



Direzione Ricerca,  
Innovazione e  
Internazionalizzazione

**UNIVERSITÀ  
DI TORINO**

**ID**

**VP\_210\_VET**

## **Visiting Professor Program Academic Year 2025/2026**

**TEACHING COMMITMENT:** 16 hours

**COURSE TITLE**

**Role of Molecular Epidemiology in Veterinary Public Health**

**TEACHING PERIOD**

II semester

**SCIENTIFIC AREA**

Infectious Diseases of Animals

**LANGUAGE USED TO TEACH**

English

**COURSE SUMMARY**

Basic principles of molecular epidemiology, with focus on the use of data from molecular analysis of infectious agents of diseases of animals. Specific interest on agents of zoonoses, to infer on the risk of spillover from wild animal reservoirs to domestic animals and people. Description of study cases at the international level. Usefulness of molecular epidemiology in the assessment of the risk of epidemics and of pandemics, as well as in the analysis of past epidemics to infer on causes, sources of microbial agents, effectiveness of disease control measures.

**LEARNING OBJECTIVES**

Learning of basic principles of molecular epidemiology; capability of understanding published results of epidemiological studies based upon the analysis of molecular data; capability of proposing the application of molecular epidemiology to specific fields of interest.

### **OTHER ACTIVITIES BESIDE THE COURSE**

Involvement of PhD students and research fellows from institutions other than the University of Torino, to gain a wider perspective on the specific field of molecular epidemiology

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### **VISITING PROFESSOR PROFILE**

The visiting Professor should be a veterinarian with extensive experience in molecular epidemiology applied to infectious disease of animals and zoonoses, including the ecology, epidemiology and evolution of infectious disease, combining field and laboratory studies to understand how pathogens in dynamic ecosystems are transmitted among hosts, across complex landscapes, and over time.

### **CONTACT REFERENT**

Alessandro Mannelli  
alessandro.mannelli@unito.it