

TEAM + ADVISORS

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Mission commander & educational designer

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Software Architecture, back-end developer

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Electronics, Software Architecture, front-end

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Plant geek and all-round maker

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ESA/MELISSA – scientific advisors

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World Startup Factory – business advisor

Cameron Norris

Wevolver – open source community development

Michel Behre

Border Sessions – creative advisor



ABOUT BORDER LABS

Border Labs is a spinoff of Border Sessions, a technology festival that fuels challenging ideas and addresses the wanted and unwanted effects of data, robots and space in our future societies.

This open innovation lab brings together space science and technology communities. Open source and entrepreneurial ideas emerge into concrete, innovative projects.

BORDER LABS



ASTROPLANT

ENGAGING
A NEW GENERATION
OF **URBAN AND
SPACE FARMERS**

MORE INFO

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ASTROPLANT

WHAT IS ASTROPLANT?

AstroPlant is a citizen science kit to educate the next generation of urban and space farmers. It is:

- **An open source plant lab**
- **An educational programme**
- **An interactive interface**

AstroPlant integrates plant science, electronics and space. The kit is provided with an application showing all relevant data. These data are used by the ESA's MELiSSA consortium to validate plant models and help improve regenerative life-support systems for astronauts.

- **Human inputs: number of leaves and nodes, size, weight, pH, fruits**
- **Sensor data: air and water temperature, CO2 levels, humidity, electrical conductivity**

AstroPlant is an open platform: anyone can customise the instrument, add new sensors and tailor it to specific plants and contexts. It enables understanding, interaction, and creativity.

NEXT STEPS

AstroPlant has grown into a dedicated community of enthusiasts and volunteers. The core team consists of engineers, plant scientists, urban farmers, designers, and entrepreneurs.

AstroPlant is part of an ongoing educational project in Belgium, and is being tested by various makerspaces and scientists in Europe. All its designs are open source and available online.

In 2018 AstroPlant will be launched on Kickstarter to raise funds for the manufacturing and distribution of over 1000 kits across the world.

YOUR INVOLVEMENT

We are actively looking for partners to further sponsor, develop and test the AstroPlant technology stack, mobile app, and educational programme.

By becoming a supporter of the AstroPlant mission, you will:

- Connect your brand with the AstroPlant mission
- Connect with the AstroPlant team and a wider network of talented professionals in the urban farming, space, educational and technology industry
- Participate in an open source project
- Get first-hand access to scientific data on plant characterisation



ASTROPLANT