

# Hands-on introduction to HPC for life scientists

# **PRACE & BioExcel**

Center of Excellence for Computational Biomolecular Research

#### Vera Matser (matser@ebi.ac.uk) EMBL-EBI

#### Training and Dissemination





Horizon 2020 European Union Funding for Research & Innovation







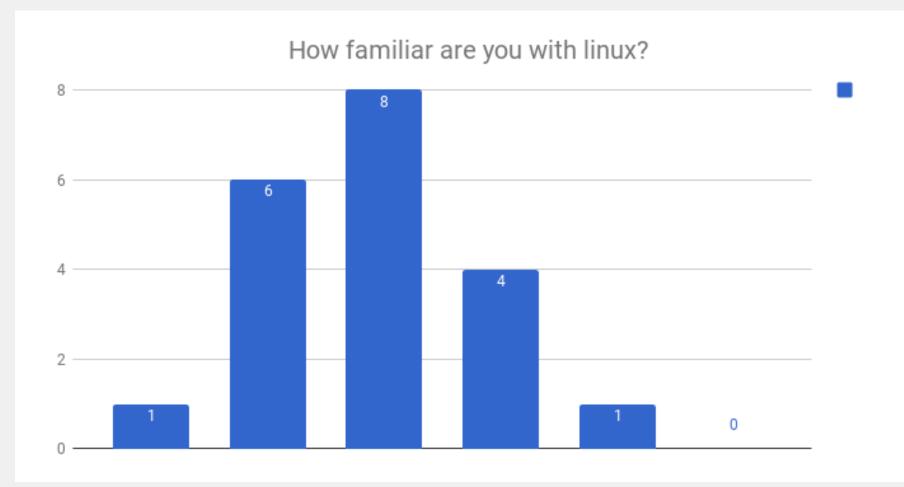
# Activity: Human barometer



### Have you ever been to Edinburgh before?

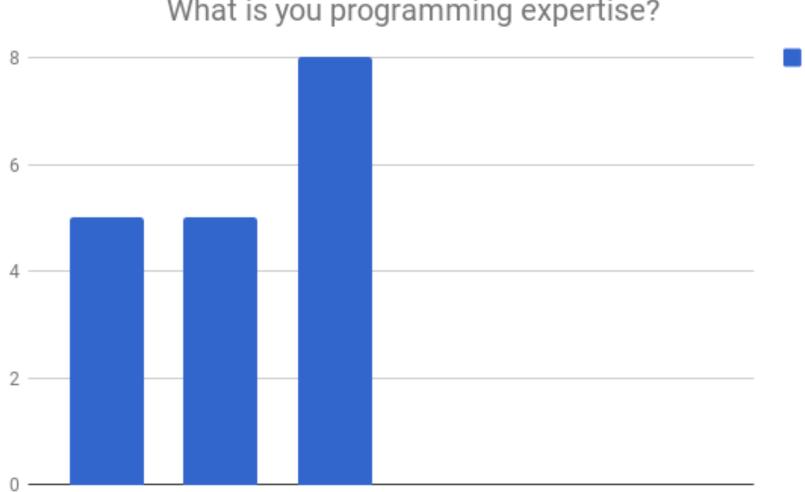
- 1 No first time ever, London is the furthest North I generally go
- 2
- 3
- J
- 4
- 5 I grew up here
- \* Wildcard Where is Edinburgh, aren't we in London?





#### bioexcel.eu

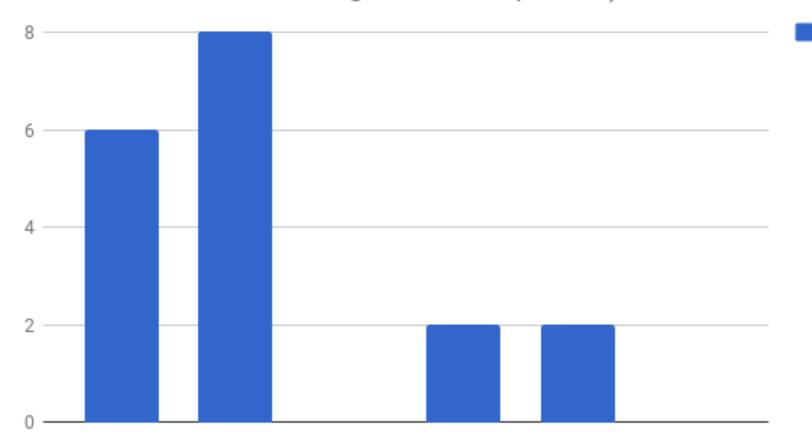




#### What is you programming expertise?

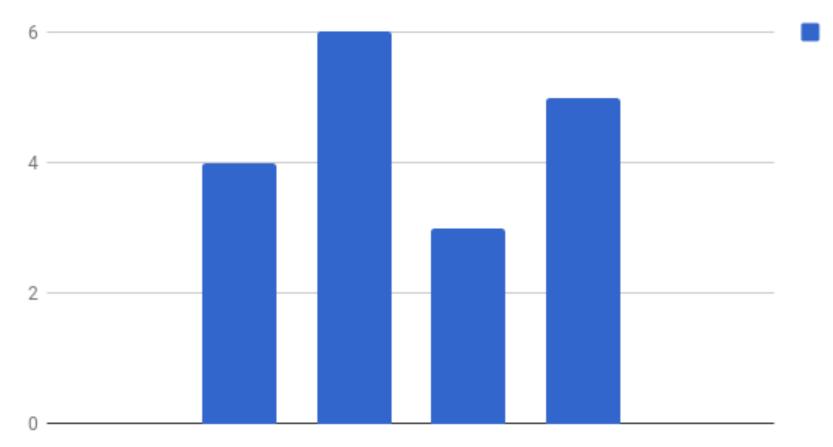


# Have you attended any previous courses dedicated to HPC (or with a large HPC component)?

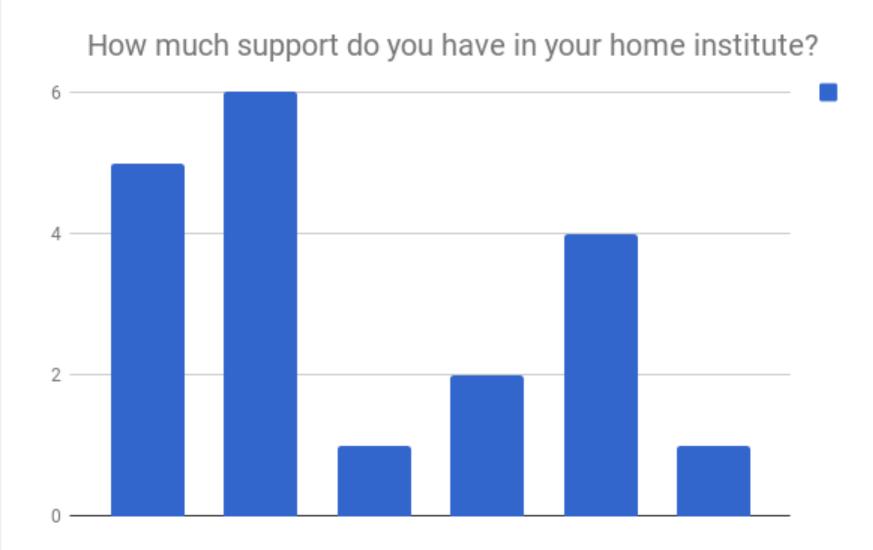




#### How freaked out are you about the prospect of working in an HPC environment

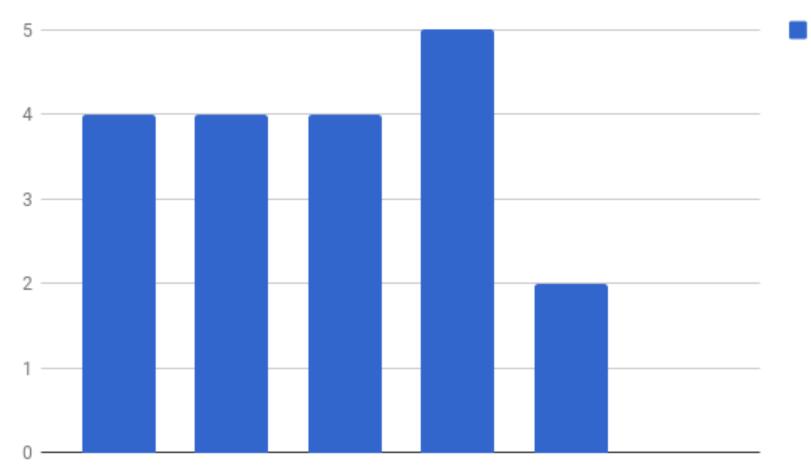






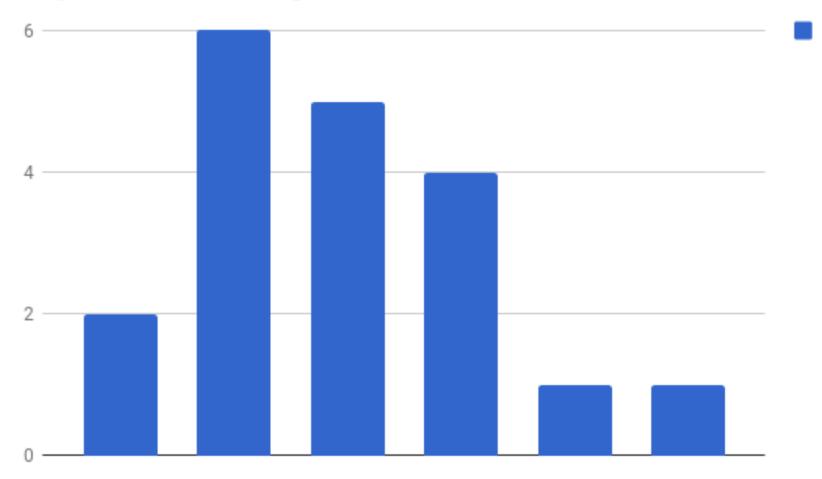








#### Do you know how to gain access to time on an HPC machine?





# **BioExcel Competency Profile**

Group related competencies together into areas

Generic	Scientific
5	13
Generic	Parallel
Computing	Computing
8	5



# **Parallel Computing Competencies**

- Assess computational workflow systems and their potential benefits
- Apply knowledge of batch system
- Write computer programs that can run on a parallel computer
- Assess advantages and limitations for deploying, executing and optimising computations in a cloud/grid/HPC environment
- Apply knowledge of performance profiling to measure suitability of computing platforms



## **Activity - Benchmarking**

Name - Day 1 A – Your rating (1-5) B – Your rating (1-5) C – Your rating (1-5) D – Your rating (1-5) E – Your rating (1-5)

How are your skills developing over time?

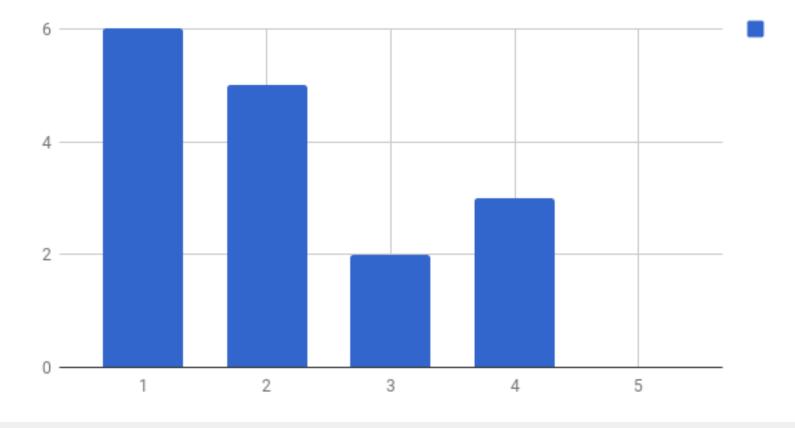
- Pre-course
- Post-course
- 6 12 months

Note:

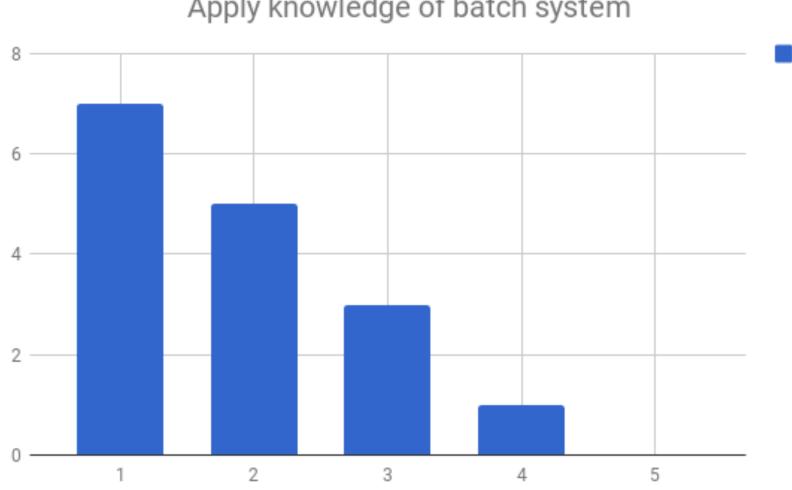
- Survey in email also rates generic computing Competencies
- Link to full profile



# Assess computational workflow systems and their potential benefits







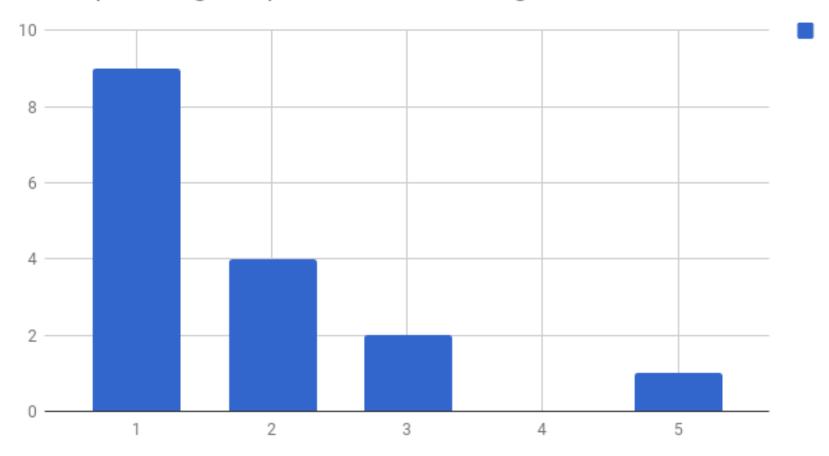
#### Apply knowledge of batch system



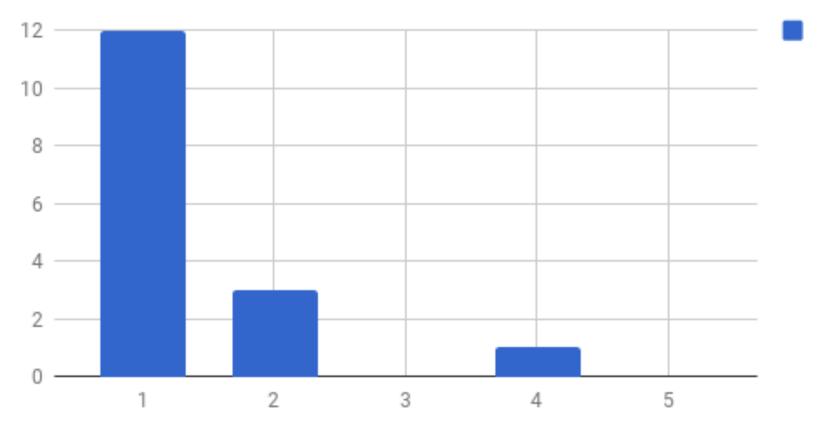
### Write computer programs that can run on a parallel computer n

#### bioexcel.eu

Assess advantages and limitations for deploying, executing and optimising computations in a cloud/grid/HPC environment



#### Apply knowledge of performance profiling to measure suitability of computing platforms





## **Competency rating after the course**

Please fill following survey

- Generic Computing Competencies (8)
- Parallel Computing Competencies (5)

https://www.surveymonkey.com/r/HPCBioExcel



## How to get in touch with us

#### www.bioexcel.eu



@BioExcelCoE



**Company Page** 

About < People

Announce updates, training courses, webinars & papers

Subscribe to mailing list



ask.bioexcel.eu User su

User support forum

Interest Groups

www.bioexcel.eu/interest-groups



## **Course Feedback survey**

http://www.archer.ac.uk/training/feedback/

Please fill in the feedback form before you leave.

Thank you!