



GOBLET

Global Organisation for Bioinformatics Learning, Education & Training

**LEARNING, EDUCATION AND
TRAINING COMMITTEE
ANNUAL ACTIVITY REPORT
GOBLET AGM
BRISBANE, AUSTRALIA
2016**



AIM

The aim of the LET Committee is to coordinate the development and sharing of best practice in teaching and learning methods, and to support bioinformatics trainers. This includes contributing to curriculum guidance, core competencies, trainer recognition, and developing a trainer support platform.

LEARNING, EDUCATION & TRAINING COMMITTEE AIM & OBJECTIVES

OBJECTIVES

Please list objectives set, referenced to the last AGM, as appropriate

- Provide a training portal for trainers to share training materials and knowledge
- Provide a forum for trainers to exchange ideas and experience
- Provide facilities and materials for high school teachers
- Develop badge system for trainer recognition
- Develop core competencies for bioinformatics training
- Establish and implement a train-the-trainer program in collaboration with EBI, ELIXIR and H3ABioNet

LET COMMITTEE COMPOSITION

In the table below, please list your committee members, starting with the Chair/s (add rows as necessary)



Name	Affiliation	e-mail
Nicola Mulder (Co-Chair)	University of Cape Town	Nicola.mulder@uct.ac.za
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Vicky Schneider	EMBL Australian Bioinformatics Resource	mv.schneider@unimelb.edu.au
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Pamela Black	Wellcome Genome Campus, Advanced Courses and Scientific Conferences	pamela.black@wellcomegenomecampus.org
Rochelle Tractenberg	Georgetown University & BD2K TCC	rochelle.tractenberg@gmail.com

LET PROGRESS AND ACHIEVEMENTS

Please describe the committee's overall progress against the set objectives, as appropriate. Explain why particular objectives may not have been achieved, or have changed. In the table below, list the committee's top 3-5 major achievement and next steps.

What is the achievement	Next steps
ICTP Proposal submitted and granted with RDA-CODATA for bioinformatics flavor Data Science Summerschool, Trieste, Summer 2017	Plan the bioinformatics flavor course, how it will run, who will teach, etc. Organisation starts Fall 2016.
High school teacher survey developed. See appendix for a more complete report.	Needs to be implemented and sent out *plan for analysis and interpretation – and utilization of the data is needed!
Competencies developed and annotated for different audiences in collaboration with ISCB. Since the meeting in SA several members of the LET committee	Finalise competencies and papers. Our next workshop will take place in Brisbane, led by Bruno Gaeta, and will focus on 'bring your own educational challenge'



have worked with the ISCB curriculum and competencies task force to refine the ISCB competency profile further; two additional workshops have taken place (one at GLBio in Toronto, the other at ISMB in Orlando). Work has begun on a paper summarising use cases for the competency profile, and we plan to begin writing a second paper, incorporating all the input that we've received to date, into a paper on v. 0.2 of the profile.	
e-learning white paper is in finalizing stages (October 2016)	Finalise and disseminate, develop into manuscript
Identified needs/wants from trainers and minimal descriptors for GOBLET e-learning pages (outcome Cape Town workshop)	Align with descriptors derived in Standards Committee and implement in e-learning trainer support page on GOBLET website
Train-the-trainer	TtT is not technically part of the LET aims, so not having achieved this/identified any next steps is plausible!! However some such activities are continuing within the EBI, ELIXIR and H3ABioNet training programs.
Visibility/Outreach of LET in 2016	LET Poster at ISMB2016 and ECCB2016

LET TOP THREE CHALLENGES

What do you consider to be the top 3 challenges for this committee?

- Finding time for GOBLET activities in among a full time job – *this actually becomes/should become a consideration for the GOBLET incentives committee, if there is one!* 1) challenging to find dedicated time to work for GOBLET, which hinders moving GOBLET forward
- Difficulty in finding suitable dates and times to meet regularly
- Creating actionable priorities – translating aspirations into concrete and achievable (evaluable) results.
- All LET members have their different perspectives/efforts related to achieving bioinformatics education/training in their work, but these were not explicitly harmonized into clear added value for GOBLET; main reason for this was likely time

LET TOP THREE PRIORITY ACTIONS

What are the top 3 actions you consider to be a priority for the future?



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- Get the first pages online entailing the “trainer support platform”. In the past years all LET task forces created useful information on their areas, which together can form a nice first layer of information for the web site visitors. It can consist of links to documents, papers, best-practices, the competencies profiles and its usage in education etc. etc. If we find more time in the future we can build further on this first layer of pages.
- Get e-learning section onto website *~this is listed as one action, but it actually entails a huge amount of work. Listing it this way/just as a single action does not do justice to how hard it is!!*
- Complete and disseminate competencies

Appendix:

Train the school teacher Task Force (TSTTF) report

The aim of this task force is to share experience within and outside GOBLET and accumulate materials and good examples of practice for introducing bioinformatics to high school teachers and to the public at large.

One particular challenge related to this TF is that

- i) the material often is in the native language of the country that is providing it
- ii) there is no universal school biology curriculum

1. Train the school teacher survey

<http://www.mygoblet.org/content/teaching-high-school-teacher-survey>

Aim:

- Collect efforts of the GOBLET partners in this area and gather all the best practices and examples (courses format and content, URL).
- Identify key principles that are shared between most school curricula and that could be linked with a bioinformatics activity.
- Collect Bioinformatics activities **for the general public**: the best practices and examples which are used by the different partners during exhibitions, open days and science fairs and made freely available.
- Discuss if the result of such an effort would be worthwhile writing a paper in PLOS CB

TODO:

- Need plan and help for analysis and interpretation – and utilization of the data, before sending out invitation to the world (first GOBLET partners) to fill it in.

2. List of existing web sites dedicated to bioinformatics activities for schools

We worked (in 2105) on a list of existing web sites dedicated to bioinformatics activities for schools : <http://education.expasy.org/cours/GOBLET/>

TODO:

- Update and format the list of freely available bioinformatics-related workshops and resources for schools, together with the pedagogical kit if it exists.



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- Associate each resource with keywords, some annotation and comments, as we do it now for the course material (<http://www.mygoblet.org/training-portal>). We could start with the initiatives and resources developed by the GOBLET members

3. Produce GOBLET branded document for the HS

Together with Terry Atwood, we plan to produce GOBLET branded document for the HS, using the content of this workshop: <http://education.expasy.org/bioinformatique/Diabetes.html>

These documents would be made available on www.mygoblet.org/

4. Enlarge collaboration

Ongoing discussions together with Rochelle Tractenberg about potential collaborations with people with longstanding and documented expertise in teaching science in the US.