

biohack academy



BioHack Academy 6 – Call for partner labs

Design, build and use your own biolab January 28th – April 2th 2019

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 sixth series.

Participants in the course learn how 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.

Over the course of the academy, participants develop their own projects following their individual curiosity. These projects vary wildly depending on personal interest and aim, ranging from playful and artistic explorations to practical applications and citizen science.

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, or design their own laboratory designs from scratch. Once build, the equipment can be used immediately in the biotechnological experiments.

What does the 10-week programme 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
- In your lab: local participants following the BioHack Academy

Important dates

Early Bird Registration deadline:
September 1st, 2018

Regular deadline for participants:
November 1st, 2018

Deadline for partner labs:
November 1st, 2018

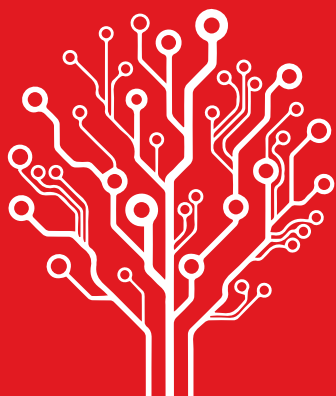
Online Coordinator's Bootcamp:
26 - 28 November 2018

Register at:
<https://waag.typeform.com/to/MwR2Kf>

Disclaimer

As a partner lab your registration will be finalized when signing a Memorandum of Understanding (MoU) with Waag. The start of the BioHack Academy #6 is dependent on reaching a certain number of participants and partner labs for it to go through.

More information can be obtained by contacting: biohack@waag.org.



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Sixth BioHack Academy in 2019

28 January – 2 April 2019

The lectures will give insight the basics of biotechnology, what kind of tool we are building and its 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 in Amsterdam: 26 - 28 November

All partnerlab coordinators are invited to join a three-day bootcamp at Waag in Amsterdam. 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 Microscopy or spectrometry 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.

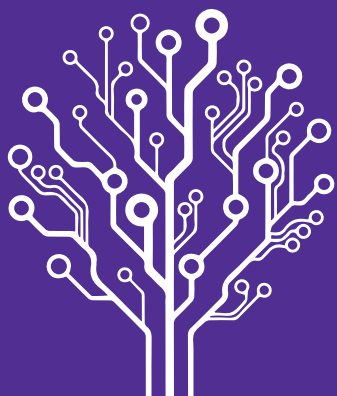
How to register as a partner lab?

Partner labs need to register and pay and before **November 1st 2019**. Register by emailing biohack@waag.org.

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.

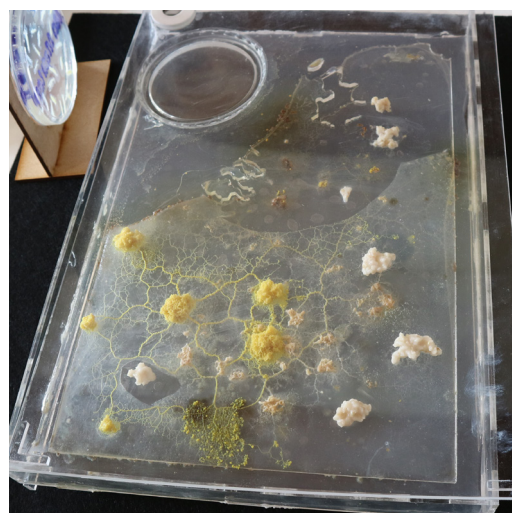
Send an email to biohack@waag.org to receive a full coordinators guide.



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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*;
 - Mycelium;
 - Slime mold;
 - Algae: *Spirulina maxima*.
- 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 Tuesdays, alternating between morning and evening 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 as materials that can be used in promotion to gather local participants to join your local BioHack Academy.

Cost

Each partner lab needs a single license, which costs 2,500 euro when registering before September 1st. Registrations are accepted until November 1st, 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. All prices are excl. VAT.

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 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 2,200 euros each.

It is recommended to recruit about 10 participants.