

Guidelines for applicants **POSTDOCTORAL FELLOWSHIPS 2024** INDUSTRIAL BIOTECHNOLOGY AND ENVIRONMENTAL BIOTECHNOLOGY

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| grant: |
| Call closes: 21 August 2024 14:00 (CEST) |
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| Latest start date: 1 November 2025 |
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The Foundation will treat all applicant and application information confidentially. Read more about how the Foundation processes personal data under 'privacy & security' in the online application system, NORMA. See how to access NORMA in section 2 of these guidelines.

You can find more information about the Foundation's application and granting process at the <u>NORMA Help Centre</u>. Detailed information about the different parts of the application is available in NORMA.



1 POSTDOCTORAL FELLOWSHIPS FOR RESEARCH WITHIN INDUSTRIAL BIOTECHNOLOGY AND ENVIRONMENTAL BIOTECHNOLOGY

1.1 Purpose

Applications are invited for individual fellowships to support outstanding postdoctoral scientists conducting research within industrial biotechnology and environmental 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.

1.2 Areas of support

The proposed research must address major challenges within Industrial Biotechnology and Environmental Biotechnology, with a strategic perspective addressing major research questions within these fields. The research should be fundamental in character but have a strategic outlook to scaling potential(s), contribute to sustainability and, if relevant, increase productivity. 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:

- Use or engineering of biological/biotechnological tools, systems or microorganisms for synthesis and production of valuable products (e.g., energy, fuels, chemicals, proteins and materials)
- Development of technologies and processes for bioproduction
- Improvement of the efficiency and/or sustainability of biomanufacturing
- Use or engineering of biological/biotechnological tools, systems, or microorganisms to protect or improve the environment
- Understanding, protection, or manipulation of natural or industrial ecosystems in relation to application of biotechnology
- Data science to advance research within industrial or environmental biotechnology, including related ecosystems research

Proposals focusing on plant science, agriculture and food biotechnology should be submitted to the Novo Nordisk Foundation Committee on Plant Science, Agriculture and Food Biotechnology,

while proposals 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 definition of biotechnology: 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 years¹ of the application deadline date,
 - or
- Be a PhD student who will defend her/his thesis before April 1, 2024. In this case, 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 (a hosting letter from the administrating institution must be uploaded, Section 3.5). If a research stay in another country is proposed (see below), the planned supervisor at that location must also be contacted prior to applying (a hosting letter from the institution abroad must be uploaded, Section 3.5). 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 regarding NNF grants and proposals:

- At any given time, the applicant may only have *one* Novo Nordisk Foundation Postdoctoral Fellowship² application under evaluation.
 - If the applicant submits 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.

¹ Not including parental leave breaks.

² **Postdoctoral Fellowship calls at the Novo Nordisk Foundation** include: Postdoctoral Fellowship within Plant Science, Agriculture and Food Biotechnology; Postdoctoral Fellowship within Industrial Biotechnology and Environmental Biotechnology; Postdoctoral Fellowship for research abroad – Bioscience and Basic Biomedicine; Visiting Scholar or Postdoctoral fellowships at MIT, Stanford Bio-X, University of Oxford *or* Weizmann, and New Exploratory Research and Discovery (NERD) programme.

- The applicant may submit applications for other grant types, e.g., Research Leader Programmes or Pioneer Innovator Grants, while their "Postdoctoral Fellowship" application is under evaluation if these applications 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.
- Please refer to our <u>general terms and conditions</u> for further information when applying for/receiving a grant from NNF.

1.4 Funding

The grant period is 1-3 years. The total grant amount is up to DKK 3 million for a 3-year grant. The grant amount should be distributed approximately equally each year, and for projects shorter than three years, the total grant amount is proportionally reduced. Please note, at least 1 year must take place 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 funding for the following types of expenses directly related to the project:

- **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 regarding current agreements and regulations).
- **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 includes at least a 6-month research stay at a collaborating laboratory outside the country of the host institution, an amount of up to DKK 100,000 for travel and housing costs abroad can be included in the budget, bringing the maximum amount of the grant to DKK 3.1 million for a 3-year project.
- Conference participation (maximum amount of DKK 25.000 per budget year)
- **Publication costs** (maximum amount of DKK 25.000 per budget year)

Full-time equivalents (FTEs)

For each salary entry, please specify the FTE in years within the designated FTE field. This will indicate the proportion of a full-time position that the project funding will support for each year of the grant period. One full-time employee for one year equals 1.0 FTE.

Bench fee (not applicable to Danish universities) 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 [eligible to apply for salary]. It may only be used for expenses related to the research project which cannot be included within another individual budget category. Bench fee may account for a maximum of DKK 8,000 per month per FTE. 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

PLEASE NOTE that bench fee cannot cover rent, administrative support, representation, social contributions etc. A valid bench fee policy in line with the Foundation's requirements must be available at the time of application, and this official documentation from the administrating/co-applicant's institution must be provided upon request.

Project supplement: (Danish universities only)

The project supplement contributes to the coverage of indirect costs at Danish universities, and replaces budget posts such as administrative costs, bench fee and parental leave.

More information on the joint model for project supplement is found at <u>Universities</u> <u>Denmark's website</u>. Questions related to the project supplement should be directed to the research support units at your university.

Administrative support (not applicable to Danish universities) 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 coapplicant(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

The Foundation will not award funding for:

- Commercial activities
- Overhead/indirect costs (such as rent, electricity, water and maintenance)
- Double funding of projects:
 - If the applicant has received funding for the proposed 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 Foundation, it must be noted in the application
 - If the applicant receives funding for the project, or parts of the project, from other sources following submission of the application to the Foundation, the Foundation must be informed immediately

1.5 Language

The application and all additional materials must be submitted in English.

1.6 Application process

| Application system opens | 21 June 2024 |
|---------------------------------|------------------------------|
| Application deadline | 21 August 2024 14:00 CEST |
| Evaluation of applications | September – November 2024 |
| Applicant notification | December 2024 |
| Earliest possible start date | 01 January 2025 |
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When all applications have been assessed, applicants will be notified about whether they have been awarded a grant. The notification e-mail will be sent from <u>norma-noreply@novo.dk</u> to the e-mail address used when creating a profile in NORMA.

PLEASE NOTE: The Foundation does not provide feedback in case an application is declined.

1.7 Assessment criteria

NNF's <u>Committee on Industrial Biotechnology and Environmental 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 `Candidate´ 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 the Foundation, this may be taken into consideration in the evaluation of your application for a new grant. In general, it is recommended that the main applicant has delivered results on the active grant(s) before submission of a new application to the Foundation. If you apply while having an active grant from the Foundation, 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). This information should be included in the **Project Description**.



2 The application and grant management system NORMA

2.1 Creating and submitting an application

The Foundation uses the application and grant management system NORMA: <u>https://norma.novonordiskfonden.dk</u>

If you do not have a user profile in NORMA, you can create one by clicking **Register** on the login page. The main applicant should only have one user profile. Please use your work e-mail address for registration.

The registered user who submits an application will be legally responsible for the truthfulness of the content of the application.

You can find guidance on how to create and submit an application at: NORMA Help Centre.

If you experience technical problems and cannot find a solution in the NORMA Help Centre, please contact NORMA Support: <u>norma-support@novo.dk</u>.



3 Application content

This section provides guidelines on the content required in the sections of the online application form for this call. Detailed information about the different parts of the application is available in NORMA.

3.1 Applicant

The **Applicant** tab pertains to information about all those involved in an application, meaning the main applicant or contact person applying on behalf of an organisation/institution.

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 administered. This institution is where the main applicant will be employed during the grant period, and the institution that will ultimately be responsible for administering and allocating the grant, including budgeting, financial reporting and staff supported by the grant.



It can take up to five working days to register a new administrating institution in NORMA. The application cannot be submitted before the institution has been registered.

3.3 Proposal

Describe the project using the fields in 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, line breaks and special characters).

PROJECT DESCRIPTION

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

- Major challenge being addressed and strategic outlook. How does the proposed research help to provide sustainable and scalable solutions to challenges within industrial biotechnology or environmental biotechnology?
- 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 can be uploaded here.

The following file formats for illustrations are accepted in the system: JPG, JPEG, PNG and BMP. The maximum accepted size for each illustration is 50 MB and 1050*1650 pixels.

LITERATURE REFERENCES

Please provide the reference information for the literature cited in the project description (maximum 8,000 characters, including spaces, line breaks and special characters).

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, line breaks and special characters).

3.4 Budget

Enter the project grant period, and the budget template will become available. Only budget information submitted via the **Budget** tab will be considered in the review process. Any additional budget information attached under **Appendices** (or any other tabs) will not be considered.

3.5 Appendices

All uploads must be in PDF format. NORMA automatically places these uploads at the end of the application. Appendices other than those specified here are not permitted and will not be included in the evaluation.

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 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, 2025.

V.1 June 2024 V.2 July 2024