, dialogue systems)

Laboratoire de linguistique formelle (LLF) http://www.llf.cnrs.fr/en

•*Chris REINTGES* : Greenberg's Lineage: Revisiting the morphological and syntactic parallels between the Afroasiatic and Celtic Verb–Initial Languages. J. Greenberg's (1963) work first noted the significant parallels between the Celtic and Afroasiatic VSO languages. Based on a refined typology, the project will reassess the Celtic/Afroasiatic parallels in morphology and syntax, both synchronically and diachronically, the latter including parallel grammaticalization paths. (Linguistic typology, Afroasiatic languages, Celtic languages.

Université Sorbonne Nouvelle

The University Sorbonne Nouvelle is the leading French institution in the field of Artistic & Cultural Studies, and also has several strong research centers in Social Sciences & Humanities. Its capacity of research is built around 29 research units collaborating through 5 doctoral schools, multiple programs, centralised administrative services and a physical implantation in the heart of the Latin Quarter in Paris. Two research units are specifically looking for candidates in the indicated fields :

THALIM - Théorie et histoire des arts et des littératures de la modernité http://www.thalim.cnrs.fr/

- •Art & literature
- Medical humanities
- •Ecopoetry and environmental themes
- •Theatre studies
- •Cinema studies
- Digital humanities

IRMECCEN - Institut de Recherche Médias, Culture, Communication et Numérique <u>http://www.univ-paris3.fr/irmeccen-447954.kjsp?RH=1179925961149</u>

•Youtube as a political expression arena

- •Julien Mésangeau : Extreme speeches, behaviours and emotions on line.
- •Information pluralism and digital platforms regulation.
- •Gérôme Guibert : Interdependence of performing Arts and cultural industries.
- •Nick Rees-Roberts : Cultural scenes, creation, fashion, design and cultural industries.

Other research units might be open to candidates in disciplines such as Law, Economy, History, Information & communication and other various fields, like Latin America studies, European Studies, Asian Studies or Language Sciences.

To find out more, you can browse through our complete list of research units : <u>http://www.univ-paris3.fr/unites-de-recherche-34.kjsp</u>





Or visit our Home of Research ("Maison de la recherche") : <u>http://www.univ-paris3.fr/la-maison-de-la-recherche-3029.kjsp</u>

Sciences Po

Sciences Po (<u>http://www.sciencespo.fr/en</u>) is a fully-fledged, self-governing research university specialised in the social-economic sciences and the humanities. Sciences Po is the leading research university in the social sciences in France with 60 full-time professors, more than 200 researchers, 80 foreign professors invited each year and 400 academic partnerships with universities around the world. Sciences Po is home to a doctoral school offering 7 graduate programmes to around 400 Ph.D. students.

Based on a multi-disciplinary approach, it associates and combines skills and know-how from the different social sciences – in particular, political science and sociology, law, economics, history (<u>http://www.sciencespo.fr/en/research/our-fields-study</u>).

The Observatoire sociologique du changement (OSC)

- Ettore RECCHI : The intersection of international mobility and social inequalities
- Ettore RECCHI : Longitudinal data-based analyses of spatial mobility careers
- Emmanuelle FERRAGINA : Welfare regime theory, family and labor market policy and social capital

The Center for the Sociology of Organizations (CSO)

• *Emmanuel LAZEGA* : The emergence of a new harmonized European intellectual property regime and its propensity to encourage various kinds of innovation with a focus on social and organizational network analysis (1. dynamics of multilevel networks; 2.comparing social networks)

• Didier DEMAZIÈRE : unemployment and women's work in Europe

• Martin GIRAUDEAU : historical sociology of venture capital, accounting

The Law School

•*Guillaume TUSSEAU :* "(comparative) theory of constitutional law" and other research themes: constitutional law; comparative Law; theory of law

•Loïc AZOULAI : research themes : European law, European Economic Law, Internal Market, European Migrants Law, Immigration, Law and State, society, persons; Law and philosophy, Law and social sciences •Séverine DUSOLLIER : Intellectual rights; Law of literary and artistic property; Law of Information and Communication Technologies; Property law

The Center of History at Sciences Po

•*Alain CHATRIOT* : Professor of Modern History. Political History; France; Europe; Public Policies; Administrative History; Rural History

• *Mario DEL PERO* : Professor of International History. XX Century International Relations; United States in the World ; Cold War History

• Sabine DULLIN : Professor of Modern History. Political history. Russia and Eastern Europe Transnational communism. Border studies

• Gerd RAINER HORN : Professor of XX Century Political History. Radical Catholicism ; The Long Sixties ; The Moment of Liberation (1943-1948) ; Antifascism in the Interwar Period

• *Marc LAZAR :* Professor of Political History and Sociology. Italian and French Political History; Comparative Politics; History of the European Left, European Populism

• Emmanuelle LOYER : Professor of Modern History. Cultural History; Intellectual History; History and Literature

•*Elissa MAILÄNDER* : Associate Professor of Gender History and Violence. XX Century; Sexual Violence in Armed Conflict, Critical Military Studies, Visual History.





•*Giacomo PARRINELLO* : Assistant Professor of Environmental History. Environmental history of Europe and the Mediterranean 19th-20th centuries; water history, disaster history/studies; coastal and marine environmental history"

•*Guillaume PIKETTY:* Professor of Modern History. War, Resistance and Society (late 19th and 20th Century). Coming out of War (late 19th and 20th Century). History of emotions.

• Paul-André ROSENTAL: Professor of Modern History. Biopolitics; Social History; History and Social Policy of Populations

• *Nicolas DELALANDE:* Associate Professor of Modern European History. XIX-XXth Century ; Political Economy ; State and Society ; Labour History ; Transnational History ; Inequality and Redistribution

Centre for European Studies and Comparative Politics (CEE) Research axes:

•the transformations of capitalism

- the state as a producer of public policies
- Cities, borders and (im)mobilities
- tensions in representative democracy