



Seminar(i)

Early life interventions to slow down female reproductive ageing

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One of the consequences of modern life is that women prefer to have children on later ages. Yet, the decline in oocyte quantity and quality with age followed by menopause is a significant obstacle for modern women. Besides, studying reproductive ageing in humans is far from being straightforward due to ethical concerns and time-consuming experiments. That is why model organisms like *Drosophila melanogaster* and *Caenorhabditis elegans* are used in search of the ways to slow down reproductive ageing in females. One way to achieve this aim is through the downregulation of nutrient signalling pathways which has been previously shown to be effective. Nutrient signalling pathways can be downregulated by using several interventions including molecular techniques (e.g., RNA interference), dietary manipulations (e.g., intermittent fasting) and pharmaceuticals (e.g., rapamycin). However, the exact timing and mechanisms of these interventions are yet to be investigated. In my postdoc, I have been using *D. melanogaster* and *C. elegans* to understand how downregulation of nutrient signalling pathways affect late-life reproduction in females. For this purpose, I have used different techniques ranging from RNA interference to intermittent fasting and dietary restriction. By far, I have found that downregulation of nutrient sensing signalling during early adulthood is beneficial for late life reproduction in both model organisms. My results underline the importance of early life interventions on slowing down reproductive ageing in females.



WHERE?

Seminar room – SS6 (Institutes bldg. floor -1)

<https://links.uv.es/biodiver/Sultanova>

WHEN?

Thursday 07/04/2022 – 12:00 h

LANGUAGE?

English