CENTRE FOR GENOME ENABLED BIOLOGY AND MEDICINE
University of Aberdeen

Genome Assembly and Annotation
__Using Galaxy and the Command Line__

Date: 9 am – 5 pm, Tuesday 29th November

Location: MR117, MacRobert Building, University of Aberdeen, Old Aberdeen Campus.

Format: Instructor led computer based tutorial with support demonstrators.

Instructor: CGEBM Bioinformaticians (Eduardo de Paiva Alves, Antonio Ribeiro, Sophie Shaw and Matthew Gemmell)

Description: Taking next generation sequencing data and transforming this into an assembled genome with annotated genes allows for further insight into the functionality of a species, allows for comparisons with other organisms, and provides a reference genome for other sequencing applications. This workshop will demonstrate a number of software choices and show the process from start to finish using both Galaxy and the command line. It is aimed at researchers who are (or will be) carrying out *de novo* assembly on organisms that do not have a reference genome. For information on resequencing a species that has a reference please attend the Alignment, Visualisation and Variant Calling Workshop on March 14th 2017.

Topics:

- Genome Assembly
- Identification of Contamination
- Gene Calling
- Gene Annotation

Who should attend: This workshop is aimed at researchers, staff and PhD students, interested in genome assembly and annotation. The aim of the workshop is to demonstrate software choices for genome assembly and some of the approaches available for annotation.

Pre-requisites: Introduction to HPC Maxwell, the University of Aberdeen Computing Cluster and Basic Unix Skills workshops. If you have alternative experience of using the command line and Maxwell please contact Sophie Shaw (s.shaw@abdn.ac.uk) to discuss this before registration.

A Maxwell account is needed. We are providing teaching accounts for all participants to use for the duration of the workshop. However if you would like to use Maxwell after the workshop you will need to obtain an account. For more details see http://www.abdn.ac.uk/staffnet/working-here/hpc.php. If you already have a Maxwell account you are welcome to use that.

Optional: Quality Control of Next Generation Sequencing Reads workshop. QC and filtering of reads will not be covered in the workshop so attendance at the previous workshop is recommended.

Closing Date for registrations: 22/11/2015

Cost: For University of Aberdeen staff and PhD students the workshop is £50. Details on how to complete payment are provided on the registration form.

For external delegates from academic institutions the workshop fee is £125. Please contact Sophie Shaw (s.shaw@abdn.ac.uk) for details on commercial rates.

CENTRE FOR GENOME ENABLED BIOLOGY AND MEDICINE
University of Aberdeen

Registrations: To register please follow the relevant link at
http://www.abdn.ac.uk/genomics/bioinformatics/training/ and complete the registration form.

Further Information: Please contact Sophie Shaw (s.shaw@abdn.ac.uk)