

Call for NanoLund project proposals for funding starting in 2024

<u>Faculty members and affiliated faculty members</u> of NanoLund are invited to propose projects for financial contributions by NanoLund. In total, about 3.5 MSEK/year are expected to be available for strategic projects and salaries, and about 2 MSEK will be awarded for equipment.

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Call description

Proposed projects should help realise and enhance the scientific and educational mission of NanoLund: Bringing together the most creative scientists, students and industry professionals in an interdisciplinary research environment to do cutting-edge research on materials science, physics, chemistry and safety of designed functional nanostructures, enabling important fundamental science and nanotechnology for the future.

NanoLund's overarching aims are described in our <u>Strategic Plan</u>. This and the more concrete subarea strategic aims are included in separate attachments to the e-mail with the call for project proposals.

Funding can be used, for example, for salaries, consumables, equipment, workshops, or schools. Several different formats for projects are available:

1) Support available to faculty members:

- (a) **Projects.** Proposed projects can be planned for up to three years. The intended budget for each year needs to be indicated. This is the typical funding form for (partial) PhD student support. It is NanoLund's policy to normally fund half positions (typically a maximum of 350 kSEK/year for theory projects and a maximum of 450 kSEK/year for experimental work). In cases that are well motivated by the proposal, deviations from this policy will be considered. It is also possible to apply for shorter projects, such as seed projects to initiate or test a new research direction, or other one-time initiatives.
- (b) Salary support for expert staff. This funding category aims to help us achieve the highest levels of sophistication in the use of the equipment and experimental and theoretical methods, by helping support senior-level staff who have a high level of skill, who work hands-on with PhD students and postdocs, and who help develop new methods and transfer expertise. Only a small number of such expert staff can be supported, and proposals need to be well-motivated. The typical

- support by NanoLund is expected to be 300 kSEK/year for three years. Guidelines are included at the end of this document.
- (c) **Equipment.** Equipment funding is of central importance to NanoLund but also represents a great financial challenge. We, therefore, expect applicants to pursue alternative or complementary funding sources wherever possible. This can be demonstrated by *prior* attempts to obtain funds for the same equipment from other sources, such as the Crafoord Foundation, other foundations, or the faculties. Specific plans for future, complementary, proposals to other sources of infrastructure investments can also be described in the proposal.

2) Support available to affiliated faculty members

Collaboration projects. These projects are intended to offer affiliated faculty members a way to increase their ties to NanoLund faculty members and engage with its strategic aims. Collaboration projects are typically of a shorter duration (1-2 years) with a level of support up to that of standard projects (see above) and will be in collaboration with one or several named NanoLund faculty members. For example, the project could aim to open up new ways for NanoLund to reach its strategic aims or expand the use of facilities such as Lund Nano Lab. Financial support must be used at Lund University.

NanoLund's policy is to fund only one running project (or collaboration project) per researcher as the main proposer. Funding for equipment, salary support for expert staff or other special funding may be funded in parallel to a project. You are not allowed to send in more than one application per category as the main proposer.

A condition for funding of new projects is that you submit a short (1 A4 page) **report on any previously funded NanoLund project(s)** expiring in 2023 or earlier which has not been reported before (a template is included with the Call e-mail). The report is submitted with the proposal in the web form.

We remind you of the possibility of applying for funds for **outgoing or incoming visits** at any time during the year. For example, we encourage mini-sabbaticals and research visits to international laboratories, to develop or assess new research directions. We also financially support visits by NanoLund members to other laboratories to test, evaluate and learn novel characterisation techniques. For more information and instructions see www.nano.lu.se/for-nanolundians/nanolund-funding.

A separate call for seedling projects (NanoLund Junior Scientist Ideas Awards) will be available to students/postdocs and published at the end of the year.

Submission

The application is submitted via **a web form**; URL: <u>www.nano.lu.se/form/nanolund-project-funding</u>.

The project description should be uploaded to the web form as a pdf. Please, name the pdf with your last name as the first part of the file name, followed by the project title for instance: "Lastname_NanoLund2024_ShortProjecttitle.pdf".

The deadline for submission is **Monday 16 October**. Questions about the call can be sent to info@nano.lu.se

Format

Project descriptions are limited to a **maximum of two A4 pages** in pdf format including figures and references. This page should contain the following information (note the word limit):

- 1. Title
- 2. Main proposer
- 3. Additional proposers and key personnel
- 4. Project type (Project; Visit; Expert staff; Equipment; Collaborative project) (see above for descriptions of each type)
- 5. Proposed project (no more than 400 words total):
 - o Background and motivation
 - o Overall goals
 - o Expected outcome/impact
 - o Specific use of the intended funds
- 6. Amount applied for.
- 7. Comments on additional current or future available funds for this project, or pending proposals related to this project. Efforts to raise funds from other sources, or to commit existing funds for the same project, are viewed as positive.

Evaluation

The projects will be discussed and pre-ranked, by one of three/four ranking groups which will cover several subareas each. The applicants will get the possibility to orally present the project to the ranking groups on **24 October**. Ranking groups will consist of sub-area coordinators and NanoLund members. The projects will then be discussed in a meeting with the NanoLund sub-area coordinators. The final ranking is done by the management group and it will be based on all this input. The final funding decision will be made by NanoLund's Board and is expected on 4 December 2023. For ranking criteria, please see the attachment.

List of subarea coordinators and email addresses:

Subarea	Coordinators	
Materials & Manufacturing	Vanya Darakchieva	Mattias Borg
	Martin Ek Rosén	
Quantum Physics	Ville Maisi	Peter Samuelsson
Semiconductor Technology	Erik Lind	Magnus Borgström
Photons	Donatas Zigmantas	Jesper Wallentin
Nano & Life Science	Jonas Tegenfeldt	Oxana Klementieva
Nanosafety	Christina Isaxon	Mikael Ekvall
LNL	Luke Hankin	Anders Kvennefors
LNCL	Rainer Timm	Jenny Rissler
Education	Jens Uhlig	Dan Hessman
	Jonas Johansson	Adam Burke (outreach)

Ranking criteria for NanoLund projects

1) General

NanoLund funding shall be used to best support NanoLund's mission, vision and strategic aims. Special attention may be given to strategically important aspects that are difficult to support by external grants or faculty support, for example in terms of important infrastructure, the start of novel research directions with high promise, and recruiting. NanoLund strives to offer equal opportunities regardless of gender, age, or affiliation.

2) Research projects

To be highly ranked for direct support by NanoLund, research projects must have *high strategic relevance* for NanoLund as a whole, combined with *scientific excellence*. In addition, research projects to be supported by NanoLund are expected to be highly prioritised by the responsible scientist in terms of other resources and effort allocated to the same goal.

The following criteria may be used to determine **strategic importance** to NanoLund as a whole:

- Use of unique nanostructures, competencies, methods, or equipment available at NanoLund.
- Includes collaboration between several groups in NanoLund.
- Alignment with the strategic aims of NanoLund and its subareas.
- Strategically important projects that currently cannot be funded in other ways.
- Pioneering initiatives that have the potential to lead to new, visible research directions that can engage multiple parts of NanoLund and/or include new partners within LU on projects.

Scientific excellence may be demonstrated by the usual criteria used for example by the Swedish Research Council (VR), including scientific novelty, expected scientific impact, boldness, feasibility, team quality, and track record relative to career stage. The existence of VR support for the same project can be one sign of such quality. Highly ranked proposals to ERC will also be considered a strong indicator of excellence even if funding was not achieved.

3) Infrastructure

Where applicable, infrastructure projects shall be evaluated along the same lines as project funding. Additional criteria for infrastructure funding:

- Equipment that is used by several groups within NanoLund and/or that is clearly important for prioritised NanoLund research.
- Strategically important equipment that cannot be applied for from other sources.
- Demonstrated *prior* efforts to (co-)fund equipment using funding from, for example, Crafoord Foundation, Lund University, the Faculties or KAW where this is possible.

4) Collaboration projects.

The ranking of these projects will follow the ranking criteria of projects as described above, but significant emphasis will be put on how they *increase* 1) the ties to NanoLund members 2) engagement with NanoLund strategic aims 3) the use of NanoLund infrastructure such as Lund Nano Lab.

5) Other

Other uses of NanoLund support, such as education initiatives and workshops, may be proposed if they support NanoLund's mission, vision and strategic goals. Openness to large parts of NanoLund is a requirement.

Guidelines for expert staff funded by NanoLund

This funding category aims to help NanoLund achieve the highest levels of sophistication in the use of equipment, and experimental and theoretical methods, by helping research groups support senior-level staff who have a high level of skill.

The following guidelines apply:

- Expert staff should not have any substantial teaching or administrative duties. By working mainly hands-on, they master the techniques used by PhD students and postdocs, and actively train new generations of researchers. They continuously work with developing new techniques and with perfecting equipment.
- Partial NanoLund support can be justified if the expert staff helps students and postdocs from multiple groups and several parts of NanoLund. The proposal must clearly describe this and must offer a plan for how to ensure that time is available to support NanoLund members outside the "home" research group(s).
- NanoLund support is awarded initially for two to three years and will then be evaluated.
- NanoLund support can only be partial (typically 300 kSEK/year) and shall not be the
 main basis for hiring expert staff. One or several research groups must make the
 fundamental decision to hire the staff and accept the full long-term responsibility in
 terms of funding and employment.