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Novo Nordisk Foundation presents

Information Meeting on our funding opportunities 2022 within natural and technical science research

Nat-Tech team

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It began with insulin

THE CLINICIAN
H.C. Hagedorn

THE INVESTOR
August Kongsted

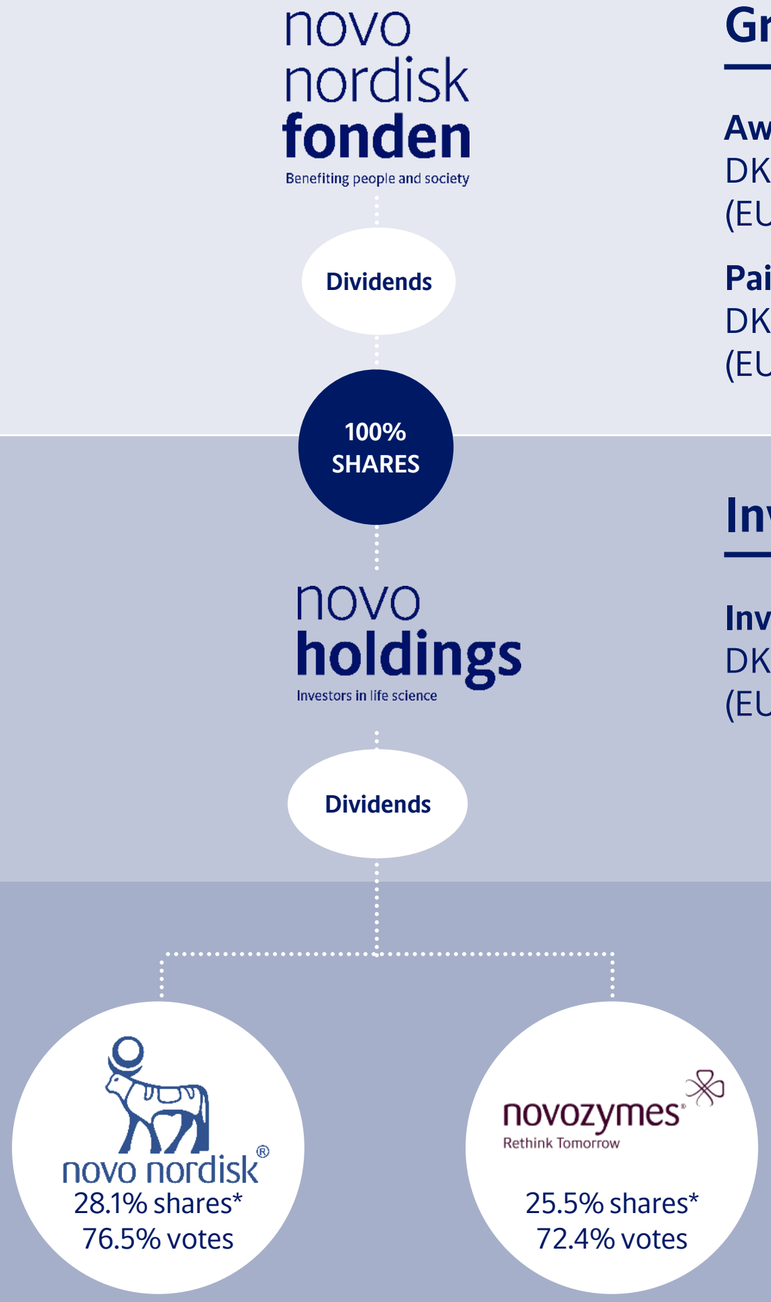
THE SCIENTISTS
Marie Krogh and August Krogh

THE ENTREPRENEUR
Thorvald Pedersen

THE ENTREPRENEUR
Harald Pedersen

The Novo Nordisk Foundation is an independent Danish enterprise foundation

*A-shares have 10 times voting power per share



Grants

Awarded in 2020:
DKK 5.54 billion
(EUR 745 million)

Paid out in 2020:
DKK 4.63 billion
(EUR 623 million)

Focus areas

- Scientific research
- Diabetes treatment
- Innovation
- Education & outreach
- Humanitarian and social causes

Investments

Investment result in 2020:
DKK 29 billion
(EUR 3.9 billion)

Focus areas

- Principal Investments
- Growth Investments
- Venture Investments
- Seed Investments
- Capital Investments

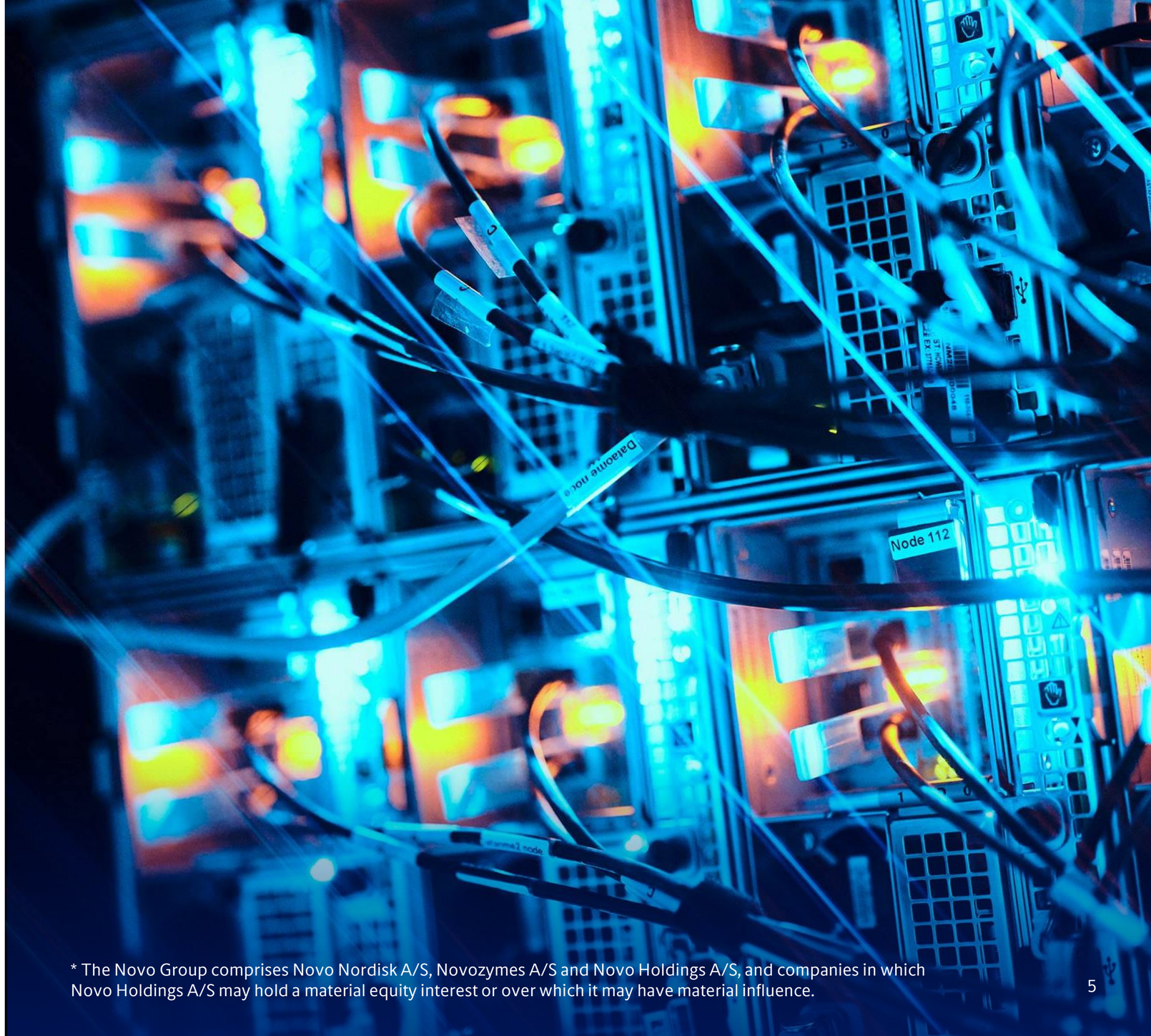
Our objectives

Corporate objective

- To provide a stable basis for the commercial and research activities of the Novo Group companies.*

Grant-giving objectives

- To support physiological, endocrinological, metabolic and other medical research,
- to support Danish research hospital activities within diabetes, and
- to support **other scientific**, humanitarian and social purposes.



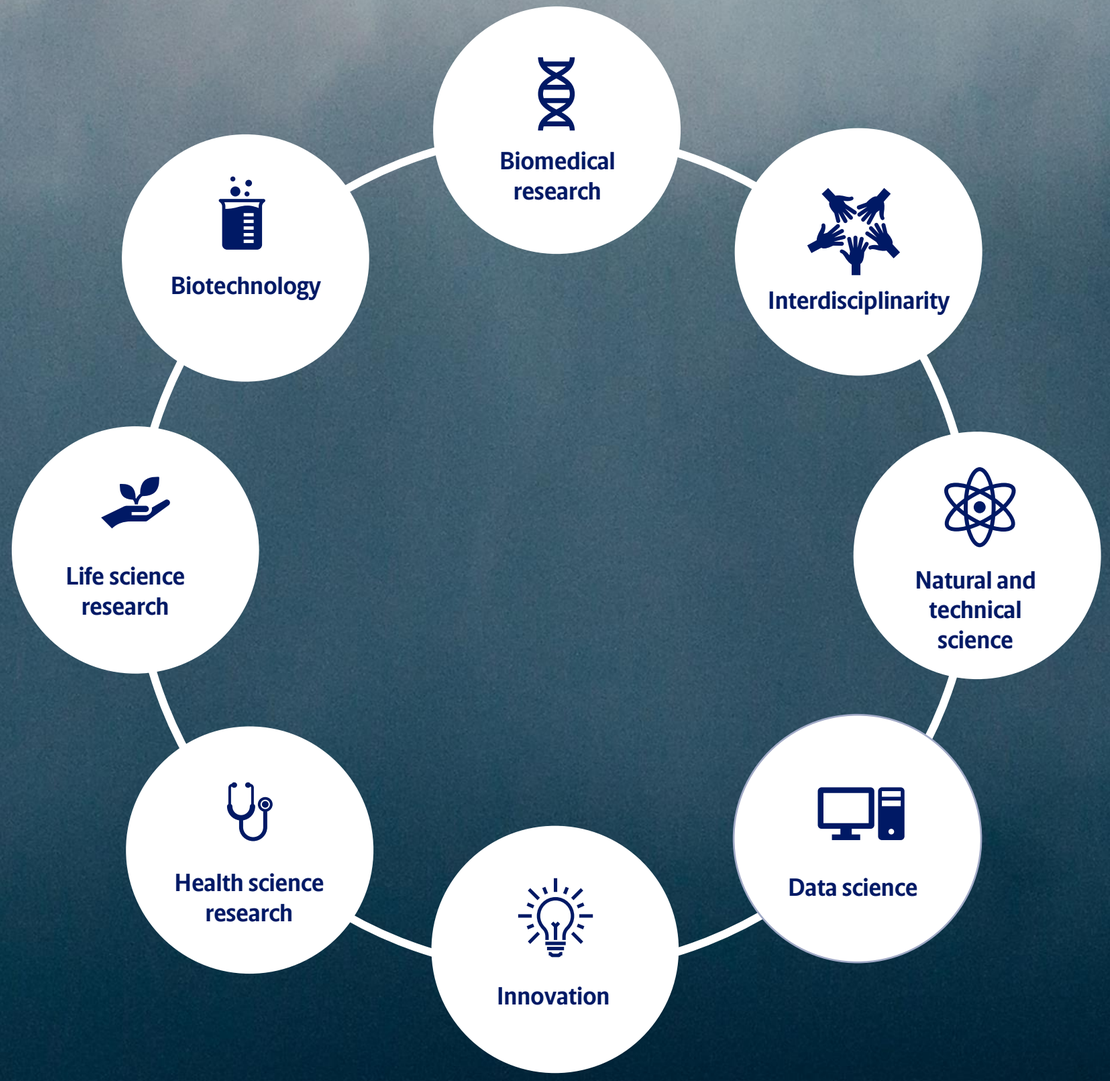
* The Novo Group comprises Novo Nordisk A/S, Novozymes A/S and Novo Holdings A/S, and companies in which Novo Holdings A/S may hold a material equity interest or over which it may have material influence.

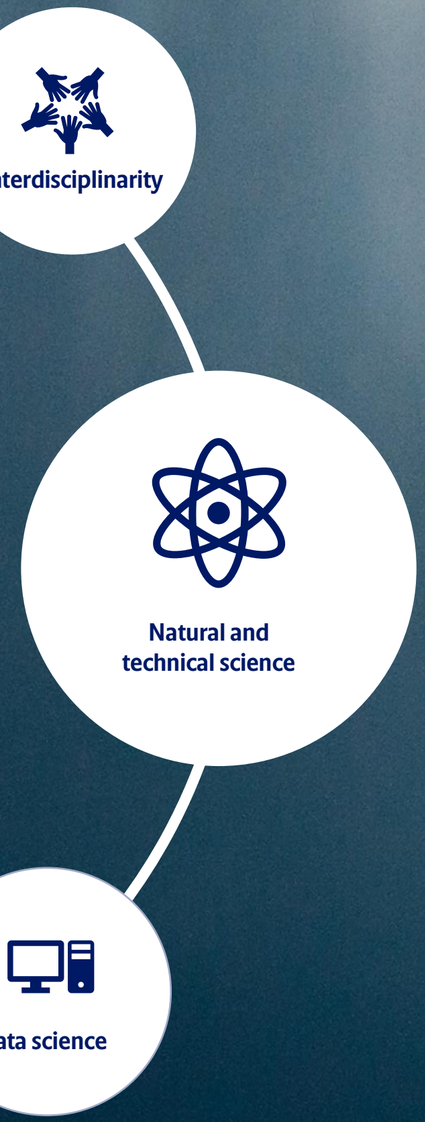
Roles in Denmark

- Supplement to public funding of research
- Privately controlled
- Can be agile, long-term, strategic, risky

- Responsible for public research
- Politically controlled

Grant-awarding focus areas in NNF





Nat-Tech grant awarding focus

Catalyse natural and technical science research, particularly in fields with potential interdisciplinary application to the life and health sciences and industrial biotechnology.

SUPPORT in Nat-Tech research areas:

- Explicitly describe how the outcome of the project may have potential future applications in the life sciences, health sciences, or in biotechnology
- Such potential applications may be either on the short term or on the long term, possibly on timescales longer than the project period.

Nat-Tech Programmes

NERD Programme
- New Exploratory Research and Discovery

Supporting a single principle investigator at any career stage with ample funding and a long time horizon, providing the required long-term stability and continuity to explore truly exceptional ideas

Hourglass problems

Sufficient funding is available for younger researchers and for very well-established researchers.

However, the middle group, at the associate professor level, experience difficulties in obtaining funding

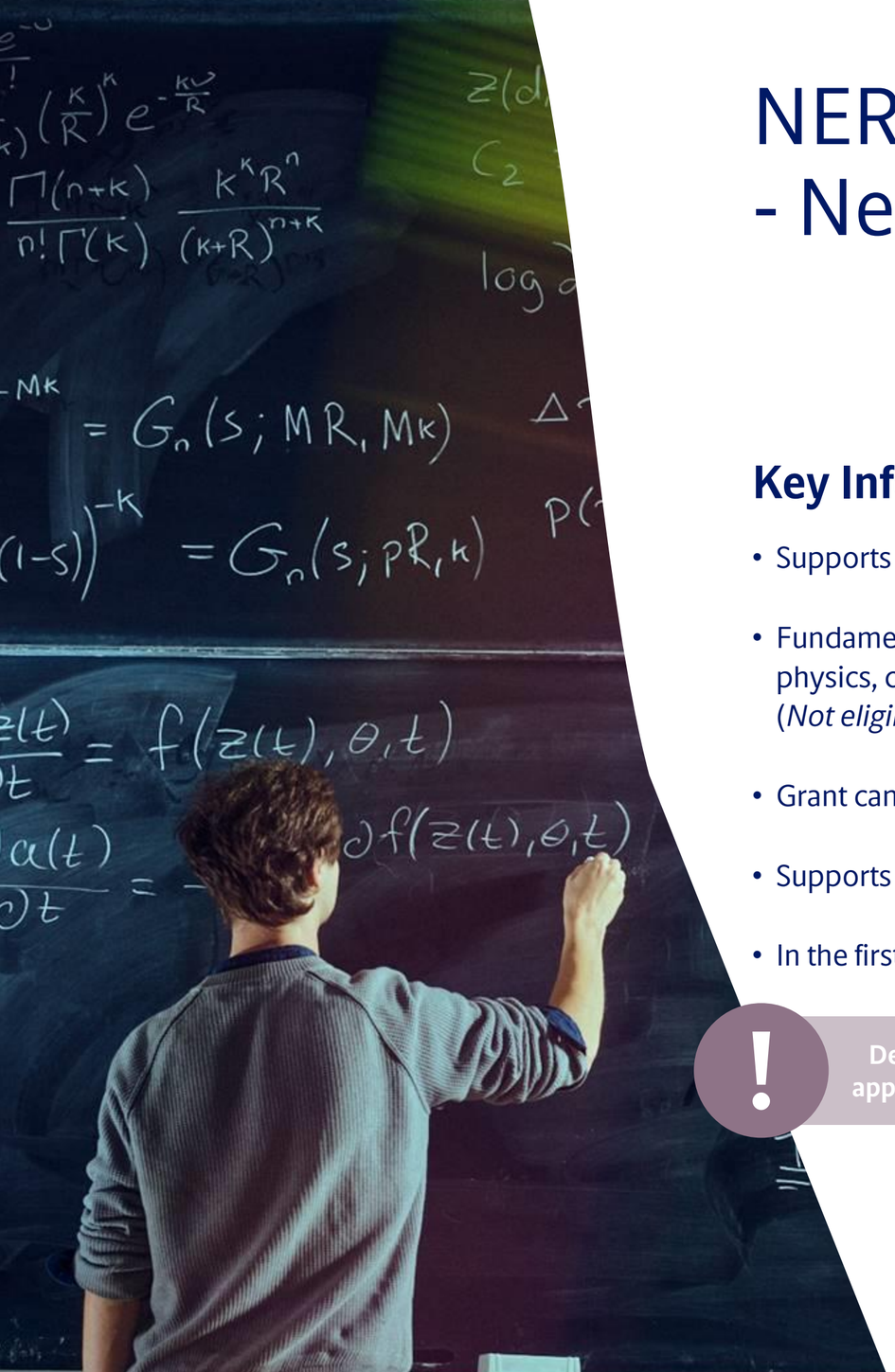
Leaky pipeline

The well-documented phenomenon that increasingly fewer female researchers exist as one ascends the academic career ladder.

Mathew effect

The tendency to fund scientists who are already successful, implying that much funding is given to few scientists.

The Matthew effect tends to favour conservative research and to leave little room for truly novel ideas



NERD Programme
- New Exploratory Research and Discovery

Key Information

- Supports creative, daring, and ambitious ideas
- Fundamental research within **the natural and technical sciences**, e.g., physics, chemistry, mathematics, computer science, and technical sciences (*Not eligible: Projects within biotechnology, biomedicine, or health science*)
- Grant can cover applicant's own salary
- Supports researchers at any career stage after obtaining the PhD degree
- In the first evaluation applicants are **anonymous** to the assessors

Describe how the outcome of the project may have potential future applications in the life sciences, health sciences, or in biotechnology.

Grant budget:

- **Up to DKK 14 million (experimental)**
- **Up to DKK 10.5 million (theoretical)**

Grant period: Up to 7 years

Grant portfolio cap: **DKK 4.0 million/year for PI** (in the first funding year)

Application deadline: **28 January 2022**

Project Grants

Promote Danish fundamental research at the highest international level within the natural and technical sciences with potential applications in the life or health sciences or in biotechnology

Key Information

- Testing of novel or continuation of ongoing research ideas
- Fundamental research within **the natural and technical sciences**, e.g., physics, chemistry, mathematics, computer science, and technical sciences (*Project Grants also exist within biotechnology, biomedicine, and clinical sciences*)
- Grant cannot cover applicant's own salary
- Independent research leaders can apply (not PhDs or Postdocs).

Describe how the outcome of the project may have potential future applications in the life sciences, health sciences, or in biotechnology.

Grant budget: **Up to DKK 3 million**

Grant period: **1 - 3 years** (4+4 PhD allowed)

Call opens: **June 2022**

Application deadline: **September 2022**

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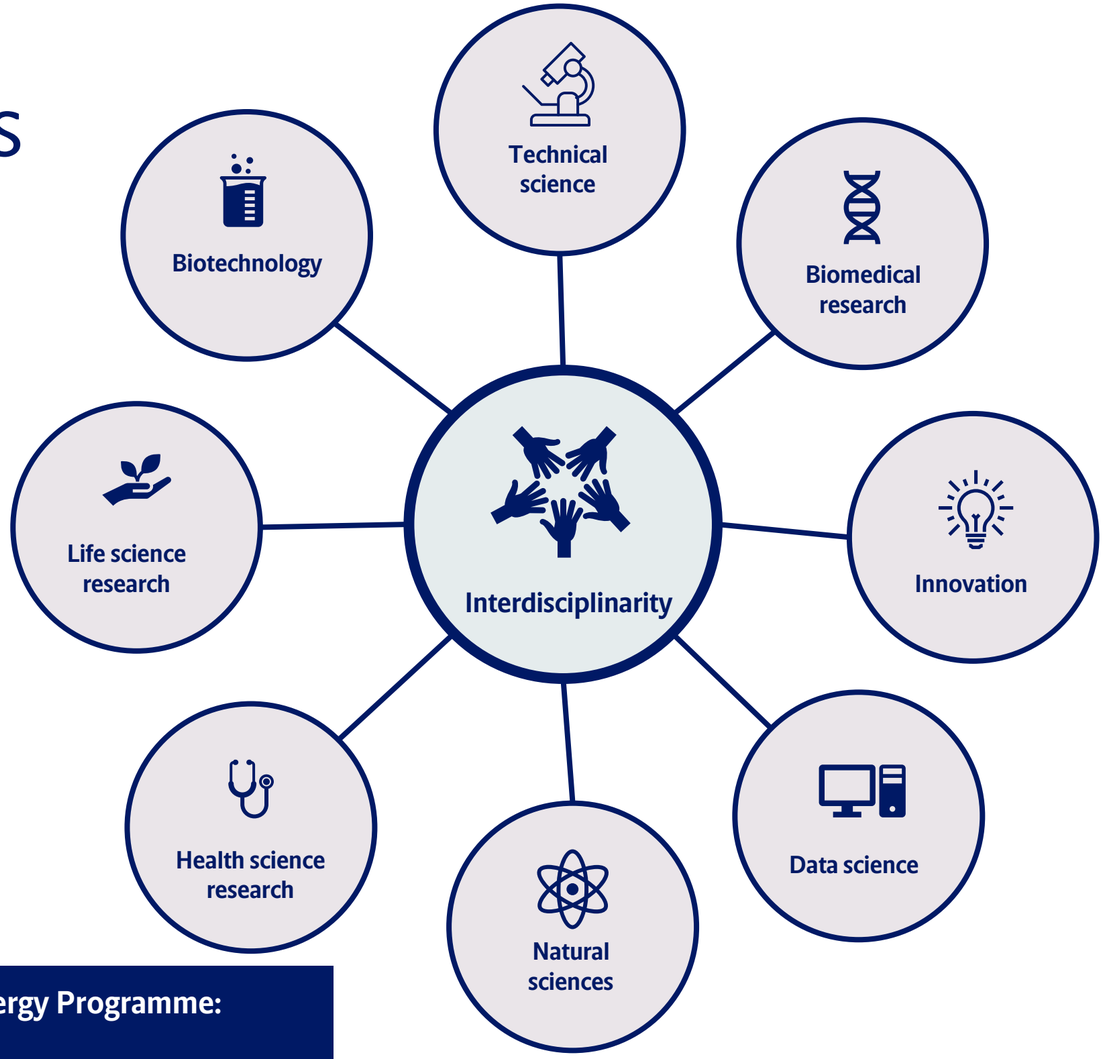
Nat-Tech Programmes with multi-disciplinary focus

Interdisciplinary Synergy Programmes

Support for research projects across disciplines, organizations, and national borders, aiming to resolve complex interdisciplinary challenges.



Key information

- Pursue creative and **high-risk/high-gain interdisciplinary** research ideas
- Break down or overcome the barriers that exist between different disciplines
- Consortia with 2 - 4 research groups
- Main applicant anchored in Denmark. 1-3 interdisciplinary co-applicants (may be international)
- Grant cannot cover applicant's own salary

Interdisciplinary Synergy Programme:

- Ideally founded on early data showing feasibility of the idea
- Grant budget: **DKK 15 million over 4 years**
- Call opens: **March 2022**
- Application deadline: **June 2022**

Exploratory Interdisciplinary Synergy Programme:

- Aimed towards early-stage or unexplored ideas
- Grant budget: **DKK 5 million over 3 years**
- Call opens: **March 2022**
- Application deadline: **August 2022**

Research Infrastructure Programme

Establish state-of-the-art research infrastructures to achieve excellence in research and innovation

Key Information

- Large equipment, running costs, storage, or data analysis
- Should be **open access**, including users from other academic institutions and industry
- Infrastructure must be continuously developed and maintained, also after its implementation
- Can fund qualified technical assistance to run the infrastructure
- Grant cannot cover applicant's own salary

Grant budget: **DKK 5 - 25 million over 5 years**

Call opens: **Expected December 2021**

Application deadline: **Expected January 2022**

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NNF Data Science Initiative

Purpose is to capacity build within data science and artificial intelligence and to support education and training of the next generation of data scientists

Open competition

Collaborative Research

Grants for collaborative projects involving data science within the Foundation's focus areas

Key Information

- Research collaborations between data scientists and domain experts At least one co-applicant must be a Danish-based data science group.
- International partners are welcome but not as main applicants

Grant budget: **DKK 25 million over 5 years**

Application deadline:

Expected March 2022

Investigator Grants

Funding for excellent independent data science group leaders at different career stages

Key Information

- Emerging Investigator
- Ascending Investigator
- Distinguished Investigator

Grant budget: **Up to DKK 10 million over 5 years**

Application deadline:

Expected March 2022

Research Infrastructure

Funding for shared super computers, hardware, GPUs, equipment, and "data as infrastructure"

Key information

- Infrastructure must be open, shared and employing FAIR principles
- Can fund staff position to run the infrastructure
- May include data collection, curation, engineering and management

Grant budget: **DKK 5-15 million over 5 years**

Application deadline: **Expected May 2022**

Stand-alone

Data Science Academy

- Educational courses
- Symposia and networking
- PhD & post-doc grants
- Visiting Professorships
- Vocational Training

DKK 183 million over 5 years
NNF:DKK 152 million
Villum: DKK 31 million

AI Pioneer Center

- State-of-the-art AI research
- Collaboration between DNRF, Villum, Carlsbergfondet, Lundbeckfonden, and NNF

DKK 360 million over 13 years

Data Science Initiative across all career levels

Open competition programmes

Collaborative Research Projects

Data science research infrastructure

Emerging | Ascending | Distinguished

Under-graduate | MSc | PhD | Postdoc | Assistant professor | Associate professor | Professor

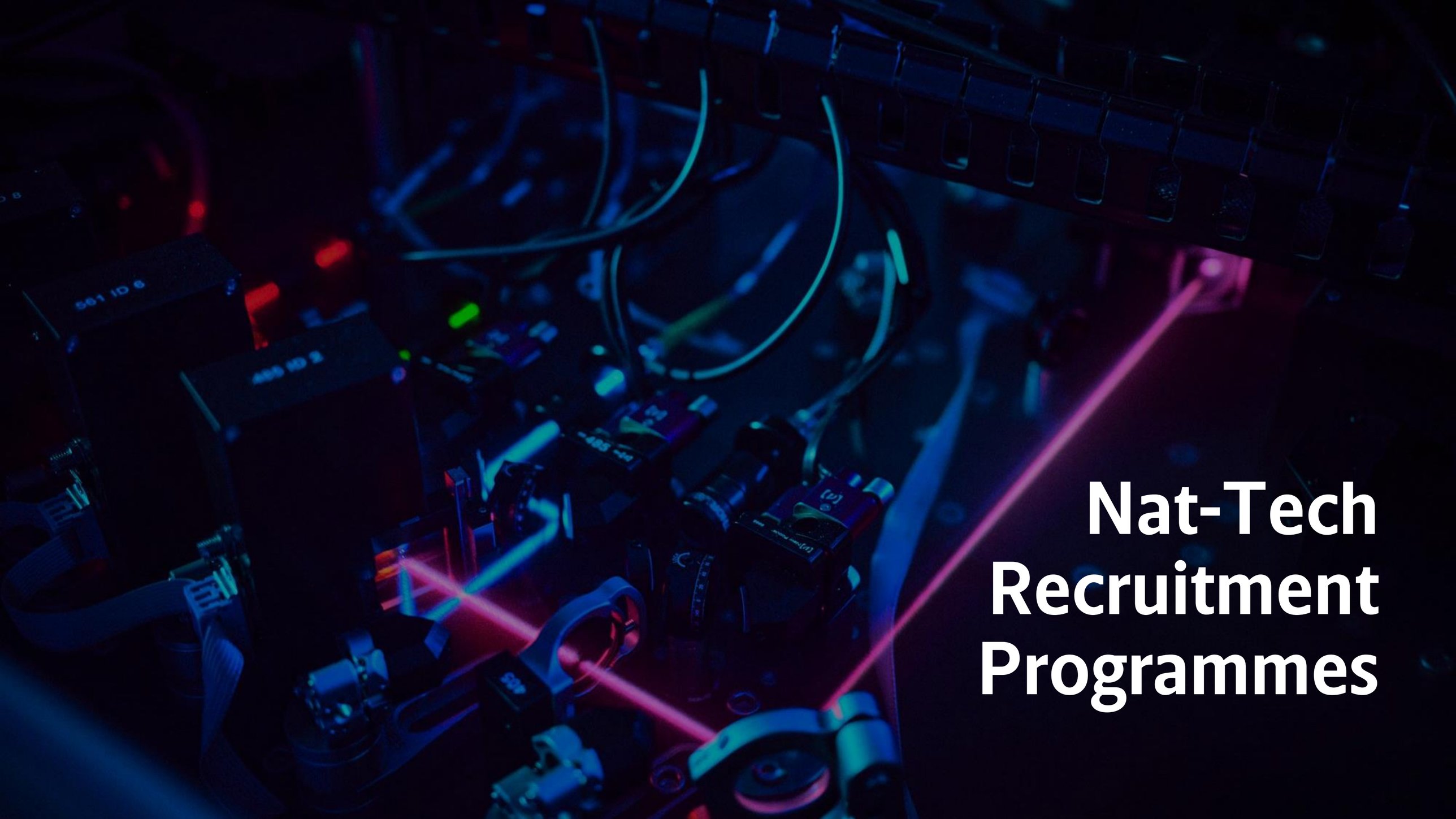
Data Science Academy

Visit grants | PhD fellowships | Postdoc fellowships

Visiting professors

Travel grants

Courses, events & community-level resources



Nat-Tech Recruitment Programmes

RECRUIT - For international recruitment

To strengthen Danish universities in the international competition of recruiting the most talented or leading researchers from abroad within the natural and technical sciences.

Key Information

- Recruitment from abroad **across all career levels**
- Grant can cover applicant's own salary
- Applicants must be endorsed by the recruiting universities accordingly to a **nomination quota**
- **The applicant's research must align with Nat-Tech key strategic themes**

Describe how the outcome of the project may have potential future applications in the life sciences, health sciences, or in biotechnology.

Grant budget:
- Up to DKK 15 million **at the assistant professor level**
- Up to DKK 25 million **at the associate professor level**
- Up to DKK 35 million **at the full professor level**

Grant period: **Up to 7 years**

Application deadline: **September 2022**

Strategic key Nat-Tech themes 2019-2023

1. Interdisciplinary research rooted in the natural and technical sciences
2. Quantum based technologies to solve complex and important problems in biology, chemistry, or medicine
3. Data science research with focus on fundamental algorithms and interdisciplinary applications
4. Technology for tomorrow's medical science and applications

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Start Package Grant - for faculty recruitment

To increase researchers' mobility and make Danish universities more competitive when recruiting top researchers of any nationality to time-unlimited research positions.

Key information

- Recruitment from abroad, from another Danish institution (with career progression), or from industry
- The candidate must be offered a time-unlimited faculty position, can be tenure-track
- **Applications must be submitted by the recruiting institution (the person with appointment authority)**

Grant budget:

- Up to DKK 4 million for a position at the **assistant professor level in a tenure-track position**
- Up to DKK 6 million for a position at the **associate professor level**
- Up to DKK 8 million for a position at the **full professor level**
- Grant period: 4 **years**

Application deadline: **four quarterly deadlines per year**

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Other Nat-Tech Programmes

Challenge Programme

To overcome specific challenges in health, technology and environment

Challenge theme 2022:

Energy Materials with Biological Applications

The challenge is to is to design, model, synthesize, and/or characterize novel bio-compatible energy materials. The focus is on energy harvesting, transforming, or storage materials with potential application for health-tech wearables, implantable devices, or other bioelectronic applications. The research should also address biocompatibility and potential toxicological or mechanically adverse effects.

Deadline for Expression of Interest:

3 November 2021

Key information

- Substantial funding to challenging and ambitious projects focused on in-depth research
- A collaborative effort in a centre-like setup.
- Consortia with 2 - 4 research groups
- Main applicant anchored in Denmark. 1 - 3 co-applicants (may be international)
- Evaluated by *ad hoc* committee (members announced on NNF's homepage)

Grant budget: **DKK 30 - 60 million over 6 years**

Two-staged process:

1. Expression of interest (open for all)
2. Full application (invitees)

Postdoc Fellowships at Stanford Bio-X or Weizmann Institute of Sciences

Knowledge, training and research experience in an excellent international research environment.

Key Information

- Support young promising and ambitious researchers in interdisciplinary research
- 3 years abroad + 1 year at a Danish research institution
- Facilitate return to, and continue career in, the Danish research environment after stay abroad

Grant budget: **DKK 4 million over 4 years**

Application deadline: **1 March 2022**

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Conferences, Symposia and Workshops

Promote knowledge sharing and networking activities

Key Information

- Support medium-sized events with a duration of 1-3 days typically
- Opportunities to present and discuss the newest research and innovation activities with peers
- Events can be located at hospitals or universities in Denmark and are organized by the researchers themselves

Grant budget: up to **DKK 500,000**

Call opens: **Expected February 2022**

Application deadline: **Expected April 2022**

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Benefiting people and society

Unsolicited inquiries: https://novonordiskfonden.dk/en/application-guidelines-unsolicited-applications/