

## Bayer Grants4Ag 2022

### Sponsor

BayerCropScience

### Description

First introduced in 2015, the Bayer Grants4Ag initiative has evolved to offer researchers financial and scientific support to develop ideas for novel solutions across all research and development areas in the Division of Crop Science. Awarded projects will be paired with an internal Bayer Scientist for project guidance.

Three funding opportunities are currently open:

1. Enabling technologies for plant transformation
2. Climate solutions through plant modifications
3. Space biology exploration at Biosphere 2

Bayer's vision of #HealthForAll, #HungerForNone drives our need to strengthen innovation capabilities in all areas of agriculture. We know we can't accomplish this alone, so we're always interested to hear about novel, early-stage scientific innovations that can contribute to feeding the world without starving the planet. You have our commitment to take a look, match with our R&D priorities and provide you timely feedback.

#### 1. [Enabling Technologies for plant transformation](#) [1]

The intent of this project is to enable research towards developing new plant transformation technologies for row crops, particularly monocots.

Solutions of interest include:

- Novel ways to enhance starting material for plant transformation
- Novel delivery systems into plant cells
- Selection systems
- Innovative ways to enhance regeneration into plants with heritable traits (e.g. morphogenic regulators)
- New methods to enhance crop transformation

### 2. [Climate solutions through plant modifications](#) [2]

Bayer Crop Science is seeking innovative trait approaches to mitigate the impacts of rising levels of atmospheric carbon dioxide on climate change using technologies that enable on-the-farm carbon sequestration or carbon removal.

We seek to fund transformation experiments that enable carbon sequestration or removal in cereals, legumes and pulses relying on the use of gene editing or transgenes.

Solutions of interest include:

- Biosynthesis of long-lived biopolymers
- Production of root exudates to increase carbon capture or its stabilization in soil aggregates
- Interactions with soil microbes

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### 3. [Space biology exploration at Biosphere 2](#) [3]

We are seeking proposals to conduct fundamental plant science research in the ultra-controlled environment of the SAM at Biosphere2 facility at the University of Arizona. Awardees will develop a more detailed experiment plan with the SAM team.

Solutions of interest include:

- Plant physiology and genetics related to resiliency under extreme conditions (e.g. light intensity, circadian rhythms, temperature, CO<sub>2</sub>)
- The effect of volatile organic compounds on plant growth and development
- Plant processes to transform regolith into soil (e.g. root exudates or root-microbe interactions)
- Development of new phenotyping tools for an ultra-controlled environment system for the main topics (plant resiliency, VOCs, soil transformation)

## **Eligibility**

Although Bayer allows non-faculty to apply, UofG requires an eligible faculty member to hold and administer funding.

## **Funding Availability**

Grants available in amounts ranging from \$5,000 to \$20,000, depending on call.

## **Indirect Costs**

0%

## **Project Duration**

Bayer expects the projects are completed in about one year. However, they can extend and renew on a case-by-case basis.

## **Special Notes**

Additional details can be found on [Halo's RFP website](#) [4].

## Deadlines

**If College-level review is required, your College will communicate its earlier internal deadlines.**

Type	Date
<b>External Deadline</b>	Sunday, July 31, 2022 - 5:30pm

Alert Classifications **Category:**  
Funding Opportunities and Sponsor News

### **Disciplines:**

Health and Life Sciences  
Information and Communications Technology  
Physical Sciences and Engineering

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**Source URL:** <https://www.uoguelph.ca/research/alerts/content/bayer-grants4ag-2022>

### **Links**

- [1] <https://www.halo.science/research/agriculture/grants4ag-enabling-technologies-for-plant-transformation>
- [2] <https://www.halo.science/research/agriculture/climate-solutions-through-plant-modifications>
- [3] <https://www.halo.science/research/agriculture/grants4ag-opportunity-with-the-university-of-arizona-sam-at-biosphere2>
- [4] <https://www.halo.science/company/bayer-crop-science>