

# VADE MECUM : A GUIDE TO YOUR PARTICIPATION TO INOCONTEST

Are you a student in Master's or engineering degree ?

Are you interested in organoids ?

## WHAT IS INOCONTEST ?

INOcontest is an **international competition on organoids** open to students in all disciplines : mathematics, computer science, physics, chemistry, and not excluding the humanities and Social Sciences. The first edition takes place in 2019.

## WHY A COMPETITION FOR STUDENTS ?

For personal development and professional advancement, a pragmatic approach of learning by doing is invaluable. The field of organoid research presents a unique opportunity for its application. The creativity and the transdisciplinary approach brought by **younger students** encourage innovative thinking and new ideas.

Browse through our **selection of videos** and biotech networks to get an idea of the philosophy of our approach.

<http://inocontest.eu/like>

# Rules

The project is to be **carried out and completed between April and October**. Results will be presented in November 2019 before a jury of experts in the field followed by a prizegiving. The following is a vade mecum designed to provide advice in the creation of a team and the definition of a project.

**Step 1:** Establish a **core team** (at least two master's/engineer students. Other undergraduate or graduate students can join the team). At least one **academic tutor** (teacher / professor) from the members' university or school will need to sign in with you and support your project. Tip :

***Tip :** A post-doctoral researcher or a PhD student can also join your team as an adviser.*

**Step 2:** Decide on your project and its scope (**type of organoid** (tooth, liver...), species (human, zebrafish...), **field** (biology, physics, informatics, ethics..)).

Here are a few pointers :

- 1) Analyse the **current state of the literature** on the subject. Identify the scientists working on your topic. Can you contact any of them? Find a host laboratory to work with.
- 2) Investigate **the current approaches** to making the organoid you want to work. List what you need to pursue your strategy.

***Tip :** A bibliographic landscape analysis tool, Vos Viewer for example may well be found useful. Several introductory tutorials and videos can be found online.*

**Step 3:** Unless your project is theoretical (Bioethics, in silico modeling...) access to **specialized laboratory equipment** will be essential for developing the practical aspects of your organoid project. in vitro or in vivo.

**Step 4: Fundraising.** Finding funds to provide reagents, pay for travel... is an important aspect of student competitions. Some universities or engineering schools may subsidize your project. In some cases, it may be advantageous to create an association under the 1901 law to administer the budget. Funding might also be obtained through **sponsors** (banks, regions, foundations, manufacturers, distributors...).

Learning by doing

Registration is open until April 15th., 2019 and is free for this first edition.

Go to the competition website, [inocontest.eu](http://inocontest.eu) for further details.

**Step 5:** By the month of May projects should be **ready to start** and team members should be **working together**. Like an « escape game », it is necessary to communicate with each other as much as possible. Collaborative tools must be set up to share documents, bibliography...

**Tip :** Mendeley or Zotero can be used to manage and share bibliography. Rspace, Docollab or Google docs can be used as electronic laboratory notebooks. A **Wiki space** will be provided to each team to document the advancement of your work and will function as a public team lab diary.

**Step 6:** The **creation and characterization steps** leading to the organoid of your choice must be documented. Throughout the project progress is archived in laboratory notebooks but also in video format (or any other - innovation will be appreciated). **June, July and August will be devoted to developing the project.**

**Tip :** Simulation of an organoid :a software solution that allows simulation of cell behaviour and/or and organoid maturation can be useful : agent-oriented programming Netlogo is an example of such an environment. To simulate cell behaviour, Vcell can also be used.

**Step 7:** In September the last four weeks should mainly be used to **complete the project** (final characterization, preparation of a presentation). The presentation must be engaging, innovative, and entertaining.

**Step 8:** Presentations must be **ready for October**. They will take place in the context of a congress (in October or November) which will provide an enriching opportunity to meet and to discuss with key opinion leaders in the field of organoids.

## PRIZES AND JUDGING CRITERIA

**Three medals** (bronze, silver and gold) will be awarded on the basis of the **objectives achieved**. The jury will take into account the conformity of projects to the standards of diligent research. All projects must take into account the ethical constraints that may be encountered or anticipated.

