

## Call for proposals:

### Chemical Biology and Genome Engineering platform pipeline projects

Chemical Biology and Genome Engineering (CBGE) is a SciLifeLab Infrastructure platform with the mission to turn phenotypic observation into mechanistic insight through a multidisciplinary approach combining chemical, proteomic, and genetic technologies. The platform consists of three units:

[Chemical Biology Consortium Sweden](#)

[CRISPR Functional Genomics](#)

[Chemical Proteomics](#)

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#### Purpose of the call.

This call is intended for projects with a **clearly defined need for services from more than one unit of the CBGE platform**. The purpose is to investigate the **mechanism-of-action** and/or **molecular targets** of small molecules identified in activities such as phenotypic assays or other screening efforts. Projects aimed at understanding the **mechanism of existing drugs**, or projects in **drug repositioning and drug repurposing** are equally suitable. **Other modalities** can be considered.

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#### Platform services relevant to this call include, but are not limited to:

##### Chemical Biology Consortium Sweden (CBCS)

Assays to remove false positives (unspecific redox phenotypes, phospholipidosis), in silico profiling to assess pan-assay interference, database and literature searches, target predictions, establishing structure-activity relationships, synthesis of chemical tools and probes for affinity profiling, compound profiling for toxicity, selectivity or viability, and morphological profiling by cell painting.

<http://www.cbcs.se/>

##### CRISPR Functional Genomics (CFG)

CRISPR technology for genome-wide or custom pooled loss- and gain-of-function screens, as well as precision editing in cell lines for model system generation and for target validation.

<https://www.scilifelab.se/units/crispr-functional-genomics/>

##### Chemical Proteomics (Chem Prot)

Proteome wide deconvolution of targets and mechanism-of-action elucidation by methods such as proteome integral solubility alteration (PISA) assay, redox proteomics, FITeXP, as well as HDX-MS for binding site mapping. <https://www.scilifelab.se/units/chemical-proteomics/>

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#### Eligibility and application process.

Research group leaders at any Swedish university are eligible to apply. Approved projects will gain cost effective access to CBGE's cutting-edge technologies.

The deadline for this call is 11/10/2024 at 14.00. We request a demonstration of technical feasibility, so please ensure that you contact CBGE well in advance (and no later than 2 weeks before) the final deadline. Contact [anna-lena.gustavsson@scilifelab.se](mailto:anna-lena.gustavsson@scilifelab.se) (Platform Director, Head of CBCS) or [bernhard.schmierer@scilifelab.se](mailto:bernhard.schmierer@scilifelab.se) (Platform co-Director, Head of CFG) to request a mandatory meeting.

The application word template available in Anubis (<https://anubis.scilifelab.se/>) must be used. Finalized project proposals are uploaded directly as a single **pdf file** into Anubis to the open call for "CBGEPPP24".

All material provided is considered confidential, and access is restricted to a limited group of CBGE personnel under conditions of confidentiality, solely for the purpose of evaluating the proposed research.

## **Contact details**

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Information about this call and CBCS services

Anna-Lena Gustavsson (Platform Director, Head of CBCS)

CFG services

Bernhard Schmierer (Platform-co-Director and Head of CFG)

Chemical Proteomics services

Massimiliano Gaetani (Head of ChemProt)