



biohack academy  
waag society

# BioHack Academy 5 - Call for partner labs

Design, build and use your own biolab



BioHack Academy is a unique international 10-week program during which participants build and use their own biolabs. It was held for the first time in the Spring of 2015, and since partners from the USA, Brazil, UK, Sweden, Denmark, Lithuania, Spain, Italy, Serbia, Slovenia, Iran, China, South-Korea, Japan and Australia have followed the course. We are now seeking new partner labs for the fifth and improved series.

Participants in the course learn how to grow their own fuel, food, filaments, pharmaceuticals, fragrances, fungi and much more funky bio stuff. Whether it's a new type of bio ink, bio polymer or bio fuel, we'll show you how to grow it and share the results with others. By the end of the course your Fablab, Maker/Hackspace or whatever machine shop will be turned into a biolab.

The BioHack Academy is an exciting project-based learning-by-making experience. You will confront your participants with prototypes of equipment and challenge them to hack and change it. Once built, the equipment will be used immediately in the biotechnological experiments.

## What does the 10-week program look like?

- Weekly live-streamed two hour lectures from Amsterdam
- Weekly partnerlab conference calls
- In your lab: at least two days a week bio experiment workshops and equipment construction

More information can be obtained by contacting:  
[biohack@waag.org](mailto:biohack@waag.org)

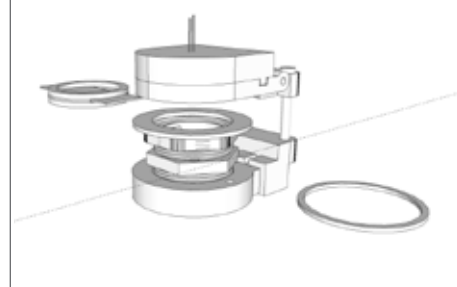
## Important dates

Regular deadline for participants:  
**November 20th, 2017**

Deadline for partner labs  
**November 12th, 2017**

Coordinator Bootcamp:  
**December, 2017**

Register at:  
[waag.org/partnerlab](http://waag.org/partnerlab)



# Fifth BioHack Academy in 2018

30 January – 3 April 2018

The lectures will give insight the basics of biotechnology, what kind of tool we are building and it's usefulness in the lab. The participants may choose to replicate the design, improve it or build their own device from scratch.

Weekly assignments will get the participants started. All students are required to keep track of their progress on a documentation page. The results will be discussed in local project meetings for immediate feedback and peer-based reviews by remote participants.

Two weeks in advance of the Academy students will receive a recommended materials list and access to the tutor's experiment protocols, designs, allowing for enough time to purchase the components and materials.

## Partner lab coordinators bootcamp December 2017

In November all partnerlab coordinators are invited to join a three-day bootcamp. We will review the Academy curriculum, test the experiments, tools, equipment and protocols and perhaps most importantly get to know each other. You will also receive samples of the biological strains.

Day	Description
1	Introduction and course overview Microbiology techniques Software
2	Hacking hardware tools Biotic gaming practical
3	Biotech theory Bio art & design practices Coordination

## What Biomaterials will be grown?

For starters, you may choose a product from our collection, such as violacein (purple dye), cellulose (biopolymer), ethanol fuel (yeast fermentation), spirulina algae (super food), lactic acid (yoghurt), penicilin (antibiotic), kombucha (drink), acidic acid (vinegar), citric acid (aspergillis) and mycelium (filaments). You are welcome to use your own organisms in the course as well.

## How to register as a partner lab?

Partner labs need to register before **November 12th 2017** by doing a prepayment on Eventbrite.

## Requirements for partner labs

- A local coordinator that is knowledgeable of digital fabrication and biotechnology or has taken part in the coordinator bootcamp;
- Workshop room that can host at least 10 people and has a video screen with camera and internet connection;
- Digital fabrication lab, including a laser cutter (at least 45 x 45 cm) and 3D printer (at least 20 x 20 cm);
- Basic kitchen infrastructure, including sink, freezer, fridge, stove, pressure cooker and scale.



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# Information for partner labs

*What will be provided? What does a license cost?*



## What we will provide to each partner lab?

- Samples of the following strains:
  - SCOBY for cellulose production;
  - 3 pigmented bacteria: J Lividum, M Roseum, M Leutus;
  - Yeast;
  - Lactobacillus;
  - Algae: *Spirulina maxima* and *D. Salina*;
  - Glowing bacteria: *P Phosphoreum*;
- All the tuition materials, assembly guides and weekly workshop briefings.
- Local participants are connected through the global knowledge sharing platform on which they document their work.
- 3 weeks in advance of the Academy the partner lab will receive the recommended material list for the equipment and chemicals.
- Each lecture will be live streamed on Tuesday evening between 19:00h and 21:00h CET. A recording will be made available afterwards.
- The work of the local participants will be reviewed by the Graduation Committee.
- A certificate of the 'BioHack Academy' for each local participant.
- Support by the BioHack Academy team in preparation of the course, such as in sourcing materials, as well

## Cost

Each partner lab needs a single license, which costs 2,500 euro when registering before August 1st. Registrations are accepted until October 15th, but at the cost of 3,000 euro. In case this is the second year your lab participates, the costs are 1,500 euro. Third year and beyond partnerlabs pay 500 euro.

Participating in the partnerlab bootcamp costs 1,000 euro. Participation is not mandatory, but highly recommended.

All prices mentioned are subject to Dutch Value Added Tax of 21%. These costs might be reimbursed by your local tax authority depending on the legislation in your country. An estimate of the material costs is available in the coordinator guide.

Email [biohack@waag.org](mailto:biohack@waag.org) to receive a copy.

## Income

You are free to set your own price to your own local participants. Prices have varied tremendously in the past according to the local context of each partnerlab. We believe anywhere between free and 3,000 euro is fair. Participants in Amsterdam pay 2,000 euros each. It is recommended to recruit about 10 participants.