



# Marie Sklodowska Curie Meet-Up Sorbonne Paris Cité Call for proposals

You are a post-doc or experienced researcher and would you like to expand your experience with a stay in a French research group. You are ready for a new challenge and an international career. You want to broaden your network and mature 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>

Sorbonne Paris Cité (SPC) launches a call to attract future MSCA Fellowship candidates and support them with their IF 2020 applications. Beneficiaries of the SPC call for proposals will be funded for a two-day stay in Paris for meeting, training and support.

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

# What is the MSCA Meet-up?

A two-day event in Paris, 25 & 26 June 2020:

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- Day 1: welcome by the SPC European Research Network, specialized training on how to write "Individual Fellowships" proposals and dedicated support from the Research managers of the host institution
- > Day 2: visit of the host laboratory and exchange with the supervisor

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

**Sorbonne Paris Cité (SPC)** is a world class comprehensive cluster of universities in and around Paris. It brings together 11 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).

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# 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 January 29<sup>th</sup> 2020, 1 pm (Paris time).

No proposals will be accepted after this submission deadline.

Results will be announced in March 2020.

#### Priority fields open to candidates

SPC 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. Applications dealing with other fields will be considered but will not be prioritized.

- FMSH Fondation Maison des Sciences de l'Homme
- Ined Institut National d'Études Démographiques •
- Inalco Institut National des Langues et Cultures Orientales •
- IPGP Institut de Physique du Globe de Paris .
- **Sciences Po** •
- Université de Paris
- **Université Paris 13**











# 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 Humanitarian Studies science platform 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 decompartmentalization 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 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.

# Ined – Institut National d'Études Démographiques

Ined was founded in 1945 with the following missions: to study the populations of France and other countries, to ensure wide dissemination of the knowledge thereby acquired, and to provide training in research through research. Ined's approach to demography is resolutely open and interdisciplinary, implicating a wide range of disciplines including economics, history, geography, sociology, anthropology, biology and epidemiology. With its research units, the Institute promotes communication and exchange within the scientific community and between researchers and the general public while conducting numerous European and international research projects.

Research at Ined is organized around multidisciplinary and topic-focused teams made up of its own permanent researchers and associated researchers. Institute research units host doctoral students and postdocs for training in and through research. Over 70 multi-annual projects are under way. For some, Ined designs and carries out its own surveys—one of its specificities. Collected data are then made available to the scientific community.

#### Research Units:

Ined's research teams are organized into 10 units and one mixed research unit (UMS), each handling a particular theme or area or applying a specific scientific approach. Three of these teams are mixed, meaning they include researchers from other institutions. Each researcher belongs to one team and may choose to join a second one.

- Fertility, Families and Couples [UR03]
- Gender, sexuality and inequalities [UR04]
- Mortality, Health and Epidemiology [UR05]
- Housing, spatial inequalities and trajectories [UR06]
- International migrations and minorities [UR08] Economic Demography [UR09]
- History and Population [UR11]











- Trajectories and territories [UR12]
- Sexual and reproductive Health and Rights (Research team in partnership with Inserm Univ Paris-Sud - UVSQ) [UR14]
- DEMOSUD Demography of Southern populations [UR15]
- French Longitudinal Study of Children (UMS: Ined-Inserm-EFS) [UR10]

# Inalco - Institut national des langues et civilisations orientales

Founding member of Sorbonne Paris Cité (SPC) 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 **14 research centers** (6 Inalco-specific and 8 mixed units in partnership with research institutions such as <u>CNRS</u>, <u>EHESS</u>, <u>Université de Paris</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 geographical area:

• <u>The French Research Institute on East-Asia (IFRAE</u>) is a new research team (merger of ASIA and CEJ, the Japanese research center) covering a vast geographical area, and focusing on the study of cultural areas in a comparative, regional and/or interdisciplinary approach (mixed research unit).

• <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>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.







• Middle East and Mediterranean Research Center (CERMOM) 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.

 Center for Languages and Cultures of North Africa and Diasporas (LACNAD) 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 domain:

• Center for Language Structure and Dynamics (SeDYL) 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).

• Linguistics Research Center on East Asia (CRLAO) 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).

• Center for Languages and Cultures of Sub-Saharan Africa (LLACAN) focuses on parsing, typology, comparatism, reconstruction, language and pragmatics covering Sub-Saharan Africa (mixed research unit).

• Center for Oral languages and cultures (LACITO) 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).

 Center for Texts, Computing, Multilingualism (ER-TIM) 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.

 Language teaching and learning (PLIDAM) 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.

 America, Africa and Asia Center for Social Sciences (CESSMA) 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).















# 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 (http://www.sciencespo.fr/en/research/our-fields-study).

#### The Center for Socio-Political Data - CDSP (UMS 828)

The CDSP provides documented and scientifically validated socio-political data for research by archiving, disseminating, and contributing to international survey programs. It also supports training in data collection and analysis.

#### The Centre for European Studies and Comparative Politics - CEE (UMR 8239)

CEE's projects combine basic and applied research, and focus on four main areas: a crosscutting approach to European studies; the inter-linkage between participation, democracy and government; election analyses: new paradigms and tools; the restructuring of the state and public action.

#### The Centre for International Studies - CERI (UMR 7050)

The CERI analyses foreign societies, international relations, and political, social and economic phenomena across the world from a comparative and historical perspective.

#### The Centre for Political Research - CEVIPOF (UMR 7048)

CEVIPOF research focuses on two main areas. The first includes political attitudes, behaviour and parties; the second involves political thought and the history of ideas.

#### The Centre for History - CHSP (EA 113)

CHSP research has evolved over time to focus on five major topics: arts, knowledge and culture; wars, conflicts and violence; states, institutions and societies; the political and cultural history of contemporary France; from local to global: international history and its levels.

#### The Centre for the Sociology of Organizations - CSO (UMR 7116)

The CSO works at the intersection of the sociology of organizations, sociology of public policy, and economic sociology. Its five major research programmes address fundamental issues such as higher education and research, healthcare, sustainable development, the evolution of firms, and the transformation of the state.

#### The Center for Studies in Social Change - OSC (UMR 7049)

The OSC is a broad-based, comparative research center in sociology. Researchers at the OSC investigate social dynamics in contemporary societies, particularly urban, school and gender inequalities, stratification and social mobility, and ethnoracial or social segregation.

#### The Department of Economics (UMR 8259)

Research in the Department of Economics contributes to the development of methodology and economic analysis. Its research focuses in particular on the labour market, international economics, political economy, microeconomics and development.

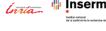
#### The Law School (EA 4461)





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The Law School's research focuses on globalization, legal cultures and the economics of law. In addition, a number of works address the theory and history of law, public and private international law and intellectual property.

#### The médialab (EA 7033)

The médialab is a digital laboratory devoted to the study and exploitation of data generated by new information technologies, as well as the study of their means of production and circulation.

#### The OFCE

The OFCE is an independent body that produces forecasts, and researches and evaluates public policy. It covers most areas of economic analysis, from macroeconomics, growth, social protection systems, taxation and employment policy, to sustainable development, competition, innovation and regulation.

# <u>Université de Paris</u>

**Université de Paris** has been created mid-2019 by the merger of former universities Paris Descartes and Paris Diderot, and the inclusion of the **Institut de Physique du Globe de Paris.** This 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.

# 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 Jacques Monod (CNRS/Université de Paris) is one of the main centers for basic research in biology in the Paris area – Team « Stem Cells, Development and Evolution » - <u>https://www.ijm.fr/en/895/research-groups/stem-cells-development-and-evolution.htm</u>

•*Michel VERVOORT & Eve GAZAVE:* Study of the fundamental mechanisms underlying regenerative abilities in animals, using the emerging model species, *Platynereis dumerilii*, which can regenerate both various types of differentiated structures (e.g., limbs) and stem cells involved in growth.

• Keywords: Stem cells, regeneration, cell reprogramming, growth.

#### Laboratoire d'Informatique Paris Descartes (LIPADE)

• Themis Palpanas There is an increasingly pressing need, by several applications in diverse domains, for developing techniques able to index and perform complex analytics on very large collections of data series (i.e., sequences of values). In order to efficiently process and analyze large volumes of data series, we have to operate on summaries (or approximations) of these data series, which are subsequently indexed in order to enable fast and scalable similarity search query answering. The purpose of this project is to design techniques for applying machine learning algorithms on truly massive collections of data series. We will







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study the most prominent machine learning techniques, and propose novel, scalable algorithms that implement these techniques. We will also examine how data series indexes can be used to this effect, and to what extent they can contribute to the scalability of machine learning techniques. http://lipade.mi.parisdescartes.fr/?page\_id=89&lang=fr

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, microfluidics, microfluidics).

The Matériaux et Phénomènes Quantiques (MPQ - UMR7162) laboratory is a joint research unit of Université de Paris and CNRS with 120 active personals, including 9 post-docs and 34 PhD students. This is an internationally leading laboratory for cutting-edge research in quantum materials and the development of novel quantum devices. Within the MPQ lab, the SQUAP team is composed of 4 permanent staff (3 faculties and 1 engineer) and is a world-leading research group in optical spectroscopy studies of quantum materials. The team is expert in Raman scattering measurements under extreme condition of temperature, pressure and magnetic fields. It is currently developing novel experimental tool dedicated to time domain measurement, like time resolved Raman scattering. The candidate is expected to be a driving force for these developments. <u>https://www.mpq.univ-paris-diderot.fr/?lang=en</u>

• Yann GALLAIS: Time-resolved and non-linear optical spectroscopies of Quantum materials.

• Keywords: Condensed matter physics, Quantum materials, Raman scattering, Superconductors, Quantum magnets, time-resolved spectroscopy, Non-linear optics.

Matériaux et Phénomènes Quantiques (MPQ). The QITe team at Laboratory Matériaux et Phénomènes Quantiques (Université de Paris/CNRS) is at the international forefront in the development of entangled photon pair sources based on a semiconductor platform (AlGaAs) and exploiting both discrete and continuous degrees of freedom of light. <u>https://www.mpq.univ-paris-diderot.fr/?lang=en</u>

•Sara DUCCI: Semiconductor quantum light chips at room temperature. The postdoctoral fellow will participate to the experimental investigation of the quantum states produced by these devices and to their engineering and manipulation for applications in quantum communications, simulations, metrology. He/she will also have the opportunity to participate to the implementation of an interface between these sources and miniature trapped ions chips developed in the group opening promising perspectives for future quantum networks. The applicant should have a solid background in experimental quantum optics.

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• Keywords: quantum information, experimental quantum photonics, entangled photons.

Paris Center for Cosmological Physics <a href="http://pariscosmo.in2p3.fr/en">http://pariscosmo.in2p3.fr/en</a>

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•*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)

The Centre for Nanoscience and Nanotechnology (C2N - Palaiseau) hosts the largest academic clean-room in France as well as cutting-edge experimental set-up to perform this project. <u>https://www.c2n.universite-paris-saclay.fr/en/</u>

•*Rémy BRAIVE:* Nonlinear dynamics of coupled optomechanical photonic crystal resonators open new avenues in various fields of physics. Thus, chaotic behaviour, synchronization and noise-induced phase transition can be studied in order to enhanced detection of weak signals for potential use and applications.

#### 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)

ITODYS Laboratory (Interfaces, Organisation et Dynamique des systems - UMR7086) is a joint unit of Université de Paris and CNRS attached to the CNRS Institute of Chemistry and its sections 13 and 15 of the National Committee. The ITODYS brings together 73 permanent staff (39 lecturerresearchers, 12 CNRS researchers and 22 BIATSS) and 40 doctoral and post-doctoral students, ie 113 people around 3 scientific departments, a molecular modeling team and common services. The laboratory develops research activities around surface chemistry, interfaces, nanomaterials and nanosystems and molecular chemistry for nanosciences. The broad thematic spectrum explores different aspects of the physical chemistry of molecules. nanosystems and nanomaterials: Nanoelectrochemistry, molecular plasmonics, electrochemical biosensors, functionalized and nano-structured surfaces, organic electronics, nanomaterials and hybrid materials, supramolecular assemblies, molecular modeling are the themes the most salient. The laboratory has a fleet of equipment for the characterization of materials, surfaces and nano-systems (SEM, AFM, XPS, X-ray diffractometry, Raman, IR, SECM, GC-MS, NMR...). This equipment is complemented by an activity of a theoretical nature, which benefits from access to both internal and external computing resources. https://www.itodys.univ-paris-diderot.fr/fr/

• *Roberta BRAYNER:* Development of polyol-based Au@Fe2O3 nanoparticles functionalized by polyethylene glycol (PEG) for Photothermal Cancer Therapy Au@Fe2O3 nanoparticles functionalized by PEG will be synthesized by the polyol method. Photothermal cancer studies will be developed using KB human mouth epidermalcarcinoma cell line.

⇒ Keywords: Au@Fe2O3, polyol, method, nanomedicine, cancer therapy.

# Laboratoire Interuniversitaire des Systèmes Atmosphériques (LISA - UMR 7583 (UP, UPEC, CNRS) http://www.lisa.univ-paris12.fr/en

•*Paola FORMENTI & Patrice COLL:* Atmospheric and desert aerosols: Desert aerosols emitted by wind erosion from the arid and semi-arid areas of the world are one of the major actors of the climate system and the terrestrial environment. Within this broad framework, the research of the theme «Cycle of desert aerosol»







LISA is specifically concerned with the quantification of desert dust emissions and deposition and the study of processes that determine their direct effect on the radiation balance and their impact on marine and terrestrial biogeochemistry.

• Keywords: desert aerosols; wind erosion; emissions; atmospheric transport; atmospheric deposition; absorption; solubility; reactivity; teledetection; climate; atmospheric aerosols.

Laboratoire de linguistique formelle (LLF – UMR 7110) - The Laboratory of Formal Linguistics studies all aspects of language, from word to speech and dialogue, from acoustic signal to interpretation. Its members develop a formal approach to this particular cognitive system of language, and decline their research using methods and objectives related to theoretical linguistics, experimental linguistics, computational linguistics, field linguistics and typology. With an open and collaborative spirit, the Laboratoire de Linguistique Formelle is a member of the Labex EFL – Empirical Foundations of Linguistics, and participates in numerous national and international collaborations. <u>http://www.llf.cnrs.fr/en</u>

•Anne ABEILLE: Elliptical constructions and non verbal utterances: Syntactic theories used to describe sentences in isolation. However, non verbal utterances (me too) are pervasive in spoken corpora and ordinary use. Are they degraded outputs (disfluencies) or do they deserve first class citizenship in the grammar? In a cross linguistic perspective, our aim will be to gather data from large corpora and/or experiments (e.g. acceptability judgements / eye tracking studies/ production task) to get a more precise view of the variety of constructions at stake, and of their respective meaning and their use. A more ambitious goal will be to use these results to test contemporary theories and propose new ones.

• Keywords: syntax, experimental linguistics, processing, ellipsis.

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

•Jonathan GINZBURG: Dialogue, Semantics, and Facial Gesture: Recent work (much of which by LLF researchers) provides evidence for significant interaction in import of spoken utterances with conversational facial gestures (CFG) (smile, laughter, frowning, eyebrow rolling, certain head movements). The project will aim to develop a model that explicates dialogical interaction that combines spoken verbal input and CFG. This requires integrating CFG in a syntactic-semantic framework for calculating compositional import based on the form of the CFG and of the verbal input, on their relative positioning, and integrating this with pragmatic reasoning and dialogical context. This will directly inform computational work that builds a platform for human-computer interaction that models the semantic effects of CFG.

⇒ Keywords: Conversational Facial Gestures, semantics, pragmatics, dialogue.

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

•*Chris REINTGES:* « VERB FIRST: The Typological Unity and Diversity of VSO and VOS Languages »: Greenberg's (1963) pioneering study on word order correlations has sparked off a considerable body of research and scientific debate on whether the placement of the verb in clause-initial position in VSO and VOS languages can be correlated with other significant crosslinguistic properties, such as the richness of agreement and the possibility of pronoun ommissibility, lower subject positions and obligatory verb movement. Another line of research concerns the relationship between verb-first order and information structure and discourse configurationality.

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➡ Keywords: Verb-initial languages: VSO and VOS languages; Information Structure; Rich Agreement; Subject positions; Null Subject property.

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

•*Caterina DONATI:* Bimodal Bilingualism: Hearing children born in deaf families are native bimodal bilinguals, i.e. they are competent in a sign and a spoken language, that exploit two separate articulatory channels. The aim of the project is to study the extent of language co-activation and language influence in bilinguals whose two languages do not compete for articulation.

⇒ Keywords: bilingualism, sign languages, co-activation.

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

•Lucia TONEVA: Non-canonical questions at the interfaces: This research project is going to explore how semantic and pragmatic factors affect the meaning of non-canonical questions, how wh-items may become associated with quantification domains that are not their typical ones, and how this may show in the syntactic and prosodic properties of the interrogative sentences. These questions convey information on the epistemic state, expectations and emotions of the speaker more than seeking factual information to be added to the common ground.

➡ Keywords: Non-canonical questions, speech act of questioning, modality, emotional and epistemic state of an agent, prosody.

Laboratoire de Recherche sur les Cultures Anglophones (LARCA) / UMR 8225. LARCA is a joint research unit of Université de Paris and CNRS (National Centre for Scientific Research) whose members study the histories, literatures, arts and cultures of English-speaking countries and their links to the wider world. Drawing together literary scholars, political, social, and cultural historians, art historians, and specialists of photography, film, television, and emerging media, LARCA is a research laboratory that bridges the disciplines and mediates between academic cultures in France and the English-speaking world. <u>https://recherche.univ-paris-diderot.fr/laboratoires/laboratoire-de-recherches-sur-les-cultures-anglophones-larca</u>

•Sandeep BAKSHI: In the last decade, a proliferation of decolonizing movements alludes to an enactment of transformative social politics. The disparate geopolitical movements span broader disciplinary borders to include archives of activist mobilization, university pedagogy, reparation and repatriation of colonial artefacts, environmental studies, genders and sexualities, arts and literatures, and everyday praxes. Decolonial interventions constitute a critical pathway in the construction of pluriversal knowledges.

⇒ Keywords: decolonial studies, decolonize, social transformation, decolonial interventions.

Laboratoire de Recherche sur les Cultures Anglophones (LARCA) - <u>https://recherche.univ-paris-</u> diderot.fr/laboratoires/laboratoire-de-recherches-sur-les-cultures-anglophones-larca

•*Cécile ROUDEAU:* Environmental humanities: If the demise of the (idea of the) human as a threat to the humanities is not new, climate change and the threats of extinction raise the question of their validity and agency with new urgency. The radical undisciplinability of climate requires that the humanities rethink their premises in relation to other disciplines as well as the scale of their (political) agency. The need for new narratives (Haraway) and new modes of reading (Clark) may well point to the humanities as the best tool that remains to envisage an Anthropogenic world.

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⇒ Keywords: Environmental humanities. Disciplines. Literature. (Global) democracy.

**Institut de Mathématiques de Jussieu-Paris Rive Gauche** is the biggest pure math research unit in France with a large number of researchers in low-dimensional topology and representation theory) - <u>https://www.imj-prg.fr/</u>

•*Emmanuel WAGNER:* The research project is concerned with algebra and topology; it has the goal to produce and study consistent families of higher algebraic invariants for mapping class groups of surfaces using homotopy theory, low dimensional topology and category theory.

⇒ Keywords: topological field theory, modular functor, operad, mapping, class group, braided monoidal category, modular tensor category.

**Integrated Biology of Red Blood Cell laboratory (UMR\_S1134)** is organized in 4 teams: Team 1 (Normal and Pathological Red Cell Physiology) in which proposed project should be developed; Team 2 (Dynamic of Structures & Interactions of Macromolecules in Biology); Team 3 (Pathogenesis of Severe Malaria); Team 4 (Tissular Biology of the Red Cell). Human Resources include 44 permanent positions (35 researchers and 9 engineers/technicians). We are equipped to develop approaches from biochemistry and molecular biology to cell biology and bio-informatics (FACS, sorter, confocal microscopy, rheology platform, flow adherence platform, etc.). https://recherche.univ-paris-diderot.fr/en/laboratoires/integrated-red-blood-cell-biology

• *Mariano A. OSTUNI:* During late stages of terminal erythroid differentiation, erythroblasts from mammals expel their nuclei and lose most of their organelles (Moras et al, Front Physiol 2017). We study the molecular mechanisms driving mitochondrial clearance throughout human erythropoiesis.

⇒ Keywords: Erythropoiesis, mitophagy, mitochondrial clearance, red blood cell, autophagy.

Institute of Plant Sciences - Paris-Saclay (IPS2) - Understanding plant organellar functions and regulations, which are at the core of the plant metabolism, is a major challenge towards improving crops with better yields and a better adaptability to a fluctuating environment. The organelles, plastids and mitochondria, are the main places of energy metabolism of eukaryotic cells, but they also play a key role in many metabolic pathways. Throughout evolution and after the ancestral events of endosymbiosis at their origins, organelles have lost much of their original genomes by the transfer of genetic material to the nucleus. As a consequence, the organelle metabolism requires many proteins encoded by the nucleus and targeted to the organelles. However, they have retained small genomes encoding key proteins and RNAs necessary for their biology creating a requirement for coordinate regulation of nuclear and organellar gene expression. A wide range of organellar transcriptional and post-transcriptional processes including DNA replication, RNA transcription, RNA processing, RNA editing, RNA splicing and translation rely on nuclear encoded proteins. Among these nuclear factors, the large family of pentatricopeptide repeat proteins (PPR), which is currently the main object of study of the team, is a key component of the regulation of these two organellar genomes. These nuclear encoded proteins are almost exclusively targeted to mitochondria and/or chloroplasts where they bind to specific RNAs and are involved in all steps of gene expression from transcription to translation. The team was involved in the discovery of the PPR family in 2000, in the genomic characterization of the family in Arabidopsis, rice and Physcomitrella and in several genetic and functional characterizations of members of the Arabidopsis family. We are now focusing on the study of organellar gene expression in a dynamic context i.e. during development or stress conditions through 3 main projects: • RNA editing and regulation of photosynthesis complexes during development and stresses. • Organelles at the core of plant responses













to pathogens. • Organelles and early development - function of organellar genome expression factors. <u>http://ips2.u-psud.fr/fr/index.html</u>

• *Wojciech MAJERAN:* In C4-plants the separation of photosynthetic functions between highly specialized mesophyll (M) and bundle sheath (BS) chloroplasts allows an efficient carbon fixation. The implication of chloroplast gene expression in C4 differentiation remains unknown. We hypothesize that C4-regulatory factors are essential in this process. Using a systems biology approach that combines proteomics and transcriptomics of isolated mesophyll and bundle sheath chloroplast nucleoid complexes we aim at identifying C4 differentiation regulators of plastid gene expression. Functional analysis of identified candidate proteins will be performed by phenotypic and molecular characterization of maize insertion mutants.

⇒ Keywords: chloroplast, gene expression, C4-photosynthesis, carbon fixation.

The UMR Neurodiderot is made up of five research teams from this Neuroscience laboratory working on understanding the mechanisms that alter the functioning of the developing brain from the fetus to the adolescent. The laboratory is led by Pierre Gressens, Research Director at Inserm (France) and Professor of Fetal and Neonatal Neurology at King's College in London (UK). The UMR Neurodiderot is a public research laboratory resulting from the pooling of several distinct administrative structures of human, material and financial resources. Housed in the Robert-Debré Hospital, one of the largest paediatric hospitals in Europe, the Research Unit benefits from an optimal working environment to continuously promote exchanges between patients, the medical profession and researchers. She is an integral part of the hospital and works closely with the various hospital departments. At the national level, the unit also coordinates a network of clinical and biological structures, called DHU PROTECT (Department Hospitalo-Universitaire – Promoting Research Oriented Towards Early CNS Therapies). At the international level, the unit is part of a network of laboratories (Europe, United States, Asia, etc.) that work together to share their knowledge and know-how for the benefit of patients. <u>https://www.neurodiderot.com/</u>

• *Pierre GRESSENS:* Aging and more specifically Alzheimer disease are associated with neuroinflammatory processes and synaptic engulfment abnormalities. Mechanisms involved are highly similar to the one described during normal development. Perinatal inflammation activated microglia and impaired its synaptic phagocytosis functions. Present project will evaluate if there is an early brain aging in animal subject to perinatal inflammation.

⇒ Keywords: Aging, microglia, synaptic abnormalities, priming, cellular memory.

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#### Saints Pères Paris Institute for the Neurosciences (SPPIN)

• *Martin Oheim:* Reseach theme: Surface-Plasmon Coupled Emission (SPCE) Microscopy of Single-Vesicle Dynamics at a Central Synapse: Total internal reflection fluorescence microscopy and, more recently, supercritical emission microscopy, are surface-selective techniques for imaging single molecules or single tiny organelles (vesicles, mitochondria, ER/plasma-membrane contact sites). Both use high-NA objectives and alignment and separation of supercritical and subcritical excitation and emission components can be tricky. In the current post-doc project, I propose the alternative use of surface-plasmon coupled emission and polarisation-assisted point-spread function engineering for fast, super-resolution imaging of near-membrane biological dynamics. <a href="https://www.sppin.fr/">https://www.sppin.fr/</a>









# IPGP - Institut de Physique du Globe

The Institut de Physique du Globe de Paris (http://www.ipgp.fr) 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.

# <u>Université Paris 13</u>

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.

Université Paris 13 welcomes applications for MSCA fellows in all of its scientific domains. To identify a lab and supervisor, please visit the university's website: <u>https://www.univ-paris13.fr/en/laboratories/</u>.





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