The purpose of this presentation is to highlight the importance of a university level for an appropriate veterinary education in general and of basic sciences teaching in particular. This is crucial to understand and be able to face the challenges linked to animal health and welfare, veterinary public health, animal production and emerging diseases risks.

Basic sciences are supposed to prepare the student for pre-clinical and clinical sciences. They mainly include: physics, chemistry, animal & plant biology, biological taxonomy, biomathematics, anatomy, histology, embryology, physiology, biochemistry, molecular biology, genetics, immunology, bacteriology, virology, parasitology, epidemiology, ethology & animal welfare.

However the organisation of basic sciences is challenging, since the occurrence of additional topics to be taught (e.g. molecular biology, foreign languages, new information technologies, new domestic animals species …) obliges to reduce the volume of traditional topics. Furthermore, the occurrence of new methods of education requires from the basic sciences teachers to have a more transversal knowledge about veterinary medicine and to collaborate with clinical sciences teachers.