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Paris, the 5<sup>th</sup> of August 2011

Object: Human Practice proposal to other European teams

Dear fellow Human Practitioner,

As you may know the President Obama had asked last year for a full report on bioethical issues surrounding synthetic biology. I have asked myself the following question: what if we, iGEM teams, would reproduce such a document? The leitmotiv behind it is that we are all future researchers and scientists might deal with synthetic biology for our Ph.D, our research etc. and as such we are entitled to sketch how the field and by extension iGEM should look like. My idea is then to create a unified document containing a set of problematics and questions that concerns us directly and give answers: may they be practices, laws, regulations that would shape the field itself.

I believe however that a more pragmatic approach might just work better than the bureaucratic blabber that most official documents have. I propose that our working format ought to be a European-level debate within the iGEM teams at first, focusing on our needs, our questions, then spread to the larger public.

I discussed with Ariel Lindner (iGEM Paris Supervisor) and here are the steps we agreed should be followed.

Step 1: scan previous iGEM wikis

This allows to collect what kind of issues, concerns and solutions were already tackled. That could be the start of our brainstorming: what can we do with these pieces of information and which questions we deem necessary have not yet been treated? Synthesizing information is already a long project in itself and this is why working with many people would allow for a greater spectrum of questions covered.

Step 2: Setting a European-level debate within iGEM teams.

This step is about critically approaching what we are working on and how. With the questions gathered from step 1, we could either synthesize debates, try to solve them or most probably find new and more relevant ones. Once this done maybe each one of us (human practitioner) could bring one or two questions to its team and discuss it. Ideally, trying to create a consensus or two-sided answer.

I have a tentative proposal based on a logical progression: which questions a newly formed iGEM should consider and what in order? Of course this needs a lot of refinement and modification which we would need to agree upon but I am giving you everything as a food for thought.

Problematic n°1: Anthropological and ethical considerations

→ Why should not we modify living organisms?

→ is the Human a natural modifier of its environment?

- What would the finality of the research be ? Or ought to be?
- What considerations would have to be taken into account?
  - Does the finality justifies the mean ?
  - Bio-safety and Bio-security: what extent and implications?
  - Which precautionary principles in practice?

Problematic n°2: iGEM as synthetic biology's showcase and pilot project

- What is the real purpose of iGEM ? Whose interests is it serving?
- Does it really, in practice, the principles set by synthetic biology?
- Should rules for participation to the competition be set (no professorial involvement for ex?)
- What conclusions can be drawn from personal experience, wikis and the work done?

Problematic 3: iGEMers as citizens and scientists: towards a proposal

- Are national or international laws sufficient regarding biosecurity and biosafety?
- Are patenting definitions
- Does the current model of research (“publish or perish”) adapted to synthetic biology?
  - Should it be changed and how?
- How could we formulate this future of research ? Which directions should be taken ?

Step 3: find a good diffusion and participative platform.

The next step I believe is to try synchronizing all our work and make it visible to other teams.

Why not use the wiki for now and transfer this content to an external site later?

A good candidate, in my opinion, could be Synbioworld.org a site dedicated to synthetic biology created by iGEM Paris 2010.

Step 4: Created a unified document.

Interestingly, 2012 are the French presidential elections as well the American Primaries. and 2013 are German federal elections. There may be many others that I am not aware of but the point is: what if we could create a real: citizen and scientific proposal on synthetic biology. It may just be a dream but couldn't we together propose