

PRACTICAL INFORMATION

LOCATION

Paris

Jouy-en-Josas

Maisons Alfort

CONTACTS

Responsables

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MES NOTES...

www.universite-paris-saclay.fr

UNIVERSITÉ
PARIS
SUD

Comprendre le monde,
construire l'avenir

université
PARIS-SACLAY

AgroParisTech

INSTITUT DES SCIENCES ET TECHNOLOGIES DU QUANTUM ET DE L'ENVIRONNEMENT
INSTITUT NATIONAL DE LA RECHERCHE AGRONOME

Other partners:

- Ecole Nationale Vétérinaire d'Alfort
- Alfort National Veterinary School
- Institut National de la Recherche Agronomique - French National Institute of Agricultural Research

Conception graphique : Université Paris-Sud - Décembre 2015

université
PARIS-SACLAY

SCHOOL

BIODIVERSITÉ, AGRICULTURE
ET ALIMENTATION, SOCIÉTÉ,
ENVIRONNEMENT

MASTER

Biologie Intégrative et
Physiologie

Biologie Intégrative et Physiologie Integrative Biology and Physiology

PARCOURS : PRedictive and Integrative ANiMal biology (M2)



Animal Biology is at the crossroads of some of the most crucial and exciting scientific issues today : the fundamental progresses in understanding the biological complexity, the development of efficient multi-scale integrative biology strategies, the advance of biotechnology, the big data revolution, the environmental and societal challenges of livestock farming, the renewal of biodiversity conservation approaches, the vast range of ethical concerns for animals as food, companions, models, work force, and economic income.

The PRIAM Master course (M2) trains students to develop an inclusive and cutting-edge view of Animal Sciences in their diversity and complementarity, from theoretical to applied aspects. They become key players in academia and industry, for the study of animals in their environment, their adaptation in a moving context, the monitoring of populations, and the development of precision livestock farming systems.

In addition to a multidisciplinary core course, PRIAM offers two axes

Animal Breeding and Genetics

Animal Physiology, Nutrition and Precision Livestock farming Systems

PRIAM is a fully english-speaking program

PREREQUISITES

Animal Biology, preferably with good background in at least one of the followings : Genomics, Population Genetics, Physiology.
Statistics.



PEDAGOGICAL OBJECTIVES

The PRIAM Course offers an updated training to:

- Improve knowledge in integrative animal biology
- Envision animals as complex and multilevel entities, in relation with changing environments
- Develop expertise on methods to model biological processes, from molecules to populations
- Develop expertise in experimental animal research
- Analyze large sets of biological data from various origins
- Implement these skills in both applied and fundamental studies
- Put these skills in context with ethical and societal concerns such as sustainability and welfare

PRIAM trains for professional research, in academia and industry, with disciplinary and interdisciplinary approaches.

We cover a wide spectrum of animal species. Emphasis is put on farm animals, for livestock production or aquaculture. Companion animals, and some wild species and model species are also taken in consideration.

PERSPECTIVES

The PRIAM Master course (M2) mainly prepares students for doctoral studies in all fields of animal sciences.

The methodological skills and expertise acquired are also relevant and adapted for positions in industry : breeding companies, feedstuffs companies, technical institutes, biotech companies, wild life conservatories.

RESEARCH

Teacher-researchers from AgroParisTech and ENVA (the Alfort National Veterinary School) jointly organize this course with a strong input of the Animal Genetics Division of INRA (French National Institute of Agricultural Research). INRA is Europe's top agricultural research institute and the world's number two centre for the agricultural sciences, Lectures and practicals are given by the staff of AgroParisTech, INRA, and ENVA.

Students prepare a six-month research thesis, mainly in laboratories from these institutions in France (Paris, Jouy-en-Josas, Toulouse, Rennes). Other academic labs and other destinations are possible.

LABORATORIES

- INRA-AgroParisTech
- UMR Génétique Animale et Biologie Intégrative (GABI) – Animal Genetics and Integrative Biology
- UMR Modélisation Systémique Appliquée aux Ruminants (MoSAR) - Systemic Modelling Applied to Ruminants
- NRA- ENVA
- UMR Biologie du Développement et de la Reproduction (BDR) - Development and Reproduction Biology

PARTNERSHIP

Breeding organizations and technical institutes are involved in some parts of the training (lectures, visits, study trip), and can be involved in some internship projects.