

Guidelines for applicants.

Cleveland Clinic – Denmark: Quantum – AI Biomedical Frontiers Fellowship 2025



Facts about the call

Total amount available for granting:
DKK 14.3 million

Amount available per grant:
Up to **DKK 3.6 million**

Call opens: **1 November 2024** Call closes:
29 January 2025

Applicant notification:
June 2025

Earliest start date: **01 September 2025** Latest start date:
01 September 2026

Review committee:
Committee for Interdisciplinary Research

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All Grant Recipients must comply with the [‘General Terms and Conditions’](#) for grants from the Novo Nordisk Foundation (the Foundation).

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 [NORMA Help Centre](#). Detailed information about the different parts of the application is available in NORMA.



1 Cleveland Clinic – Denmark: Quantum – AI Biomedical Frontiers Fellowship

1.1 Purpose

In a new initiative that blends innovation in quantum technologies and artificial intelligence (AI) with clinical applications, the Novo Nordisk Foundation together with the Cleveland Clinic, has launched the Cleveland Clinic – Denmark: Quantum-AI Biomedical Frontiers Fellowship Programme.

The postdoctoral fellowship offers a unique opportunity to engage in cutting-edge research projects in the fields of Quantum Technologies and AI for biomedical and clinical applications. This prestigious programme is designed to foster a collaborative relationship between the Cleveland Clinic and the Danish research ecosystem. The fellowships offer up to three years of research experience, providing opportunities for researchers from Denmark to undertake projects at the Cleveland Clinic, and for affiliates of the Cleveland Clinic to pursue research at Danish institutions.

The Novo Nordisk Foundation (NNF) aims to propel the career development of early-stage postdoctoral researchers by:

- Providing them the opportunity to gain extensive research experience and training in a unique interdisciplinary environment at the highest international level, while fostering an open exchange of intellect and ideas.
- Promoting their scientific networks and innovative spirit through mobility, thus fostering scientific independence and international collaboration.
- Supporting their continued research career development between the Danish research ecosystem and the Cleveland Clinic.

1.2 Areas of support

The programme aims to leverage quantum technologies and AI around key scientific areas:

- **Enhanced diagnostic precision:** Utilizing quantum sensing and AI-driven analytics to improve diagnostics, thereby increasing accuracy and reducing diagnostic times.
- **Innovative drug discovery:** Applying quantum computing and machine learning algorithms to simulate and predict molecular interactions at an unprecedented scale

and speed, potentially reducing the time and cost associated with discovering new drugs.

- **Optimization of clinical trials:** Employing sophisticated data analysis tools to improve the design and efficiency of clinical trials, enabling more personalized medicine approaches.
- **Personalized medicine development:** Using AI to analyse vast datasets from genomic information and clinical records to tailor treatments to individual patients.

Collaborative excellence and industrial engagement

In addition to a focus on academic research, this programme also encourages applicants to consider industrial placements lasting three to six months with leading technology companies and startups. These placements are intended to provide practical experience and foster the translation of research innovations into market-ready medical solutions.

1.3 Eligibility

All applicants must meet the following requirements at the time of application:

- Will have obtained a PhD degree within 5 years of the fellowship start date. **Note:** *Periods with leave of absence should be excluded from the 5 years.*
- Will have a degree in medicine, natural and technical sciences, biomedicine, or biotechnology.
- Can apply as a PhD student if the PhD supervisor signs a declaration stating that the applicant is expected to graduate before the start date of the fellowship.

Applicants to a Danish research institution:

- Must demonstrate association/affiliation with the Cleveland Clinic
- Must establish contact with a hosting faculty member at a Danish research institution who has committed to being the primary research mentor for the duration of the fellowship.
- Must provide a hosting letter from the Danish research institution agreeing to host the candidate under the conditions of the grant.
- Must be available to work fulltime for the duration of the program. Medical or parental leave qualifies as exceptions.
- Must maintain a valid passport and be eligible for a Danish work visa.

Applicants to the Cleveland Clinic:

- Must demonstrate association to the Danish educational system or research environment (e.g. graduated from a Danish University, Danish citizenship, or several years of research experience at a Danish institution).
- Must submit their application in collaboration with the University of Southern Denmark. *See Section 1.6 for more details including contact information.*
- Must establish contact with a host PI at the Cleveland Clinic who has committed to being the primary research mentor for the duration of the fellowship.
- Must be available to work fulltime (1 FTE) in the U.S. for the duration of the grant.

- Must demonstrate adequate English language skills via taking and passing English proficiency tests applicable to all international postdoctoral fellows at Cleveland Clinic.

Special rules for applications:

- Applicants can only submit one application at a time for any of the NNF postdoctoral fellowship grants and must receive notification of the outcome before re-applying.
- The project can receive partial funding from other sources. Any co-funding must be explicitly mentioned in the application.

The general conditions for receiving a grant from NNF can be found on our [webpage](#).

1.4 Funding

A total of up to DKK 14.3 million is available for four grants up to DKK 3.6 million each with three-year project periods.

Eligible project expenses include:

- Salary for the applicant (1 FTE per year)
 - Project Supplement at Danish Universities
- Operating expenses
 - Equipment
 - Consumables
 - Administrative expenses at Cleveland Clinic
 - Bench fee
- Dissemination, Training, and Education
 - Conference participation including travel
 - Publication costs
 - Relocation expenses including travel
 - Health insurance
- Direct administrative support at Danish Hospitals

Please carefully read the boxes below and Section 3.4 for details about eligible expenses.

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 for research grants: (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 [Universities Denmark's website](#). Questions related to the project supplement should be directed to the research support units at your university.

Direct administrative support

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
- 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	1 November 2024
Application deadline	29 January 2025 8:00 EST / 14:00 CET
Evaluation of applications	February – May 2025
Applicant notification	June 2025
Earliest possible start date	1 September 2025

BEFORE APPLYING

To start the application process, follow the institute specific guidance below. Please find application requirements detailed in Section 3.

Applicants to a Danish research institution:

The applicant must establish contact with a PI at a Danish university or hospital who will be the applicant's primary research mentor for the duration of the fellowship. The applicant should work closely with their identified PI on the research proposal and budget.

Applicants to the Cleveland Clinic:

The applicant must establish contact with a PI at the Cleveland Clinic who will be the applicant's primary research mentor for the duration of the fellowship ([link](#)). The applicant should work closely with their identified PI on the research proposal and budget.

Once the project has been developed with a preliminary budget, applicants should contact Mikkel Girke Jørgensen (mikkelj@bmb.sdu.dk) at the University of Southern Denmark to obtain a host letter and support for application submission. Please note this step should be completed no later than 16 January 2025.

All applicants are welcome to contact Dr. Priya Putta (puttap@ccf.org) with questions related to identifying a faculty host.

AFTER SUBMISSION

The proposals are evaluated by the [NNF Committee on Interdisciplinary Research](#). Up to 4 proposals are selected for evaluation by a committee at the Cleveland Clinic.

Applicants will be informed of their grant status after all applications have been assessed. The notification e-mail will be sent from norma-noreply@novo.dk to the e-mail address provided when creating a profile in NORMA.

IF SELECTED

Selected candidates will need to contact their host university about their appointment, visa, and IP agreements. Information will be provided in the grant agreement. It is important that the IP agreement is established with the institute where the research is performed.

1.7 Assessment criteria

NNF's Committee on Interdisciplinary Research will primarily assess the applications based on the following criteria:

- The creativity, novelty, innovation potential, and ambition of the proposed research project
- The scientific excellence and merit of the applicant
- The appropriateness and involvement of the host research group
- Recommendation Letter from former/current PI
- Support Letter from the prospective PI
- Hosting Letter from hosting institute



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:

<https://norma.novonordiskfonden.dk>

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: norma-support@novo.dk.



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 the main applicant.

MAIN APPLICANT

CV (Maximum 4,000 characters): Include a short bibliographic overview summarizing total number of peer-reviewed publications, number of first authorships, number of corresponding authorships, and number of citations.

Publication list (Maximum 5,000 characters): List up to 10 relevant publications including a complete list of all authors with your name highlighted. Include a link to an updated profile with a full publication list on Google Scholar, Scopus or ORCID.

Summary of own research (Maximum 2,000 characters, including spaces) Provide a short summary of your previous research experience and explain how your research interests fit into the current proposal and collaboration.

Supplementary Information (Maximum 2,000 characters including spaces): If applicable, list all instances where you have submitted the same or similar proposal in the last six months. Also provide a list of any potential submissions you plan to make in the next 6 months. Wherever possible, provide the project title, funding agency, requested amount, duration, submission deadline, and anticipated notification date.

Note: If you receive funding for the project, or parts of the project, from other sources following submission of this application, please inform NNF by emailing the grant manager (uvn@novo.dk). Receiving other funding will not impact the assessment of your application with NNF, but failure to disclose other funds may result in retraction of this fellowship.

PREVIOUS AND CURRENT GRANTS FROM NNF

List previous or ongoing grants with NNF where you were/are the main applicant or co-applicant. 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 the grants are related to the current application. Leave blank if not applicable.

3.2 Institution

Please provide details about the institution administering the grant. This institution will employ the applicant during the grant period and oversee the administration, allocation, budgeting, financial reporting, and staffing supported by the grant.

3.3 Proposal

PROJECT TITLE

Use the format '*CC – project title*' (maximum 150 characters, including spaces).

BRIEF PROJECT DESCRIPTION

Provide a brief stand-alone summary of the project describing its purpose and activities (Maximum 2,000 characters, including spaces, line breaks and special characters).

PROJECT DESCRIPTION

Describe the proposed project in detail (maximum 20,000 characters, including spaces):

- Include purpose, background, methods, collaborations, and the significance of the project.
- Clearly demonstrate the novelty and interdisciplinary approach of the proposed research.
- Include a justification of the proposed grant period with a description of the activities
- To enhance interdisciplinary aspects of the project, consider including co-mentors. Indicate any potential co-mentor(s) if applicable.

Limit the use of abbreviations and acronyms, and ensure they are defined upon their first use since their meanings can vary across disciplines. Applications will be evaluated by an interdisciplinary committee, of which some members may not be experts in your research area.

ILLUSTRATION UPLOADS

A maximum of four illustrations can be uploaded with the proposal. The following file formats for illustrations are accepted: JPG, JPEG, PNG and BMP. The maximum allowed size for each illustration is 50 MB and 1050*1650 pixels.

LITERATURE REFERENCES

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

Provide a brief summary in non-technical language for general readers. If the application is awarded, the text may be published (maximum 1,000 characters, including spaces, line breaks and special characters).

3.4 Budget

GRANT PERIOD

Enter the project grant period, defined by the project start and end data. NORMA generates the grant period in project years, which is reflected in the budget template. The maximum grant period for this call is 3 years.

CREATE BUDGET

The budget will open in a new tab, in which subcategories can be added. Please use the provided Excel template ([link](#)) to generate your budget, then copy the numbers and descriptions into NORMA. All budget items must be entered in Danish Kroner (DKK). *Refer to Section 2.1 for more information about working in NORMA.*

ELIGIBLE BUDGET EXPENSES

Applicants to a Danish research institution:

The total amount applied for should not exceed DKK 3.6 million, with approximately DKK 1.2 million per year. Applicants may apply for funding for the following types of expenses:

- **Salary for applicant** including pension, according to collective agreements of Danish public institutions for postdoctoral fellows. The Danish host institution will administer the salary and process reimbursements for expenses related to living abroad, travel, and relocation. **Note:** *salary for people other than the applicant (scientific or administrative) cannot be covered by this grant.*
- **Project supplement** DKK 250,000 per year. *Refer to Section 1.4 for more information.*
- **Equipment** required for the project, not exceeding 20% of the total budget.
- **Operating expenses** related to the research, including consumables, reagents, analysis, and computational resources.
- **Bench fee** up to DKK 8,000 per FTE. Only applicable when the Danish host institute is a Danish hospital. *Refer to Section 1.4 for more information.*
- **Conference participation** up to DKK 50,000 per budget year can be requested for travel and registration expenses in relation to presenting the project at conferences and workshops.
- **Publication costs** of results emanating from the research project. Up to DKK 25,000 per budget year can be requested.
- **Relocation expenses** up to DKK 100,000 over total grant period.
- **Direct administrative expenses** Up to 5% of the total funding can be allocated to the Danish host hospital or non-profit organization (non-university). *Refer to Section 1.4 for more information.*

Applicants to the Cleveland Clinic:

The total amount applied for should not exceed DKK 3.6 million, with approximately DKK 1.2 million per year. A minimum of DKK 210,000 must be requested per year for total project-related costs including equipment, operating expenses conference participation and travel, publication costs, health insurance, and administrative expenses to be used during the research stay at Cleveland Clinic. The applicant should discuss and get approval from the PI at Cleveland Clinic on these categories prior to submitting the application.

Applicants may apply for funding for the following types of expenses:

- **Salary for applicant** including pension, according to collective agreements of Danish public institutions for postdoctoral fellows. The University of Southern Denmark will administer the salary and process reimbursement for relocation. **Note:** *salary for people other than the applicant (scientific or administrative) cannot be covered by this grant.*
- **Equipment** required for the project, not exceeding 20% of the total budget total.
- **Operating expenses** related to the research, including consumables, reagents, analysis, and computational resources.
- **Administrative expenses** at Cleveland Clinic. A minimum of 5% of the total project-related costs must be reserved for administrative expenses to the Cleveland Clinic. The funds allocated to the Cleveland Clinic will be transferred as annual upfront instalments from the University of Southern Denmark.
- **Conference participation** up to DKK 50,000 per budget year can be requested for conference and workshop related travel and registration expenses related to the project.
- **Publication costs** up to DKK 25,000 per budget year can be requested to publish results emanating from the research project.
- **Relocation expenses** up to DKK 100,000 over total grant period.
- **Health Insurance** approximately DKK 100,000 per year for health insurance for the fellow and accompanying family. Annual rates as offered by Cleveland Clinic Postdoctoral Fellow designation should be requested from Dr. Priya Putta (puttap@ccf.org).
- **Direct administrative expenses** 5% of the total funding must be allocated to the University of Southern Denmark as the host institute. This expense is independent of the administrative expenses allocated for the Cleveland Clinic.

Any additional comments and budget justifications should be included in the SUPPLEMENTARY INFORMATION field in NORMA.

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.

Applicants to a Danish research institution:

- **Support Letter** A signed letter of support from the PI in Denmark including an endorsement of the proposed research.

- **Host Letter** A signed letter from the Danish university or hospital that will act as the administrating institution, confirming its role in administering the fellowship throughout the entire grant period. Must be signed by the head of the institute/authorized signatory.

Applicants to the Cleveland Clinic:

- **Support Letter** A signed letter of support from the Cleveland Clinic PI including an endorsement of the proposed research.
- **Host Letter** A signed letter from University of Southern Denmark, the administrating institution, that confirms its role in administering the fellowship throughout the entire grant period. Must be signed by the head of the institute.

All applicants:

- **Recommendation Letter** One other professional letter of recommendation.
- **PhD Completion Letter** (only relevant for applicants who have not finished their PhD at the time of submission): A statement from the current PhD supervisor confirming the anticipated completion of the PhD degree prior to the fellowship start date.
- **PDF of the budget** created using the provided budget template.