Bioinformatics Workshop  
SEB Conference 2014  

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Survey Background

• Anecdotal evidence of bioinformatics skills gaps/shortages amongst life scientists
• Conducted a survey within SEB community to get a snap-shot of this (~200)
• Extension of survey via GOBLET to examine how common these findings were amongst global communities of life scientists (~500).
Survey – The Aim!

• What was included:
  - How people have received bioinformatics training & education
  - Level of confidence with databases, software, command line tools
  - How people would like to receive education and training in the future
  - What skills would particularly be of interest
Survey – The Results

• Comparison of respondents by job title:
Survey – The Results

- SEB Respondents by discipline:
Survey – The Results

• GOBELT Respondents by discipline:
Survey – The Results

• How have you received this training or education:

![Bar chart showing responses to training or education methods]

- Self taught & colleagues
- Masters/UG courses/doctoral
- Professional training courses/university courses
- Internet/online courses
- Other
Survey – The Results

• How would you like to receive this training or education in the future:

- Online/e-learning
- Stand-alone workshops
- Courses at place of work
- Summer schools
- During scientific conferences
- Graduate level programmes at my university
- Undergraduate programmes at my university
- Other

No. of Responses

4/7/2014
Confidence in data analysis techniques

How confident are you using Data analysis techniques?
Confidence in command line software tools
Survey – The Results

• Which skills do you require:

- Analysing & interpreting data/stats
- Programming
- Database selection and usage
- Software tools (using correctly + adapting)
- Sequencing analysis
Online course could be ok if includes a good opportunity to discuss with teachers.

It is too late for me, we need to fix the undergraduate syllabus - all biology students should be encouraged to learn programming and statistics.

User friendly courses for biologists with no programming skills

So many learning sites / tutorials / tools – difficult to pick the "best one"
The Future

- GOBLET priorities:
  - We would like to facilitate and develop appropriate bioinformatics training and education through this global network
  - We would like to expand the GOBLET community and its programmes
  - Train the trainer initiatives
  - Rating of training
  - Collaboration

4/7/2014
Discussion

• Do the survey trends resonate with you? If not, why not?
• Are there gaps in the results? If so, what are they?
• What could Universities/other providers do to help?
  - e.g., CPD? If so, in what form (distance, blended, short workshops)?