

## Catalyze4Life Call for projects

Catalyze4Life is the EPFL School of Life Sciences Innovation Initiative

### Background

A significant obstacle, for the development of early-stage university discoveries, is the lack of funding and industrial R&D expertise for accomplishing validation studies needed to demonstrate future commercial potential. This issue is enhanced by the lack, in the academic environment, of knowledge and know how on the complex and very long product R&D process that are typically required for life sciences projects.

Left without a solution, especially in the life sciences, a high attrition and risk profile area, the majority of promising technologies and start-ups will be stunted or will struggle mightily to realize their goals. This technology development and technology transfer problem, the well-known “valley of Death”, is recognized as the most serious threat in the path of translating academic technologies into societal need solutions.

### Catalyze4Life

Its primary goal is to advance high innovation potential, strictly translational and applicable technologies to the point where additional funding from industry and/or technology transfer comes within reach or can be achieved. Catalyze4Life is providing: R&D expertise and networking, business development support and, exceptionally, funding, to help validating technologies and identifying potential industry partners, or other “exits” such as startups, with the global aim therefore of advancing these technologies towards technology transfer and the marketplace.

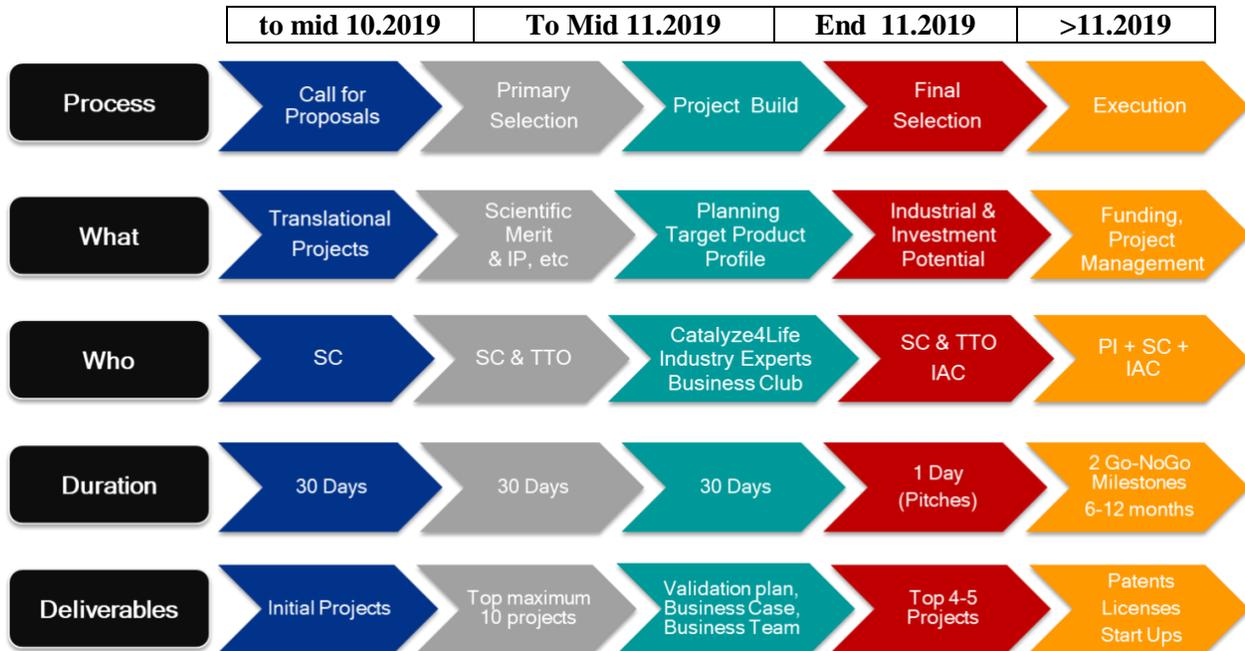
### Catalyze4Life Call for Projects

**This call is not for a research grant and is not destined to support salaries or basic research activities.**

It is specifically aimed at identifying and supporting the development of **strictly translational and applicable** life sciences technologies with a high potential to eventually help citizens and health care systems. The call, with the help of industry experts, is designed to help technologies build development strategies already during the evaluation and selection process. Thus, even if a project is not selected for funding, the goal is that it shall still leave the process with an early development strategy and technology transfer potential understanding. The key to this is the building of an early Target Product/Technology Profile, which mainly includes defining its industrial development feasibility and potential commercial applications.

**Timeline and Process;** the process of submission and selection starts immediately and should be complete by the end of September at the latest. The selection process shall be highly interactive as it is deemed to be an innovation training for the applicant’s project. The aim is to help the applicant with better understanding the industrial potential of her/his project.

## The process overview



**SC:** Scientific Committee, **TTO:** Technology Transfer Office, **IAC:** Industrial Advisory Committee  
**IP:** Intellectual Property, **PI:** Principal Investigator

## Next Steps

if you are interested to participate, here are the next steps and requirements.

1. Send an email declaring your interest, including a title for your project to [catalyze4life@epfl.ch](mailto:catalyze4life@epfl.ch). Use the provided application for your project application and submit it no later than 15.10.2019
2. When you have submitted your application, you shall be invited to meet and discuss your project with Catalyze4Life (Kostas Kaloulis) to discuss the project objectives and help you get a clear understanding of the aims of the call and next steps.

## General requirements

- Be available, and flexible, to exchange proactively on structuring a milestone-driven Catalyze4Life project.
- Be available to participate in the selection process activities such as the **Drug and Device Development Course (15.10-15.11.2019) co organized with the San Diego University**, Pitch day, Venture Capital/Starting Up workshops with the InnoSuisse, etc) and interact when needed with the selection committee (Catalyze4Life scientific committee, the TTO and, in a case by case, the Catalyze4Life industrial committee)
- Proactively exchange with Catalyze4Life on the progress of your project and stay flexible to support technology transfer activities (Licensing, Partnerships, StartUp).

## Examples of projects eligible for support

Catalyze4Life is not providing research grants and its funds can therefore only be used for strictly translational and applicable planned projects, and thus also not for activities that have already been carried out. The main driver to determine the eligible Catalyze4Life projects is the potential to increase the project's

value and thus the attractiveness towards industrial partners and the technology transfer traction. Projects having already filed Intellectual Property are preferred. Nevertheless, we commit to considering all high potential translational projects and ideas.

### Examples

- Medicinal chemistry, Structure-based design, synthesis, and testing of small molecule modulators of high-value targets
- Molecular screening platform or screens and confirmatory studies to identify modulators of high-value targets Validation of therapeutic or diagnostic monoclonal antibodies, antibody-drug conjugates, or other biologics
- Validation of clinical biomarkers and/or relevant diagnostic methods and devices
- Validation of novel vaccine technologies
- Gene and cell therapy approaches
- Life Sciences research-enabling tools or software
- Production and formulation platform technologies and/or solutions
- Regulatory Planning of Clinical Repositioning of generic molecules
- Orphan Designation
- Medical devices
- Etc.

**The projects need to be structured in a “two milestones for instalments” manner.** Thus, clearly measurable and applicable deliverables have to be defined for Catalyze4Life projects.

### Examples

- a good affinity monoclonal antibody is identified,
- viral vector successfully produced and showed transduction in a cellular assay before continuing with in vivo experiments,
- initial read outs of a new cellular or biotechnological assay achieved,
- research-enabling capacities of a new software application demonstrated,
- candidate leads are identified with a cellular assay screen,
- clinical trial plan and clinical center network is secured for drug repositioning,
- samples from human subjects are secured and have 1st read outs with a proposed biomarker, etc

Application areas of Research: this is open as long as the applicability and product development feasibility can be clearly demonstrated. Examples; Oncology, Neurosciences, Immunology, etc.

### Who is eligible to apply?

Researchers affiliated with the EPFL Life Sciences School (including those with a double affiliation). Any additional requirements relating to applicants will be stipulated in the guidelines to applicants that shall be communicated upon declaration of interest at the <https://www.epfl.ch/schools/sv/school-of-life-sciences/innovation/catalyze4life/>

### How are the applications evaluated?

A set of evaluation criteria is used in the selection process:

The main ones are as follows:

1. Scientific and Technical Merit

2. Innovation and novelty
3. Feasibility and risk
4. Significant market need and opportunity
5. Society need served (exceptionally even if it does not represent high market potential)
6. A relatively clear and short path to a commercially viable technology
7. Competitive advantage over currently available technologies
8. Significant de-risking or value inflection point without which the technology would not be partnerable
9. Clarity of the research objectives and proposed technical milestones
10. Potential impact and significance for human health and public benefit
11. Potential for Technology Transfer
12. Likelihood of enabling a strong patent position or enhancing an existing patent position
13. Entrepreneurs available for technologies that may have a startup potential.

### **Support to selected projects**

Already during the selection process, all the applying projects will receive industrial expertise “training” support.

The projects selected for execution shall be receiving:

- 1) Access to an industrial R&D and business expertise network for long term product development planning,
- 2) 40'000 CHF average per project (**please adjust the requested budget accordingly**),
- 3) Facilitation/networking for industrial partnering, including direct exchanges with the IAC.
- 4) Exceptionally: startup coaching with the building a development and business case

### **Reporting**

For the selected projects, two milestone reports will be requested: a mid-term and a final one.

### **Publicly available information**

A summary of all projects receiving funding will be made publicly available.

All relevant publications and presentations should mention the Catalyze4Life support.

### **About Catalyze4life**

**Mission:** to build a hands-on, Innovation and Applicable Research Incubator, supporting high potential early Technologies and Innovation Projects, in the field of Life Sciences, on their path towards Applications, Technology Transfer and Product Development

**Vision:** With the sole focus of serving the welfare of the society, establish a long-term sustainable vehicle, acting as a hub, comprising adequate resources and expertise, to facilitate the advancement of EPFL Life Sciences technologies

**Objective:** Advance Life Sciences Applicable and Innovative Projects, in a transparent, comprehensive and inclusive manner based on excellence research

Catalyze4Life is the EPFL Life Sciences School innovation encouragement program, operating in close proximity with scientists, and acting upstream and in support of the missions of the EPFL's Vice-Presidency for Innovation, and the Technology Transfer Office (TTO)

For more information: <https://www.epfl.ch/schools/sv/school-of-life-sciences/innovation/catalyze4life/>, [catalyze4life@epfl.ch](mailto:catalyze4life@epfl.ch), [Kostas.kaloulis@epfl.ch](mailto:Kostas.kaloulis@epfl.ch)