ÉCOLE NATIONALE VÉTÉRINAIRE, AGROALIMENTAIRE ET DE L'ALIMENTATION

2023 - JOB PROFILE

POSITION TITLE :
AERC in Ruminant Herd Health Management

Teaching department: SAESP
Teaching unit: Farm Animal Medicine
Research unit: UMR BIOEPAR

NATURE OF EMPLOYMENT

- **Establishment : Oniris**
- **Recruitment Grade: AERC**
- **CNECA Section: 08**
- **Disciplines to be filled: Bovine medicine**
- **Type of recruitment: competition**
- **Renoirh No.: A2ONI00009**

RECRUITMENT CONDITIONS

The position is accessible by mobility for any teacher-researcher civil servant. See the memo from the Ministry of Agriculture and Food Sovereignty: https://info.agriculture.gouv.fr/gedei/site/bo-agri/document_administratif-36905242-d3aa-470d-b03e-55a0ab822145

However, if it is not filled by mobility, the post is also accessible to any eligible European citizen by competition. For any information, consult Order AGRS2135763A of the Official Journal of the French Republic:

https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000047721087

GENERAL ARGUMENTS AND OBJECTIVES

The latest General States of Food insist on the need to strengthen and promote the attractiveness of education in animal production and to encourage the installation of young veterinarians in rural areas. To ensure the sustainability of the beef sector, veterinarians must propose health management solutions in line with regulations and societal demands to implement practices that (*i*) save on chemical inputs and (*ii*) improve animal health and welfare. They must constantly adapt their practices to the rapid changes in livestock farming. Thus, the expansion of herds and the resulting increased workload implies greater anticipation on the part of farmers to manage health risks and therefore a need for planning. The same applies to livestock farmers wishing to increase the share of grazing for whom securing feeding strategies is made more complex and management of specific health risks is necessary. To this end, students must receive high-level training based on scientific knowledge of the risks and ways to control them in changing livestock systems.

In bovine veterinary medicine, Oniris offers recognized training, based on case resolution approaches. The clinical training of future veterinarians is carried out in the CHUV and during breeding visits, outsourced internships in veterinary clinics and tutored internships. The attractiveness of the training is reflected in the fact that the year of deepening and the tutored format are regularly chosen by more than a third of each promotion. In addition, an internship and a residency preparing for the examination of the European College of "*Bovine Health Management*" are organized.

The next challenges are to prepare students, ever more numerous, for all the skills required by the new diploma framework. In bovine medicine, in addition to individual medicine and population

medicine approaches, initial and continuing training in herd monitoring methods based on regular monitoring of animals and the identification of corrective actions to improve health and health must be strengthened. animal welfare when necessary. The demand for this type of service is growing and will develop with the projected evolutions of livestock systems. Ensuring all these training courses and maintaining the strategic positioning of the institution requires maintaining human resources in bovine medicine education. This will make it possible to develop innovative supports for training, in particular the provision of methods and training in situations for herd monitoring, production of supports for virtual situations.

In terms of research, the main objective pursued within the UMR BIOEPAR is to produce biological, epidemiological and economic knowledge for an integrated management of farm animal health. One of the current challenges is to produce scientific knowledge on reliable and robust methods for measuring health status, which can be used for herd monitoring, on the identification of disease risks and on the development and the evaluation of innovative animal health management solutions, co-constructed with users, in the context of changes in livestock systems. The first work of the LIT Ouesterel (an association focused on animal welfare in the west of France and of which Oniris is a major player) shows in particular that difficulties in health monitoring and disease risk control are a barrier to the increased use of grazing in dairy cattle farming.

MISSIONS

TEACHING:

- Participation in the implementation of courses dedicated to health and health management production at the herd level (Herd Health Management) as part of regular follow-ups in connection with the modules already in place or to be developed in population medicine.
- Participation in the realization of directed ruminant medicine courses in the veterinary core curriculum, promoting personal and group work on site or in breeding (face-to-face or remote)
- Participation in the clinical teachings of the year of clinical training in ruminant medicine: training in clinical case resolution in individual and collective medicine , integrating when possible digital tools (*virtual-vet*, *e-learning* ...)
- Participation in the year of deepening "production animals": supervision of students in the resolution of cases, supervision of 6A tutored
- Participation in the supervision of veterinary doctor's thesis work in the fields of ruminant medicine and animal welfare management

RESEARCH :

Epidemiology of grazing-specific health conditions

The research missions will be carried out in the UMR BIOEPAR, epidemiology team PEP'S (Herd Health Public Health). The AERC's research will focus on the characterization of health states vis-à-vis diseases whose risk may be increased by increased use of grazing and on the other hand, on the assessment of the risks specific to pasture management for these diseases. During his PhD, the AERC will apply these questions to parasitic diseases (digestive strongyles, respiratory strongyles, trematodoses), vector-borne diseases (e.g. ehrlichiosis), or metabolic diseases (e.g. hypomagnesiemia).

To do this, an observational epidemiological study system of the cohort follow-up type could be set up within a network of farms (to be recruited) with levels and modalities of different grazing management (duration, type of rotation, existence of wetlands, animal mixtures). The prevalence of target health states will be estimated from individual, lot or herd level measurements, based on health and well-being to build and evaluate. The detailed description of the behaviour of dairy cows on pasture (based on the use of tools such as GPS or rumination monitoring) can be implemented in order to integrate this information to assess the level of exposure to health risks on pasture.

The AERC will be able to rely on the skills of BIOEPAR colleagues involved in work on metabolic diseases, bovine strongyloses, tick-borne diseases, and the nutrition-health relationships of cattle. Networks of farms with a grassland system may be solicited (network developed as part of a thesis in progress and network of breeders being set up as part of the hunt for innovations within the LIT Ouesterel). This work will contribute to the development and evaluation of tools to support livestock farmers wishing to increase the use of grazing.

CANDIDATE PROFILE WISHES TO :

Proficiency in French required

Holder of a veterinary doctor degree and qualified to practice in France, the candidate will have acquired skills in bovine medicine and will have to show aptitude educational and a scientific interest in epidemiology. He will have a strong motivation for teamwork. A commitment to obtain a thesis and European diploma from the ECBHM will be strongly encouraged.

CONTACTS

Mr. Raphaël Guatteo - Head of the DSAESP: raphael.guatteo@oniris-nantes.fr /
tél: +332 40 68 28 00
Mrs Nathalie Bareille - Director of UMR BIOEPAR – nathalie.bareille@oniris-nantes.fr /
tél : +332 40 68 76 49

FOR FURTHER INFORMATIONS :

https://www.oniris-nantes.fr/accueil/travailler-a-oniris
https://www.oniris-nantes.fr/en/home/working-at-oniris