

Why do we care about problems ?

Today, one of our main goals is to call for political dissensus within the scientific community. Because events like today's are not places where scientists are in "dialogue" with "society", they should at least be places where scientists voice different opinions about technoscientific practices. Indeed, the possibility to talk politically about technoscience should also come from the scientific community. The RBSIU Bullshit BINGO™ was made to stand up for problems and conflicts that are ignored. We hope that irony and satire will help loosened tongues, that they will allow us to depart from a manufactured consensus and provide a meeting point for alternative critical positions and practices. We are here to share our problems with synthetic biology, but also hear other people and researchers' concerns. We would like to know why young scientists conduct Syn Bio research ? When, how and for what reason did they come to this scientific practice ? What are the organizational constraints which structure careers paths ? Did academical institutions offered an equal access to different scientific fields, including less innovation-oriented domains ? Are researchers uncomfortable with their research in Syn Bio ? With the source of their funding ? With their bosses ? With the discourse that institutions produce about their work ? With the corporate agenda associated with Syn Bio ? Are scientists talking about the political values of a Syn Bio world ? Do scientists talk about researchers defecting the field ?

We ask these questions because they are the conditions of possibility for a discussion among us, and not a pseudo-debate on the "social impacts" of some "research breakthroughs". There are no "science" distinct from a "society", there are ideas, people and values are the material around which to collaborate and to gather. Politic is everywhere and as scientists, we should acknowledge our positioning and make it explicit.

If you want to continue this discussion, write your email down and give us this paper!

SYNTHETIC BIOLOGY BINGO

TODAY IN LAUSANNE COME AND PLAY!

BULLSHIT

MEMBER OF THE PUBLIC

MEMBER OF THE PUBLIC

I am a black person! rentaminority.com

ETHICAL

Approved by a certified ethicist

The best reassuring and comforting arguments from scientific institutions ! Special guests: Young scientists, old scientists, ethicists, opinion managers, social scientists and maybe even "the general public"!

What is a Research Breakthroughs and Social Impact Unbelievable Bullshit BINGO™ (RBSIU Bullshit Bingo™) ?

A RBSIU Bullshit BINGO™ is an innovative communication tool created at the MIT Science Communication Incubator, best known as "WTF TechnoScience". More than in any other emerging scientific fields, Synthetic Biology (Syn Bio) promoters are known for their intense conceptual creativity: brainstorming is one of their main technological prouesse. The RBSIU Bullshit BINGO™ acknowledges the great production of buzzwords and catchphrases done by researchers, engineers, science communication professionals, social scientists and ethicists to avoid to reflect upon the problems posed by emergent technologies such as Syn Bio.

Who hasn't heard about "Making Biology Easier to Engineer"¹, bacteria compared to "Chassis"², or "Making life better, one part at a time"³? Since 2006, these buzzwords and catchphrases are proudly collected and brought to you by the "WTF TechnoScience" MIT's incubator in form of a RBSIU Bullshit BINGO™. Today, as we are conquering the European Science Communication Marketplace™, we have compiled our best bullshit portfolio for you.

Thanks to our RBSIU Bullshit BINGO™, you will be entertained and gain expertise. In a fun and challenging game you will learn about the hegemonic definitions of "life", "science" and "technology" that are repeatedly used by Syn Bio promoters. You will also discover the realm of consensual ethical thinking, and you will finally taste how satisfying it is to give a good excuse to any Members of the Public™ in order to justify your research projects and funding needs.

How it works ? Listen carefully to what the pannelists say, if you hear a Syn Bio's buzzword or catchphrase listed in the RBSIU Bullshit BINGO™ table, draw a cross it! If you are lucky and if you find more than three sentences, shout out clear and loud: "BINGO, This is bullshit!"

Why is the "Research Breakthroughs and Social Impact" a smoke screen ?

Since its early development in the mid 2000's, synthetic biology has not only been practiced in labs. Scientists have also dedicated an important amount of time and financial resources in the design of the field's public image. Their aim was to represent Syn Bio as revolutionary and ethically responsible, dynamic and reflexive, combining "research breakthroughs" and debates about its "social impacts". More specifically, "Research Breakthroughs and Social Impact" is an expression skilfully used by scientific institutions promoting so-called "science and society" dialogues, such as in today's event organized by the Swiss Natural Science Academy and in particular the Genetic Forum.

These expressions reduce the politics of technoscience to a mere exercise of science communication. For instance in today's presentation and round-table, you will probably not hear about synthetic biology's industrial project. This project seeks to further develop a bio-industry and a biotech-economy through application in sectors such as biofuels and agroindustry. This biotech-economy sees environmental and sanitary crisis as new opportunities for economical growth, as it is said in every political report and

communication in the USA and in Europe⁴. At is has been largely demonstrated, the development of these sectors re-conduct global inequalities and perpetuate a nefarious technicization of the living world⁵. Science as business, industrial development and occidental way of life are considered as strictly non-negotiable. As citizens, we have no rights to say anything about it, except maybe later on as consumers or patients, and we are just invited to constitute the passive "rational public" of participation devices.

As with any other "science and society" dialogue, the framing of today's event is not really concerned with the following questions: Who decides which research program should be founded? What normative values and world views underpins technoscientific agendas presented as objective and pragmatic? Why researchers aligns themselves to and promote such agendas ? Who pays ? With what money? To what ends ? Why such decision is being taken far from the concerned and affected citizens?

These are not "social impacts", these are political starting points necessary to define problems which are often putted aside in the frenetic quest for new technological "solutions".

The "Research Breakthroughs and Social Impact" meeting, a productive pseudo-reflexivity

During "science and society" events, scientists are invited to present their work and explain it to a "broader audience". Scientific institutions encourage scientists to communicate with "society". This is seen as a desirable skill of the "responsible" researcher, who can be presented as an active member of a technoscientific democracy. On one side, scientific institutions pretend to be "reflexive" by encouraging researchers to go public and to care about "ethical issues". But, on the other side, the decoupling of these moments with the actual decision-making allows technoscience business to go on as usual.

Today, you either can participate seriously to the event, or you can have fun with our RBSIU Bullshit BINGO™, don't worry, none of these acts will actually have a political consequence ! This event is indeed design to have no consequences at all on the research agenda of synthetic biology.

Yet, we certainly do not suggest that nothing is happening in today's meeting. Science communication act as a tool to prevent public criticism, relying on the idea that social protests can be taken care of by more science communication, more ethics, more embedded social scientists. "Participation", "responsible innovation", "collaboration" have now become the present form of crisis management for research institution and scientists. These labels of techno-democracy are not rights that have been gained, neither goals to achieve. They are the new form of production of collective consent, of social order and of the organization of technological production. These concepts have colonized scientific policy making and they are now an additional step in the smooth path linking the laboratory to the marketplace.

1 Drew Endy. Synthetic biology: Can we make biology easy to engineer? *Industrial Biotechnology*. Winter 2008, p. 340-351

2 Clément Marquet has offered an analyse of the use of the metaphor of the "chassis" to name synthetic biology's organism. Clément Marquet. *Are you a chassis? A philosophical investigation into the introduction of Xenopustropicalis as a new chassis in the iGEM contest*. iGEM Human Practice Report. Evry 2012 Team. Available at : http://2012.igem.org/wiki/images/f/f8/Are_you_a_chassis.pdf

3 Another Drew Endy's expression, available at : http://syntheticbiology.org/Abstraction_hierarchy.html

4 For two exemples, see the Nation Bioeconomy Blueprint (US) and the Speech by Hon George Osborne to the Royal Society (UK) <https://www.gov.uk/government/speeches/speech-by-the-chancellor-of-the-exchequer-rt-hon-george-osborne-mp-to-the-royal-society>). In Switzerland, a 2012 event organized by the Swiss Academy of Natural Sciences, embraced fully this rhetoric : <http://www.sciencesnaturelles.ch/service/events/33728-les-biocarburants-entre-securite-energetique-et-crise-alimentaire->

5 See the various publication of the ETC Group, and the "Open letter to synthetic biologists" addressed by Luddites 200 and Biofuelwatch to the participants of the 2013 SB6.0 Conference. <http://www.etcgroup.org/issues/synthetic-biology> ; <http://luddites200blog.org.uk/2013/07/open-letter-to-synthetic-biologists/>