Bioinformatics training needs in Australia

Australian BioCommons and the National Bioinformatics Training Cooperative offers national training to uplift the skills of Australian biologists and bioinformaticians. We collaborate to ensure we can offer the best training opportunities in areas that are relevant. It is important for us to hear what training you - the bioscience research community - need so that we can best support your research.

This survey should take less than 10 minutes to complete.

If you are a trainer that offers bioinformatics training, please complete the Bioinformatics Training Availability survey for trainers: https://tinyurl.com/bioinf-training-survey

*Required

Privacy Collection Notice

By participating in this survey you agree that your responses will be provided to the Australian BioCommons (hosted by The University of Melbourne) and will be used solely for documenting the broad bioinformatics training needs of the Australian life science research community and to inform the design of future training events by Australian BioCommons and their partners. Your responses will be protected against unauthorised access and use; providing your email address is optional. Full Privacy Statement: www.biocommons.org.au/privacy

1.   How would you describe your primary role? *

Mark only one oval.

( ) Undergraduate/ Honours Student

( ) PhD or Masters Student

( ) Postdoc

( ) Lecturer/ Associate Lecturer

( ) Senior scientist / Principal investigator

( ) Research assistant / Technician

( ) Research support

( ) Project Manager

( ) Clinician

( ) Other: _____

2.   How would you describe your level of competency in bioinformatics /   *
     computational biology?

Mark only one oval.

( ) None

( ) Beginner

( ) Intermediate

( ) Advanced

( ) Depends on the tool and analysis

3.   What are your main fields of research? *

Tick all that apply.

☐ Health

☐ Animals

☐ Microbes

☐ Plants

☐ Agriculture

☐ Bioinformatics / data science

☐ Biostatistics

☐ Genetics

☐ Genomics and clinical data

☐ Immunology

☐ Cell biology

☐ Neuroscience

☐ Computational neuroscience

☐ Cognitive neuroscience

☐ Stem cells/ 3D tissue/disease models/ tissue engineering/ biofabrication

☐ Other: _____

4.   What is the postcode of your usual place of work? Eg. Parkville is 3010. *

_____

5.   Who is your primary employer or your place of work? Eg. Melbourne   *
     Bioinformatics, University of Melbourne

_____

6.   What are your preferred modes of learning (you may select more than one   *
      option).

      Tick all that apply.

      ☐ In-person instructor-led hands-on workshop
      ☐ Online instructor-led hands-on workshop
      ☐ Self-paced online learning
      ☐ Watching short videos
      ☐ Webinars
      ☐ Reading research reports / methods
      ☐ Working through example datasets and vignettes for packages
      ☐ Hacky sessions/ coding clubs or in-person support
      ☐ Other: _____

7.   What is your preferred length of training activity? *

      Tick all that apply.

      ☐ 1 hour or less
      ☐ Half day (3-4hr)
      ☐ Whole day

8.   What is your preferred frequency of training events? *

      Tick all that apply.

      ☐ One-offs
      ☐ Multiple sessions over consecutive days (intensive)
      ☐ Multiple spread out sessions (series)

9. Which of the following areas do you require training in to support your   *
   research? Please limit your selections to key needs.

Tick all that apply.

☐ Genome assembly (including denovo)
☐ Genome annotation
☐ Proteomics
☐ Metabolomics
☐ Protein interactions
☐ Networks / pathway analysis
☐ Drug discovery (Target identification and homology modelling)
☐ Clinical genomics
☐ Motifs and binding site analysis in DNA/RNA
☐ RNAseq
☐ Single cell RNAseq (scRNAseq)
☐ Small RNA (miRNA, snoRNA, siRNA)
☐ Variant calling
☐ Machine learning
☐ Mathematical modelling
☐ Metagenomics / Microbiome
☐ Evolutionary bioinformatics and phylogenic trees
☐ Alternate splicing analysis
☐ Epigenetics (Chipseq, ATACseq, methylation etc)
☐ Structure and Modelling
☐ Image analysis
☐ Systems biology
☐ None of the above (please note additional areas in a later question)

10. Which of the following skills are you interested in learning? Please limit your *
selections to key needs.

Tick all that apply.

☐ R
☐ Python
☐ Bash / Unix
☐ Git / Github
☐ Good software engineering practice
☐ Workflows / Pipelines
☐ Portable software (e.g. containers)
☐ Reactive Workflow frameworks (e.g. NextFlow, Snakemake etc)
☐ HPC
☐ Cloud computing
☐ Data management / transfer
☐ Statistics
☐ Experimental design
☐ Galaxy
☐ None of the above (please note additional skills in next question)

11. Are there any other bioinformatics applications or skills that you desire
training in?

_____

_____

_____

_____

_____

12. Are you confident that your training needs will be met by your local *
institution?

Mark only one oval.

◯ Yes

◯ No

◯ Not sure

13.   Please indicate the organisations whose training resources you have   *
      accessed. These could include a seminar/webinar, workshop, help desk,
      written instructions, documentation etc.

      Tick all that apply.

      ☐   Australian BioCommons
      ☐   Sydney Informatics Hub, University of Sydney
      ☐   Melbourne Bioinformatics, University of Melbourne
      ☐   QCIF, University of Queensland
      ☐   Monash Bioinformatics Platforms, Monash University
      ☐   Pawsey Supercomputing Centre
      ☐   National Computational Infrastructure
      ☐   Other: _____

14.   Would you like to hear about upcoming training by receiving the Australian
      BioCommons monthly newsletter?

      Add your email address here or subscribe on the website: biocommons.org.au/subscribe

      _____

15.   Any other thoughts or comments you'd like to share?

      _____
      _____
      _____
      _____

16.   Would you like us to contact you about the outcomes of this survey?

      Please provide your email address and we'll let you know the results when they are available

      _____

This content is neither created nor endorsed by Google.

Google Forms