Plan Overview

A Data Management Plan created using DMPonline

Title: PhD: Evolutionary models for describing regulatory diversity.

Creator: Peter Price

Principal Investigator: Alison Wright

Project Administrator: Alison Wright

Affiliation: The University of Sheffield

Funder: Natural Environment Research Council (NERC)

Template: NERC Template

Project abstract:

Adaptive evolution through changes in coding sequence is severely limited by functional constraints. As such, differential regulation of the genome is often central to the generation of novelty, complex body plans, and intraspecific diversity. We aim to explore the role of differential expression, differential splicing and gene regulatory network rewiring in the generation of sex differences across an avian lineage. As such we will use pre-existing and novel RNAseq datasets to answer questions regarding the evolutionary dynamics guiding regulatory diversity.

ID: 80600

Start date: 01-10-2020

End date: 01-10-2023

Last modified: 15-07-2021

PhD: Evolutionary models for describing regulatory diversity. - Outline DMP

Outline DMP

Project Title

Detecting signatures of selection in regulatory diversity.

Principal Investigator(s) / Grant Holder

Peter Price

Will the grant produce data?

- Yes

Yes. The project will generate Illumina paired RNAseq data and PacBio IsoSeq data for several avian species.

Nominated Data Centre(s)

- Environmental Information Data Centre (EIDC)

Briefly list the datasets that the project will produce. If the total is likely to be larger than 1TB please indicate.

Illumina Paired-end RNAseq data
Samples: five male and five female gonads across two developmental stages for five avian species
Species: Numida meleagris, Anas platyrhynchos, Meleagris gallopavo, Phasianus colchicus and *Taeniopygia guttata.*
Datatype: FASTQ
PacBio Isoseq data
Samples: pooled data from two male and two female gonads from two developmental stages from two species (one library per species)
Species: *Phasianus colchicus* and *Meleagris gallopavo*
Datatype: FASTA and BAM