# Agroscope Job Advertisement

## Position

**PhD on the temporal development of the microbiome in the growing pig**

## Introduction

Targeted manipulation of the gut microbiota is increasingly recognized as a mean to improve livestock health. To date, understanding the precise role of the intestinal microbiome in health and disease has been restricted by limited access to the ‘true’ (not fecal) intestinal microbiome. However, interpretation of bacterial communities of the small intestine by studying the rectal microbiome from stool samples has its limitations. The objective of this PhD thesis is to study the temporal stability of the gut microbiota throughout pig’s life. In this PhD, you will test and validate a new non-invasive sampling technology. You will then study the fate of the microbiota under physiological and pathophysiological conditions.

This PhD project is a collaboration between Agroscope and the Department of Agricultural and Food Science (DISTAL) of the University of Bologna in Italy. The MonoGutHealth project will provide an interdisciplinary, intersectoral and international training experience for you as an early stage researcher (ESR). Together with 10 other ESRs, you will be involved in projects exploring novel strategies employing nutritional and/or bioactive ingredients that positively influence perinatal development in monogastrics through optimal microbial colonisation of the gut. Ultimately, the MonoGutHealth project aims to promote optimal growth of pigs and chickens and at the same time make them more resilient to environmental and health challenges, reduce the number of medicinal interventions and improve animal welfare.

## Tasks

- Test and validate the new sampling techniques in pigs
- Perform pig trials using the new digesta sampling techniques
- Perform microbiome analysis on digesta samples

## Requirements

- International ESR with a master degree in veterinary medicine, animal or nutritional sciences or biology
- Basic knowledge in pig nutrition and gastrointestinal physiology is essential, and first-hand lab experience would be a plus
- Candidates who have previous experience with pig experimental work are desired
- Applicants must show their ability to understand and express themselves in both written and spoken English sufficient to derive the full benefit from the network training
- There are strict eligibility requirements for the ESR PhD positions in MSCA-ITN. Please ensure that you qualify before applying, as ineligible candidates cannot be considered. (refer to [https://ec.europa.eu/research/mariecurieactions/resources/document-libraries/information-note-fellows-innovative-training-networks-itn_en](https://ec.europa.eu/research/mariecurieactions/resources/document-libraries/information-note-fellows-innovative-training-networks-itn_en))

## Information on the Employer

Agroscope is the Swiss federal centre of excellence for research in the agriculture and food sector. Its researchers carry out their work at a number of sites in Switzerland. Headquartered in Bern-Liebefeld, Agroscope is attached to the Swiss Federal Department of Economic Affairs, Education and Research EAER.

The Swine Research Unit at Agroscope Posieux carries out research on pig nutrition and pig physiology. A major focus of our research is on piglet development. We offer a varied job in a dynamic work environment, as well as thorough training and a modern research infrastructure. Flexible working hours and good social benefits are among the perks of this position.
**Workplace**
1725 Posieux (Fribourg state, Suisse)

**Compensation**
According to standards of the Grant Agreement MonoGutHealth

**Employment Level**
100%

**Application**
If this position interests you and you fulfil the profile of requirements, we look forward to receiving your online application including contact information of 2-3 referees here: human.resources@agroscope.admin.ch (Ref.nr. 46438). Application deadline: August 15, 2021

The application should include the following points:

• your complete CV,

• motivation letter*,

• copies of University Bachelors/Masters certificates or equivalent and

• contact details of two referees, who can provide a letter of recommendation.

• Include a General Data Protection Regulation (GDPR) statement**.

* Points to be included in the motivation letter (maximum 600 words)

• Describe what about the advertised position particularly interests you, why you want to apply for it and why you should be considered for the ESR position.

• Indicate why you want to pursue a PhD project and not take a job in industry.

• Explain why you think it is important to improve animal welfare and efficiency in livestock production.

• Describe your experience in working with experimental animals, if any, and why animal experiments need to be performed.

** You consent that your personal data will be processed by the MonoGutHealth project consortium for considering your application for the ESR position.

Additional information can be obtained from Dr. Catherine Ollagnier (catherine.ollagnier@agroscope.admin.ch) or Dr. Giuseppe Bee by mail (giuseppe.bee@agroscope.admin.ch) (please do not send applications to these email addresses).

Start: 1st of September 2021 or by arrangement. Duration of employment: 3 years.