



BCPM Call for Lighthouse Projects

Purpose

The BCPM is soliciting applications for up to three lighthouse projects addressing **key challenges in the field of precision medicine with the potential for clinical translation**. Funding is expected to establish important areas of excellence in precision medicine in Bern, with the ultimate goal of impacting clinical care. Successful projects will help discover or develop approaches leading to improved disease prevention, diagnosis, and/or treatment.

Projects must be interdisciplinary, ideally combining basic and clinical research (translation, patient care), and should use the health data infrastructure established at the Insel Gruppe in Bern, such as data from the clinical data warehouse or an SPHN BioMedIT node. Successful projects should offer a prospect for an external impact, focusing on clinical translation as an outcome. Clinical translation could mean a new diagnostic modality, a new therapeutic approach, the repurposing of existing therapy, and the development of novel drug targets with potential for clinical development. Proposals exploring novel strategies leading to early detection or prevention are also welcome.

Applying for a BCPM Lighthouse Project is a 3-stage process: Letter of Intent (LOI), full application submission upon invitation, and then oral presentation.

Lighthouse projects will be granted to teams of at least three co-PIs and one young investigator and run for three years. A neutral cost extension of up to two years can be granted. Collaboration partners outside of Bern from academia or industry are welcome but cannot receive funds from this mechanism.

Key Dates

Please note, that some dates may be subject to change, due to administrative constraints. In this case, applicants will be informed accordingly.

- **Call launch date:** Thursday, December 8, 2022
- **Letter of intent (LOI) due:** Friday, February 03, 2023, 17.00h CET
- **Invitation to submit a full application:** Monday, March 13, 2023
- **Full application due:** Monday, April 17, 2023, 17.00h CET
- **Invitation for oral presentation:** Early June 2023
- **Oral presentation for selected projects:** Late-June 2023 (tentative date is June 30)
- **Announcement of selected projects:** Late-June 2023
- **Earliest start of a project:** Monday, July 3, 2023

Team Eligibility

- Teams must be composed of at least three PIs **and** at least one young researcher.
- One of the PIs will be the contact PI.
- All PIs must be affiliated with the University of Bern or the University Hospital of Bern (Insel Gruppe).
- Young investigators are defined as researchers from postdocs up to assistant lecturers, under the condition that they have a primary non-professorial appointment at the University of Bern and/or the Inselspital (i.e., Ph.D./MD-PhD/MD-students, postdoctoral researchers, MD trainees/fellows, Ambizione fellows, Group Leaders).
- Collaborations to develop interdisciplinary and translational approaches, ideally between different faculties from the University of Bern, are strongly encouraged.
- Investigators who received funding from the BCPM in prior calls are eligible to apply.
- Project partners not affiliated with the University of Bern/Insel Gruppe can be included as additional team members (but are not eligible to receive funding). They may come from academia or industry.

Project Eligibility

- Lols and full proposals must comply with the specifications mentioned in the application forms.
- Ideally, projects will use the health data infrastructure available through the Insel Data Science Center (IDSC) and/or the Swiss Personalized Health Network (SPHN).
- Ideally, projects will use scientific methodology typical for precision medicine, such as multi-omics, data science, or population studies.
- Ideally, projects will work with patient data or samples from the Insel Gruppe and/or other Swiss hospitals.
- Ideally, projects will link with pre-existing SPHN projects (SPHN Driver, National Data Stream, Demonstrator) and/or collaborate with similar bigger national or international data pools.
- PIs are encouraged to collaborate with the core facilities/platforms of the University of Bern and Insel Gruppe (see <https://www.bcpm.unibe.ch/research/platforms/>).
- Projects should offer a prospect for an external impact (see evaluation criteria) focusing on clinical translation as an outcome.
- Plans should describe external funding (e.g., SNF, industry support, etc.)

Budget

- The total budget for this call is CHF 2'200'000 (2.2 Mio).
- Teams may request up to CHF 1'000'000.
- Funding will be contingent on obtaining the appropriate protocols (e.g., ethical approval).
- Funding will be paid in two installments:
 - the first installment after the project starts,

- the second payment is contingent on sufficient scientific progress, as presented at the 18-month project review.

Eligible Costs

- Salary support for personnel (e.g., technicians, postdocs, PhD students) who have a primary appointment at the University of Bern and/or the Insel Gruppe
- Costs for laboratory consumables
- User fees for core facilities, such as Next Generation Sequencing.
- Travel costs if invited to present the project (talk, poster) at a conference.

Ineligible Costs

- Salary support for PIs
- Salary support for personnel whose primary appointment is not the University of Bern and/or the Insel Gruppe
- Secretarial/administrative personnel
- Indirect costs/overheads
- Except for the payment of services to core facilities, all costs incurred by partners/collaborators/PIs not belonging to the University of Bern.
- Capital costs/equipment, including maintenance/service contracts
- Office furniture and supplies
- Construction, renovation, or maintenance of buildings/laboratories
- Rental of laboratory or office space
- Personal Computers
- Non-medical services to patients
- Purchasing of periodicals and books
- Dues and membership fees in scientific societies.

Submission instructions

Letter of Intent and Full proposal must be submitted using the official templates (see the Call for Projects section on https://www.bcpm.unibe.ch/call_for_projects/). The template for the full proposal will be sent to the teams invited to submit.

Applications must be submitted as a single PDF document to info@bcpm.unibe.ch. The subject line of the e-mail should read "BCPM Project Application." The receipt will be confirmed by e-mail.

Incomplete or non-compliant applications or those received after the deadline will not be considered. Please direct questions to info@bcpm.unibe.ch .

Evaluation Process and Criteria

- Letters of intent and full proposal applications will be screened for completeness and formal compliance. Only eligible documents will be considered.
- An executive review panel will evaluate Lols. The panel will consider the scientific and strategic merits of each proposal.
- Based on the retained Lols, teams will be invited to submit a full application, which external experts will evaluate. The executive panel will then rank proposals.
- The top ranked teams will be invited for an oral presentation (tentative date is June 30), which will serve as a basis for the funding recommendations. Ideally all PIs of the invited projects for the oral presentation should be present.
- All decisions are final.

Proposals will be evaluated on the following criteria:

- External impact:
 1. Likelihood that the project will take findings into the arena of patient care within the next three to five years, ideally on a broader level, via an industry partnership.
 2. Likelihood that the project can sustain itself in the future (e.g., financially).
 3. Likelihood that the project will lead to peer-reviewed publications in scientific journals of international renown.
- The project addresses an important question in the field of precision medicine.
- Is the proposed research project original, innovative, and/or of socioeconomic importance?
- Methodology: Have the most appropriate realization methods been chosen?
- Feasibility: Is the project feasible regarding finances, human resources, organization, and time frame?
- Projects are not expected to realize their clinical endpoint in three years. They will, however, be evaluated for their potential to lead to a clinical endpoint.
- Acceptable clinical endpoints include but are not limited to diagnostic testing (e.g., molecular or imaging), identification of novel drug targets with a road to clinical development, repurposing of existing drugs, prevention strategies, and development of new clinical trial(s).

Grant Terms

Acceptance of an award indicates agreement to abide by the BCPM guidelines for Lighthouse Projects. Failure to comply with these guidelines will jeopardize eligibility for future grants.

1. The PIs will provide an interim progress report after 18 months, based on which a project progress evaluation will be done. If it is deemed satisfactory by the executive panel and the External Advisory Group, the funds for another 18 months will be allocated. If not, the project will be stopped, and no further funds will be given.
2. The PIs will provide a final progress report after three years, including an overview of the results which have been reached or will be reached (clinical outcome, expected publications, further external funding, etc.).
3. Publications resulting from research supported by this grant must state the acknowledgment "Supported by the Bern Center for Precision Medicine."

4. Any additional publications or grants resulting from the present grant must be reported via mail to info@bcpm.unibe.ch.
5. The awarded funds shall be used solely for the purposes specified in the grant, in strict compliance with the application submitted and executed by the recipient.
6. Funds from the BCPM can only be transferred to a business credit (Betriebskredit) account. If relevant, BCPM funds may be managed at the Insel Gruppe, but it is not allowed to re-direct BCPM funds from the Insel Gruppe back to a third-party credit (Drittmittelkredit) at the University.
7. Grant recipients must respond to requests for information from the BCPM scientific leadership and administrative staff about their project.
8. Recipients will be asked to participate in yearly project update presentations or conferences to describe their research.