**Neoplants Background Information**

**Company Name**: Neoplants

**URL**: www.neoplants.com

**Number of employees**: 20

**Year Founded**: 2018

**Headquarters:** Paris, France

**Lab Address:** 47 Rue du Dr Léonce Basset, 93400 Saint-Ouen-Sur-Seine

Note: this is one of (if not **the**) largest private synthetic biology laboratories in the world. A significant portion of the most recent funding round was dedicated to the building of this lab, and it opens in November 2022.

**Funding:** $20M in funding to date.

Round 1: $3.6M USD

Round 2: $ 13.8M USD

The most recent round of funding was dedicated to:

(1) Building a cutting edge, 12,000 square foot bioengineering lab north of Paris, and

(2) Bringing the first line of plants to production with a growth facility in the United States

**Investors:**

* True Ventures
* Heartcore
* Entrepreneur First
* Collaborative Fund
* Individual investors include:
	+ [Niklas Zennstrom](https://en.wikipedia.org/wiki/Niklas_Zennstr%C3%B6m) (Founder @Skype, Atomico),
	+ [Dan Widmaier](https://www.linkedin.com/in/dan-widmaier-1760601/) (Founder @Bolt Threads),
	+ [Emily Leproust](https://www.linkedin.com/in/emily-leproust/) (Founder @Twist Bioscience),
	+ [Xavier Duportet](https://www.linkedin.com/in/duportet/?originalSubdomain=fr) (Founder @Eligo Bioscicence and @Hello Tomorrow),
	+ [Arnaud Plas](https://www.linkedin.com/in/arnaudplas/) (Founder @Prose),
	+ Additional individual and strategic investors.

**Media Kit:** <https://drive.google.com/drive/folders/1aCMPNLJj1YQ3uKAlhVMrHD1sfS34ZByl?usp=sharing>

**Overview:** Neoplants brings together the world’s most accomplished bioengineers to put nature at the heart of innovation. Founded in 2018 by CEO Lionel Mora and CTO Patrick Torbey, PhD, Neoplants uses bioengineering and directed evolution to create “Plants with a Purpose”, beginning with the first plant built to fight air pollution: the Neo P1. The most efficient natural air purification system ever created, the Neo P1 is proven to be as effective as thirty of the most performant houseplants in capturing and recycling harmful VOCs from indoor air,

**Products**

* Neo P1
	+ The first bioengineered generation of the popular Pothos houseplant, Neo P1 is designed at the genetic level to efficiently capture and recycle the most dangerous air pollutants commonly found in the home: formaldehyde, benzene, toluene, and xylene. These Volatile Organic Compounds (VOC’s) are constantly released into indoor ambient air from ubiquitous building materials such as paint, varnishes, adhesives, sealants, upholstery, and flooring. The Neo P1 is more than thirty times more effective than common houseplants in removing VOCs from the air.
* Neoplants Powerdrops
	+ Designed to enhance Neo P1’s evolutionarily-directed microbiome that partners with Neo P1 to capture and recycle VOC’s. The Powerdrops can be added to any houseplant to improve and maintain naturally occurring microbiomes, but perform best when paired with the Neo P1.
* Neoplants Shell (this is what we call our pot)
	+ Airflow: the shell is designed to allow maximum air intake, bringing the polluted air in contact with the microbiome-rich soil while increasing root growth and Neo P1’s health.
	+ Maintenance: it is cleverly designed with a water reservoir to maintain optimal health of the plant and provide you maximum convenience - you only have to water Neo P1 once per month during winter, and once every 2 weeks over summer.
	+ Soil: the soil of Neo1.0 is optimised for the health of the plant, its performance and the planet thanks to one special ingredient: Biochar. It helps the plant grow, provides niches for our microbiome to flourish and is a way to store CO2 out of the atmosphere.
	+ Design: we’ve worked hard with our partners to choose the most environmentally-friendly materials. Our planter is made of recycled plastics and bio-waste such as wheat stalks. It was not an instinctive choice, but when we dop the math for the planet it was the best option. We produce everything locally in the US (only shipping country for now).

**Founding Team & Bios:**

* **Lionel Mora, CEO and co-founder:**
	+ Lionel Mora is the CEO of Neoplants. He has a business background and a product obsession, having previously worked as a Product Marketing Manager at Google, launching new categories at scale.
* **Patrick Torbey, CTO and co-founder**
	+ Patrick Torbey is the CTO of Neoplants. He has a DeepTech background with a passion for taking the “fi” out of “sci-fi”, he completed his PhD in genome editing at ENS Paris.

**About our team of Scientists and PhDs:**

Our R&d team is composed of 4 different workstreams, each of them dealing with one specific aspect of our product development:

**Plant Metabolism & Biodesign**: The Plant metabolism & Biodesign team is responsible for the design and implementation of the new metabolic pathways responsible for the pollutant degradation. This team is led by Selcuk Aslan, PhD, who worked previously as a postdoctoral researcher at the Max Planck Institute.

**Performance & Measurement**: The Performance & Measurement team is responsible for assessing the performance of our products. This is done through various in-house experiments as well as third-party measurement. This team is led by Dona Sleiman, PhD, who worked previously as a postdoctoral researcher at *Collège de France* and is the author on several major research papers in Biochemistry. We have collaborated with two 3rd party institutions for performance and measurement of Neoplants efficacy: Institut Mines Telecom ([IMT](https://www.imt.fr/)), and La Rochelle University ([LRU](https://www.univ-larochelle.fr/)).

**Plants & Transformation:** The Plants & Transformation team is in charge of inserting the selected genes into plants cells, setting-up the in-vitro culture and ensuring stable transformation through agroinfiltration and biolistic techniques. This team is led by Iman Tabatabaei, PhD, who worked previously as a postdoctoral researcher at the Max Planck Institute.

**R&D Operations**: The R&D Operations team is responsible for the proper execution of the various processes, protocols and manipulations done in the Lab, as well as the relationship with suppliers and third parties to ensure maximum efficiency. This team is directly led by Patrick Torbey, CTO.