

## Webinar – 15<sup>th</sup>- 16<sup>th</sup> December 2020

# Using ontologies to improve animal science research

**Organizing center:** INRAE (France)

**Target participants:** Scientists, RI technicians, Bachelor, Master or PhD students

### Objectives

- Understand the usefulness of the ontologies to annotate experimental dataset
- Use these ontologies and reference them in publications
- Use the ontologies adapted to SmartCow

**Pre requisite skills:** Basic knowledge in biology

## Program

**Tuesday 15 December 2020, 9:45 – 15:30 (Paris time)**

9:45-10:00 Introduction of the course

10:00 -12:00 What is an ontology? by Olivier Dameron, University of Rennes 1 (France)

1. Definition
2. History
3. Examples of use of ontologies (application of ontologies)
4. Exercises:
  - i. How to build a small ontology?
  - ii. How to use ontologies to annotate data with the open-source editor Protégé?
  - iii. How to use ontologies to retrieve data with the open-source editor Protégé?

*12:00 – 13:30 lunchbreak*

13:30-15:30 The ontology engineering lifecycle and its best practices by Monika Solanki, Agrimetrics (UK)

**Wednesday 16 December, 10:00 -12:00 (Paris time)**

1. Presentation of French ontologies from INRAE
  - a. ATOL ontology by Catherine Hurtaud and Linh Chi Nguyen, INRAE (France) (25 min)
  - b. EOL ontology by Jérôme Bugeon, INRAE (France) (15 min)
  - c. AHOL ontology by Marie-Christine Meunier-Salaün, INRAE (France) (15 min)
2. Example of application/use of an ontology AHOL for professional use, by Marie-Christine Meunier-Salaün, INRAE (France) (20 min)
3. Text based annotation with ontologies, Claire Nédellec INRAE (France) (45 min)

***Complementary practical sessions – Upcoming dates***

*A one-day complementary practical session will be given twice, online, for a limited number of participants (10 max per session). The program of this session and the registration procedures will be detailed after the webinar.*