ATIP – Avenir Program
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 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. After evaluation, it can be extended for an additional 2 years.
It is open to any young scientists, whatever their present position and nationality, who have defended their PhD (or equivalent doctoral degree) within the last 10 years (after September, 15th, 2004)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). No more than two applications are allowed.
Projects must relate to Life sciences or Health. The interdisciplinary projects combining biology and mathematics, physics, informatics, chemistry, public health (more specifically economic and social sciences research about social determinants of health), will be examined with a particular attention. Applications from clinicians and qualified women are strongly encouraged. Projects should comply with ethics rules of Inserm and CNRS.

Funding:
- Annual grant of € 60,000
- Two-year salary for a postdoctoral researcher.
- Monthly gross salary of € 3,600 (before tax deduction) for 3 years 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 but must then in parallel contact Inserm and/or CNRS to help identifying a suitable scientific environment.

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

- LS1 Molecular and Structural Biology, and Biochemistry;
- LS2 Genetics, Genomics, Bioinformatics and Systems Biology;
- LS3 Cell Biology, Development and Evolution;
- LS4 Physiology, Pathophysiology and Translational Research;
- LS5 Neurosciences and Disorders of the nervous system;
- LS6 Immunity, Infection and Microbiology;
- LS7 Diagnostic tools, Therapies, Biotechnology and Public Health.

The selection will be done in two stages: shortlisting in April 2015 and interviews of the selected applicants in June 2015. The final list of laureates and their host laboratories will be established jointly by Inserm and CNRS early July 2015.

Applications must be submitted in electronic form⁴ before November 27th 2014

Proposals should be submitted on-line at: https://www.eva2.inserm.fr/EVA/sp/AppelsOffres/ATIP-AVENIR/index_INSERM_CNRS.jsp

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 France Rhumatismes, la fondation Bettencourt Schueller, LNCC (Ligue nationale contre le cancer), MILDT (Mission interministérielle de lutte contre la drogue et la toxicomanie), Plan Cancer, Sanofi, les universités.

¹ Exceptions can be granted for maternity (one year per children) or paternity and/or military service leaves
² Exceptions can be granted to teachers from university hospitals
³ Consult the themes of research covered by these juries following page
⁴ The elements for the application are already available online

Further information can be obtained from

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

**LS1 Molecular and Structural Biology and Biochemistry:**
- Physico-chemical and biochemical studies of the interactions between macromolecules
- Study of in vivo assembly of macromolecules in biological processes
- DNA biosynthesis, modification, repair and degradation
- RNA synthesis, processing, modification and degradation
- Protein synthesis, modification and turnover
- Biochemistry of signal transduction
- Biochemistry and physiology of microorganisms
- Biophysics
- Structural biology (crystallography, NMR, EM) of single molecules or interacting partners
- Computer modelling of 3D structures, reactivity predictions and molecular dynamics

**LS2 Genetics, Genomics, Bioinformatics and Systems Biology:**
- Genomics, comparative genomics, functional genomics
- Transcriptomics
- Proteomics
- Metabolomics
- Glycomics
- Molecular genetics, reverse genetics and RNAi
- Epigenetics and gene regulation
- Genetic epidemiology
- Bioinformatics
- Computational biology
- Biostatistics
- Systems biology
- Biological systems analysis, modelling and simulation
- Study of genome dynamics, gene transfer between unrelated species
- Systems microbiology and modeling
- Synthetic biology and new bio-engineering concepts
- Systems Evolution, biological adaptation, phylogenetic, systematics
- Biodiversity, comparative biology

**LS3 Cell Biology, Development and Evolution:**
- Morphology and functional imaging of cells
- Cell biology and molecular transport mechanisms
- Cell cycle and division
- Apoptosis
- Cell differentiation, physiology and dynamics
- Organelle biology
- Cell signalling and cellular interactions
- Signal transduction
- Development, developmental genetics, pattern formation and embryology in animals or plants
- Cell genetics
- Stem cell biology
- Evolution of developmental mechanisms

**LS4 Physiology, Pathophysiology and Translational Research:**
- Organ physiology

**LS5 Neurosciences and Disorders of the nervous system:**
- Molecular and cellular neurobiology
- Neuroanatomy and neurosurgery
- Neurophysiology
- Neurochemistry and neuropharmacology
- Sensory systems
- Mechanisms of pain
- Developmental neurobiology
- Cognition (e.g. learning, memory, emotions, speech)
- Behavioural neuroscience (e.g. sleep, consciousness, handedness)
- Systems neuroscience
- Neuroimaging and computational neuroscience
- Neurological and psychiatric disorders

**LS6 Immunity, Infection and Microbiology:**
- Innate immunity
- Adaptive immunity
- Phagocytosis and cellular immunity
- Immunosignalling
- Immunological memory and tolerance
- Immunogenetics
- Mycology, Virology, Bacteriology, Parasitology: Interaction of microorganisms with their environment
- Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)
- Biological basis of immunity-related disorders
- Allergy
- New targets for drug development, resistance to drugs

**LS7 Diagnostic tools, Therapies, Biotechnology and Public Health:**
- Medical engineering and technology
- Diagnostic tools (e.g. genetic, imaging)
- Pharmacology, pharmacogenomics, drug discovery and design, drug therapy
- Analgesia
- Toxicology
- Gene therapy, stem cell therapy, regenerative medicine
- Surgery
- Radiation therapy
- Genetic engineering, transgenic organisms, recombinant proteins, biosensors
- Biotechnology, bioreactors, applied microbiology
- Health care research epidemiological, bio-statistical, human, economic and social sciences research about social determinants of health
- Public health and epidemiology
- Environment and health risks including radiation
- Occupational medicine
- Medical ethics

Comparative physiology
Endocrinology
Ageing
Metabolism, biological basis of metabolism related disorders
Cancer and its biological basis
Cardiovascular diseases
Non-communicable diseases (except for neural/psychiatric and immunity-related disorders)