

SEED FUNDING

CALL FOR APPLICATIONS | 2026

The Center for Synthetic Genomics (**Center SynGen**) is a trans-regional center at Heidelberg University, Karlsruhe Institute of Technology (KIT), and Johannes Gutenberg University Mainz (JGU), generously funded by the Carl-Zeiss-Stiftung and the participating universities.

Center SynGen bridges disciplines across **engineering, life sciences, medicine**, and the **humanities** to drive innovation in synthetic DNA, train future scientists in **molecular systems engineering** and **biomedical research**, and advance genomics research by focusing on the **creation, programming, and synthesis** of large, complex DNA sequences – including complete genomes.

To realize these goals, Center SynGen fosters collaboration and provides dedicated infrastructure to support cutting-edge research through two specialized platforms:

- **Synthetic DNA Accelerator Laboratory** (Center SynGen DNA Lab) | Located in Heidelberg
- **Synthetic DNA Virtual Material Design** (VirtMat) | Located in Karlsruhe

These platforms provide advanced technologies and infrastructure to overcome two bottlenecks in synthetic genomics research: the synthesis of long DNA strands, and the simulation and prediction of synthetic DNA building blocks. Together, they enable and accelerate cutting-edge research projects in synthetic genomics.

Seed Funding Program

Center SynGen offers **Seed Funding** to support new projects and initiatives in synthetic genomics. Areas of interest include:

- Artificial Intelligence
- DNA Synthesis (synthetic genes and genetic landscapes)
- Genome Engineering
- Life Science Technologies
- Synthetic Epigenomics
- DNA Simulations (AI/ML/LLMs)
- Ethics and Philosophy related to synthetic genomics

Purpose of Funding

The program aims to stimulate new ideas from students and scientists exploring new concepts and cross-site collaborations in Synthetic Genomics by providing financial support for:

- Bachelor's or Master's theses (HiWi contracts possible)
- Consumables (excluding Hardware/devices)
- Training for Doctoral or postdoctoral research
- iGEM and other international competition projects
- Travel and lab visits

Eligibility

- Researchers affiliated with KIT, Heidelberg/Mainz Universities, EMBL, DKFZ
- Applications from PhDs or PostDocs require group leader approval (Exception: iGEM and other initiatives from students, here approval by an academic mentor needs to be provided)
- PhD/Postdoc salaries cannot be funded

Application Format

- Maximum 2 pages (A4)
- Font: Arial 11 pt | line spacing 1.15 | margins 2 cm

Evaluation Criteria

Applications will be assessed based on:

- Scientific quality
- Innovative potential
- Contribution to synthetic genomics research at the three partner institutions

Important Notes

- Existing projects will not be funded unless they present a **new focus and research question**
- **Proof-of-concept experiments** and **cross-location collaborations** are highly encouraged
- Funding amounts range from **three-digit to lower five-digit figures** and must be **justified in detail**

After acceptance of the project

Upon the award of seed funding, the group leader becomes an official member of Center SynGen and will be introduced on the Center SynGen website as a new member. The research group will gain access to Center SynGen research platforms, internal training opportunities, and will be invited to participate in the center's scientific and social events. After completion of the project – within a maximum of one year following the approval of the seed funding – a short report needs to be provided that details the work conducted and the results obtained. Successful projects will be given the opportunity to present their work in the Center SynGen Seminar Series.

Submission Details

Deadline: 31st January 2026 (*iGEM projects may contact us beyond the deadline*)

Email Subject Line: "Seed funding 2026"

Submit Proposals To:

Heidelberg: office-syngen@zmbh.uni-heidelberg.de

Karlsruhe: office-syngen@zoo.kit.edu

Mainz: Lemke-office@uni-mainz.de

Contact

For questions or to discuss your idea before applying, feel free to reach out to:

- **Prof. Sylvia Erhardt** – sylvia.erhardt@kit.edu
- **Prof. Michael Knop** – m.knop@zmbh.uni-heidelberg.de
- **Prof. Edward Lemke** – edlemke@uni-mainz.de