

*Evolutionary ecology of life-long telomere dynamics in a wild mammal population*  
**at the University of Edinburgh**

A postdoctoral position is available for 2.5 years in Dan Nussey's group at the University of Edinburgh investigating the evolutionary ecology and genetics of telomere dynamics in a wild Soay sheep population.

Telomeres are repetitive DNA sequences that cap the ends of vertebrate chromosomes. They play a pivotal role in the maintenance of genomic integrity and regulation of senescence at a cellular level, and there is growing interest across disciplines in the utility of telomere length measured in blood cells as a biomarker of ageing and health.

The project, funded by BBSRC, is based on the long-term study of Soay sheep on St Kilda and will utilise a large freezer bank of blood samples (>8000) collected since 1990 to measure telomere dynamics from birth to death for thousands of individuals, alongside other genetic, phenotypic, life history and fitness data collected as part of the study.

The post-doc will work closely with an established and experienced team in the laboratory to generate leukocyte telomere length (LTL) measurements from these blood samples. Their principal responsibility will be to analyse the data produced to address key questions for both evolutionary ecologists and telomere biologists, including: (1) To what degree early-life LTL versus life-long changes in LTL drive population-level variation in LTL, (2) How do early-life environmental conditions and genes contribute to LTL variation, (3) How does natural selection act on LTL across the entire lifespan.

Contact Dan Nussey [dan.nussey@ed.ac.uk](mailto:dan.nussey@ed.ac.uk) or see <http://nussey.bio.ed.ac.uk/> for more information  
Or search for job reference 033045 at <https://www.vacancies.ed.ac.uk> for application details.

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