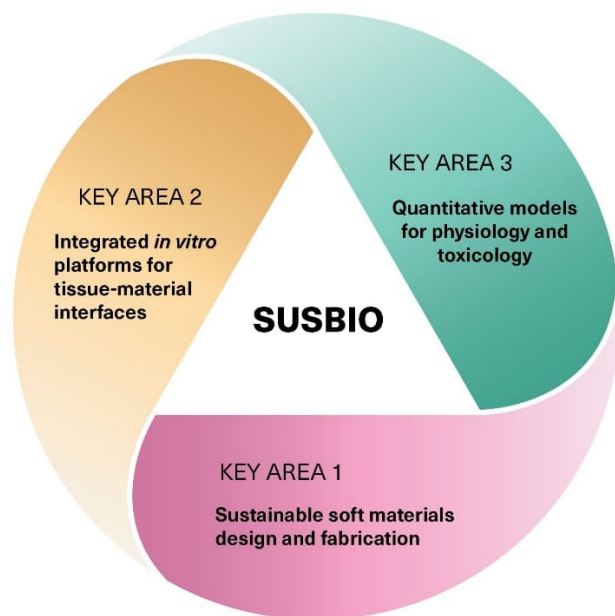


Call for proposals to advance Sustainable Biomedical and Toxicological Research in Tampere

Sustainable Biomedical and Toxicological Research (SUSBIO) is one of the profiling areas at Tampere University that were granted by the Research Council of Finland in the PROFI 7 Call. The key development subjects of SUSBIO project are to **emphasize and enhance cross-faculty collaboration between MET and ENS**. Scientifically, aim is to **develop novel sustainable soft materials**. Another aim is to develop **advanced *in vitro* methods** for studying human physiology and simulating complex disease mechanisms. These methods should be used to study soft materials or utilize soft materials (see definition for soft materials, e.g. in [here](#)). The goal is to find new ways to model human body, allowing deeper understanding of complex physiological processes, which will pave the way for the development of new therapies and diagnostics, and reduce the need for animal testing. In addition, with the help of new biodegradable functional materials, it could in long term be possible to reduce the accumulation of microplastics in different living environments.



SUSBIO is divided into **three key areas**:

- 1. Sustainable Soft Materials Design and Fabrication** provides resource-friendly fabrication methods for dynamically responsive soft materials with tailored chemical and mechanical properties, and development of animal-free cell culture media and conditions.
- 2. Integrated *in vitro* platforms for tissue-materials interfaces** provides combination of technologies to construct complex *in vitro* platforms with quantitative manipulation and measurement capabilities (electrical, mechanical, and biochemical cellular responses), using a combination of soft responsive materials and lab-on-chip.
- 3. Quantitative models for physiology and toxicology** provides development of integrated quantitative models of human physiology, pathologies, and toxicology (e.g. cell monocultures, 3D-bioprinted co-cultures & tissue/organ-on-chip combined with data-rich measurements) to understand the evolution of the properties of micro- and nanoplastics in human cells and tissues. The gathered information will be used to influence to regulatory acceptance pathways for the *in vitro* models, and design of new materials.

Guideline

In pursuing these goals, we are now looking for **seed funding projects** to be funded by the SUSBIO profiling action. **The closing date for applications is 28.04.2024** (24:00 EST / 22:00 UTC).

Each project will be funded with **a fixed sum of 25 000 €**. Funding can be applied for salary support (in which case full cost model applies) or to cover other research expenses that should be itemized in the proposal.

The **project** must

- address the above **SUSBIO aims and key areas**.
- be a **new opening** (not a continuous, existing project!).
- be a **true collaborative project between MET and ENS researchers**.

The **applicant** should be

- a **Postdoctoral Research Fellow** (the PI should be aware of the proposal!),
- an **Academy Research Fellow**,
- a **Senior Research Fellow**,
- a **University Instructor**,
- a **University Lecturer**, or
- an **Assistant/Associate Professor**

affiliated to Tampere University.

Please note that if you have received any SUSBIO funding last year (2023) as the main PI, you cannot apply funding in the current call.

The funding period can start at any time following the funding decision; however, the funding must be spent, and all the costs paid by the end of November 2024.

A requirement for the funding is the willingness to share the expertise in the usage of technology or data in question with the SUSBIO community in Tampere. In addition, after the project is finished, we expect a 1–2-page long project closeout report (including a list of main deliverables of the project and how the project has met the expectations and goals) no later than at the end of April 2025, and a seminar presentation about the project at the SUSBIO Spring seminar 2025.

Application

- Please use the attached **template** for the proposal.
- The **maximum length** of the proposal is **two pages**.
- Proposals must be written in English.

The **closing date for applications is 28.4.2024** (24:00 EST / 22:00 UTC). Please send the proposal in PDF format by email to jennika.karvinen@tuni.fi with the title ***Application for seed funding 2024***.

Funding decisions will be made based on ranking in internal peer review. The main evaluation criteria are relevance and added value to the SUSBIO program. As mentioned above, the default assumption is that the proposed collaborative, cross-disciplinary projects are new openings focusing on the development of soft materials and strengthening collaboration between the MET and ENS faculties.

For any further information, please contact: jennika.karvinen@tuni.fi (SUSBIO coordinator)