



# ATIP – Avenir Program 2021

## Young group leader

### Important dates

- **October 15<sup>th</sup> (4:00 pm) 2020** : opening of the registrations online
- **November 18<sup>th</sup> 2020 (inclusive)**: deadline for the online submission and the letters of recommendation
- **Mid-April 2021**: publication of the short list of candidates to be interviewed
- **June 16<sup>th</sup> to 18<sup>th</sup> 2021** interviews of the selected applicants
- **July 2021**: publication of the final list of laureates
- **From January 2022**: Start of the contract

### Summary

- A- Eligibility and evaluation criteria
- B- Elements for the application
- C- Scientific file
- D- ATIP-Avenir evaluation panels and fields of research covered by the respective panels

### Contacts

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## A- Eligibility and evaluation criteria:

### Eligibility

ATIP-Avenir grants are open to researchers of any nationality who may reside in any country in the world at the time of application.

Projects must be developed within an Inserm and/or CNRS (Institute of biological sciences) host laboratory in France. **An identified host lab is not a pre-requisite for applying for the program.**

Applicants must have defended their PhD (or equivalent doctoral degree) for over 2 years and under 8 years (PhD between september 15<sup>th</sup> 2012 and september 15<sup>th</sup> 2018)

The projects have to be developed within a Unit in which the applicant:

- has not been working for more than 18 months (not after march 15<sup>th</sup> 2018)
- 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 programs to start an independent research group or ERC grants). However laureates with an ANR program are eligible to an ATIP-Avenir grant if their ANR contract is finished and if they develop their project in another lab. ATIP-Avenir laureates can candidate to similar programs, but cannot cumulate fundings for programs similar to ATIP-Avenir.

Applicants cannot apply for more than two different calls.

### Exemptions

#### Medical doctors

For medical doctors, an MD will not be accepted by itself as equivalent to a PhD award. To be considered eligible, medical doctors (MDs) need to provide the certificates of both basic studies (MD) and a PhD or proof of an appointment that requires doctoral equivalency (e.g. post-doctoral fellowship, professorship appointment). Additionally, candidates must also provide information on their research experience (including peer reviewed publications) in order to substantiate the equivalence of their overall training to a PhD. The MD completion should be within the last 10 years instead of 8 years.

#### Clinical training

For clinicians (Ecole de l'Inserm Liliane Bettencourt,...) extension will be considered according to the documented amount of clinical training received by the Principal Investigator after the award of the first eligible degree and until the call deadline.

#### Teachers (MCU, MCU-PH, PU, PU-PH)

For teachers, the rule that the project has to be developed within a structure in which the scientist has not been working for more than 18 months does not apply.

#### Leaves

For maternity, the effective elapsed time since the award of the PhD will be reduced by 18 months for each child before or after the PhD award.

For paternity, the effective elapsed time since the award of the PhD will be reduced by the amount of paternity leave actually taken for each child born before or after the PhD award.

For national service, the effective elapsed time since the award of the PhD will be reduced by the amount of leave actually taken after the PhD award.

### Evaluation

**Scientific excellence is the sole criterion on the basis of which ATIP-Avenir grants are awarded. However, candidates should be able to show their early achievements attested by significant publications (as main author) in major international peer-reviewed multidisciplinary scientific journals, or in the leading international peer-reviewed journals of their respective field.**

Evaluation criteria:

- Quality of the applicant (background and publications)
- Scientific quality of the research proposal (originality of the project and suitability of the proposed methodology)
- Quality of the management (ability of the applicant to manage the project and a team)

## B- Elements for the application:

### 1- CV

2- **Form** to be filled in online

3- **Scientific file** containing the description of your research project

4- **Two letters of recommendation** (written in English, stating the ability of the candidate to conduct his/her own research project should be sent directly by their authors by e-mail to: Christiane Durieux: [atip-avenir@inserm.fr](mailto:atip-avenir@inserm.fr))

5- **Host laboratory and host university** document (if identified, not mandatory)

6- **PhD diploma**

**Registration through the Submission Website is mandatory.** : <https://www.eva3.inserm.fr/login>

**All the documents and forms must be written in English**

## C- Scientific file

- **Summary of the research project**

- **Research project**

Your document (no more than 10 pages, Arial 10, figures included and references not included) should adhere to the following format:

- State of the art and proposed work (must be backed up by references that include the major relevant publications)
- Experimental approaches to be used
- Originality and feasibility of the project
- Expected results
- Expected applications in the medical, social, economic and technological domains
- Expected collaborations
- Work plan for a period of 3 first years

**Formatting references: please use the reference style outlined by the International Committee of Medical Journal Editors (ICMJE), also referred as the “Vancouver” style (title and list of all authors).**

- **Your publications limited to accepted publications / invited conferences/**

For each reference, give the full name and initials of each author in the exact order, full title, name of journal, year of publication, volume number, first and last pages

## D- ATIP-Avenir Evaluation panels and fields of research covered by the respective panels

### **LS1 Molecular and Structural Biology and Biochemistry:**

Macromolecular complexes including interactions involving nucleic acids, proteins, lipids and carbohydrates  
Biochemistry  
DNA biosynthesis, modification, repair and degradation  
RNA synthesis, processing, modification and degradation Protein synthesis, modification and turnover  
Lipid biology, Glycobiology  
Molecular biophysics (e.g. single-molecule approaches, bioenergetics, fluorescence)  
Structural biology and its methodologies (e.g. crystallography, cryo-EM, NMR and new technologies)  
Molecular mechanisms of signalling pathways  
Fundamental aspects of synthetic biology and chemical biology

### **LS2 Genetics, 'Omics', Bioinformatics and Systems Biology:**

Molecular genetics, reverse genetics, forward genetics, genome editing  
Non-coding RNAs  
Quantitative genetics  
Genetic epidemiology  
Epigenetics and gene regulation  
Genomics (e.g. comparative genomics, functional genomics)  
Metagenomics, transcriptomics, proteomics  
Metabolomics, glycomics, lipidomics  
Bioinformatics  
Computational biology  
Biostatistics  
Systems biology

### **LS3 Cell Biology, Development and Evolution:**

Morphology and functional imaging of cells and tissues  
Cytoskeleton and cell behaviour (e.g. control of cell shape, cell migration and cellular mechanosensing)  
Organelle biology and trafficking  
Cell junctions, cell adhesion, cell communication and the extracellular matrix  
Cell signalling and signal transduction  
Cell cycle, division and growth  
Cell death (including senescence) and autophagy  
Cell differentiation, physiology and dynamics  
Tissue organisation and morphogenesis in animals and plants (including biophysical approaches)  
Stem cell biology in development, tissue regeneration and ageing  
Evolution of developmental mechanisms

### **LS4 Physiology, Pathophysiology and Endocrinology:**

Organ physiology and pathophysiology  
Comparative physiology and pathophysiology  
Molecular aspects of endocrinology  
Fundamental mechanisms underlying ageing  
Metabolism, biological basis of metabolism related disorders  
Fundamental mechanisms underlying cancer  
Fundamental mechanisms underlying cardiovascular diseases  
Non-communicable diseases (except for neural/psychiatric and immunity-related disorders)

### **LS5 Neurosciences and Neural Disorders:**

Neural cell function, communication and signalling, neurotransmission in neuronal and/or glial cells Systems neuroscience and computational neuroscience (e.g. neural networks, neural modelling) Neuronal development, plasticity and regeneration  
Sensation and perception (e.g. sensory systems, sensory processing, pain)  
Neural bases of cognitive processes (e.g. memory, learning, attention)  
Neural bases of behaviour (e.g. sleep, consciousness, addiction)  
Neurological disorders (e.g. neurodegenerative diseases, seizures)  
Psychiatric disorders (e.g. affective and anxiety disorders, autism, psychotic disorders)  
Neurotrauma and neurovascular conditions (including injury, blood-brain barrier, stroke, neurorehabilitation)

**LS6 Immunity, Infection and Microbiology:**

Innate immunity

Adaptive immunity

Regulation and effector functions of the immune response (e.g. cytokines, interferons and chemokines, inflammation, immune signalling, helper T cells, immunological memory, immunological tolerance, cell-mediated cytotoxicity, complement)

Immunological mechanisms in disease (e.g. autoimmunity, allergy, transplantation immunology, tumour immunology)

Biology of pathogens (e.g. bacteria, viruses, parasites, fungi)

Mechanisms of infection (e.g. transmission, virulence factors, host defences, immunity to pathogens, molecular pathogenesis)

Biological basis of prevention and treatment of infection (e.g. infection natural cycle, reservoirs, vectors, vaccines, antimicrobials)

Infectious diseases in animals and plants

**LS7 Diagnostic tools, Therapies, Biotechnology and Public Health:**

Imaging for medical diagnosis

Genetic tools for medical diagnosis

Other medical technologies for diagnosis and monitoring of diseases

Pharmacology and pharmacogenomics (including drug discovery and design, drug delivery and therapy, toxicology)

Applied gene and cell therapies, regenerative medicine

Radiation therapy

Analgesia and surgery

Epidemiology and public health

Environmental health, occupational medicine

Health services, health care research, medical ethics