

Preamble

This document outlines a recommendation for a collaborative strategy to support complementary activities between GOBLET and EMBL-ABR.

Description of the partners: GOBLET and EMBL-ABR

The EMBL Australia Bioinformatics Resource (EMBL-ABR) is a distributed national research infrastructure providing bioinformatics support to life science researchers in Australia. It was set up as a collaboration with the European Bioinformatics Institute (EMBL-EBI) to maximise Australia's bioinformatics capability. This close partnership is made possible in the context of Australia's associate membership of EMBL.

Training is a key area of EMBL-ABR effort. Specifically, this encompasses the support and coordination of training delivered by EMBL-ABR nodes across Australia, as well as support of bioinformatics training in Australia by providing:

- scalability, sustainability and expansion mechanisms and strategies,
- best practice advice across the training cycle, including impact measures and monitoring of learning uptake,
- development and adoption of solutions implemented internationally that are beneficial for the bioinformatics training community in Australia, including e-learning.

In addition, the following points are also relevant to the GOBLET/EMBL-ABR collaboration:

- a key role for EMBL-ABR is to liaise and develop partnerships that bring Australia closer to efforts like ELIXIR's Training e-Support System (TeSS);
- the recently-implemented EMBL-ABR-focused training registry – *i.e.*, an aggregating platform to inform users of training news, opportunities and resources across its Nodes, based on iAnn, a mechanism successfully deployed within GOBLET;
- EMBL-ABR aims to deliver best practice workshops (*e.g.*, best practice in data management) specifically to empower researchers, developers and trainers to make the most of existing resources and solutions present in AU, as well as to identify capabilities that exist internationally and could be usefully adopted in Australia;
- EMBL-ABR also aims to investigate open and free learning management systems that are most suitable for delivering e-learning modules and materials produced across the EMBL-ABR network.

GOBLET's core mission is to provide a global, sustainable support and networking infrastructure for bioinformatics trainers and trainees (Attwood *et al.*, 2015). This includes a training portal (Corpas *et al.*, 2015), allowing trainers to share materials, tools and techniques, guidelines and best-practice documents, and resources to help train trainers and teachers. In addition, GOBLET is fostering the international community of bioinformatics/ computational biology trainers through networking events; facilitating bioinformatics capacity development across the globe, particularly through its train-the-trainer and train-the-teacher initiatives, and developing best-practice standards and guidelines for bioinformatics training (Via *et al.*, 2013).

GOBLET-specific activities include:

- developing a training platform, including a repository of training materials, a registry of trainers and course organisers, and a portal to inform users of training news, events and resources across continents;
- building and coordinating an active, expert global network of bioinformatics trainers and course organisers, reaching organisations across continents, including those in developing countries;
- exploring recognition mechanisms for trainers/courses/materials using open badges or similar;
- running training events alongside its AGM and as part of the ISMB/ECCB conferences;
- co-chairing the ISCB Computational Biology Education COSI.

Added value of a harmonised GOBLET/EMBL-ABR training strategy

It is clear that EMBL-ABR training activities fall within GOBLET efforts, advances and activities, so there is a natural connection based on complementarity and shared interest of these two organisations to collaborate.

Examples of potential joint activities and discussion topics are:

- EMBL-ABR Best Practice Workshop material on the Data Life Cycle: how this can be shared and adopted by others in the GOBLET community;
- joint expert training events (e.g., Eija Korpelainen's end-user training in Melbourne).

EMBL-ABR and GOBLET would mutually benefit by working together to articulate realistic and meaningful approaches to training challenges, and to ensure the development of common standards. For example, a joint EMBL-ABR/GOBLET workshop could be organised aiming to compile agreed lists of requisites, or minimum requirements, for “EMBL-ABR branded” and “GOBLET-branded” training courses (including the venue, audience, instructors, topic(s), learning objectives, materials, etc.). Courses that comply could then be awarded the EMBL-ABR/GOBLET tag/brand. This would give courses greater visibility, it would make them and their materials more discoverable, and ultimately, it could feed into ongoing discussions on training quality.

In creating GOBLET, part of the vision was to try to harmonise worldwide bioinformatics training activities, “to share, not duplicate, effort; to share, not duplicate, cost; to work together in a mutually respectful way towards common solutions and a sustainable future.” It clearly makes sense for EMBL-ABR and GOBLET to work towards that vision together: to jointly organise events of common interest; to share materials, tools and techniques; to jointly develop resources to help train trainers and researchers; to collaborate on the development of best-practice guidelines and common standards for training; to jointly prepare white papers; and to share sponsorship opportunities. Bringing the EMBL-ABR and GOBLET training communities together will add new perspectives and expand audiences. For example, GOBLET can help to connect EMBL-ABR with a range of international organisations, allowing outreach to communities beyond EMBL-ABR's nodes. Importantly, initial discussions will help to clarify their respective roles, and make it clearer how to work towards common goals.

References

Attwood TK *et al.* and the GOBLET Consortium. (2015) GOBLET: the Global Organisation for Bioinformatics Learning, Education and Training. *PLoS Comp. Biol.*, **11**(4), e1004143. doi: 10.1371/journal.pcbi.1004143

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Via A *et al.* (2013) Best practices in bioinformatics training for life scientists. *Briefings in Bioinformatics*, **14**(5), 528-37. doi:10.1093/bib/bbt043.