



DATA SCIENCE COLLABORATIVE RESEARCH PROGRAMME 2022

Information and guidelines for
applicants

Science
Collaborative
Research
Programme
2022

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Information about the call

Grant capital:
DKK 60 million

Award amount
Up to DKK 25 million per grant, with the possibility of additional funding of up to DKK 5 million per grant for research infrastructure

Application form opens:
December 2021 (Phase 1)
23 June 2022 (Phase 2)

Application deadline:
15 March 2022, 2 pm CET (Phase 1)
25 August 2022, 2 pm CEST (Phase 2)

Applicant notification:
December 2022

Earliest start date:
January 2023

Latest start date:
December 2023

Review committee:
Committee for Data Science

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1 DATA SCIENCE COLLABORATIVE RESEARCH PROGRAMME 2022

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 carefully read these guidelines before initiating the application process, as the guidelines contain the complete call text as well as instructions regarding the completion of the application.

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

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.

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

1.1 PURPOSE

The Data Science Collaborative Research Programme aims to support synergistic research collaborations rooted in data science that:

- a) lead to new or improved core data science algorithms, methods, and technologies.
- b) explore and expand data science applications to real-world scientific problems within the scope of the NNF Data Science Initiative.

The programme is part of the NNF Data Science Initiative, through which the Foundation aims to strengthen the Danish academic research environment within data science and artificial intelligence, as well as support the education and training of the next generation of data scientists.

The Data Science Collaborative Research Programme supports data science-driven research in the intersection between mathematics/statistics, computer science, and "domain-specific" applications in scientific fields (e.g., medicine, biology, biotechnology, plant science, physics, chemistry, etc.).

- The collaborations can be between researchers within data science (or its underlying areas, i.e., computer science and mathematics/statistics), and/or between data scientists and "domain" experts in other fields within the NNF's scientific focus areas.

- The collaborations can be across disciplines, institutions, or national borders, and should be based on synergistic opportunities for excellent data science-driven research within the core science areas of the NNF strategy.
- To ensure that the funded research projects also advance education and training courses in data science-related topics in Denmark, at least one of the collaborators must be a Danish-based data scientist with a relevant teaching portfolio.

Open competition calls in the Novo Nordisk Foundation's Data Science Initiative

- **The Data Science Investigator Programme** supports excellent independent research leaders with ambitious projects within the field of data science.
- **The Data Science Collaborative Research Programme** supports data science-driven collaborative research projects within the Foundation's scientific focus areas.
- **The Data Science Research Infrastructure Programme** supports investment in shared supercomputers, hardware, staff positions, data collection, curation, and management.
- **The Danish Data Science Academy** promotes collaboration, education, and awarding of travel grants and PhD and postdoc fellowships (calls are announced at <https://ddsa.dk>).

Applicants may include expenses in their proposal of up to DKK 5 million for acquisition and establishment of research infrastructure that is an intrinsic part of the collaboration and critical for a successful outcome. Research infrastructure in this context is defined as:

- Computational infrastructures, including supercomputers, GPUs, storage, software, etc.
- Databases and data resources, including data collection, cleaning, annotation, integration, management, etc. This includes building and maintenance of existing databases if it promotes collaboration and FAIR (Findable, Accessible, Interoperable, Reusable) principles, as well as secure and ethical use of such data.
- Data-generating technologies, including, but not limited to, sensors, instruments, omics platforms, etc.

The infrastructure must be state-of-the-art. Applicants may request a specialist-use infrastructure or a common-use infrastructure with a large user base. Applicants may apply for a new infrastructure, or the maintenance, extension, and/or improvement of an existing one.

1.2 AREAS OF SUPPORT

The proposed research must fall within the scope of the NNF Data Science Initiative, which aims to support the following key science areas:

- Development of new algorithms, methods, and technologies within data science, artificial intelligence (incl. machine learning and deep learning), data engineering, data mining, statistics, applied math, computer science, big data analytics, etc.

- Applications of data science (as defined above) within NNF's scientific focus areas (see box below): Biomedical and health science, life science and industrial applications promoting sustainability, as well as natural and technical sciences with potential application in biotechnology or biomedicine.

For projects mainly concerned with data science methods development, it is important that the applicants clearly show the relevance for potential future application and impact within life science, health science, or biotechnology. Vice versa, projects which have their primary focus on application of data science methods must describe and explain the novelty and impact of their data science approach, be it development of novel methods or novel applications of existing methods.

The Novo Nordisk Foundation's scientific focus areas

Biomedical and Health Sciences supports basic research in biomedicine that paves the way for advances in translational medicine and innovative clinical applications. Among the key topics are: basic biomedical research, translational biomedical research and technologies, clinical research, health-related data science infrastructure and applications, and research in patient-centred healthcare and treatment systems.

Life Science and Industrial Applications Promoting Sustainability addresses the escalating global sustainability challenges and the potential to make a positive impact for the environment. The research areas that are supported are within industrial biotechnology and environmental biotechnology, plant science, agriculture and food biotechnology as well as ecosystems research related to these areas. Basic research, platforms, and technologies enabling research on sustainability are included.

Natural and Technical Sciences supports fundamental research within the natural and technical sciences, including, e.g., physics, chemistry, mathematics, data science, and technical sciences. The research must have potential interdisciplinary application in biomedicine, health sciences, or biotechnology; this application need not be in the project period but could be beyond. Focus areas include interdisciplinary research, quantum technologies with potential application in the life sciences, data science, and health- and med-tech.

In general, projects without potential future applications within the NNF's scientific focus areas and projects with no novelty in terms of development or application of data science methods will not be funded in this programme.

Projects where the primary focus is on financial or insurance data, fraud detection, advertisement, social media, social science or humanities, security and mass surveillance, defence, gaming, etc. are considered outside of scope and will not be considered for funding.

1.3 ELIGIBILITY

The Data Science Collaborative Research Programme supports up to six excellent scientists from up to four different research departments - that of the main applicant plus up to three other

departments - who will collaborate in a dynamic structure, exploiting their mutual synergy to solve a specific, shared research question which is within the scope of the NNF Data Science Initiative. The collaboration need not to be a new one, and the primary focus is scientific excellence and synergy in the collaboration. The maximum funding budget is determined by the number of co-applicants, cf. section 1.4 and 3.5.

The main applicant (programme leader) should be at least 50% associated to/employed at a Danish university, hospital, or other non-profit organisation, which will be the host institution for the project. Levels of association of less than 50% at the Danish host institution must be justified in the application and should be considered a rare exception.

The research departments of the co-applicants can be either located in Denmark or abroad. It is critical that the collaboration has a clear impact on data science research in Denmark and that measures are taken to maximise interaction between the groups.

'Co-applicants' are independent researchers that will receive part of the funding, as detailed in the budget. Other collaborators not written as co-applicants cannot receive funding under this programme. Collaboration with industry partners is possible but not a requirement, however, funding cannot be awarded to industrial partners. It is critical that all co-applicants contribute significantly to advancing the science in the proposal.

The main applicant need not be conducting data science research, but the project must be rooted in data science, and have a clear data science-driven focus.

It is a requirement that the state-of-the-art research is translated into data science teaching programmes and/or training initiatives at Danish universities. At least one of the collaborators (main applicant plus co-applicants) must have a current teaching portfolio at a Danish university that consists of undergraduate, graduate and/or training courses in data science-related topics. The applicants should outline how their project can contribute to strengthening the Danish data science education ecosystem at the national level.

The proposed research project must support collaborations between different institutional departments or different scientific and technical disciplines. A project solely with applicants from the same institutional department will generally not be considered as sufficient basis for a collaboration within this programme.

A non-exhaustive list of examples of collaborations are:

- Collaboration between experts in machine learning from different institutions to improve or develop new algorithms with potential applications in life sciences.
- Collaboration between a medical doctor and data analysis expert to improve handling of clinical imaging data.
- Collaboration between a physicist, a statistician, and a deep learning expert on mining of large data sets from big-science experiments.
- Collaboration between a biogeochemist, a mathematician, and a deep learning expert on mining of large data sets from complex biological ecosystems.

It is a requirement that the synergy obtained by the collaboration is clearly defined and evident in the proposal. The application must clearly state the timeliness and appropriateness of the collaboration, and how the synergy will be catalysed between the involved partners.

For applicants invited to submit a Phase II application, a signed hosting letter from the Danish administrating institution must be included in the application, as well as signed letters of commitment from all co-applicants. Commitment letters from the co-applicants' institutions are not required (see section 3.6 for details).

1.4 FUNDING

The total 2022 grant budget for the programme is up to DKK 60 million.

Each Data Science Collaborative Research grant can receive up to DKK 25 million over minimum 4 and up to 5 years, and the total allowed budget for the consortium is calculated based on the following:

- Up to 4 different departments (including that of the main applicant) can receive funding.
- Each department that participates with a single independent applicant increases the consortium total budget by up to DKK 1.0 million per project year.
- Each department that participates with multiple independent applicants (which must be justified in the application) increases the consortium total budget by up to DKK 1.5 million per project year.
- Up to 6 applicants (main applicant and 5 co-applicants) can be involved in the collaboration.

In addition to the above-described funding, applicants have the option to apply for top-up funding of up to DKK 5 million ear-marked for project-essential research infrastructure and associated technical staff.

The funding of the total budget may be redistributed between participants and over the project years. However, the funding level of a department should reflect its project activities. See section 3.5 for further details.

Applicants may apply for funding for the following types of expenses (see section 3.5 for details):

- Salary for scientific staff
- Tuition fee for PhD students
- Salary for technical/administrative staff
- Operating expenses
- Equipment
- Infrastructure establishment and installation
- Data management
- Collaborative activities
- Conference participation
- Publication costs
- Bench fee
- Direct administrative expenses (up to 5% of the total funding applied for).

NB: Salaries for main applicant or co-applicants cannot be covered.

NNF will not award funding for:

- Commercial activities

- Overhead
- Double funding of projects:
 - If the applicant has received funding for the proposed project from other sources, in part or in full, this situation must be accounted for in the budget, as no budgetary overlaps are allowed.
 - If an identical or overlapping project proposal has been submitted to other funding institutions than the NNF, it must be noted in the application.
 - If the applicant, post application submission, receives funding for the project or parts of the project from others, the NNF must be contacted immediately.

Applications cannot be submitted simultaneously to the NNF Interdisciplinary Synergy Programme.

Applying for a Data Science Collaborative Research grant does not block the applicant from also applying (as either a main or co-applicant) for funding via the two other programmes under the NNF Data Science Initiative (Data Science Investigators and Data Science Research Infrastructure); but:

- The applicant must indicate which other submitted proposals includes her/him as a main or co-applicant.
- The different applications should not be contingent on each other.
- Applying with the same project to more than one call is not allowed. Any overlap in project description between applications that are submitted should be clearly indicated and explained.
- An applicant can only be main applicant of one proposal in each of the three programmes.
- An applicant can, apart from being main applicant on a proposal, be involved as co-applicant on several other Data Science Collaborative Research proposals. However, an applicant will, regardless of being main or co-applicant, only in exceptional cases be awarded more than one 2022 Data Science Collaborative Research grant.
- An applicant who has used the possibility of adding top-up funding for infrastructure in a Data Science Collaborative Research proposal cannot submit an application for the Data Science Research Infrastructure call in the same round.



The grant may not be used to cover 'overhead' (i.e., rent, electricity, water, maintenance etc.)

1.5 LANGUAGE

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

1.6 APPLICATION PROCESS

The application process consists of 2 phases. Phase 1 consists of a short expression of interest, limited to 10,000 characters. Several shortlisted applicants will be invited to Phase 2, in which the

applicants will be asked to submit an application with a detailed project proposal of up to 30,000 characters. See section 3.4 for detailed instructions on content.

As final part of the Phase 2 evaluation, the applicants will be invited to the Novo Nordisk Foundation to present and discuss their proposed research projects with the review committee.

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.



When all applications have been assessed, applicants will be notified about the result in an e-mail 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

The NNF's 2022 Committee for Data Science, which consists of 13 international experts within the field, will be responsible for the scientific evaluation and prioritisation of the applications based on the following criteria:

- Scientific excellence of the project.
- The project's originality, ambition, and expected outcome.
- The scientific excellence of all collaborators.
- The collaborative approach and relevance, including the clarity of the overall synergy, and work plan and distribution between the collaborators
- Feasibility.
- Alignment of the proposed research with the strategic directions outlined in the scope of the NNF Data Science Initiative.
- Plans for how the proposed state-of-the-art research can advance or create new data science teaching programmes and/or training initiatives at Danish universities.
- Managerial and scientific qualifications of the programme leader/main applicant.
- The financial situation and prior obligations of the programme leader, in case it can compromise the dedication to, and quality of, the proposed project.
- If infrastructure is included:
 - The scientific need for the infrastructure in the collaboration, as well as in the wider (local and national) research community.

- Plan for accessibility to the infrastructure for internal, external, and/or industrial users.

The proposed research must be in-depth, but the subject can be cross-disciplinary, and should not be considered limited to a specific research methodology or discipline.

If you have an active grant 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. If you apply while having an active grant from NNF, you must describe how the project you propose in this application is different from and/or coherent with the project(s) already funded and briefly describe the progress of the already funded project(s).

2 THE APPLICATION AND GRANT MANAGEMENT SYSTEM – NORMA

Sections 2 and 3 provide guidance on completing and submitting an application through NNF's online application and grant management system NORMA. Section 2 contains general technical information, while section 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. 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.



A list of any incorrect or incomplete entries will be generated at the top of the screen when you click SUBMIT. Clicking one of these error messages will take you to the relevant field. Amending incorrect or incomplete entries can be time-consuming, so we recommend submitting applications well before the deadline.

3 APPLICATION CONTENT

This section provides guidelines on the content required in the individual sections of the online application form for this call, as well as essential information regarding the project description, structure, and budget.

3.1 APPLICANT

The APPLICANT-tab contains information about all those involved with an application, meaning the main applicant or the contact person applying on behalf of an organization/institution as well as any co-applicants. Information about each applicant is collected through individual tasks in the APPLICANT DETAILS-section, detailing experience, publication history, application history with NNF, etc.

MAIN APPLICANT

The main responsible party for the application can 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.

In addition to a CV, please include in the **CV** section:

- 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.
- An overview of your current grants with indication of how much of your research time (in %) is committed to each of the projects.
- A short paragraph on your teaching experience and current obligations. In the project description, you must provide a clear plan for how the collaboration will actively direct or participate in educational or training courses in data science in Denmark during the project period (see section 3.4).

Please include in the **publications** section:

- A link to an updated profile with a full publication list on, e.g., ORCID, Google Scholar, Web of Science, or Scopus.
- A list of the 10 most relevant publications (or conference contributions) for evaluating your merits. Kindly include a complete specification of all authors for each publication.

Please include in the **Summary of own research** section an outline of your research focus and main contributions and achievements relevant for the present application.

3.2 CO-APPLICANTS

For this call, up to 4 institutions can collaborate, that of the main applicant, plus 3 others. The total number of co-applicants is limited to 5.

Co-applicants participate actively in organizing 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 must be invited through NORMA and subsequently enter their details in the system.

Please follow the instructions in NORMA on how to invite co-applicants to your application.



Note that inviting co-applicants can be time-consuming. Please start the invitation process as soon as possible and well in advance of the submission deadline

When the co-applicant accepts his or her invitation and has registered as a user in NORMA, they will gain access to the application. In addition, they will be assigned an APPLICANT DETAILS-task, available under MY TASKS from the APPLICANT PORTAL in NORMA. With this task, co-applicants should input details such as their institutional affiliation, work and publication history, application history with NNF and will be able to upload supporting documents.

In addition to a short CV, please include in the **CV** section:

- 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.
- An overview of teaching track record, highlighting especially the data-science related contributions (if applicable).

Please include in the **publications** section:

- A link to an updated profile with a full publication list on, e.g., ORCID, Google Scholar, Web of Science, or Scopus.
- A list of the 10 most relevant publications (or conference contributions) for evaluating your merits. Kindly include a complete specification of all authors for each publication.

Please include in the **Summary of own research** section a short summary of your research career, and how the past years of research fit into the current proposal and collaboration

Co-applicants will 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.

3.3 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 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.

3.4 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, and Research methods) will have a short instruction text describing the expected input and maximum characters available.

PROJECT DESCRIPTION

General for both Phase 1 and 2:

Please describe your proposed research project – including **purpose, background, current state-of-the-art, methods, implementation, collaborations**, and the **novelty and significance** of the project, including its contribution to moving data science forward in Denmark.

It is particularly important to clearly describe the methods development and data science applications part of your project, putting this in relation to the current state-of-the-art and describing how your project will bring novelty in terms of development of new data science methods or new impactful applications of established methods.

The Phase 1 project description is a short expression of interest, limited to 10,000 characters (including spaces, line breaks and special characters), which should briefly describe:

- The proposed research, including the main hypotheses and methodologies, and if relevant, the involved research infrastructure.
- The project's novelty, expected outcome, and relevance to the Data Science Initiative.
- The respective fields of expertise of the participating research groups and associated synergies.

As part of the Phase 1 project description, please fill in the expected total amount requested, the expected total project costs, and the total additional contributions. If relevant, please indicate how much of the total requested amount is allocated for research infrastructure. A more detailed budget will be requested in Phase 2 (see section 3.5).

The Phase 2 project description: Several shortlisted applicants will be invited to Phase 2, in which case the NORMA interface will open a new tab (PROPOSAL), where the applicants must enter a detailed project proposal of up to 30,000 characters. This full application should include descriptions of:

- An extensive, detailed research proposal, including purpose, background, state-of-the-art, methods, implementation (with Gantt chart and work package description), and the novelty and significance of the project.
- The data that will be used (i.e., how it will be generated and accessed). Wherever possible, support/approval letters, or permits should be included (see section 3.6).
- The involved research groups, and their roles and synergies.
- The proposed governance, organisational structure, and plan for achieving a successful and high-impact collaboration.
- If relevant, a description of the involved research infrastructure and its relevance for the project activities and other user groups locally and nationally, including a plan for how it will be made available to scientists outside the collaborative team.
- How the proposed research will translate into teaching activities rooted in data science (undergraduate courses, graduate courses, vocational training, BSc and MSc study lines, etc.). The main applicant or at least one of the co-applicants must plan to actively participate in and manage educational/training courses in data science in Denmark during the project period.
- How the project will contribute to strengthening the Danish data science ecosystem at the national level through dedicated educational, training, networking and/or outreach activities. The activities should be budgeted accordingly.
- How the proposed collaboration will strengthen and advance data science research in Denmark, highlighting future possibilities for synergy or expansion.
- Potential future applications for the proposed research within the NNF's scientific focus areas (see section 1.2).

- Whether applications for other NNF programmes are submitted simultaneously, particularly for the Data Science Initiative (see section 1.4).

Abbreviations should be defined at the first use, and preferably a list of abbreviations should be included in the project description.



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

3.5 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.

A detailed budget is only requested if applicants are invited to submit a Phase 2 proposal. For Phase 1 proposals, the expected total requested funding, additional contributions, and total project costs are provided as part of the project description (see section 3.4).

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.

MAXIMUM BUDGET AND ELIGIBLE COSTS

Each Data Science Collaborative Research grant can receive up to DKK 25 million over 4-5 years, and the total allowed budget for the consortium is calculated based on the following:

- Up to 4 different departments (including that of the main applicant) can receive funding.
- Each department that participates with a single independent applicant increases the consortium total budget by up to DKK 1.0 million per project year.

- Each department that participates with multiple independent applicants (which must be justified in the application) increases the consortium total budget by up to DKK 1.5 million per project year.
- Up to 6 applicants (main applicant and 5 co-applicants) can be involved in the collaboration.

In addition to the above-described funding, applicants have the option to apply for top-up funding of up to DKK 5 million ear-marked for project-essential research infrastructure and associated technical staff.

The funding of the total budget may be redistributed between participants and over the project years. However, the funding level of a department should reflect its part of the project activities.

As an example, a consortium with 3 departments, 1 with a single applicant and 2 with 2 applicants or more, can request up to DKK 4 million per year, resulting in a total budget of up to DKK 20 million for a 5-year project period. The total budget of DKK 20 million can be distributed unevenly over the period to reflect the proposed research activities. Similarly, applicants of one department in the consortium may budget with more than DKK 5.0 (or 7.5 million) in funding over the 5-year period, provided that the total budget of the other applicants is lowered to correspond with the funding maximum of DKK 20 million, and that the funding level of each department reflects its project activities.

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

- **Salary for scientific employees**, e.g., PhD students, postdoctoral researchers, assistant/associate professors, researchers/senior researchers. Salary will not be covered for applicants, co-applicants, or faculty with time-unlimited contracts.
- **PhD Tuition fee** up to DKK 80,000 per year per student (must be included separately).
- **Salary for technical staff** for, e.g., data processing, data analysis, data management, software/database development, dissemination of data/tools, and, if relevant, running and maintenance of research infrastructure.
- **Salary for research secretary** for the main applicant.
- **Equipment**, provided that it is essential for the proposed project, and its use after completion of the project can be clearly justified.
- **Infrastructure**, i.e., establishment and installation of research infrastructure. This may include minor modifications strictly necessary for establishing and operating the infrastructure.
- **Data management** expenses for collecting and storing data.
- **Operating expenses**, e.g., materials, consumables, 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 fees** 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. The budget must specify the expenses covered by the bench fees, 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 fees 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 it must apply for all employees independently of funding source. Documentation that the administrating institution has a general bench fee policy should be included in the Hosting Letter from the administrating institution (see section 3.6). An unspecified bench fee without documentation will not be accepted. Maximum DKK 8,000 per month per FTE working on the project is acceptable for this post.

- **Administrative support** of up to 5% of the total budget (must be included separately):
 - can cover expenses such as 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.
 - 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 that it is clear which collaborator an expense is dedicated to, and, if relevant, what expenses are allocated for research infrastructure.

Please provide a high-level overview of the budget in the SUPPLEMENTARY INFORMATION field, explaining the distribution of funds among the collaborators and activities, and, if relevant, how much of the expenses are allocated to research infrastructure and the associated top-up funding of up to DKK 5 million.



Applicants may only apply for the types of expenses listed in section 1.4 and 3.5.

3.6 APPENDICES

Applicants who are invited to submit a Phase II application must upload the following documents in PDF format:

- Signed hosting letter from the administrating Danish institution.
- Signed letters of commitment from all co-applicants (NB: commitment letters from co-applicants' institutions are not required).

If relevant, support/approval letters or permits regarding the data to be used in the project should also be included (see section 3.4).

All appendices must be in PDF format. NORMA automatically places these uploads at the end of the application. Please do not include other appendices.

December 2021

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.

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