YCCSA Seminar Series
Summer 2017

An interdisciplinary seminar series hosted by the York Centre for Complex System Analysis aimed at researchers from all disciplines

The evolution of prolonged post-reproductive lifespans

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9 June 2017
Ron Cooke Hub, RCH/204 at 13:30

Abstract:
Why females of some species cease ovulation before the end of their natural lifespan is a longstanding evolutionary puzzle. In humans as well as some natural populations of cetaceans and insects, reproductive aging occurs much faster than somatic aging and females exhibit prolonged post-reproductive lifespans (PRLSs). Determining the mechanisms and functions that underpin PRLSs has proved a significant challenge. Here I show how my team has used models, along with statistical analysis of observational data, bring together both classic and modern hypotheses proposed to explain PRLSs and discuss their application with particular reference to our studies of killer whales.

In doing so I highlight the need to consider multiple interacting explanations for the evolution of PRLSs. I will finish by discussing how I will be using drones and machine learning in future studies.

The seminar includes a refreshment break

Ron Cooke Hub is on Heslington East Campus – accessible by free bus services Nos. 66 and 44 running at frequent intervals from Heslington West.
The YCCSA Seminar room is on the second floor