Learning Education and Training Committee
Committee overview

• **Composition:**
  – Nicky Mulder (Chair)
  – Celia van Gelder (Chair)
  – Cath Brooksbank
  – Pedro Fernandez
  – Marie-Claude Blatter

• **Task forces:**
  – Accreditation/recognition (Pedro?)
  – Train the trainer (Cath)
  – Train the school teacher (Marie-Claude)
  – E-learning (Celia)
  – Outreach to developing countries (Nicky)
Status prior to elections

- Some of the task forces existed informally
- Some activities were ongoing as continuations of BTN activities
- No formal structure or plans
**Current status and achievements**

- Set up committee – aims to meet quarterly before OB meeting
- Activities mostly fall under task forces
- Set up google doc of our activities
- Looked into move of materials from BTN
- Set up matrix of overlaps with other committees

<table>
<thead>
<tr>
<th>Activity</th>
<th>Task force/individual responsible</th>
<th>GOBLET committee responsible</th>
<th>Other GOBLET committees involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving BTN material to GOBLET</td>
<td>Nicky + tech team LET</td>
<td>Technical (Manuel)</td>
<td>LET</td>
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<tr>
<td>Set up web pages for LET Committee</td>
<td>LET (all)</td>
<td>LET (all)</td>
<td>Technical</td>
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<tr>
<td>Capacity development</td>
<td>LET (Nicky)</td>
<td>LET (Nicky)</td>
<td>Outreach &amp; PR</td>
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<tr>
<td>Curriculum development</td>
<td>TF to be formed</td>
<td>LET (Nicky, Cath)</td>
<td>Standardisation</td>
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<tr>
<td>Setting up e-learning TF</td>
<td>Celia</td>
<td>LET (Celia)</td>
<td>Technical</td>
</tr>
<tr>
<td>High school Survey</td>
<td>Marie-Claude, Celia</td>
<td>LET (Marie-Claude)</td>
<td></td>
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</tbody>
</table>
Projects

• **Standardisation of courses**
  – Quality of training, same curriculum, sharing best training resources
  – Develop monitoring and evaluation system

• **Setting the web environment for LETC**

• **Trainer support platform**
  – Adapting to trainees’ different expertise level (Beginners/Beginners+/Experimental/Super-experimental)
  – Webinars, workshops, road-shows, posts, blogs, newsletters
  – Running pilots where there are no Train the Trainer programmes
  – A meeting in which GOBLET members can share their experiences
  – GOBLET-sponsored/GOBLET-accredited trainers
  – Sharing best practice in teaching, learning methods, online tutorials, videos, etc
  – Set up mechanisms to share (discuss with Technical and PR/Communication committee)

• **Curriculum development** – Nicky, Cath (ISCB, Lifetrain)
Accreditation/recognition TF

• **Members:**
  – Pedro Fernandes (IGC) -Chair
  – Michelle Brazas (bioinformatics.ca)
  – Aidan Budd (EMBL)
  – Nicky Mulder (ASBCB)
  – Allegra Via (Sapienza University of Rome)
  – Additional contributors

• Aims to develop an accreditation process for courses and trainers

• Doing data collection on how training is recognised in scientific and business areas, how industry uses badges and how the Open Badges project is progressing
ARTF projects

• Providing a shared mechanism for recognition/ accreditation of training and trainers
• Devising mechanisms for sharing best practice
  – Shared monitoring/evaluation system for courses and programs
  – Evaluating online courses
LET E-learning Taskforce

• TF e-learning still has to have kick-off meeting
• Members: Celia van Gelder (NBIC), Pedro Fernandes (Gulbenkian), Victoria Nembaware (H3Africa/H3ABioNet)
• Please join us in the taskforce and share your e-learning expertise!!

**Overall ambition:**

• Gather knowledge and insight in about e-learning principles (in bioinformatics)
• Establish a list of good e-learning resources in bioinformatics (including reviews/comments of users and trainers)
• Share all this with the GOBLET community
Activities & plans

Activities Summer/Fall 2014:
• Started with a list of e-learning resources (Victoria)
• Connect to E-learning taskforce of Training WP of ELIXIR (Celia)
• Evaluating learning outcomes in synchronous distance learning, mobile learning and using standardised learning objects across different LMS (Pedro)

Plans
• Get more TF members & have kickoff telcon
• Define GOBLET e-learning scope & mission - we may want to discuss this on this AGM
Train the school teacher Task Force (LET)
Members, Aim & Challenges

**Members:** Marie-Claude Blatter & Celia van Gelder, Pedro Fernandes, Vicky Schneider-Gricar, Fran Lewitter

**Aim:** Share experience within and outside GOBLET and accumulate materials and good examples of practice for introducing bioinformatics to high school teachers but also to the public at large.

**Challenges**

i) the material often is in the native language of the country that is providing it

ii) there is no universal school biology curriculum.
Train the school teacher Task Force (LET) Projects

- **High School Teacher training**: survey for GOBLET members (ready to be put on the GOBLET website). Follow-up activities include to set up a document to give insight in how high school bioinformatics teaching is organized in GOBLET countries. The survey might also allow to collect national contact points.

- Identify key principles that are shared between most school curricula and that could be linked with a bioinformatics activity (to be done together with the national contact points).

- Collect information of related ongoing initiatives and projects in the world and put up liaisons with them (e.g. European Schoolnet, InGenious, ELLS or Scientix). Put this information on the GOBLET website (to be finalized; already 50 web sites, projects, games, …).

- **Organize events** with HS teachers during GOBLET AGM or major Bioinformatics meeting (Boston (July 2014) and Toronto (November 2014)).

- **General public**: collect the best practices and examples which are used by the different partners during exhibition, open days or science fairs. Special attention will be given to the language issue since GOBLET members in particular could play an important role in translation of materials (not done yet).
• **Chair:** Cath Brooksbank (EMBL-EBI), **Co-Chair:** Urmia Trivedi (NBAF)

• **Activities to date:**
  - Survey of trainer support mechanisms and needs (n=17):
    • Most undertaking TtT schemes using bespoke courses and methods
    • Major difficulties - time and resources; Major resource lack - NGS analysis
  - Development of trainer skills matrix
    • For self-evaluation and further development - covers all aspects of training organisation, delivery and management
  - Learning methods - involvement in EMTRAIN resource kit
Proposal at previous meeting to gather successful methods for training new trainers, then pilot in other centres (approach to be employed within ELIXIR under Infradev 3)

Training trainers better done in context of specific analysis course, two potential approaches:

- Attendance at specific course to view course in action, followed by general principles training and focus on developing elements of the course for delivery in their home institution;
- Or, initial week long course of training principles and then an opportunity to develop course materials which are delivered as part of a specific course in the following week.

View other trainers in action; discuss all aspects of the course with organisers and trainers; chance for reflection.
Outreach to developing countries

- Chair: Nicky Mulder
- Aim to outreach to developing countries to assess and address their training needs
- Nicky, through H3Africa/H3ABioNet has done survey of Bix training needs
- Also mini survey at UCT for researchers
- H3ABioNet has run several courses for both bioinformaticians and researchers
- Set up TtT in NGS with EBI
• Ran a degree development workshop in Botswana

• Started African Bioinformatics Education Committee (African researchers + Terri + Lonnie)

• Formed curriculum development task force – developing detailed content for core and elective modules
Requests for LET committee

- Ensure proper coordination with standards committee
- Text of achievements that can be highlighted in a sponsorship request
- Names/institutions to whom we may ask for sponsorship
- Examples of grant proposals that you have submitted in the past which contain a large proportion of training (WT DELTAS)
Short term plans

• Develop materials for website
• Collect resources for website – Trainer support platform
• Identify and address overlaps with other committees
• Set up surveys
• Recruit more members
Long term plans

• Have useful resources on the website for:
  – Trainers
  – High school teachers

• Run training workshops on e.g. best practices, teaching methods, evaluation etc.

• Provide information on e-learning facilities

• Have accreditation system for lecturers