

# Postdoctoral Research Fellow in Antibiotic Resistance

**NEIKER – Basque Institute for Agricultural Research and Development** is a public research institute member of the Technological Corporation TECNALIA, specialized in Agricultural Innovation, as well as Environment and Natural Resources. R+D+i at the Department of Animal Health (located in Bizkaia, Northern Spain) focuses on surveillance, control and prevention of animal diseases in livestock and at the livestock–wildlife interface.

We are seeking a postdoctoral fellow to work within the *Department of Animal Health* of NEIKER, in a project funded by the Basque Government to promote the rational use of antibiotics in Veterinary Medicine.

## Key tasks:

The position aims to comprehensively delineate the molecular epidemiology, nature and extent of Antimicrobial Resistance (AMR) in animal health in the "One Health" context to inform evidence-based strategies for its monitoring, prevention and containment by:

- 1. Instituting surveillance programmes on antibiotic use and resistance in animal health,
- Demonstrating the phenotypic and genotypic mechanisms of antibiotic resistance by sensitivity testing and appropriate screening tests together with whole genome sequencing (WGS) and/or polymerase chain reaction (PCR) and DNA sequencing of resistance genes respectively,
- 3. Delineating the genetic determinants of resistance and clonality,
- 4. Developing procedures to reduce infectious diseases in animals and promote animal health to reduce antimicrobial consumption,
- 5. Developing novel diagnostic techniques,
- 6. Collaborate with relevant departments to improve capacities of the local systems to contain and decelerate the evolution and progress of ABR in the "One Health" context.

## Duties:

- Carrying out research contributing to the successful completion of the research project.
- Analysis of research gaps in the antibiotic resistance area.
- Critical analysis and compilation of published literature in the area.
- Planning and conducting scientific studies, including field work.
- Maintaining detailed records of the research.
- Manuscript preparation.
- Planning and participating in national and international meetings.
- Assisting with supervision of laboratory members working on the same research project.

## **Eligibility:**

- A PhD that was completed within five years of the application deadline (those applicants that received their PhD earlier will be considered if special circumstances exist).
- Experience in molecular microbiology and AMR are mandatory.
- Experience of bacterial genome analysis and knowledge of bio-informatics would be highly advantageous.
- Excellent communication skills, both written and oral.

Preference will be given to applicants with a veterinary/health sciences background





# **Application Documents:**

- 1. A letter of motivation
- 2. Curriculum vitae including full academic record, experience and list of publications
- 3. The contact details of 2 academic referees.

# **Benefits:**

Gross salary: It will be established according to the candidate's experience

Period: Three year contract

#### Deadline:

October 6

# Contact person:

Ana Hurtado ahurtado@neiker.eus +34 627979094

