





La science pour la santé From science to healt

Objectives

In the context of a partnership, Inserm and CNRS launch every year a call for proposals aimed at:

- Facilitating young researchers in establishing and heading their own research team within an established Inserm or CNRS (Institute of biological sciences) laboratory in France. The ATIP-Avenir teamswill contribute to the advancement of research in the host unit while simultaneously pursuing independently their own scientific project.

- Promoting mobility and attracting talented early-career scientists to assume leadership roles.

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

The program is open to young scientists, regardless of their current position or nationality, who possess 2 to 8 years of experience since obtaining their PhD or equivalent doctoral degree (PhD defence between September 15, 2015 and September 15, 2021)¹, Successful applicants are required to conduct their projects within a structure in which he/she has not been working for more than 18 months² and will not find any prior mentors from their PhD and/or post doctorate. Candidates who have received grants similar to the ATIP-Avenir program (e.g. ANR JCJC or ERC programs to manage a research group) are not eligible. While ATIP-Avenir laureates can apply to similar programs, they cannot combine funding from programs similar to ATIP-Avenir.

Applicants are limited to applying for a maximum of two different ATIP-Avenir calls.

Projects must relate to Life sciences or Health. The contract will have to begin during the first half of 2025.

Clinicians are encouraged to submit applications. Projects must comply to the ethical guidelines established by Inserm and CNRS.

Funding:

Package for 5 years including:

- Annual grant of € 60,000
- Two-year salary for a postdoctoral researcher or an engineer.
- Five-year salary for non-tenured laureates.
- A mid-term report must be provided.

Selection procedure

Applications will be assessed by specialized international scientific committees composed of experts in the relevant fields³:

Égalité

- 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: initial shortlisting will take place in April 2024 and interviews of the selected applicants in May 2024. CNRS and Inserm will finalize the list of laureates in early July 2024.

The deadline for submitting applications is November 16, 2023 Applications must be submitted electronically at:

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

¹ Exceptions can be granted for maternity (12 months per child), paternity, 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 affiliated with university hospitals

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

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The host laboratory will provide a dedicated research area of approximately 50m², with infrastructures costs covered by the host lab. Additionally, the team will have access to the local technological facilities. Candidates have the option to submit their proposal without having identified a host laboratory at the time of application.

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

ANRS-MIE (Agence nationale de recherches sur le sida et les hépatites virales – Maladies Infectieuses Emergentes), AFM-Téléthon (Association française contre les myopathies), ARC (Fondation pour la recherche sur le cancer), FINOVI (Fondation innovations eninfectiologie), la Fondation Bettencourt Schueller, LNCC (Ligue nationale contre le cancer), Stratégie décennale de lutte contre les cancers 2021-2030, IdEx et I-SITE .

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 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