

Minutes Emergence Meeting Zurich

May 28, 2008

ETH Zurich

Participants:

- ETH: Sven Panke, Mario Marchisio, Frauke Greve
- CRG: Alejandro Nadra, Andreu Alibes, Raik Grünberg
- CSIC: Victor de Lorenzo
- MIT: Randy Rettberg
- HZI: Vitor Martins dos Santos
- EP: Alfonso Jaramillo
- DSM: Luis Passamontes
- Geneart: Frank Notka
- Excused: UCL (Nicolas Szita) and UCAM (Jim Haseloff)

General update: Sven

- SB4.0 (<http://sb4.biobricks.org/> 10-12 Oct 2008, Hong Kong).
- TESSY stakeholder meeting (<http://www.tessy-europe.eu>), 10.6.2008. Attendance of Emergence participants: Vitor, Luis Serrano, Sven.
- Tarpol Kickoff meeting on July 3/4. Attendance of Emergence: Frauke, Victor, Alfonso J., Vitor, Frank N. and Alfonso V.
- EuroCores proposal: Deadline June 2, submitted.
- Emergence advisory board meeting: either as a side event at the SB4.0 in Hong Kong or combined with an Emergence meeting (before or after the conference in Hong Kong).
- ESF SB Conference in SF de Guixols in 2009; contact persons: David Gilbert (drg@brc.dcs.gla.ac.uk) and Sibylle Gaisser (Sibylle.Gaisser@isi.fraunhofer.de).

Midterm report & status deliverables (Frauke)

- Reporting period: 1.12.2006 until 31.5.2008.
- Deadline for delivery of report by Frauke to Brussels: End of June (summer holidays!!!).
- 'New' midterm report template will be sent to everyone to be filled out by the WP Leader and Emergence participants.
- Form C needs to be filled out by your financial department.

WP1: General Networking Activities (Vitor)

- There is a template on the Emergence webpage available for the application for networking activities such as travel for students, travel money for visiting groups, or the registry in Europe.
- Standardized meeting structure in progress such as the 'Satellite symposium in Vienna' 2007 (D1.2).
- **Please update deliverables: D1.1, D1.2, D1.3, D1.4**

Discussions WP1:

- Victor: Do we need more 'weight' in SB in Europe? Background: Complaints by the EU that 'there are always the same people involved in European SB projects'.
- Sven: Calls are so specific that this is unavoidable. The EU cannot put out little money in a moderately relevant activity and then complain that the call is only twofold oversubscribed.
- Raik: A lot of SB activities are taking place in the UK (Imperial: Department of Systems- and Synthetic Biology; also Sheffield and Edinburgh are involved).
- **Action point Randy:** sends out a list with iGEM instructors in Europe to enlarge the SB consortium.

WP2: Attracting Talent to SB in Europe

Sven:

- First 'Synthetic Biology Winter School' takes place in January 2009 at the ETH Basel (in the new department BSSE).
- 2-week school program including theoretical- and lab work.
- A skiing weekend for the students and teachers will be also organized as part of the winter school.

Alfonso:

- The 'Master program in SB' at the EP is still on-going; Alfonso submitted the proposal in October 2007. Begin delayed until October 2009.
- **Please update deliverables: D2.5 (Jim H)**

WP3: European IT Infrastructure for SB

Mario:

- Goal: building a European mirror of the Registry containing computational tools to retrieve biological information from other databases; and to design circuits made of the Standard Biological Parts.
- Circuit simulation (ETH: Mario & Jörg): Building a 'drag & drop' tool for circuit design.
- Information integration (CNIO & Randy): testing the Registry connectivity with other databases, development of new tools to access and visualize content of biological databases, and the realization of a pilot application.

Raik Grünberg:

- Raik is part of the 'Biobrick Foundation Technical Standards group' who organized a Biobrick-standardization workshop' in Seattle (not Biobrick-sponsored).
- At the workshop, a draft language for describing Biobrick parts was launched with the goal to create a web of interconnected parts registries.
- More information, see attached pdf file of Raik.

Randy:

- There will be a web of registries.
- Distributed registries are not the perfect solution.

- Community developed software for registry; again, might be helpful, but will not solve all problems.
- Considers seriously a more centralized approach to registry.
- Until 21st of June latest, Randy will be in Paris for this summer.

Discussion WP3:

- **Action Point Alfonso V:** IT infrastructure meeting including Alfonso V, Jörg S, Randy and Luis S (and/or Raik).

WP4: Towards a Consensus Language for SB (Victor)

- Status report on database on quantitative prokaryotic promoter performance/expert group on promoter standardization formats.
- Activities in the US: Workshop in Boston after iGEM 2007 (<http://bbf.openwetware.org/Workshop.html>).
- Discussion on required scientific level for establishment of standards. Consensus: high level expert group. Student activities here (e.g. Kit, iGEM 2008) are helpful, but not enough.
- Questions: Shall we build up a global expert group for promoter standardization formats together with American experts - Consensus Emergence participants.
- **Action point Victor:** Expert group building & workshop
- **Please update deliverables (D 4.1 & D1.4)**

WP5: Building the Academia-Industry Interface (Frank)

1. Contribution to WP3: Building an IT infrastructure for SB:
 - Strategies and tools for gene synthesis and assembly: 1. Design, 2. Synthesis capacities, 3. Variants of CDR/regulatory elements, and 4. Functional circuit design.
 - Strategies and tools for gene synthesis and assembly: Laboratory Information Management System (LIMS) on the operation- and information level.
2. Organization of IP workshop (Sven, Geneart & DSM):
 - Organization of the IP Workshop on June 16, 2008 in Munich.
 - Invited participants: Sven, Joachim Henkel (Schöller Chair in Technology and Innovation Management at the TU Munich), Berthold Rutz (European Patent Office), DSM and Geneart
3. Organization of the Industry/Academia Workshop (Geneart, Sven, Vitor & DSM):
 - Organization of the Industry/Academia Workshop on June 25, 2008 at the Airport in Munich
 - Experts from leading European industries covering: Chemistry (Lonza, BASF, Novozymes, Henkel), Pharma (AstraZeneca, Roche, Novartis), Environment/Biomaterials (Metabolix, BASF), Energy (Shell, Butalco), Biotechnology (Lifewizz, Brain, Cellectis) and European academic Synthetic Biology exponents (DKFZ).
 - All Emergence partners are cordially invited to participate.
 - **Please update deliverables (D 5.1, 5.2, 5.4) → final reports will be available after the workshops**

Other strategic items

Randy:

- Do we need iGEM in Europe? Huge increase in European iGEM teams (12 in 2007 → 24 in 2008)
- Registry in Europe: There is ample opportunity for improvements and additional activities around a potential European registry. Question is, do the Europeans want something in this direction. Current status: Registry version available at Genopole (France) → further development beyond current status unclear

Discussion:

- Registry in Europe desirable
- Conceptually to be expanded -> 'European Institute of Biological Standards'

→ Suitable locations (**Action points**):

- Genopole (Alfonso J. to update)
- ETH Basel (Sven to explore)
- EMBL (Victor to explore)

Summary Action Points:

- **Randy**: sends out a list with iGEM instructors in Europe to enlarge the SB consortium.
- **Alfonso V**: IT infrastructure meeting including Alfonso V, Jörg S, Randy and Luis S (and/or Raik).
- **Victor**: Expert group building & workshop
- Suitable locations for a potential European registry:
 - Genopole (**Alfonso J.** to update)
 - ETH Basel (**Sven** to explore)
 - EMBL (**Victor** to explore)