# ATIP – Avenir Program 2022
# Young group leader

## 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 months[2] 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 experts[3]:

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

[1] *Exceptions can be granted for maternity (18 months per child) or paternity and/or military service leaves, and for clinicians (laureates from the École 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

Inserm
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or CNRS
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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; Metagenomics
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 organoid 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