# ISEAS
**I**nternational **S**ociety of
**E**ducation in
**A**nimal **S**ciences

## *Saliva and Extracellular Vesicles: From Biomarkers to Education*

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**DESCRIPTION**

Saliva is a versatile, non-invasive biological sample with multiple applications in research and education. Participants will learn about the composition and functions of saliva, focusing on extracellular vesicles (EVs) and their potential as biomarkers. Key EVs isolation and characterization methods will be outlined. The workshop also explores the use of saliva and EVs in teaching and training, showing how research-based activities can engage students and illustrate practical applications. A case study from will demonstrate how salivary EV analyses can be integrated into educational settings, linking scientific research to hands-on learning experiences.

**STRUCTURE OF THE WORKSHOP (total 1 h):**

Format: 1-hour online presentation.
The workshop is structured as a dynamic theoretical session divided into four main blocks:
- Part 1: Introduction to Saliva as an Analytical Sample (15 min). Brief overview of saliva composition, characteristics, and its advantages as a versatile, non-invasive biological matrix for both research and education.
- Part 2: Salivary Extracellular Vesicles (EVs) & Methodology (25 min). Definition and biological potential of EVs. General overview of the main techniques and challenges regarding their isolation and characterization, specifically tailored to salivary samples.
- Part 3: EVs in Teaching and Training: A Practical Case (10 min). Exploring the educational utility of salivary EVs. Presentation of a case study based on a successful past project developed at the University of Murcia (UMU), demonstrating how to integrate these analyses into hands-on learning experiences.
- Part 4: Q&A and Discussion (10 min).

**DATE AND TIME**: April 22 at 13:00 (CEST)

**PRICE**: 5€ for ISEAS members

**PLATFORM:** ZOOM (link and password will be sent to participants' email before the workshop)

**EXPECTED AUDIENCE:**
Educators, although other profiles are also welcomed.