





La science pour la santé

# **Objectives**

Under a partnership, Inserm and CNRS launch every year a call for proposals aimed at:

- Enabling young scientists to create and lead a research 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 independently develop their own scientific project.
- Promoting mobility and attracting talented early-career scientists to become team leaders.

# The ATIP-Avenir grant is allocated for a period of 5 years.

The program is open to any young scientists, whatever their present position and nationality, with 2-8 years of experience since completion of PhD (or equivalent doctoral degree) (PhD defence between September 15, 2014 and September 15, 2020)<sup>1</sup>. Successful applicants will have to develop their projects within a structure in which he/she has not been working for more than 18 months<sup>2</sup> and will not find any previous mentors (of PhD and/or post doctorate). Laureates of a grant similar to the ATIP-Avenir program are not eligible (e.g. ANR JCJC or ERC programs to manage a research group). ATIP-Avenir laureates can candidate to similar programs, but cannot cumulate funding of 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 2024.

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

# Funding:

Package for 3 years including:

- Annual grant of €60,000
- Two-year salary for a postdoctoral researcher or an engineer.
- Three-year salary for non-tenured laureates.
- Two-year extension after evaluation.

The host laboratory will provide a dedicated research area of about 50m<sup>2</sup> (infrastructures fees will be covered by the host lab) and access to the local technological facilities to the ATIP-Avenir team. Applicants may submit their proposal without an identified host laboratory.

# 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), Stratégie décennale de lutte contre les cancers 2021-2030, Université de Lorraine (ISITE LUE), Université de Montpellier (ISITE MUSE), Université Clermont Auvergne (I-SITE CAP 20-25), Université Côte d'Azur (IDEX UCAjedi), Université Aix-Marseille (A\*Midex 3.0 21-24).

# **Selection procedure**

Applications will be assessed by specialized international scientific committees with appropriate experts<sup>3</sup>:

- 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

Two rounds of selection are applied: shortlisting in April 2023 and interviews of the selected applicants in mid-June 2023. CNRS and Inserm will jointly establish the final list of laureates early July 2023.

**Dead line**: applications must be submitted in electronic form before **November 22, 2022** at:

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

<sup>1</sup> 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...)

<sup>2</sup> Exceptions can be granted to teachers and medical doctors from university hospitals

<sup>3</sup> Topics of research covered by these juries on the following page online

### **Contacts for further information:**

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#### ATIP-Avenir Evaluation panels with the covered fields of research

### 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 Influence of stress (including environmental stress) on physiology Metabolism and metabolic disorders, including diabetes and obesity The cardiovascular system and cardiovascular diseases Hematopoiesis 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