

Welcome

Parallel Computing with R using SPRINT
on post-genomic data

Housekeeping

- Health and Safety
- Food
- Computing equipment
- Pub options
- Questions re above?

SPRINT team @



THE UNIVERSITY of EDINBURGH

- Terry Sloan (Co-I)
- Eilidh Troup (Lead Developer)
- Luis Cebamanos (Consultant)



- Prof Peter Ghazal (PI)
- Thorsten Forster (Statistician and PJM)



Partnering/funding

- James Osborne (Training and Outreach)
- Charlie Godfrey (Skills Academy Manager)



After this course, you should...

- have a basic understanding of how to access High Performance Computing Resources
- have some understanding of how parallelisation and HPC could be used for your own post-genomic (or other) “big data”
- have enough knowledge to install the SPRINT package on OSX or unix-like OS
- know how to use SPRINT on ARCHER, HPC Wales, or your own multicore machine/laptop

You will not leave this course with ...

- an HPC programming qualification
- solutions to all your specific data problems
- ability to use parallelisation on Microsoft Windows OS (of course you can use PuTTY on Windows to access a non-Windows cluster)
- knowledge of how to install SPRINT on your local HPC cluster/
service

Programme overview

1. Background on HPC and HPC Wales (James Osborne)
2. Introduction to SPRINT (Thorsten Forster)
3. SPRINT hands-on (Eilidh Troup)

Thursday

1. SPRINT case study (Thorsten Forster)
2. SPRINT hands-on continued (Eilidh Troup)
3. SPRINT installation
4. Q&A (HPC, parallelisation, SPRINT, statistics,...)

Friday

Put up a couple of post-it notes (before lunch)

1. We'll make space for short open discussion sessions (16.45 today, 12.15 tomorrow, 14.00 tomorrow)

> Please use a post-it note to write down one or two of the questions you have going into this course. We'll put them up on a wall and discuss later.
(Simple, complicated, hardware, software, stats, ... anything goes)

2. While you're all here, take the opportunity to exchange problems or ideas between yourselves.

> Take another post-it note and (as concise as you can) write down what sort of data you work (or think of working) on, and maybe the specific issue you have with that. We'll put those up on a wall.

PRACE