



INTERDISCIPLINARY SYNERGY PROGRAMME 2023

Information and guidelines for
applicants

Science
Interdisciplinary
Synergy
Programme
2023

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Information about the call

Grant capital:
DKK 75 million

Award amount
Up to DKK 15 million over 4 years per grant (approximately DKK 3.75 million per year)

Application form opens:
8 March 2023

Application deadline:
1 June 2023

Applicant notification:
December 2023

Earliest start date:
1 February 2024

Latest start date:
31 December 2024

Review committee:
Committee on Interdisciplinary Research

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1 INTERDISCIPLINARY SYNERGY PROGRAMME

These guidelines are intended to assist you in the application process when applying for a grant from the Novo Nordisk Foundation (NNF). It is important that you read these guidelines carefully before initiating the application process. The guidelines contain the complete call text as well as instructions regarding the completion of the application.

- **Chapter 1** describes the overall frame and conditions of the call, eligibility criteria and evaluation process.
- **Chapter 2** provides technical guidance for how to access and navigate in the application and grant management system NORMA.
- **Chapter 3** gives essential information regarding the requirements to content, structure, and budget of the application.

NNF will treat all applicant and application information confidentially. Read more about how NNF processes personal data under 'privacy & security' in the online application system, NORMA. See how to access NORMA in chapter 2 of these guidelines.

Furthermore, please read 'General Terms and Conditions' for grants from NNF that all Grant Recipients must comply with: <https://novonordiskfonden.dk/en/conditions-for-grants/>

1.1 PURPOSE

It is becoming increasingly clear that some of the most complex scientific challenges only can be addressed through interdisciplinary efforts. With the Interdisciplinary Synergy Programme, the Novo Nordisk Foundation seeks to strengthen the synergy between researchers, across disciplines, organisations, and national borders.

The goals of the Interdisciplinary Synergy Programme are to:

- Enable creative and novel, high-risk/high-gain interdisciplinary research
- Provide long-term support of such novel interdisciplinary research ideas
- Stimulate an emerging interdisciplinary research culture that spans across scientific disciplines and techniques
- Break down or overcome the barriers that exist between the different disciplines
- Strengthen and internationalize Danish research

1.2 AREAS OF SUPPORT

Research funded under this programme must aim at reaching novel insight through interdisciplinary approaches to resolve complex challenges in relation to NNF's strategic focuses on medical sciences, life sciences, and natural and technical sciences with potential future applications within health or sustainability.

If the application falls inside the Natural and technical sciences area, the applicant must explain in the application text how the topic has potential applications to health or sustainability.

1.3 ELIGIBILITY

Interdisciplinary research.

The project should be based on a novel research idea, where the interdisciplinary challenges are at the centre. Such a novel interdisciplinary research direction is characterised by high-risk/high-gain elements and has potential for disruptive science and development of entirely new research areas.

The interdisciplinary research targeted here, is defined by collaboration across scientific and technical disciplines and where the researchers may not have a common language. It is important that the collaboration is not just founded on adding methods from one research field to another but strives to synergistically combine theories, methods, and concepts from different fields to arrive at new results of broad interest.

The programme supports 2-4 research groups (the main applicant plus 1-3 co-applicants).

A project with all co-applicants within the same discipline/institutional department will generally not be considered interdisciplinary under this programme. Of note, disciplines do not refer to the education or formal position of the applicants, but rather their ongoing work expertise. Furthermore, the interdisciplinary consortium forming the application does not have to be new, the researchers may already have established interdisciplinary research directions together.

The goal of the programme.

The proposal is ideally founded on clear pilot data that support pursuing the novel and high-risk/high-gain idea over an extended project period of 4 years. The project must build on these early and promising results, to consolidate the novel interdisciplinary research direction and carry the concept forward. If there at the application stage exists no pilot data, the applicants are encouraged to consider the Exploratory Interdisciplinary Synergy Programme.

To be eligible for a grant:

- The main applicant should be at least 50% associated to a Danish university, hospital or other non-profit research organisation that will be considered the host institution of the project.
- The research groups of the co-applicants can be either located in Denmark or abroad. The co-applicants should significantly contribute to the scientific advancement of the project and receive part of the funding, shared by the host institution of the grant according to the details under the budget. *Ideally, all applicants should have the same level of obligation and commitment to the project.*
- Collaboration with industry is possible within this programme, however funding cannot be awarded to industrial partner(s).

A guiding principle is that projects that can well be supported by other of the foundation's grants, cannot be supported via the Interdisciplinary Synergy Programme.

General rules for applications:

- a. Being the recipient of another Novo Nordisk foundation research grant does not preclude receiving an Interdisciplinary Synergy Programme grant.
- b. An applicant may submit only one application per call as "main-applicant". The applicant can participate as "co-applicant" on other applications within the same call, however, the projects that the applicant participates in must not overlap.

- c. NNF does not allow double funding of project-specific expenses. If an applicant has applied for, or has received, funding for the project or parts of the project from others, this must be detailed in the budget of the application. If the applicant receives funding for the project or parts of the project from other sources following submission of the NNF application, NNF must be contacted immediately.
- d. An applicant that holds an active “NNF Exploratory Interdisciplinary Synergy Programme” or an active “NNF Interdisciplinary Synergy Programme” grant is only eligible to apply for a new “NNF Interdisciplinary Synergy Programme” if the two grant periods will not overlap.
- e. Please refer to our general terms and conditions <https://novonordiskfonden.dk/en/conditions-for-grants/> for further information that apply when applying for/receiving a grant from NNF.

1.4 FUNDING

A total funding of up to DKK 15 million may be awarded per project which may run for up to 4 years. The total annual budget of the programme is DKK 75 million.

The grant cannot be used to cover the main applicant’s or the co-applicant’s own salary.

Applicants may apply for funding for the following types of expenses (see chapter 3.4 for details):

- Salary for scientific, technical, and administrative staff
- Tuition fee for PhD students
- Direct operational project costs
- Equipment
- Scientific publications costs
- Collaborative activities
- Conference participation
- Bench fee
- Direct administrative expenses (up to 5% of the total budget applied for).

NNF will not award funding for:

- main applicant’s or the co-applicant’s own salary
- commercial activities
- overhead

1.5 LANGUAGE

The application and any additional uploads must be written in English.

1.6 APPLICATION PROCESS

The application process consists of a one phase submission that must include the following elements (see chapter 3 for details):

- An extensive detailed project description
- Applicant and co-applicant details (CV, research summary, publication list)
- Letter of commitment from the Danish host institution
- A detailed budget including all participating groups

- Bench Fee policy for all institutions who apply for bench fee

The application must be completed and submitted using NNF's online application and grant management system, NORMA, which can be accessed from:

<https://norma.novonordiskfonden.dk>

Further information on how to access and navigate in NORMA can be found in chapter 2.



The Novo Nordisk Foundation's Committee on Interdisciplinary Research evaluates the applications. The proposals are first evaluated by the committee. Up to 10 proposals are then selected for international, external peer review assessment, to the extent possible using experts in each of the main scientific disciplines of the application. Following the receipt of the peer reviews, the committee will make the final decision.

Applicants that are not selected for external peer review will after initial evaluation and first committee meeting be notified (i.e., ultimo September 2023). The remaining applicants will ultimo December 2023 be notified about whether they have been awarded a grant. The notification e-mail will be sent from norma-noreply@novo.dk to the e-mail address entered on initial registration.



NNF does not provide feedback in case an application is not selected for funding.

1.7 ASSESSMENT CRITERIA

It is essential that the applications are not evaluated on absolute feasibility, as projects that are high risk/high gain are encouraged. However, an ideal application will contain early pilot data that support the feasibility of the novel, high-risk/high-gain idea and that show a path towards the larger- scale research implementation over the four years of the project.

In the evaluation of the applications, the committee will primarily focus on the following aspects:

- Scientific quality of the project.
- Idea, creativity, and novelty.
- The interdisciplinary approach of the project and its relevance.
- Demonstration of pilot data that support the interdisciplinary concept and the plans for carrying the concept forward.

- Synergy between the applicants and how this will be achieved.
- Managerial and scientific qualifications of the main applicant.

If the main applicant or co-applicants have active grants from NNF, this may be taken into consideration in the evaluation of your application for a new grant. **In general, it is recommended that the Grant Recipient has delivered results on the active grant(s)** before submission of a new application to NNF.

2 THE APPLICATION AND GRANT MANAGEMENT SYSTEM – NORMA

Chapter 2 and 3 provide guidance on completing and submitting an application through NNF's online application and grant management system NORMA. Chapter 2 contains general technical information, while chapter 3 contains information specific to the individual call. All the fields of the application form must be completed in accordance with these guidelines and the instructions in NORMA.

2.1 USER REGISTRATION

NORMA can be accessed through links on NNF's website or directly at:
<https://norma.novonordiskfonden.dk>

Before you begin, please read the instructions on the login page.

If you do not have a user profile in NORMA, you can register by clicking REGISTER from the login-page. Here you can also retrieve forgotten passwords by clicking the FORGOT PASSWORD-link. The main applicant should only have one user profile. Please use your work e-mail address for registration. After registration, you will receive an e-mail with your user name and a temporary password, which you can then use to log in to NORMA. After logging in for the first time you will be asked to provide a password of your own choosing.

A registered user who submits an application is legally responsible for the truthfulness of the content of the application.

If you experience technical problems, please contact NORMA Support: norma-support@novo.dk.



An applicant cannot change the e-mail address provided at registration. Please contact NORMA Support if you need to change your e-mail address.

2.2 CREATING AN APPLICATION

Initiate an application by finding the call you wish to apply for in the OPEN CALLS-section on the Applicant Portal in NORMA. Use the search filters at the top of the section to filter by e.g., overall funding area, and initiate an application by clicking APPLY NOW next to the relevant call.

Applications can be edited up until the deadline. A draft application can be saved by clicking SAVE DRAFT and may be cancelled at any time up until the deadline by clicking CANCEL APPLICATION. An application is not submitted to NNF until an applicant has clicked SUBMIT and has received confirmation that the application has been successfully submitted.

You can review the application at any time by reopening from within NORMA. Opening the application will also allow you to download the application in its entirety as a PDF. Make sure the PDF is readable and formatted appropriately before submitting your application.

2.3 TEXT AND ILLUSTRATIONS

For all applications, the individual fields must be completed in accordance with these guidelines and the instructions supplied in NORMA.



To prevent loss of data, it is essential to press SAVE DRAFT before you leave NORMA or navigate in the system.

TEXT FIELDS

Text from Microsoft Word or comparable word processors can be copied and pasted into most text fields of the application. It is, however, important to check that formatting, special characters, and symbols have not been converted or lost in the text fields after copying and pasting. If the formatting looks wrong in NORMA or in the PDF, try changing all text to *Normal* using the FORMAT dropdown. It is the responsibility of the applicant to ensure that the pdf looks correct before submitting.

The available options for formatting text are at the top of the text fields. Some shorter text fields do not have the option to use rich text formatting.



For readability purposes, standard fonts, font size 11-12, and line spacing between 1.0 and 1.5 must be used.

ILLUSTRATIONS

Illustrations such as figures, charts, tables, images, etc. related to the project description can be uploaded under PROPOSAL. A Maximum of four illustrations are allowed. The illustrations will be placed on a separate page in the application PDF but can be referenced throughout the project proposal as needed. For readability, please name the files numerically by the order in which they are referenced.

The following file formats for illustrations are accepted in the system: JPG, JPEG, PNG and BMP. The maximum accepted size for each illustration is 1050*1650 pixels.

2.4 SUBMITTING THE APPLICATION

The application in its entirety must be submitted electronically via the application system by clicking SUBMIT. It is not possible to submit an application or any part of it by standard mail or e-mail. Any material submitted outside the application system will not be included in the evaluation and will not be returned.



Please remember to check that the PDF version of the application is legible and contains all data and uploads before submitting.

All applicants must read and accept NNF's [Standards for Good Research Practice](#) before submitting the application. Further, the applicant must declare that the information provided in the application is true and accurate.

An application cannot be submitted unless all the required fields have been completed. **However, the system does not provide a check of mandatory uploads, e.g. hosting letter and bench fee documentation.** Applications can be cancelled at any time before submission. If you need to withdraw an application after the deadline, please get in touch with NNF via e-mail, using the contact information on page 3.

3 APPLICATION CONTENT

This chapter provides guidelines on the content required in the sections of the online application form for this call.

3.1 APPLICANTS

The APPLICANT-tab contains information about the main applicant and 1-3 number of co-applicants.

MAIN APPLICANT

The main applicant is the responsible party for the application and should enter their details through the Applicant Details-task with the type 'Applicant'. After filling in all mandatory fields, the applicant should complete the task to save the details.

CO-APPLICANT(S)

For this call, 1-3 co-applicants is required for the application. Co-applicants must be invited through NORMA and subsequently enter their details through the APPLICANT DETAILS- task with the type 'co-Applicant' in the system. Please follow the instructions in NORMA on how to invite co-applicants to your application.

Co-applicants participate actively in organising and implementing the project and receive a share of the grant. The project description should clearly describe the role of any co-applicants, and the budget should clearly indicate the co-applicants' share of the total budget.

Co-applicants will only be able to edit their own APPLICANT DETAILS-task, as well as make changes to the main application. The main applicant, on the other hand, can review and edit all Applicant Details-tasks for the application including those for co-applicants.



Please note that co-applicants can read, edit, and upload information in the entire application but cannot submit the application.

MANDATORY INFORMATION

The following information about each applicant is mandatory and is collected through individual tasks in the APPLICANT DETAILS- section:

- **CV:** can be a maximum of 4,000 characters. Please include in your CV a short bibliographic overview summarising total number of peer-reviewed publications, number of first authorships, number of corresponding authorships, number of citations, h-index, etc. Applicants are strongly encouraged to provide a link to an updated profile with a full publication list on, e.g., ORCID, Google Scholar, Web of Science, or Scopus.
- **Publication list:** Can be a maximum of 5,000 characters. Please only include the 10 most relevant publications for evaluating your merits. Include a complete specification of all authors for each publication with your own name highlighted.
- **Summary of own research and support of application:** Can be a maximum of 2,000 characters. Please provide a short summary of your research, your support for this application, and explain how the past years of research fit into the current proposal and collaboration.
- **Previous and current grants from NNF:** If you have previously submitted other applications in the same calendar year, summarise how these applications are related to the current application. If you have received any grants from NNF as an applicant or a co-applicant within the past five years, you must provide the application number, project title, grant period (in years), grant amount and the percentage share of the grant (100% if there is no co-applicant). Briefly summarise how any of the grants are related to the current application and what results has been delivered.

3.2 INSTITUTION

Please provide information about the institution where the grant will be administrated. This institution is where you will be employed during the grant period and the institution which will be responsible for budgeting, accounting, and staff supported by the grant.



Registering a new administrating institution in NORMA can take up to two working days. The application can be edited but cannot be submitted before this information is registered. We therefore recommend that you register an administrating institution in good time.

3.3 PROPOSAL

Describe the project using the fields on the PROPOSAL tab. Each field (Project title, Brief project description, Project description, Illustration uploads, Lay project description) will have a short instruction text describing the expected input and maximum characters available.

PROJECT TITLE

Please provide a short title for the project (maximum 150 characters, including spaces).

BRIEF PROJECT DESCRIPTION

Please provide a brief stand-alone summary of the project describing its purpose, target group, activities, and justify wherein the interdisciplinary synergy value of the project lies (maximum 2000 characters, including spaces). NOTE: The brief project description should be in a format suitable for sharing with potential peer reviewers before disclosing confidentiality.

PROJECT DESCRIPTION

Please provide a comprehensive project description (maximum 30,000 characters, including spaces). The project description should be well-written, clear, concrete, and avoid unnecessary repetitions from the brief project description (which supposedly contains descriptions of purpose and target group). The project description is expected to be developed and written jointly by the group of applicants and should clearly describe the role of each applicant.

The project description must provide:

- A description the novel interdisciplinary idea, its timeliness, and how it is supported by the pilot data.
- Clearly formulated hypotheses and details on work packages and methodologies (existing or developing).
- Details on why the project requires that exact combination of complementary expertise and knowledge of the involved partners and how the synergy between them will ensure advancement of the project.
- Details on the role of each of the applicants, e.g., in relation to supervising students, and what synergy-enhancing activities are planned.
- Motivation of the overall end-goal and its impact, as well as possible side benefits within the individual scientific disciplines that could be generated from the novel research direction.
- A description of identified risks in the project, i.e. describe which part(s) of the proposal contains high risk elements. *Note: As the programme focuses on high-risk/high-gain ideas, a mitigation plan is not expected.*

Please do not use abbreviations and limit the use of acronyms – the applications will be assessed by a committee that are not necessarily experts within all disciplines covered by the call. An abbreviation might mean something in one discipline, and something different in another discipline. In the same line, please use a language directed towards persons that are non-experts but have a high academic level.

ILLUSTRATION UPLOADS

A maximum of four illustrations of 50 mb each can be uploaded here. Accepted formats are .jpg, .png, .gif, .bmp.

LITERATURE REFERENCES

Please provide the reference information for the literature cited in the project description (maximum 8000 characters, including spaces).

LAY PROJECT DESCRIPTION

Please provide a brief summary for non-experts in lay language. If the application is awarded a grant, the text may be used for publication (maximum 1000 characters, including spaces).



Please note that the application should address all the assessment criteria listed in subsection 1.7

3.4 BUDGET

The budget for the project applied for only comprises the information entered on the BUDGET tab. Additional budget information attached under UPLOADS or added on any other tabs than BUDGET will not be considered.

The Novo Nordisk Foundation does not allow duplicate funded projects. If co-funding is obtained for the research described in the application, or parts of it, from other sources the applicant must inform the Novo Nordisk Foundation as soon as possible.

GRANT PERIOD

Before you can fill in the budget template, start by entering the start and end dates for the grant. This will determine the number of years available from the budget template. The grant period is the duration of NNF's grant for the project, and the budget counts years following the project start date rather than calendar years.

CREATE BUDGET

After saving the project start and end dates, the budget template will become available to edit. The budget will open in a new tab, in which you will need to add the subcategories you need for your budget. Please follow the instructions at the top of the screen to complete the budget.

Notes:

- The budget continuously saves changes you have made without the need to manually save. You are free to leave the budget at any time and come back at a later point.
- When you are done filling in your budget, please use the **SAVE AND CLOSE** button. This will check that all information has been filled out correctly and in accordance with the guidelines, saving the budget to your application.
- You can now return to the BUDGET tab. A summary of the budget will be displayed, review it to ensure that it is correct.
- The full budget details can be viewed or edited at any time before submission of the application by reopening the budget template.

ELIGIBLE BUDGET COSTS

Applicants may apply for funding for the following types of expenses when directly related to the project:

- **Salary for scientific and technical employees**, e.g., PhD students, postdoctoral researchers, assistant/associate professors, researchers/senior researchers, laboratory

administrators. Salary will not be covered for applicants, co-applicants, or scientific faculty with time-unlimited contracts.

- **PhD Tuition fee** up to DKK 80,000 per year per student (must be included separately).
- **Equipment**, provided that it is essential for the proposed project, and its use after completion of the project can be clearly justified.
- **Operating expenses**, e.g., materials, consumables, data management and services.
- **Collaborative activities**, e.g., workshops, meetings, exchange, seminars, and other efforts directed at ensuring fruitful collaboration and synergy between the partners of the programme.
- **Conference participation**, e.g., travel, accommodation, and registration for scientific conferences.
- **Publication costs** related to scientific publications originating from the project.
- **Bench fee** can be included in the budget for support of individual researchers to cover expenses needed to conduct the proposed research. Bench fee is calculated per academic employee actively working on the project and may only be used for expenses that are related to the research project and which cannot be included within another individual budget category. Bench fee may account for maximum DKK 8.000 per month per full-time equivalents (FTE,) working on the project, and the budget must specify the expenses covered by the bench fee, which may include:
 - Common or shared laboratory expenses and consumables
 - Laboratory utilities (electricity, gas, water)
 - Maintenance of essential equipment
 - Service contracts
 - Technical and IT support

Note, that bench fee *cannot* cover rent, administrative support, representation, social contributions etc. To include a bench fee in the budget, the fee must be a part of the general expense policy of the administrating institution and/or the hosting institutions of the co-applicants, and it must apply for all employees independently of funding source.

Bench fee policy documentation: Official Documentation stating that the administering institution or the co-applicant's hosting institution has a general bench fee policy must be included. An unspecified bench fee without documentation will not be accepted.

- **Administrative support** may account for a maximum of 5% of the total budget and must be included therein. The administrative support:
 - can cover expenses such as for accounting, payment of salaries, purchasing, hiring, as well as auditing and financial reporting on the project
 - cannot cover administrative expenses that are not directly related to the project
 - can via the host institution be shared between the institutions of the main- and co-applicant(s), as detailed in the application budget
 - is not automatically included in the grant, and must be stated/applied for in the application budget, but should not be specified in detail

Please make sure it is clear which of the applicants each expense is dedicated to and include a high-level overview of the budget in the SUPPLEMENTARY INFORMATION field, explaining the distribution of funds among the collaborators and activities.

FULL-TIME EQUIVALENTS (FTE)

For salary items, the number of full-time equivalents in years must be stated in the field FTE.

There are 1924 gross hours in a year, from where non-working days must be deducted.

EXAMPLE: 6 weeks of holidays (222 hours), 10 public holidays (74 hours) 10 educational days (74

hours) deducted from 1924 amounts to 1554 net hours per year. To find the FTE for e.g., 30 hours, the calculation should be: $30 \text{ (hours)} / 1554 \text{ (net hours)} = 0.02$, which is what should be stated in the FTE field.

Budget item (illustrative purposes only)	FTE	Description (illustrative purposes only)
Salary – PhD	1	PhD (1 person-year full time)
Salary – project employees	0,08	Project staff (2 x 60 hours)
Salary – TAP	0,21	Technical staff 2.5 person months full time



For salary items, the number of full-time equivalents in years must be stated in the field FTE.

3.5 APPENDICES

- **A signed letter of commitment from the Danish host institution**, taking responsibility to hosting the project as well as administrating the grant (*Hosting letter*)
- **Bench fee policy documentation (if applied for)**: Official Documentation stating that the administrating- and co-applicant institutions has a general bench fee policy

Please do NOT attach other appendices such as recommendations, support letter from collaborators, offers on equipment, etc.

All uploads must be in PDF format. NORMA automatically places these uploads at the end of the application. Please respect the page limitation and the upload requirements stated in the call. Uploads in excess of these limits may not be considered for evaluation.

March 2023

The Novo Nordisk Foundation

The Novo Nordisk Foundation is an independent Danish Foundation with corporate interests. The objective of the Novo Nordisk Foundation is twofold: To provide a stable basis for the commercial and research activities conducted by the companies within the Novo Group and to support scientific and humanitarian purposes.

The vision of the Novo Nordisk Foundation is to contribute significantly to research and development that improves the lives of people and the sustainability of society.