# Heat stress in dairy cows

Two research internship opportunities in Agroscope (Switzerland)

## Topic 1: Bringing together behaviour & physiology: does the behavioural reactivity of a dairy cow influences its physiological reactions to heat stress?

In many species, personality traits, including behavioural reactivity, partly influence the individual's physiological reactions to stress situations. In the context of a project investigating the influences of the diet and cow type on heat stress in dairy cows, the mission of the internship is to investigate if and how behavioural reactivity (evaluated by stress reactivity tests, such as Novel-Object-Tests) is associated to physiological reactions to heat stress (for example respiration and heart rates, body temperature).

Tasks

- Literature overview
- Data analysis (correlation and multivariate analyses)

Timeframe: 3-5months, earliest possible start: January 2023

## Topic 2: Mitigating heat stress on pasture: which shadow location for grazing dairy cows?

With increasing global temperatures, grazing dairy cows are more and more exposed to heat stress. In a pilot study, we observed that providing shadow on pasture can mitigate heat stress. However, cows used the provided shadow depending on the time of the day and potentially shadow location. The mission of the internship is to investigate if shadow management/location can maximize the use of provided shadow and therefore minimize heat stress.

Tasks

- Helping in carrying out a study with dairy cows on pasture (preparations, sampling, data collection)
- Data analysis

Timeframe: 3-5 months, start in April/May 2023

Both internships are located in Posieux, in the French part of Switzerland. The internship language may be German, French, English or Italian.

Contact person:
Anna-Maria Reiche | Agroscope - Ruminant Research Group
anna-maria.reiche@agroscope.admin.ch