

Catalyze4Life; Guidelines

Catalyze4Life Mission: to build a hands on, Innovation and **Translational Incubator**, supporting high potential early Technologies and Innovation Projects, in the field of **Life Sciences**, in their path towards **Applications, Technology Transfer and Product Development**.

Catalyze4Life Vision: With sole focus serving the **welfare of the society**, establish a **long term, self sustainable vehicle**, acting as a hub, comprising adequate resources and expertise, to facilitating the **advancement** of EPFL **Life Sciences technologies**

Catalyze4Life Objective: Advance All Life Sciences Applicable and Innovative Projects, in a **transparent, comprehensive and inclusive, for scientists, manner**, based on **excellence research**

Catalyze4Life support may become available, **only, to applicable and translational research** projects.

Guidelines & General Information

Criteria for the selection of the proposals:

1. Scientific and Technical Merit
2. Innovation and novelty
3. Feasibility and risk
4. Market need and opportunity
5. Society need served (exceptionally even if it does not represent high market potential)
6. A relatively clear 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 partner-able
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 if available; In all cases **Catalyze⁴Life**, when needed, shall secure, in residence, all entrepreneurial/business activities (example; market research, business plan, etc), including training potential entrepreneurs.

Selection committee (Catalyze⁴Life Scientific and Industrial Advisory Committee): For details please contact catalyze4lifepfl.ch and see at <https://www.epfl.ch/schools/sv/school-of-life-sciences/innovation/catalyze4life/>

Catalyze4Life funding General Policies (eligibility, planning, Deliverables and project management, IP).

1. Anyone with rights as a principal investigator (PI), whose employer is EPFL and who has an obligation to assign intellectual property (IP) rights to EPFL, and who has or is associated to an active laboratory, is eligible to apply.
2. The Principal Investigator, may have an invention disclosure on file with the EPFL TTO (Technology Transfer Office), upon which the proposed project will be based, prior to applying. Applications may be accepted if the project proposal has an obvious potential generating novel Intellectual Property

3. The technology, which provides the basis for the project proposal, must not yet be licensed or optioned and should not be licensed or optioned until the completion of the POC (the technology Proof Of Concept) project. Thus, this **Catalyze4Life** funding should not be used as a “Trojan Horse” for entities seeking non-dilutive money. Flexibility should remain nevertheless for exceptional, obvious and transparent partnering opportunities in the interest of EPFL, Faculty, Technology and Society.
4. The main intellectual property (IP) surrounding (or to be generated by) the POC project proposal must be owned by the EPFL. If IP is jointly owned with another institution, an inter-institutional agreement must be in place with EPFL designated as the commercialization lead.
5. In coordination with **Catalyze4Life**, the PI must report any and all inventions to the EPFL TTO no fewer than 30 days in advance of a public disclosure to allow the TTO to determine if such public disclosure contains new, potentially patentable subject matter.
6. The research project may be structured such that some, or even a large part of the approved, budgeted activities are outsourced to one or more approved contract research organizations (CROs).
7. For each project, a project team will be assembled to manage and monitor progress throughout the funding period. In addition to **Catalyze4Life**, team members may include, research personnel, and external consultants with specific technical expertise (e.g., medicinal chemistry, PK/PD, product development and commercialization).
8. the support by **Catalyze4Life** must be cited in all publications that describes supported work.
9. Progress reports are due on the mid term and the end of the funding period. Each report should specifically address research results relative to each specific aim and a statement of any inventions made in the course of the performance of the funded project.
10. The proposed project must be focused on activities facilitating soon to come product development or testing. **Catalyze4Life** funding cannot be used for basic research or as general funding for the PI’s lab. Projects should address how achieving identified project milestones will move the associated technology towards commercialization.
11. **Catalyze4Life** funding will not be subject to EPFL indirect expense charges. Funding may only be used for research directly related to, and budgeted under the project, and may not be used for any other purpose. Periodic financial reports may be run to verify the appropriateness of project expenses.
12. Only one **Catalyze4Life** project may be submitted per PI. Investigators with multiple technologies should focus their proposal on the most commercially promising technology (or if possible a combination of technologies) within their portfolio. Flexibility should remain for this rule.
13. All project milestones should be achievable within 12 months the latest of the start of funding and within the requested budget.
14. A previous **Catalyze4Life** funding winner is eligible to re-apply. A new funding should be paid at the earliest post mid term milestone of his currently running POC project.
15. Extension of **Catalyze4Life** funding may be possible for technologies with exceptional potential having achieved all milestones designed in the 1st **Catalyze4Life** funding period.
16. By submitting a **Catalyze4Life** funding pre-application the PI acknowledges that this project is eligible for submission based on the criteria set forth in this application. He/She further understands that if invited to submit a Proposal there is no guarantee that such proposal will be funded.
17. The proposal will be reviewed and scored by a **Catalyze4Life** funding Review Committee and only those projects which are selected by the Committee will be funded.

Expectations from Applicants:

1. Work closely with the **Catalyze4Life** office to structure the proposal and put together a short PowerPoint presentation of 2-3 slides explaining the essentials of the technology.
2. Be available for in-person meetings (at least for 1 meeting with the **Catalyze4Life** team and 1 pitch with the **Catalyze4Life** committee).
3. Any funds remaining in the PIs' account upon shall be returned to the **Catalyze4Life** account upon; a) stopping the project due to non-successful mid-term milestone or b) upon completion of the final milestone, c) funding support for the same work is secured from industry or other sources.
4. Participate, pro actively, in follow up commercialization related activities

Activities Eligible for funding (examples)

The focus of the proposal must be in applicable, only, research in the field of Life Sciences. Examples of studies eligible for funding include but are not limited to:

1. Medicinal chemistry optimization of lead compounds (e.g., to define structure-activity relationships, increase potency or target selectivity, and improve pharmaceutical properties including solubility and metabolic stability for in vivo testing)
2. Structure-based design, synthesis, and testing of small molecule modulators of high-value targets
3. High-throughput screens and confirmatory studies to identify modulators of high-value targets
4. Development of therapeutic or diagnostic monoclonal antibodies or other biologics
5. Development and validation of clinical biomarkers and/or relevant diagnostic methods
6. Development and validation of novel vaccine technologies
7. Testing of lead molecules, monoclonal antibodies, or other biologics in cell-based and/or animal models of disease to confirm their clinical or diagnostic relevance
8. Preclinical development of validated lead molecules or biologics (e.g., ADME/T, PK/PD, formulation, or safety studies)

Some other examples of specific activities

- a) Performance of a high-throughput screen for candidate therapeutic compounds or antibodies, and confirmation of specific biological activity in identified hits
- b) Demonstration that a candidate vaccine antigen or technology elicits a functional immune response in a suitable animal model
- c) Demonstration that a candidate biomarker detection method is appropriately sensitive and specific under ideal lab conditions.
- d) Medicinal chemistry optimization and preclinical studies of lead therapeutic molecules
- e) Determination of a candidate vaccine's ability to elicit protection against pathogen challenge, formulation/stability studies
- f) Validation of a biomarker and an appropriately sensitive and specific detection method using clinical samples, correlation of biomarker status with clinical outcomes

Additional Clarifications

Salaries:

The part of salary in the budget should be much lower than, definitively not exceed, the 50% of total costs. This funding cannot be used as "salary bridge" for personnel in search of career "next step", unless is the only way

to secure deliverables, research management and technology transfer exit. Material and outsourcing, for absolutely necessary activities not possible within EPFL, should be prioritized

Examples of scheduled Milestones:

1. a good affinity monoclonal antibody is identified,
2. viral vector successfully produced and showed transduction in a cellular assay before continuing with in vivo experiments,
3. initial read outs of a new cellular assay, achieved,
4. candidate leads are identified with a cellular assay screen,
5. clinical trial plan and clinical center network is secured for a drug repositioning,
6. samples from human subjects are secured and have 1st read outs with a proposed biomarker,
7. etc