O32: Unlocking the Power of Veterinary Samples: A Promising Source for “One-Health” Research

Ingrid Walter (1), Stefanie Burger (1), Melanie Stargardt (1), Stefan Kummer (1), Monika Wieser (1)
(1)University of Veterinary Medicine, VetCore Facility of Research/VetBiobank, AT

Description

The importance of biobanks collecting high quality human biospecimens for research is widely recognized and promoted. However, the potential benefits of animal samples often remain underestimated, although the integration of veterinary biobank collections could add valuable findings for both human and animal medicine.

The One-Health concept goes far beyond the research of zoonoses, which is probably the best-known area in this field. Comparative medicine has a high potential, as pets and owners live in the same environment and are often amected by similar diseases such as obesity, diabetes, and cancer. To ensure reliable comparison between data obtained from animal or human samples, it is essential to adhere to the same standards when collecting and storing biospecimens and associated data. Following ISO standards for pre-analytics is crucial to guarantee accurate and consistent results for molecular analyses.

In summary, investigating veterinary samples in an integrative, transdisciplinary approach will open new insights into the transmission, etiology, diagnosis, prevention, and treatment of diseases, leading to a deeper understanding of disorders. Ultimately, this concept can result in the development of emective therapies that are emective across dimerent species. To achieve this goal, bridging the gap between researchers in human and veterinary medicine is necessary. This is already recognized by incorporating the Veterinary University of Vienna with its VetBiobank into the Austrian national node, BBMRI.at. Collaboration with biobanking initiatives such as BBMRI-ERIC will enhance the impact and success of this research.

Keywords

veterinary biospecimens, One-Health, Comparative Medicine, preanalytics, BBMRIERIC