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# Information about the call

Grant capital: DKK 10 million

Award amount Up to DKK 2.5M per grant

Application form opens: June 18, 2021

Application deadline: August 26, 2021 at 2 pm CET

Applicant notification: December 2021

Earliest start date: January 1, 2022

Latest start date: November 1, 2022

Review committee: Committee on Plant Science, Agriculture and Food Biotechnology

Contact:
Sisse Marquina-Jongberg
Scientific Manager
smj@novo.dk
+45 7242 2557

Anastassia Khrouchtchova Scientific Manager AKH@novo.dk +45 3527 6675

# 1 POSTDOCTORAL FELLOWSHIPS FOR RESEARCH WITHIN PLANT SCIENCE, AGRICULTURE AND FOOD BIOTECHNOLOGY

#### Nordic countries 2021

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.

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 section 2 of these guidelines.

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

Please, also go to <u>Applying for a grant</u> at the NNF website <u>Grants in Open Competition</u> to learn more about the NNF application and granting process.

#### 1.1 PURPOSE

Applications are invited for individual fellowships to support outstanding postdoctoral scientists conducting research within plant science, agriculture<sup>1</sup> and food biotechnology. The intention of the fellowship is to enable excellent young scientists to develop their own independent research area. Fellowships must be based at a university or other non-profit research institution in Denmark, Finland, Iceland, Norway, or Sweden.

The proposed research should address major challenges within plant-, agricultural- and food science associated with developing sustainable agriculture and food production. There should be a clear and strategic outlook to improve sustainability and provide high-impact solutions at a large scale.

## 1.2 AREAS OF SUPPORT

The proposed research must address major challenges within plant-, agricultural and food science related to sustainable agriculture and food production. The research should be fundamental in character but have a strategic outlook to provide solutions that promote productivity and sustainability at a large scale. The proposed research must involve a clear element of biotechnology (see box below). One or more of the following topics should preferably be included in the research:

- · Plants with increased productivity, resiliency, nutritional content and/or resource-use efficiency
- Development of plants for food, fibre, fuels, materials, chemicals, and carbon storage
- · Reduction of greenhouse gas emissions from agriculture
- Increased productivity and resiliency of agricultural systems
- Fundamental research within sustainable foods and food processing
- Functionality and the associated structures of food components
- Data science to advance research within plant science, agriculture, and food biotechnology

<sup>&</sup>lt;sup>1</sup> Agriculture is here defined as terrestrial farming and cultivation of plants, including forestry.

#### The program will not support:

- Research focusing on livestock, livestock commodities and feed.
- Research with a main component within nutritional uptake and metabolic effects of specific foods.

Applications with a focus on pharmaceuticals and therapeutics should be submitted to the Novo Nordisk Foundation Committee on Bioscience and Basic Biomedicine.



IMPORTANT! For the biotechnology requirement, the OECD short definition of biotechnology will be used as a reference for assessments. The OECD single definition of biotechnology is: the application of science and technology to living organisms, as well as parts, products and models thereof, to alter living or non-living materials for the production of knowledge, goods and services.

Essentially, any chemical or physical modification of a biological entity or product is considered biotechnology within this call.

#### 1.3 ELIGIBILITY

An applicant must either:

- have a PhD or equivalent degree obtained within 6 years of the application deadline date, or
- be a PhD student who will defend her/his thesis before April 1, 2022. The PhD supervisor must confirm the expected defence date. The PhD degree must have been obtained before the Postdoc Fellowship can be activated.

The applicant must consult with the planned supervisor at the Nordic host institution before submitting the application (Hosting letter from the administrating institution must be uploaded). If a research stay in another country is proposed (see below), the planned supervisor at that location must also be contacted prior to applying (Hosting letter must be uploaded). The Nordic host institution will administer the fellowship throughout the fellowship period, including possible periods when the postdoctoral research is performed at another research institution. To utilize the fellowship, a recipient must be accepted as a postdoctoral employee at the Nordic host institution (in Denmark, Finland, Iceland, Norway, or Sweden).

The applicant has the main responsibility for developing the project, writing the application, and carrying out the proposed research.

## Important restrictions

Important restrictions regarding NNF grants and proposals:

- At any given time, you may only have one Novo Nordisk Foundation "Postdoctoral Fellowship" application under evaluation. Postdoctoral Fellowship calls include: Postdoctoral Fellowship within Plant Science, Agriculture and Food Biotechnology; Postdoctoral Fellowship within Industrial Biotechnology and Environmental Biotechnology; Postdoctoral Fellowship for Research within Biotechnology-based Synthesis and Production; Postdoc fellowship for research abroad Bioscience and Basic Biomedicine; Visiting Scholar or Postdoc fellowships at Stanford Bio-X, and New Exploratory Research and Discovery (NERD) programme. If you submit more than one application, only the first application submitted will be evaluated, while any subsequent applications will receive an administrative rejection. After having received notification on the funding decision, the applicant may submit a new application for a Novo Nordisk Foundation "Postdoctoral Fellowship".
- You may submit applications for other grant types, e.g. Research Leader Programmes or Pioneer Innovator Grants, while your "Postdoctoral Fellowship" application is under evaluation if they cover different research activities.

• It is not possible to hold more than one active Postdoctoral Fellowship grant. Applicants with an active Postdoctoral Fellowship grant can only apply for a new Postdoctoral Fellowship grant in the final year of the project, however, the grant periods cannot overlap.

#### 1.4 FUNDING

A total of up to DKK 10 million is available for grants up to DKK 800.000 per year for projects with a duration of 1, 2 or 3 years of which at least 1 year must be used at the Nordic host institution. The duration of the fellowship should reflect the time frame of the research activities.

For applicants currently based at a Nordic host institution who have not conducted research in another country, research activities in a laboratory in another country for at least 6 and maximum 24 months in total will be considered as a positive element for the postdoctoral training, but is not a requirement.

Applicants may apply for up to DKK 800.000 per year for the following types of expenses:

- Salary for applicant including pension, holidays, etc. according to the current agreements and regulations at the Nordic host institution (please, consult with the Nordic host institution for this).
- Salary for research technician (costs for technical/scientific assistance)
- Operating expenses
- Equipment (maximum amount of DKK 100.000 for an individual instrument)
- Travel / Relocation expenses: If the fellowship will include at least 6 months research stay at a collaborating laboratory in another country, costs up to DKK 100.000 in total for the travel and housing can be included in the budget. The amount for travel and housing costs abroad is in addition to the annual maximum of DKK 800.000 for all other expenses.
- Conference participation (maximum amount of DKK 25.000 per budget year)
- Publication costs (maximum amount of DKK 25.000 per budget year)
- Bench fee: Support for individual researchers for the coverage of direct expenses needed to conduct the proposed research project. Bench fees must be specified in the budget, and may only be used for operating expenses, lab consumables, and access to lab space, as well as lab facilities and -utilities that are directly related to the research project and that cannot be included within another individual budget category. To include a bench fee in the budget, the fee must be part of the general expense policy of the section/institute/institution and apply for all employees. A confirmation that the section/institute/institution has a bench fee expense policy should be included in the Hosting Letter from the administrating Nordic Institution.
- Direct administrative expenses: For administrative support of the fellowship, an amount up to 5%
  of, and included in, the funding applied for from the NNF may be included in the budget. The
  administrative support:
  - can cover non-scientific, administrative expenses in relation to the project, such as accounting, administration related to payment of salaries and 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

#### NNF will not award funding for:

- Commercial activities
- Overhead
- Double funding of projects:
  - If the applicant has received funding for parts of the project from other sources, in part or in full, this 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 under 'supplementary information'.

- If the applicant, after submission of the NNF application, receives funding for the project or parts of the applied project from others, NNF must be contacted as soon as possible.



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 must be completed and submitted using NNF's online application and grant management system, NORMA, which can be accessed from: <a href="https://norma.novonordiskfonden.dk">https://norma.novonordiskfonden.dk</a>
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 whether or not they have been awarded a grant. The notification e-mail will be sent from <a href="mailto:norma.novonordiskfonden.dk">norma.novonordiskfonden.dk</a> 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

NNF's <u>Committee on Plant Science</u>, <u>Agriculture and Food Biotechnology</u> will primarily assess the applications based on the following criteria:

- Novelty and originality of the research idea
- Potential impact on the research areas mentioned in Section 1.2
- Impact on the applicants' future career prospects
- Feasibility of the proposed research
- Achievements of the applicant
- Mobility and international experience

Postdoctoral Fellowships are individual grants awarded to excellent young scientists with original and ambitious projects to enable them to develop their independent research area. Hence, the potential of the applicant constitutes an important assessment criterion, and as such, both 'Project' and 'Person' will be considered in the assessment.

As a general rule, the Novo Nordisk Foundation processes all applications and grants in accordance with the rules followed by public research councils and foundations. This applies, in particular, to conditions concerning confidentiality, reviewer eligibility, impartiality and conflicts of interest. Applications from ineligible applicants will not be reviewed.

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:  $\underline{\text{https://norma.novonordisk} fonden.dk}$ 

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 on REGISTER AS APPLICANT. You will be asked to fill in a contact form, which will appear in a new window. The main applicant should only have one user profile. Use your work e-mail address for registration. After the registration, you will receive an e-mail with your username and password. You can now log in to NORMA. When you log in for the first time, you will be asked to change your password.

Applicants who have previously applied for a grant from NNF or have an active grant may already have a user profile in NORMA. If you are in doubt, an existing user profile can be retrieved by clicking FORGOT PASSWORD and entering an e-mail address. If you have a user profile in the system, you will receive an e-mail with login information and a new password within 5–10 minutes.

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: <a href="mailto:norma-support@novo.dk">norma-support@novo.dk</a>.



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

To initiate a new application, you first need to identify the call and grant you wish to apply for. From the Applicant portal in NORMA, scroll down to the OPEN CALLS section, where all currently available calls are visible. Use the search filters at the top of the section to filter by e.g. overall funding area or geography.

Initiate an application by clicking the blue APPLY NOW button. Your draft application is then created and will remain a draft version until you actively submit the application.

You can create and subsequently edit a draft version of the application until the deadline. A draft application can be saved by clicking save draft and may be cancelled at any time up to the deadline by clicking the button cancel application. An application is not submitted to NNF until an applicant has clicked submit.

The application comprises tabbed sheets that need to be completed but not necessarily in chronological order. Fields marked with a red star (\*) are obligatory to fill in.

You can review the application at any time by clicking OPEN under MY APPLICATIONS on the Applicant Portal in NORMA. The whole application, including any currently entered data, can be downloaded as a PDF file by clicking on APPLICATION PDF. Make sure the PDF is readable and formatted appropriately before submitting your application.

#### 2.3 TEXT AND ILLUSTRATIONS

## **FILLING IN THE FIELDS**

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.

#### **APPLICATION TEXTS**

Text from Word, for example, can be copied and pasted into most text fields of the application. It is, however, important to check that formatting, special letters and symbols have not been converted or lost in the text fields after copying and pasting. If the formatting looks wrong in NORMA and in the PDF, you can try to change all text to "Normal" under the tab FORMAT.

The available functions for formatting text are at the top of the text fields. Some shorter text fields do not have the option to format.



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

#### **ILLUSTRATIONS**

Illustrations with figures, charts, tables, images etc. related to the project description can be uploaded under PROPOSAL (a maximum of four illustrations are allowed). Include the illustration number and a legend or caption for each illustration file when uploading. The illustrations will be integrated in the final application PDF.

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.

All applicants must read and accept NNF's Standards for Good Research Practice before submitting the application. A link can be found under "Policies" in the top right corner of the window. 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. Fields in the application that are incorrectly completed or incomplete will be listed in a box at the top of the screen. Clicking on each individual line marked in red takes you directly to the incomplete field. The box will disappear when you select SAVE DRAFT. This allows you to continue with the application and submission.



A list of any incorrect or incomplete entries will be autogenerated when you click SUBMIT. Amending incorrect or incomplete entries can be time-consuming, so we recommend submitting applications well before the deadline.

If you wish to modify a submitted application before the deadline, it is possible to reopen the application. Be aware that the application must be resubmitted before the deadline. Applications cannot be modified after the submission deadline.

Once the application has been submitted, a confirmation of receipt will be sent to the e-mail address used for logging into the system. If you do not receive a confirmation of receipt (please check your spam folder), you should contact NNF as soon as possible using the contact details on page 3.

If you wish to withdraw a submitted application after the deadline, you must contact NNF via e-mail, using the contact information on page 3.



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

# 3 APPLICATION CONTENT

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

#### 3.1 APPLICANT

The APPLICANT tab contains various sections with information about the main applicant:

- Personal information
- Educational information
- Current institution
- Experience (CV, Publications, Summary of own research, and Supplementary information, see below)
- Previous and current grants from NNF (see below)

#### CV

Please provide your brief CV with information on education, employment history, recent research funding, current supervision/training/teaching activities, summary of publication and bibliometric information (total number of peer-reviewed publications, first/corresponding/senior authorships, citation information, h-index), and other relevant information if space allows (max. 4,000 characters, including spaces).

#### **PUBLICATION LIST**

Please provide the complete reference information for your most important publications (up to 10). Include all authors (or number of authors, if necessary) for each publication and use bold or underline for your name. Applicants should include a link to an updated profile with a full publication list for the applicant on either Google Scholar, Web of Science, Scopus or ORCID. (max. 5,000 characters, including spaces).

#### SUMMARY OF OWN RESEARCH

Please summarize your own research that is of relevance to this application. (max. 2,000 characters)

#### SUPPLEMENTARY INFORMATION

This field can be utilized if there is additional information that is important for the committee's review of your application. (max. 2,000 characters, including spaces).

#### PREVIOUS AND CURRENT GRANTS FROM NNF

If you have previously submitted other applications in the same calendar year, summarize 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 summarize how any of the grants are related to the current application.

# 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 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 following fields on the PROPOSAL tab:

#### **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, the scientific question being addressed and activities. (maximum 2,000 characters, including spaces).

#### PROJECT DESCRIPTION

Please describe your proposed research project in detail. Elements to be included are (maximum 20,000 characters, including spaces):

- Major challenge being addressed and strategic outlook. How does the proposed research help to provide solutions enabling sustainable agriculture and/or food production?
- Specific aims, testable hypotheses, and success criteria.
- Critical knowledge gaps and identification of important research questions.
- Scientific background covering state-of-the art most relevant to the project.
- Experimental plan including methods and technologies to be utilized and/or developed.
- Alternative approaches, risk assessment and contingency plans.
- Discussion of experimental outcomes and potential impact.
- Description of scientific skills (e.g. new techniques and data handling) and transferable skills (e.g. project management and entrepreneurship) that the applicant will gain from the planned postdoctoral training.
- Motivation for developing an independent research area and seeking a research career

#### **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 4,000 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 1,000 characters, including spaces).



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

# 3.4 BUDGET

The budget only comprises the information entered in the BUDGET tab. Additional budget information attached under UPLOADS or added under other tabs than BUDGET will not be considered. The budget must be entered in budget years following the grant period and not calendar years.

#### **GRANT PERIOD**

Before you can fill in the budget template, start by entering the start and end dates for the grant. NORMA then generates a grant period in whole years, which is reflected in the budget template. The grant period is the duration of NNF's grant for the project.

Complete the budget as follows:

- Click on the blue OPEN/EDIT icon to open a budget in a pop-up window.
- Click the + key to add budget rows.
- Select one of the budget headings, enter an amount under VALUE (DKK) and specify what the amount is for under DESCRIPTION.
- All amounts must be stated in Danish kroner (DKK) without decimal points, commas, or spaces. NORMA automatically inserts the thousands separator.
- In the first budget year, the costs are shown from the project start until 31 December. The first budget year can cover a period of 15 months if the project's start date falls within one of the last three months (October, November, or December) of a calendar year. This ensures that the next budget year follows the calendar year.
- In the subsequent budget years, the costs are shown from 1 January to 31 December.
- The last budget year can cover a period of 15 months if the project's end date falls within one of the first three months (January, February or March) of a calendar year.
- Save and close the budget spreadsheet by clicking SAVE and CLOSE (in that order) and then return to the BUDGET tab.

**Important**: If you make any changes to the grant period after filling out the budget, you <u>must</u> clear the budget table <u>before</u> making the change to the grant period.

Any comments about the budget can be entered in the SUPPLEMENTARY INFORMATION field. The number of months covered by the budget in individual budget years should be specified here if they differ from 12 months.

Funding, both received and applied for, from the applicant's own organisation and from other sources should be entered under ADDITIONAL CONTRIBUTIONS FOR THE PROJECT. The amount entered should be the total sum for the entire grant period. The NNF does not allow double funding and there can be no budgetary overlaps between projects. The INFORMATION FOR ADDITIONAL CONTRIBUTIONS field must clearly describe what the additional contributions cover and how the project proposed in this application is different from the project already funded or applied for from other parties than NNF. If the applicant, after submitting the application, receives funding for the project or parts of the applied project from others, the NNF must be contacted as soon as possible.

The way in which the budget is set up influences any later financial reporting to NNF. Please note that the financial accounts must have the same headings as the budget posts in the application.



Applicants may only apply for the types of expenses listed in subsection 1.4.

#### 3.5 APPENDICES

#### **HOSTING LETTERS**

Host letter from the planned postdoctoral supervisor at the administrating institution in Denmark,
Finland, Iceland, Norway or Sweden acknowledging that the postdoctoral fellow can conduct the
proposed project in the supervisor's lab and institution. If a bench fee is included in the budget, the
hosting letter must include a statement that this fee is part of the general expenses policy of the
administrating institution. If the project will involve a research stay at a laboratory in another
country, a host letter from the collaborating laboratory confirming that the postdoctoral fellow can
work on the project at that institution must be provided.

# **OTHER UPLOAD** (only for current PhD students):

• If the applicant is a PhD student: A letter from the PhD supervisor confirming the timeline for thesis completion before April 1, 2022.

**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.

Do not upload any other documents/appendices - additional items will not be included in the application that is assessed.

May 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.

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.