

DIY SynBio: A New Geography of Research

Rees Kassen

Past Co-Chair, Global Young Academy
Professor & University Research Chair, University of Ottawa, Canada

kassenlab.weebly.com

@ReesKassen

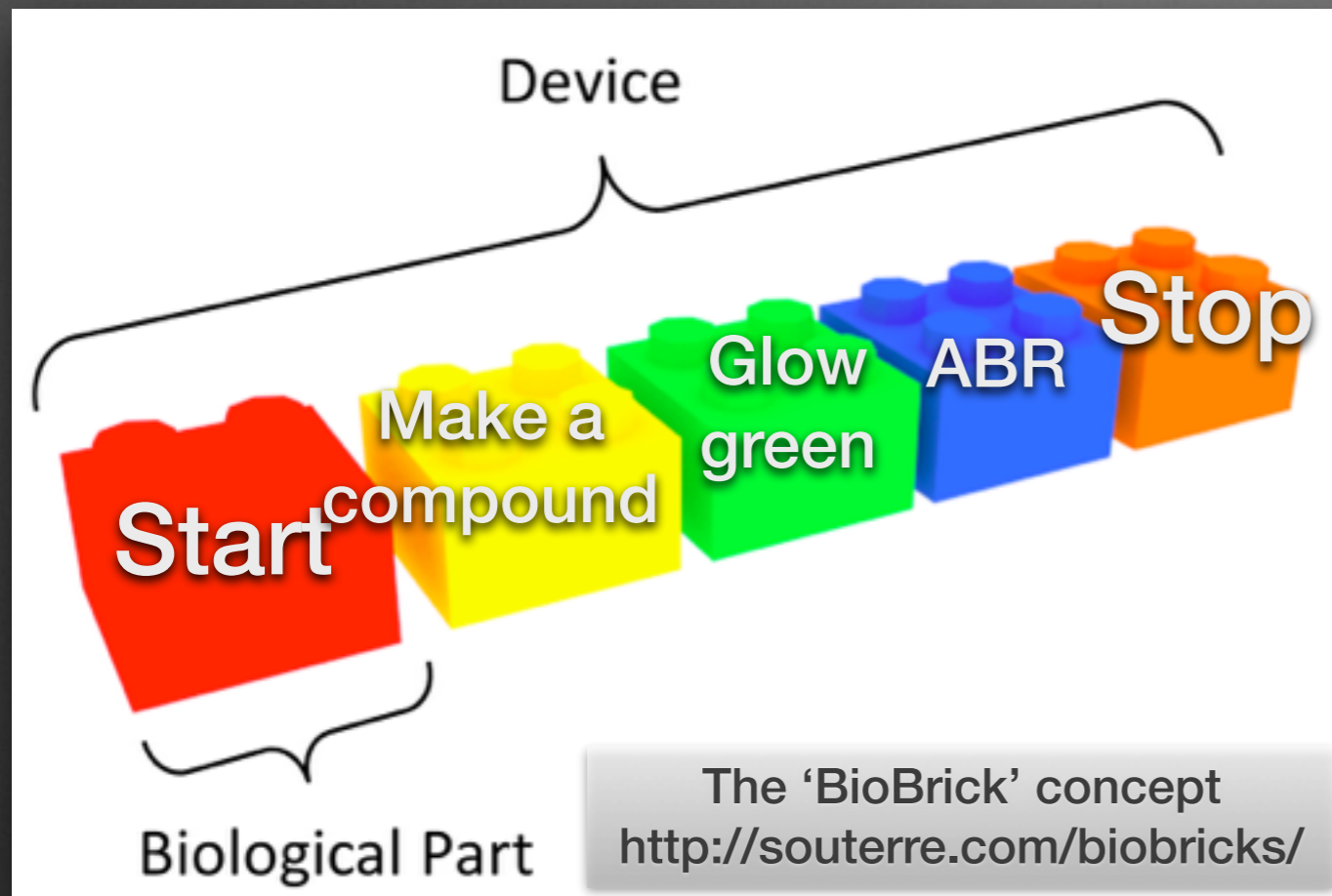


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What is synthetic biology?



Who is doing SynBio?



Andrew Pelling
<http://www.pellinglab.net/>

Who is doing SynBio?

Based on a survey by Grushkin, Kuiken, Millet (2013) through the Woodrow Wilson Centre's Synthetic Biology Project

- Typically < 45 years
- Lack extensive professional (ie - Masters or higher) research training
- Innovative, entrepreneurial, committed to information-sharing & peer-to-peer education
- Mostly work in shared labs/collaborative spaces outside of academia, industry, or government; some work at home

**The promise of synthetic biology
is not just *what* can be produced
but by *whom* and *where***

The major challenge for science advice:

**Identify leaders and experts working outside of
the 'normal' academic community and
institutions for research**

Some suggestions

- Engage the community via major DIY competitions (eg - iGEM, BIOMOD, CAGEN)
- Establish links to SynBio workspace hubs (eg - Montreal's <http://brico.bio>, Sydney's <http://foundry.bio/>)
- Support co-development of standards & tools
- Ensure we can track who is buying what from where
- Consider modifying the Cartagena Protocol on Biosafety to include DNA 'devices' as well organisms