

Call for project proposals

SSF Works; Instrument, Technique, and Method

Development Projects 2017

The Swedish Foundation for Strategic Research announces a total of SEK 240 million in a national call for proposals on instrument, technique, and method development projects that are internationally competitive and has the aim to strengthen Swedish-based research with relevance and impact for present or future Swedish-based industry and society.

Background

Technique development is a necessary factor for competitive research and industrialization. Yet, direct public funding with this aim is largely lacking.

Innovation-spirited research engineers and staff scientists – as well as those in mainstream faculty tenure tracks – need to be challenged and supported with adequate resources to realize and demonstrate new tool concepts in science and engineering. The present SSF program is intended to encourage such development and at the same time promote research staff career paths for specialists who seek exchange between academia, industry, and/or the health sectors.

Scope

This strategic initiative has a focus on realizing enabling technologies in the form of instrumentation, technique, and method development that actively promotes research and applications. The later can, e.g., be connected to industrial production, processing and development. It applies to all SSF's activity fields, and encourage cross-disciplinary efforts and novel advanced methods across:

- Materials Research, and Industrial Production and Processing
- Information, Communication, and Systems Technologies (ICT)
- Life Science Technology, Medical Technology, and Bioengineering

Selected projects will be supported by grants of up to SEK 8 million for three years, in total (including overhead), to be used for costs specifically connected with the instrument,

technique or method development proposed. The Foundation seeks to encourage projects of high risk/gain. After the project's first year of operation, we will evaluate the progress and success prospects of each project. The second half of funding will be conditioned upon a positive outcome of this evaluation.

Exclusions

The Call is *not* directed toward projects that are primarily concerned with *using* (new) methods and instruments in research. Development should be significant (more than incremental) and not directly only constitute the lesser part of an existing research and development initiative. The call is also *not* directed towards a project that has as a primary purpose to support the main applicant's own current disciplinary research, *but* to enable (other's) future research with relevance and impact to present or future Swedish-based industry, university, and society. Building/development of institute test beds are not a target of this call.

Strategic relevance

The proposed projects should aim to make scientific or technological breakthroughs by:

- providing novel instrument and/or
- method development and/or
- techniques targeted at important applications problems.

Thus, the projects should enable future research, products, or services around which industry, and/or public sector can grow.

The following non-exclusive target activities aiming at industrial and/or scientific application are considered by SSF to be particularly strategic to Sweden, within the present Call:

- Conceiving, designing/constructing, and implementing scientific instrumentation.
- Developing measurement-, process-, detection-, probing-, or imaging methods for scientific purpose and
- Creating novel computer architectures, system programs, or software techniques.

SSF aims to distribute grants between application areas evenly to achieve a strategic portfolio. Furthermore, SSF promotes equal opportunity between women and men.

Eligibility

Proposals may be submitted by an applicant who is a researcher, engineer or staff scientist that is committed to the project during the entire grant period. The main applicant must be employed more than 50% by a Swedish university, university college or university hospital which will also be the administrating organization of the grant.

The proposal budget should be in the interval of SEK 4 to 8 million for the total of 3 years.

Project participation from industry, public authorities, or other relevant organisations (for example public or private non-profit research institutes) and big research facilities will be

considered a merit. However, such participants may not be funded by the SSF grant, but participate on their own budget.

A maximum of 25% of the grant may be used for salary for the applicant, but only to cover up to a maximum of 25% of the salary of the applicant. Project co-workers, such as PhD students, postdocs, other junior researchers and technicians or laboratory assistants, may be funded up to 100% of their salary.

Please note:

- Each applicant is allowed to be represented in only one application.
- Applicants holding the SSF-grants "Research Infrastructure Felows" (RIF) are *not* eligible to apply in this call.
- PI:s (approved main applicants) holding a SSF Framework Grant ("rambidrag") are *not* eligible to apply.

Applications not conforming to the above conditions will not be considered. It is the responsibility of the applicant to check the proposal for compliance with the rules before submission.

Proposal and submission

A complete application must contain, among other data specified in the portal, a clear purpose statement, a full description of the project plan, an explicit description on how the proposed development will meet the goals of this program, and full details of the relevant expertise of the participating personal. It should also contain a clear account of the strategic significance of the research in the medium to long term, including a plan for utilization/exploitation efforts that should commence, in parallel with the research activities, from day one in the project.

Each proposal shall clearly describe the international state of the art within the area(s) addressed. It is also important for the proposal to provide a clear picture of the resources available and to demonstrate that the proposed constellation of research groups will be effective in meeting its objectives.

A Letter of Intent (LoI) from the Head of the applicant's department is compulsory. Additional LoI:s may be required if the main applicant is partly employed by a different organisation ("secondment") during the application period and throughout the project period. In case the project involves large-scale research infrastructure, centralized research laboratories, etc., a certificate from that organization is also required, providing permission to access and use the facilities for needs of the project.

The proposal must be written in English and submitted via the SSF portal at: http://apply.stratresearch.se. Note that a complete description of all data required for submission is obtained by viewing the portal. Please log on to the portal well in advance of the deadline. Please also submit the application in due time before the deadline. When the application is submitted, the system will reject it if some data fields are missing. If this is done before the application deadline, it is possible to submit and re-submit multiple times.

All applications must be submitted by **14:00 hours (2:00 pm CET) on March 21, 2018**. No material will be considered after this deadline.

Please note that the Foundation is subject to the Principle of Public Access to Official Records (*Offentlighetsprincipen*). Thus, applicants should avoid submitting material that they do not wish to be made public, for example information that could obstruct patenting.

Evaluation

Applications will be assessed by an evaluation committee consisting of generalists and specialists from industry and academia.

The applications will be reviewed using the following criteria:

- Conformity to the scope of the Call, as defined in this document
- Strategic relevance, and potential impact of the proposed project to Swedish university, industry or society, including utilization/exploitation plans
- Technological and scientific quality; originality and feasibility of the project plan for developing the intended instrument, technique or method
- Qualifications of the applicants, previous achievements (technological and entrepreneurial) and networks. Length of publication list and impact factor will not be determining factors.

Timetable

Announcement of call: November 2017

• Deadline for applications: 14:00 CET, March 21, 2018

Decision by the SSF Board: November 2018

• Project start: 1 January 2019

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