Montpellier SupAgro Joint Research Units (UMR)

Contacts for Students Internships

BE Department – Biology and Ecology

UMR AGAP - Genetic Improvement & Adaptation of Mediterranean and Tropical Plants

In order to create innovative breeding methodologies and plant material, AGAP research unit seeks to understand the factors of plant development and their adaptation to environmental constraints, analyses the organization and diversity of genomes and studies agrobiodiversity. It combines biological and social sciences to broaden the disciplinary base and better understand plant domestication. Genomics and genetics, bioinformatics, ecophysiology and mathematical modelling make it possible to study the relationships between genetic diversity, agronomic behaviour and response to selection. About twenty tropical and Mediterranean crops are studied in AGAP, covering a very wide range of biological characteristics and uses by farmers.

Information: http://umr-agap.cirad.fr/en
Members: Cirad, Inra, Montpellier SupAgro
Contact: dominique.this@supagro.inra.fr

Internship offers: http://www.cirad.fr/emplois-stages/stages

UMR BGPI - Biology and Genetics of Plant/Parasite Interactions for Integrated Protection

The BGPI joint research unit aims at studying plant diseases with the goal of proposing rational control methods. The researchers of BGPI unit work on viruses, bacteria and fungi (including quarantine organisms) that are pathogenic to temperate and tropical plants. Population dynamics of emerging diseases, mechanisms of pathogenicity and plant resistance are the main investigated domains. Knowledge transfer for quarantine management of genetics resources is also a strong component of our activities.

Information: http://umr-bgpi.cirad.fr/
Members: Inra, Cirad, Montpellier SupAgro
Contact: claire.neema@supagro.inra.fr

UMR BPMP – Biochemistry and Molecular Physiology of Plants

The B&PMP joint research unit is defined as an Integrative Biology research department, focused on the mechanisms of plant responses and adaptation to variable abiotic environmental conditions.

Information: http://www1.montpellier.inra.fr/ibip/bpmp/english/index.htm

Members: Inra, CNRS, UM, Montpellier SupAgro

Contact: pierre.berthomieu@supagro.fr

Internship offers: http://www1.montpellier.inra.fr/ibip/bpmp/emplois.htm

UMR CBGP - Centre for Biology and Management of Populations

The CBGP joint research unit aims to understand the mechanisms that govern populations of organisms that are important to agriculture, forests, human health and biodiversity conservation. Its studies concern biological models (arthropods, nematodes and rodents), and follow six lines of research: origin and characterization of biodiversity; adaptation of plant eaters, their natural enemies and symbionts; ecology and evolution of zoonoses; biology, ecology and evolution of invasive species; statistical and evolutionary population genomics; and high-throughput molecular and bioinformatics techniques

Informations: www6.montpellier.inra.fr/cbgp Members: Cirad, Inra, IRD, Montpellier SupAgro

<u>Contact:</u> marie-stephane.tixier@supagro.fr - serge.kreiter@supagro.fr

<u>Internship offers</u>: http://www6.montpellier.inra.fr/cbgp/Informations-pratiques/Offres-stages-theses-

post-doc

UMR LEPSE – Ecophysiology Laboratory of Plants under Environmental Stress

The LEPSE joint research unit produces methods and knowledge to help maximizing crop production with less input, essentially water. This objective was initially assigned in the context of the necessity to limit water use by agriculture. Ongoing climate change, with global temperature elevation, increased probability of heat waves and drought episodes have led us to widen our domain of research.

Information: http://www6.montpellier.inra.fr/lepse

Members : Inra, Montpellier SupAgro *Contact:* anne.pellegrino@supagro.fr

Internship offers: http://www6.montpellier.inra.fr/lepse/Utile/Offres-d-emploi-Stages

USC CEFE – Centre for Functional and Evolution Ecology (CEFE)

The CEFE is currently the largest French research center in Ecology. Its mission is to perform independent, fundamental scientific research on the dynamics of biodiversity, planetary environmental change, and sustainable development. The CEFE works at a great variety of field sites around the world, but developed particular expertise in Mediterranean and tropical ecosystems. One of its main objectives is to develop scenarios on the evolution of biological systems, as well as strategies for their conservation and their restoration.

Information: http://www.cefe.cnrs.fr/fr/

Members: UM, CNRS, UM 3, EPHE, Montpellier SupAgro

Contact: elena.kazakou@supagro.fr

Internship offers : http://www.cefe.cnrs.fr/fr/emploi-stage-2/offres-de-stages

MPRS Department - Soils, Water, Crops and Livestock Systems Department

UMR Eco&Sols – Functional Ecology & Biogeochemistry of Soils

The aim of the Eco&Sols joint research unit is to use ecological engineering to propose scientifically-based practices to maintain and improve the agricultural and environmental functions of agro-ecosystems. The research undertaken by Eco&Sols seeks to describe and understand the ecological processes of primary production and the regulation of the carbon and nutrient fluxes in the agro-systems.

Information: http://www6.montpellier.inra.fr/ecosols eng/Research

Members: Inra, Cirad, IRD, Montpellier SupAgro

Contact: edith.lecadre@supagro.fr — claire.marsden@supagro.fr

UMR LISAH - Laboratory for the Study of Interactions between Soil, Agro-Systems and Water Systems

The LISAH joint research unit focuses its work on hydrology, the transfer of contaminants and erosion of highly developed and cultivated soils. It also studies the spatial proprieties of these areas, and their evolution. These studies aim at analyzing the issues of water and soils in cultivated areas.

Information: https://www.umr-lisah.fr/ Members: Inra, IRD, Montpellier SupAgro

Contact: stephane.follain@supagro.fr - francois.colin@supagro.fr - armand.crabit@supagro.fr

UMR LSTM - Tropical and Mediterranean Symbioses Laboratory (LSTM)

The LSTM joint research unit studies microbiology and biology of plants, based on a multidisciplinary and integrative approach. It aims at understanding the molecular mechanism influencing the establishing of symbioses, as well as their role in ecosystematic services. It also studies the biodiversity of symbiotic microorganisms.

Information: http://umr-lstm.cirad.fr/l-unite
Members: UM, Cirad, IRD, Montpellier SupAgro
Contact: brigitte.brunel@supagro.inra.fr

<u>Internship offers</u>: http://umr-lstm.cirad.fr/offres-d-emploi-et-propositions-de-stages

UMR SELMET – Livestock Systems in Tropical and Sub-Tropical Regions

The SELMET joint research unit works on animal production agro-ecosystems in warm climates, in normal and harsh conditions. The extreme conditions under which some of these systems function challenge the limits of ecological intensification.

Information: http://umr-selmet.cirad.fr/en
Members: Inra, Cirad, Montpellier SupAgro

Contact: nathalie.agbagla@supagro.fr - charles-henri.moulin@supagro.inra.fr

UMR SYSTEM - Crop Systems Tropical and Mediterranean Cropping Systems functioning and management

The SYSTEM joint research unit produces knowledge and tools to assess and design cropping systems combining economic efficiency and the production of environmental services. In Mediterranean and tropical areas, it explores the hypothesis whereby the biological diversity of species cultivated in the same place fosters ecological intensification.

Information: http://umr-system.cirad.fr/

Members: Cirad, Inra, Montpellier SupAgro, Ciheam-IAM

Contact: aurelie.metay@supagro.fr

SABP Department - Department of Sciences for Agro-Bio-Processes

UMR G-EAU - Water Management, Actors, Uses

The G-EAU joint research unit conducts researches on hydrosystems, from physical description to integrated water management; it contributes to the design and evaluation of facilities to develop innovating solutions and policies for improved water management. The unit is strongly involved in 'Water and Agriculture' and 'Water and Society' master programmes.

Information: http://www.g-eau.net/

Members: IRSTEA, Cirad, IRD, AgroParisTech, Montpellier SupAgro

Contact: gilles.belaud@supagro.fr

Internship offers: http://www.g-eau.net/index.php/recrutement

UMR IATE – <u>Agro-Polymer Engineering and Emerging Technologies</u>

The IATE joint research unit generates knowledge regarding the structural-functional properties of plant-based products upon transformation to food, biomaterials, biomolecules and bioenergy.

Information: http://umr-iate.cirad.fr/

Members: Inra, Cirad, UM, Montpellier SupAgro Contact: maeva.subileau@supagro.inra.fr

UMR ITAP – <u>Information and Technology for Agro-Processes</u>

With the aim of developing equipment for a more sustainable agriculture and for services related to the environment, UMR ITAP develops the scientific and technical bases of the following topics: information and associated systems (optical measurements, decision support systems), eco-technologies for sustainable agricultural production (including equipment for crop protection and maintenance), environmental and social assessment based on life cycle assessments.

Information: http://itap.irstea.fr/
Members: IRSTEA, Montpellier SupAgro
Contact: carole.sinfort@supagro.fr

Internship offers: https://itap.irstea.fr/?page_id=59

UMR MISTEA - Mathematic, Computing & Statistic for Environment and Agronomy

The activities of the MISTEA joint research unit concern the development of mathematical, statistical and computer science methods dedicated to analysis and decision support for Agronomy and Environment, with particular emphasis on modeling, dynamical systems and complex systems.

Information: http://www6.montpellier.inra.fr/mistea

Members: Inra, Montpellier SupAgro Contact: benedicte.fontez@supagro.fr

Internship offers: http://www6.montpellier.inra.fr/mistea/Offres-de-stage-these-emploi

UMR NUTRIPASS - Preventive malnutrition & associated pathologies

The NutriPass Joint Research Unit develops research on nutritional status as determinants and consequences, as well as on strategies and intervention policies. Its research is centered around issues which arise in the context of the nutrition transition and the dual burden of malnutrition (deficiencies and excesses) now affecting a majority of developing countries.

Informations: http://www.nutripass.ird.fr/ Members: IRD, UM, Montpellier SupAgro

Contact stage: nutripass@ird.fr

UMR QUALISUD – Integrated Quality Food System

The QUALISUD joint research unit aims at developing an integrated approach for production and preservation of products and food with optimum organoleptic, health and nutritional optimal qualities.

Information: http://umr-qualisud.cirad.fr/en/the-research-unit

Members : Cirad, UM, Université Avignon et des pays de Vaucluse, Montpellier SupAgro, Université de la

Réunion

Contact: manuel.dornier@cirad.fr

UMR SPO – Sciences for Enology

The SPO joint research unit is one of the most important organizations involved in research in enology worldwide. It comprises 3 research teams: microbiology, biosynthesis and composition in polyphenols and polysaccharides (BCP2) and structures of phenolic (interactions, reactivity, assemblies) (SPIRAL). Close interactions with the INRA Experimental Unit of Pech Rouge-Narbonne (UE PR) allow the development of research projects up to pilot or pre-industrial scale and provide unique opportunities for innovation and transfer.

Information: http://www6.montpellier.inra.fr/spo/
Members: UM, Inra, Montpellier SupAgro
Contact: bruno.blondin@supagro.fr

USC LBE – Laboratoire de Biotechnologie de l'Environnement

Les recherches conduites par l'USC LBE portent sur la valorisation par voie biologique des résidus issus de l'activité humaine selon le concept de la bioraffinerie environnementale et se déclinent en 4 axes transversaux renforçant la compréhension des mécanismes et la maîtrise des procédés :

- Diversité et Ingénierie des Ecosystèmes microbiens (DIEM)
- Matières compleXes & Ingénierie des bioProcédés (MaXIP)
- Système, Analyse, Modélisation et Informatique (SAMI)
- Développement Technologique et Innovation (DTI)

Informations: http://www6.montpellier.inra.fr/narbonne

Membres: Inra, Montpellier SupAgro

<u>Contact</u>: <u>Sylvie Farine – sylvie.farine@supagro.inra.fr</u>

<u>Internship offers</u>: attention stages à Narbonne - http://www6.montpellier.inra.fr/narbonne/Offres-de-these-stage-emploi

SESG Department - Sciences Economiques, Sociales et de Gestion

UMR INNOVATION - Innovation and Development in Agriculture and Agri-Food Sector

The mission of the INNOVATION joint research unit is to inform private and public actors' decision-making by producing knowledge on the processes of innovation and development in agricultural and food systems. Its research focuses on innovation processes, ranging from understanding the objectives of the actors wanting to innovate to analyzing innovations' impact on development. Its research also covers the methods required to support the actors who innovate.

Information: http://umr-innovation.cirad.fr/
Members: Cirad, Inra, Montpellier SupAgro
Contact: stephane.de-tourdonnet@supagro.inra.fr

UMR LAMETA – Montpellier Laboratory of Applied & Theoretical Economics

The LAMETA joint research unit aims at developing a plurality of works through specific tools (Market Econometrics, behavioral economics, experimental economics, public economics, history of economics thought, micro economy, social economy, game theory). The targeted areas are as follow: Risks, preferences and behaviors; Public decision, collective actions and social ethic; Competition, regulations and network industry and finally Environment, natural resources and biodiversity.

Information: http://www.lameta.univ-montp1.fr/
Members: Inra, CNRS, UM, Montpellier SupAgro
Contact: pauline.lecole@supagro.inra.fr

UMR MOISA - Markets, Organizations, Institutions and Actors' Strategies

The MOISA joint research unit studies issues related to the strategies implemented by the different actors, private or public, individuals (consumers) or collectives (social groups of market or non-market production), to their internal mode of communication (enterprises) or external (vertically or horizontally), and to the functioning of institutions (markets, laws), which are applied to food science and rural agricultural systems in the Mediterranean and tropical areas.

Information: http://umr-moisa.cirad.fr/

Members: Cirad, Inra, CIHEIAM-IAMM, Montpellier SupAgro

Contact: lucie.sirieix@supagro.fr

Internship offers: http://umr-moisa.cirad.fr/offres-stages-theses-post-doc

USC GRED - Gouvernement, Risque, Environnement, Développement

Quatre axes structurent à présent l'USC GRED:

- Biodiversités et sociétés
- Gouvernance des ressources et des territoires Pluralité des règles, des acteurs et des espaces de décision
- Risques, transports et vulnérabilités des territoires
- Modélisation et représentations spatiales pour l'aide à la décision en aménagement

De nouvelles actions transversales ont été identifiées, au niveau des thématiques (conflits et accès aux ressources, politiques publiques) et/ou des chantiers relatifs à des milieux spécifiques (forêts, milieux littoraux et insulaire), ou encore des pays ou région (Maghreb, Afrique de l'Ouest) qui permettent des collaborations et dynamiques trans-axes.

Informations: http://www.gred.ird.fr/
Tutelles: IRD, UM3, Montpellier SupAgro

Contact <u>stage</u>: <u>pascale.maizi@supagro.fr</u> – <u>marie-jeanne.valony@supagro.fr</u>