

Inspiring BioHack Academy

On February 17, 2015, 60 people on three continents started participating in the first BioHack Academy organised by De Waag in Amsterdam. They could follow lectures that were given and recorded every week. The challenge to the participants was to build their own lab in 10 weeks, use it for whatever they felt was relevant and share it with the world. Pieter van Boheemen, organizer of the Academy, tells us about his impressions.



Why did De Waag organize a BioHack Academy?

“With the BioHack Academy we want to enable students to build their own lab while sharing ideas, designs and their societal and ethical reflections on what they are trying to achieve. In possession of their own biofactory, students may continue to advance their production skills, engage in directed evolution experiments, produce biogas, purify water, bioremediate polluted soil, just to give a few.”

Who participated?

“Most participants, people with close to zero prior experience in biology, worked in partner labs in Barcelona, São Paulo, Rome and Amsterdam, some even on their own, but all connected via video stream.”

Did the Academy meet your expectations?

“The results exceed my wildest dreams. The Academy was set up to introduce people to a number of techniques for making and using equipment for your own lab. I witnessed research into environmental pollution, 3D bioprinting, longevity, typography, biomaterials, bio imaging and microbial intelligence whilst pushing the envelope of internet-mediated collaboration on rapid prototyping. Tamara Hoogeweegen (Netherlands), for instance, develops [methods for growing textiles of the future with bacteria and mycelium](#). [Antonia Garcia](#) had read in science publications about the life span of animal models and wanted to see if aging a process that can be stopped, slowed down or even reversed. Günter Seyfried (Austria) creates ‘[yeastograms](#)’: living certificates made out of printed yeast.”

Will there be another BioHack Academy soon?

“All the instructions for starting a new chapter are freely available on biohackacademy.github.io, so anyone can start a new Academy anytime based on these outcomes. The next globally coordinated round will start in September, based on an improved version that will be released afterwards as well. Just sign up via www.waag.org/biohackacademy and join in.”

The BioHack Academy classes can be watched [at the BioHack Academy video channel](#).

Similar initiatives

Similar 'education initiatives' take place in other parts of the world too. [Genspace](#), which opened in downtown Brooklyn in 2009, offers a three-class crash course in synthetic biology to anyone who is interested. It also has a working lab space where the general public is invited to come in and learn how to do genetic science — hands on.

In [a story on PRI's Studio 360](#) Dr. Ellen Jorgensen, co-founder and Executive Director of Genspace, says: "I would like to see everybody have a working knowledge of things like genetic engineering, the same way we have working knowledge of electricity,". "We treat electricity with respect, but we're not afraid of it. I think we need to get to that place with some of the new DNA science."

