Objectives

Under a partnership between Inserm and CNRS, a call for proposals is launched aimed at:

- **Enabling young scientists to create and lead a team** within an established Inserm or CNRS (Institute of biological sciences) laboratory in France. The ATIP - Avenir teams will strengthen the research of the host units but will develop independently their own scientific project.
- **Promoting mobility** and attracting young team leaders of high-level working abroad.

The ATIP - Avenir grant is allocated for a period of **3 years, renewable for 2 years**. It is open to any young scientists, whatever their present position and nationality, who have defended their PhD (or equivalent doctoral degree) for over 2 years and under 8 years (PhD between September 15th, 2013 and September 15th, 2019)¹. Successful applicants will have to develop their projects within a structure in which he/she has not been working for more than 18 months² and will not find any previous mentors (of PhD and/or post doctorate). Laureates of a grant for the young researchers similar to the ATIP-Avenir program are not eligible (e.g. ANR or ERC programs to manage a research group). ATIP-Avenir laureates can candidate to similar programs, but cannot cumulate funding for programs similar to ATIP-Avenir. Applicants cannot apply for more than two different ATIP-Avenir calls.

Projects must relate to Life sciences or Health. The contract will have to begin during the first half of the year 2023.

Applications from clinicians are encouraged. Projects should comply with ethics rules of Inserm and CNRS.

Funding:

- **Annual grant of € 60,000**
- Two-year salary for a postdoctoral researcher.
- Three-year salary for non-tenured successful applicants.

The host laboratory will provide the team a dedicated research area of about 50m² (infrastructures fees will be paid by the host lab) and access to the local technological facilities. Applicants may submit their proposal without an identified host laboratory.

Selection procedure

Applications will be assessed by specialized international scientific committees with appropriate experts³:

- LS1 Molecules of Life: Biological Mechanisms, Structures and Functions;
- LS2 Integrative Biology: from Genes and Genomes to Systems;
- LS3 Cell Biology, Development and Evolution;
- LS4 Physiology in Health, Disease and Ageing;
- LS5 Neurosciences and Neural Disorders;
- LS6 Immunity, Infection and Microbiology;
- LS7 Diagnostic tools, Therapies, Biotechnology and Public Health;

The selection will be done in two stages: shortlisting in April 2022 and interviews of the selected applicants in mid-June 2022. CNRS and Inserm will establish the final list of laureates and their host laboratories jointly early July 2022.

Dead line: applications must be submitted in electronic form before **November 18th 2021**.

Proposals should be submitted on-line at:

[https://sp2013.inserm.fr/sites/eva/appels-a-projets/Pages/Atip-Avenir.aspx](https://sp2013.inserm.fr/sites/eva/appels-a-projets/Pages/Atip-Avenir.aspx)

¹ Exceptions can be granted for maternity (18 months per child) or paternity and/or military service leaves, and for clinicians (laureates from the ‘Ecole de l’Inserm Liliane Bettencourt’…)

² Exceptions can be granted to teachers and medical doctors from university hospitals

³ Consult the themes of research covered by these juries on the following page online

Further information can be obtained from

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Potential partners for the co-funding of projects in their scientific areas

ANRS (Agence nationale de recherches sur le sida et les hépatites virales), AFM (Association française contre les myopathies), ARC (Fondation ARC pour la recherche sur le cancer), FINOVI (Fondation innovations en infectiologie), la Fondation Bettencourt Schueller, LNCC (Ligue nationale contre le cancer), Plan Cancer, Université de Lorraine (ISITE LUE), Université de Montpellier (ISITE MUSE).
ATIP-Avenir Evaluation panels and fields of research covered by the respective panels

**LS1 Molecules of Life: Biological Mechanisms, Structures and Functions:**
- Macromolecular complexes including interactions involving nucleic acids, proteins, lipids and carbohydrates
- Biochemistry
- DNA and RNA biology; Protein biology; Lipid biology
- Glycobiology
- Molecular biophysics (e.g. single-molecule approaches, bioenergetics, fluorescence)
- Structural biology and its methodologies
- Molecular mechanisms of signalling processes
- Synthetic biology
- Chemical biology
- Protein design
- Innovative methods and modelling in molecular, structural and synthetic biology

**LS2 Integrative Biology: from Genes and Genomes to Systems:**
- Genetics; Gene editing
- Epigenetics; Gene regulation
- Genomics; Genomewics
- Transcriptomics; Proteomics; Metabolomics
- Glycomics; Lipidomics
- Bioinformatics and computational biology;
- Systems biology
- Biostatistics
- Genetic diseases
- Innovative methods and modelling in integrative biology

**LS3 Cell Biology, Development and Evolution:**
- Cell cycle, cell division and growth
- Cell senescence, cell death, autophagy and cell ageing
- Cell differentiation, physiology and dynamics
- Cell behaviour, cell shape and cell migration
- Cell junctions, cell adhesion, cell communication and the extracellular matrix
- Organelle biology and trafficking
- Functional imaging of cells and tissues
- Tissue organisation and morphogenesis
- Mechanobiology of cells, tissues and organs
- Stem cell and organism biology
- Developmental and evolutionary genetics
- Evolution of developmental mechanisms and strategies

**LS4 Physiology in Health, Disease and Ageing:**
- Organ and tissue physiology and pathophysiology; Comparative physiology
- Physiology of ageing
- Endocrinology
- Microbiome and host physiology
- Nutrition and exercise physiology
- Impact of stress (including environmental stress) on physiology
- Metabolism and metabolic disorders, including diabetes and obesity
- The cardiovascular system and cardiovascular diseases
- Haematopoiesis and blood diseases
- Cancer
- Non-communicable diseases (except for neural/psychiatric and immunity-related diseases)

**LS5 Neurosciences and Neural Disorders:**
- Neural cell function, communication and signalling, neurotransmission in neuronal and/or glial cells
- Systems neuroscience and computational neuroscience
- Neuronal development, plasticity and regeneration
- Sensation and perception
- Neural bases of cognitive processes
- Neural bases of behaviour
- Neurological disorders
- Neuroimmunology, neuroinflammation
- Psychiatric disorders
- Neurotrauma and neurovascular conditions
- Imaging in neuroscience
- Attention, perception, action, consciousness
- Learning, memory, cognition in ageing
- Reasoning, decision-making; intelligence
- Innovative methods and tools for neuroscience

**LS6 Immunity, Infection and Microbiology:**
- Innate immunity
- Adaptive immunity
- Regulation of the immune response
- Immune-related diseases
- Biology of pathogens (e.g. bacteria, viruses, parasites, fungi)
- Mechanisms of infection and infection diseases
- Biological basis of prevention and treatment of infection (e.g. infection natural cycle, reservoirs, vectors, vaccines, antimicrobials, antimicrobial resistance)
- Innovative immunological tools and approaches, including therapies

**LS7 Diagnostic tools, Therapies, Biotechnology and Public Health:**
- Medical imaging for prevention, diagnosis and monitoring of diseases
- Medical technologies and tools (including genetic tools and biomarkers) for prevention, diagnosis, monitoring and treatment of diseases
- Pharmacology and toxicology
- Nanomedicine
- Applied gene, cell and immune therapies; Resistance to therapies
- Regenerative medicine
- Analgesia and surgery
- Epidemiology and public health
- Environmental health, occupational medicine
- Health services, health care research, medical ethics
- Digital medicine, e-medicine, medical applications of artificial intelligence