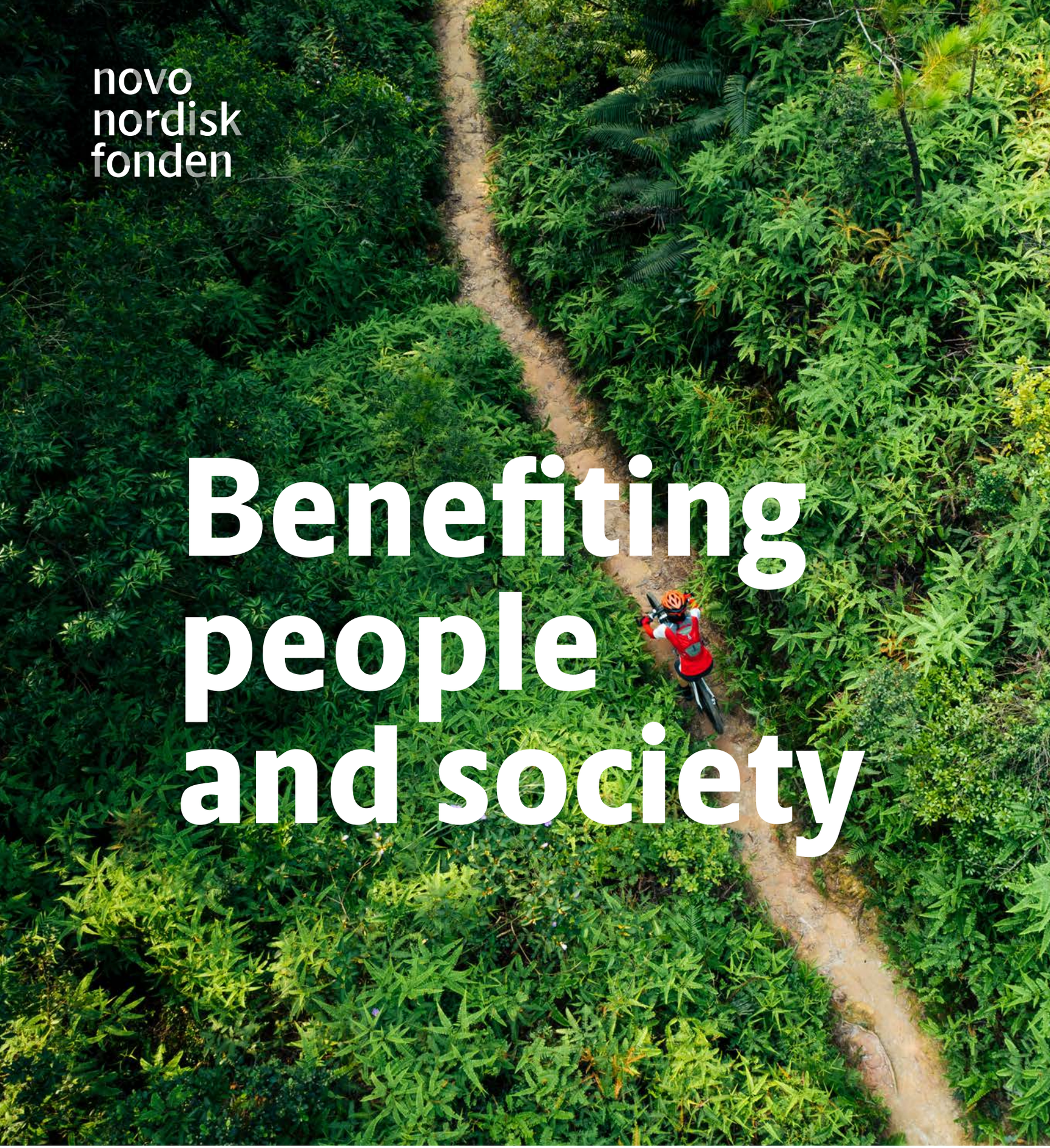
novo nordisk fonden

Benefiting people and society



Growing contribution
A year of high activity and impact

A greener future
Moving towards a sustainable society

Policy on grants
Excellence, diversity, innovation, interdisciplinarity

Content

Welcome

2019 was a year of high activity for the Novo Nordisk Foundation

To this end, we increased our payouts in 2019 while we received a record-high number of applications. We supported projects in a broad range of fields, such as medical science, natural science, biotechnology, diabetes treatment, education, innovation and social and humanitarian causes, many of which illustrate the new, broader scope of the Novo Nordisk Foundation's grant-giving activities.

The Foundation awarded DKK 4.9 billion and paid out DKK 3.6 billion in 2019.

Our new initiatives in 2019 include grants within biotechnology, a new standalone grant-giving area in the 2019-2023 strategy, to help accelerate the green transition. The research projects that we support are at the highest level, seeing Danish universities collaborate with leading international research units. We hope that this will provide new scientific breakthroughs and lead to the creation of sustainable solutions for the future. We aim to foster more international collaborations along these lines in the future, although with Denmark and the other Nordic countries as the centre of gravity.

We have also partnered with relief organizations on projects designed to provide educational opportunities and improve employment prospects to create a better future for thousands of young Syrian refugees in Jordan.

To match our grant-giving ambitions and desire to support new areas, we strengthened our organization in 2019, for instance by establishing new scientific committees to ensure the highest possible quality in our awarding of grants.

The performance of the companies in the Novo Group, Novo Nordisk and Novozymes, along with the successful investments by Novo Holdings – the Foundation's holding and investment company, continue to enable the expansion of our grant-giving activities.

In 2019, Novo Holdings made a profit of DKK 23.1 billion. This is the best result since the establishment of the company in 1999. About half of this result comes from the companies in the Novo Group, while the other half comes from Novo Holding's investments in other companies and financial activities. This provides a robust foundation for the Foundation's finances going forward.

In the coming years, we will continue to support research, treatment and development that can improve people's lives. In addition, we will further unfold our focus on education, innovation and areas that can contribute to creating greater sustainability in society.

This booklet provides information on our 2019 grant activities, including facts and figures, examples of projects funded, our grant-awarding policy and an overview of our scientific committees.

We hope you will enjoy reading this overview.

Lars Rebien Sørensen, Chairman, Novo Nordisk Foundation

The 2019–2023 strategy

The NNF vision and mission

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.

To fulfil the vision, the Foundation will pursue a three-pronged mission:

- To enable Novo Nordisk A/S and Novozymes A/S to create world-class business results and contribute to growth
- To develop knowledge-based environments in which innovative and talented people can carry out research of the highest quality and translate discoveries into new treatments and solutions
- To inspire and enable children and young people to learn

The grant-giving areas and long-term goals

Biomedical and health science research and applications
Enable people to live healthier and better lives by facilitating research that advances knowledge of human health and disease, solves health challenges and develops the healthcare system.

Patient-centred and research-based care
Make Denmark a global leader in delivering care for people with diabetes and facilitate development of patient-centred and research-based care within diabetes comorbidities and other endocrine disorders.

Life science research and industrial applications promoting sustainability
Act for and inspire the development of a more sustainable world by supporting research that translate into life science solutions to benefit people and the environment.

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

Education and outreach
Support general science education and cultivate scientific and technical competencies and engagement.

Innovation
Create and promote a life science ecosystem that increases the capacity for research institutions, clinics and start-ups to mature and translate scientific discoveries into products and solutions for the benefit of people and society.

Social, humanitarian and development aid
Improve lives and prospects of vulnerable children and youth through education, competency development and health initiatives.

Read more about the strategies www.novonordiskfonden.dk/da/strategi-og-maal/

Themes in grant-giving areas

This section shows specific focus themes in the strategy period.

Biomedical and health science research applications

Health-related data science

- Development and exploitation of health related data for research and development of new diagnostics and treatments.
- Combining data-science with clinical experience and designing new validation models for personalized/precision medicine interventions.

Innovative therapies

- Innovative therapies, based on cutting edge biomedical/biotechnical research.
- New therapeutic strategies based on e.g. gene editing techniques, and a suggested national infrastructure to support cell-based therapies.

Coherence in health care

- Focus on research into cohesive health care and research into implementation of new research-based solutions.
- Focus on how changes in demography and partially curative treatments change the composition of the future patient population in Denmark.

Breadth in biomedical research-commitment and integration

- Program for recruitment of research leaders, thematic calls in existing instruments in open competition, and collaborative medical projects, and instrument for grantees to pursue unexpected findings.

Life science research and industrial applications promoting sustainability

Industrial Biotechnology

- Solve fundamental challenges within bio-based production and technologies.

Plant Science and Agriculture

- Provide more productive and resilient plants by addressing challenges related to development and cultivation of plants.

Food Biotechnology

- Develop sustainable and safe food products feeding the growing population.

Environmental Biotechnology and Ecosystems research

- Develop biological tools and solutions with a global impact on the environment.

Education and outreach

STEM education

- Promote excellent and inspiring education for children and young people in natural science and technology by strengthening teaching resources and methods – from day-care through upper-secondary education.
- Enhance competencies of pedagogues and teachers of STEM disciplines.
- Support LIFE as the overarching strategic initiative within education.

Research in science education

- Identify and promote national and international best teaching practices within natural sciences and technology.
- Facilitate knowledge-sharing and dissemination of research results to guide science teachers and policy makers.

Vocational education and training

- Increase the skills and output of well-qualified and motivated graduates for vocational occupations, related to biotechnical and biomedical disciplines as well as IT and technology in general.

Science communication and informal learning environments

- Raise awareness, knowledge and appreciation of science and technology among children, families and the general population.
- Support humanities research related to new technologies.
- Help to secure fact-based, constructive societal debates around science and technology and build a stronger voice for the importance of research.

Research in art and art history

- Support research which challenge existing dogmas, inspire new ideas and improve people's life.
- Support cross-disciplinary research within art and natural science which may put science matters into perspective.

Social, humanitarian and development aid

Overweight and obesity among children and youth in Denmark

- Reduce overweight among children, primarily through prevention among pre-school children.

Strengthening learning opportunities among vulnerable children in Denmark

- Improve learning opportunities for vulnerable children through early interventions.

Youth education and empowerment in Jordan, Lebanon and potentially Syria

- Improve the prospects and possibilities of young refugees from Syria through quality education and other learning opportunities.

Non-Communicable Diseases in eastern Africa, Jordan, Lebanon and potentially Syria

- Reduce NCD mortality by supporting prevention and treatment in developing countries and humanitarian settings.

Patient-centred and research-based care

Implementation of Steno Diabetes Centres

- Improved quality of life and longer life expectancy for diabetes patients.

Steno DK

- Enhancing collaboration across the Steno Diabetes Centres network, the Copenhagen Bioscience Cluster, Steno Collaborative Grants and other relevant activities.

Steno Diabetes Centre Greenland

- Improve public health and quality of life for patients with diabetes and other lifestyle-related diseases in Greenland.

Co-morbidities to diabetes

- Integrated care for diabetes patients with co-morbidities.

Endocrinology other than diabetes

- Improve quality of clinical practice for patients with endocrine disorders other than diabetes.

Natural and technical science research and interdisciplinarity

Nat-X
- Significant breakthroughs in understanding the fundamental mechanisms governing life, health and biotechnology achieved by joining forces between biologists, chemists, physicists, engineers, and computational scientists.

Q-Life
- Solve complex and important problems in biology, chemistry and medicine - problems which are currently unsolvable - through the realization of quantum simulators and novel quantum technologies.

Dat-Mat core
- Develop tomorrow's ground-breaking algorithms for handling and understanding Big Data with applications in artificial intelligence, machine learning and bioinformatics through a strengthening of fundamental and applied research in mathematics and computer science.

Tech-med
- Transform tomorrow's therapies and diagnostics and significantly progress human health and society through advances in the technical sciences and engineering technologies.

Innovation

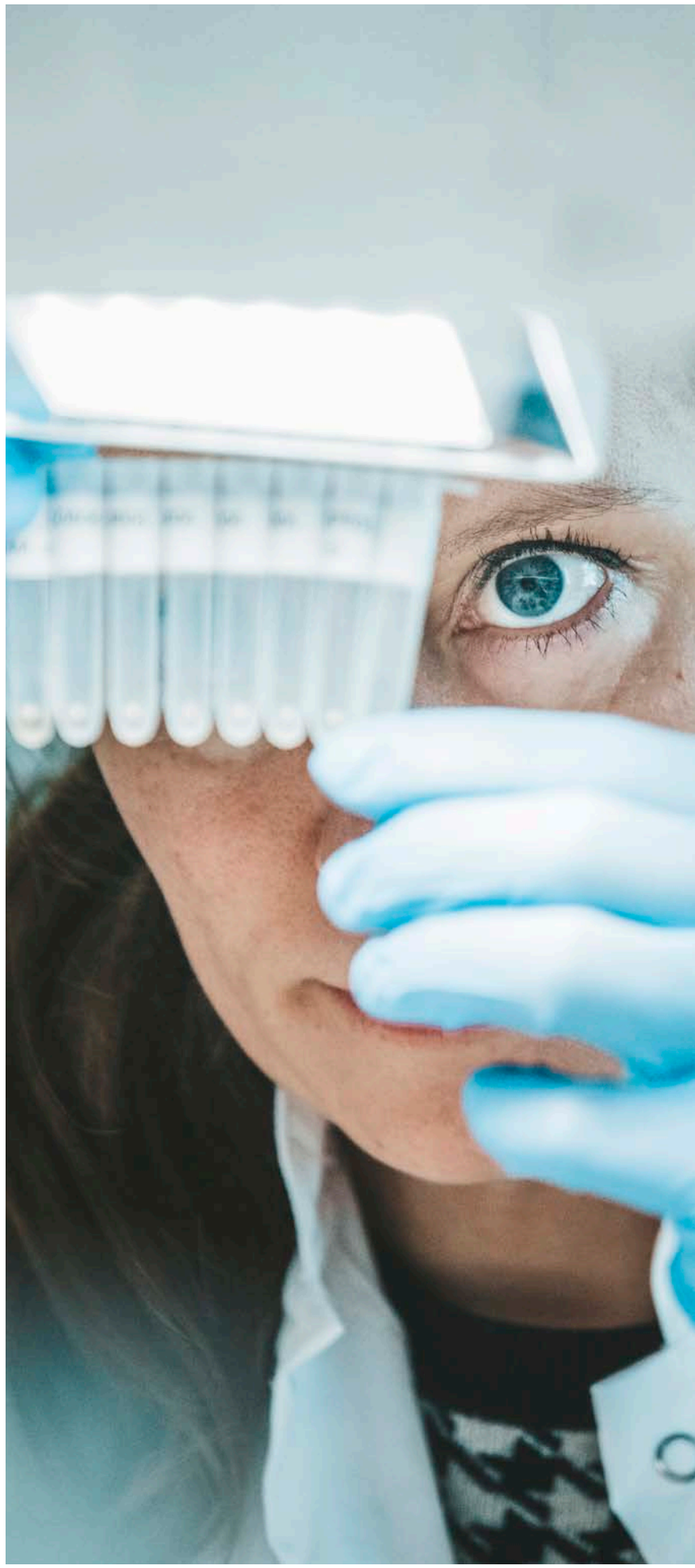
Support the talent base
- Attract international talents and develop the skill set among students, researchers, and clinicians, to increase their potential to explore and perform activities translating discoveries.

Support infrastructure
- Support access to Research Infrastructure, Test Facilities and Expert Teams in Innovation to in-crease the translational potential of a project.

Open Innovation
- Create new models which change the way academia and industry are interacting, ultimately accelerating innovation.

Attract capital and investors
- Stimulate a larger number of investors from the public and private space to fund research driven discoveries.

BioInnovation Institute
- Support BII as the overarching strategic initiative within innovation.



Supporting the research environments

It is the Novo Nordisk Foundation's ambition to make significant long-term contributions to society

The Novo Nordisk Foundation provides support for high quality research and research talents. The support is offered through a range of different funding instruments. The Foundation wishes to strengthen research in Denmark and the Nordic countries, while contributing to knowledge creation and growth that may pave the way to societal development and sustainable solutions.

As a significant contributor of research funding to universities and research hospitals, the Novo Nordisk Foundation adopts a long-term perspective. Scientific research involves risk-taking and achieving results can be time consuming. The Foundation support high-risk projects, as the greatest breakthroughs often occur when there is room for having big ambitions and thinking new ideas.

The Novo Nordisk Foundation wishes to strengthen research in Denmark and the Nordic countries in general and specifically at universities and university hospitals

The Foundation aims to provide research funding that is to benefit patient and society. It has a wide range of grants that target the needs of the universities and researchers. The Foundation supports large as well as small research centres, research programmes and projects at the Danish universities, hospitals and other research institutions. It supports activities within a wide range of topics and at different stages of the researchers' careers. The support is offered through strategic research collaborations and partnerships as well as through calls for applications in open competition.

The Novo Nordisk Foundation supports research environments and institutions to fulfil their own research ambitions and plans

Through its funding, the Foundation offers a supplement to public research, and our ambitions is to improve the quality of scientific research and contribute to a strong and dynamic research environment. We respect the universities' own strategies and priorities and engage in a dialogue with the institutions.

We support researchers in all career stages – from PhD students and postdocs to associate professors and professors. We are continually in close dialogue with the universities and research environments on our strategy and funding instruments and initiatives that may further the scientific career paths.

The Foundation also contributes to education, dissemination of knowledge, commercialization, research-based innovation and infrastructure at the research institutions. To support these purposes, it awards grants for one or several years, either through strategic initiatives developed in dialogue with the institutions, or offered through open competition.

Through its funding instruments, policies and monitoring of research impact, the Foundation addresses numerous opportunities and challenges that the research environments are facing. This includes issues such as the financing of research careers beyond the senior researcher level, ensuring diversity in the pool of researchers, attracting foreign talents, access to modern research equipment, strengthening the interdisciplinarity of research, improving the possibilities of applying research discoveries, etc.

Facts and figures 2019

Overall grants in 2019

4,893
DKK million awarded

623
grants awarded

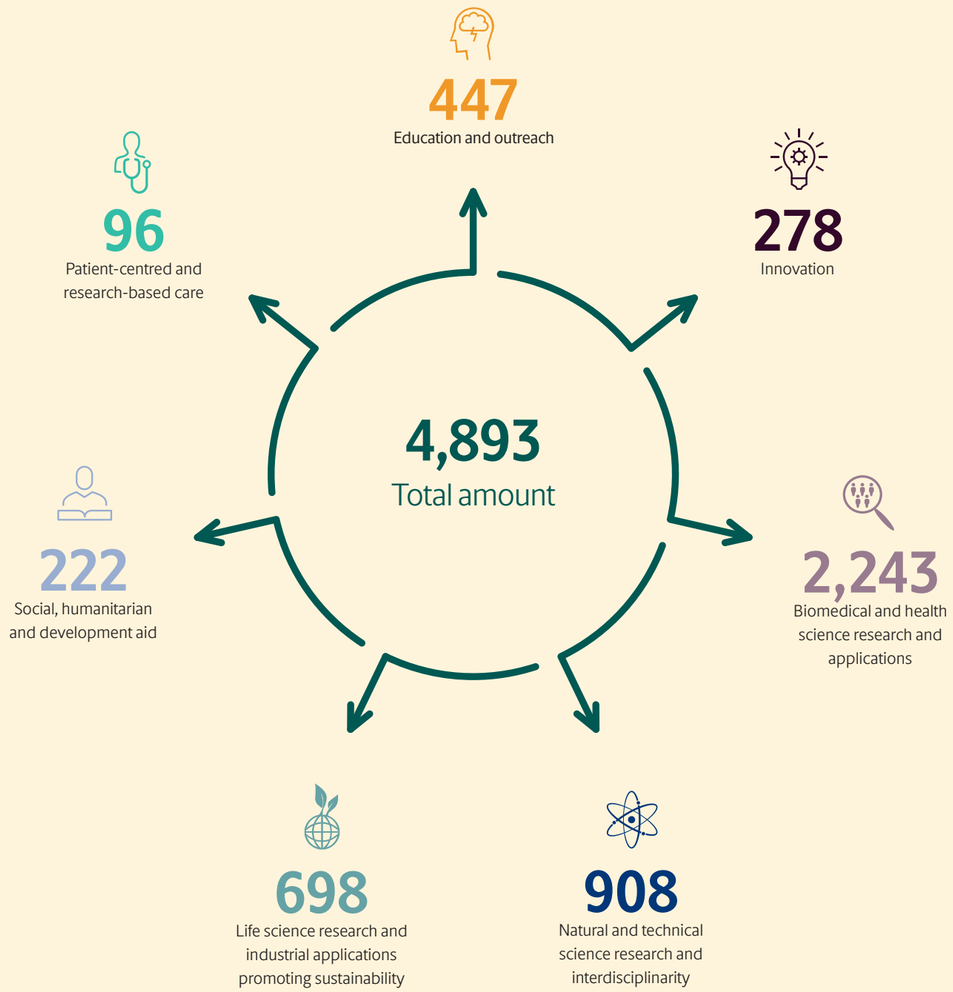
3,611
DKK million paid out

18%
Share of applications awarded a grant

3,378
applications received

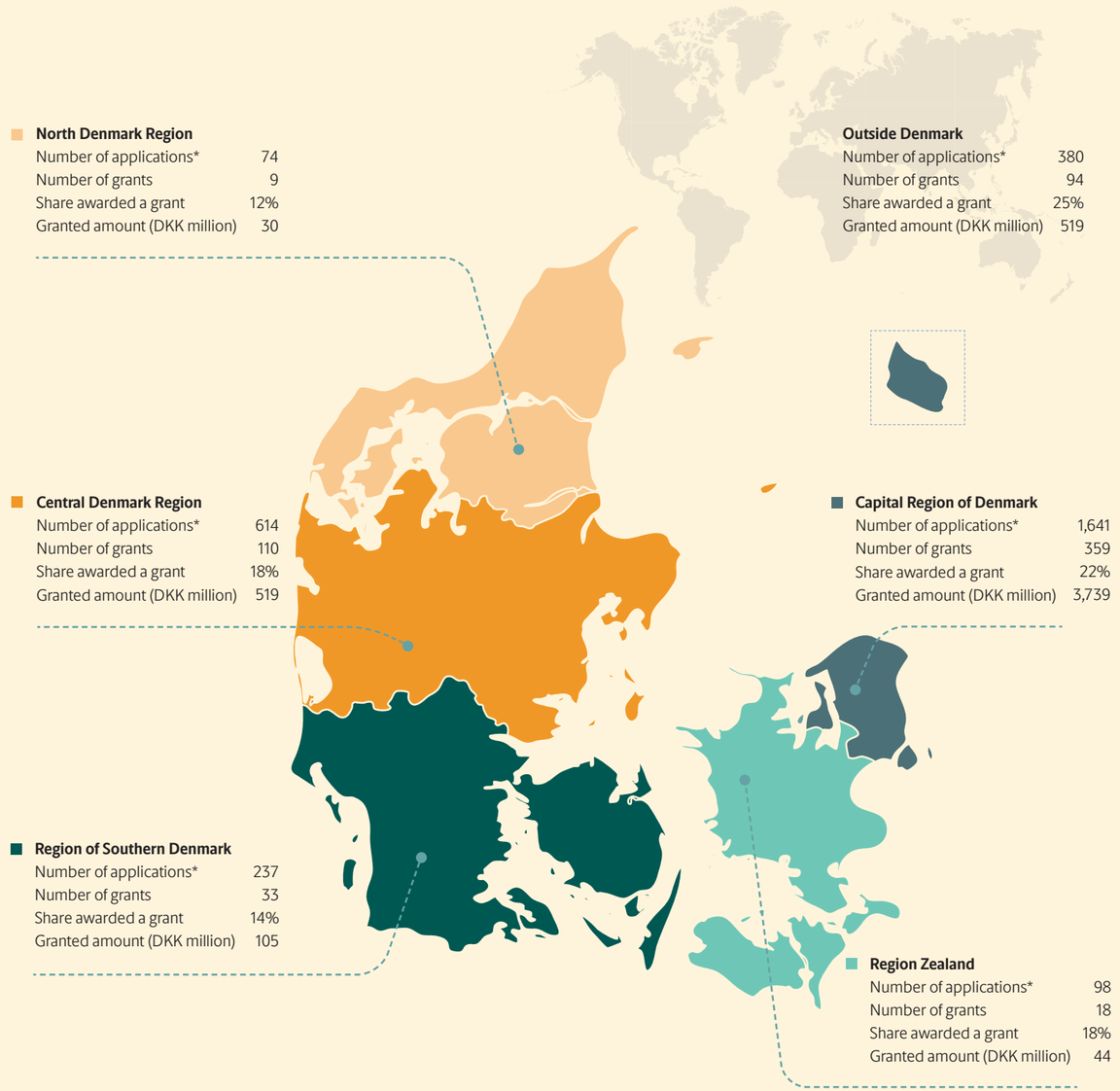
Amount granted in 2019 by grant-giving areas (DKK million)

*DKK million

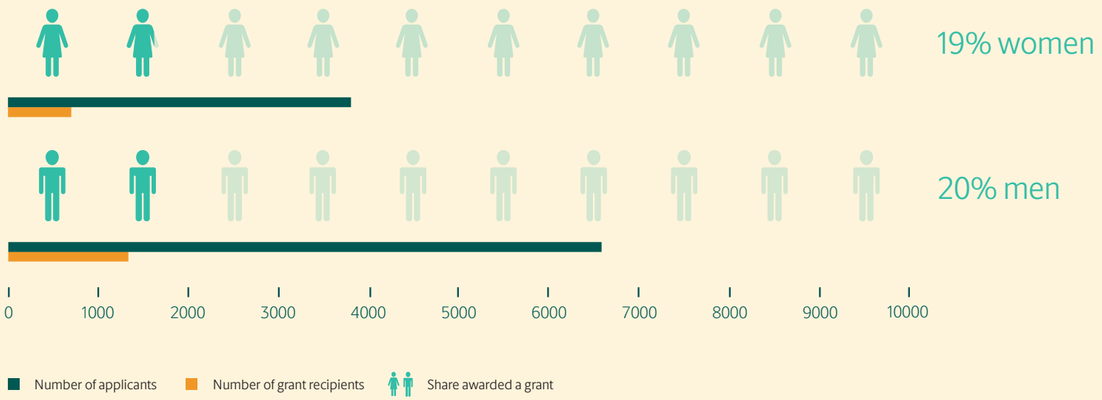


Grants awarded by administrative region in Denmark, 2019

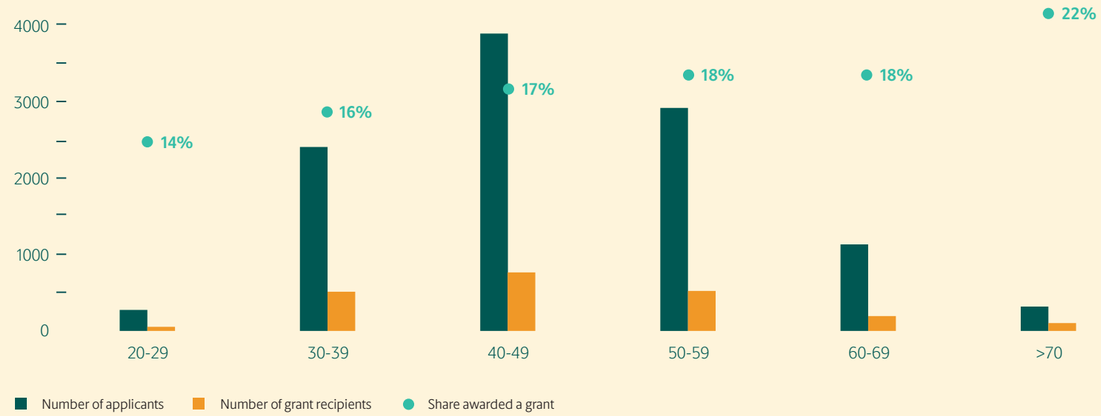
*Excludes unsolicited applications



Grant recipients by gender, 2015–2019

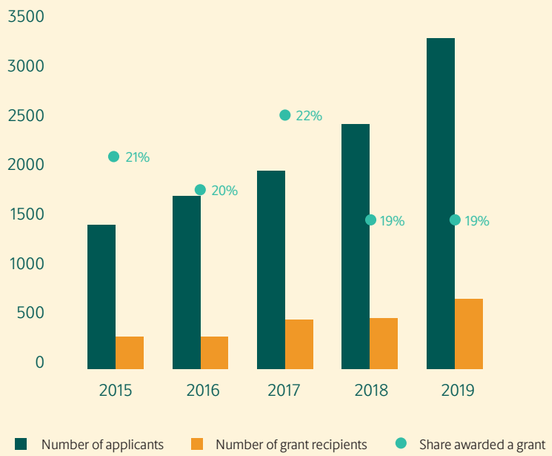


Grant recipients by age, 2015–2019

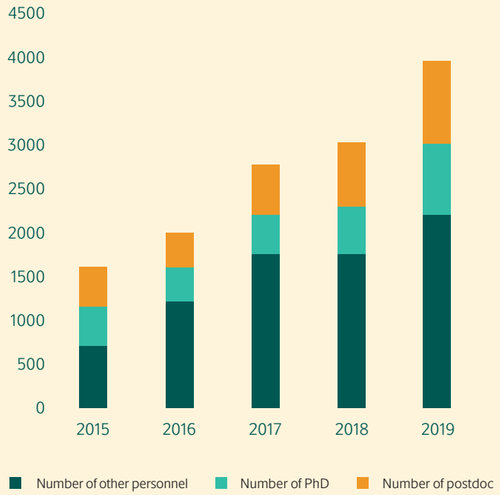


Development in grant-awarding activities, 2015–2019

*Excludes unsolicited applications

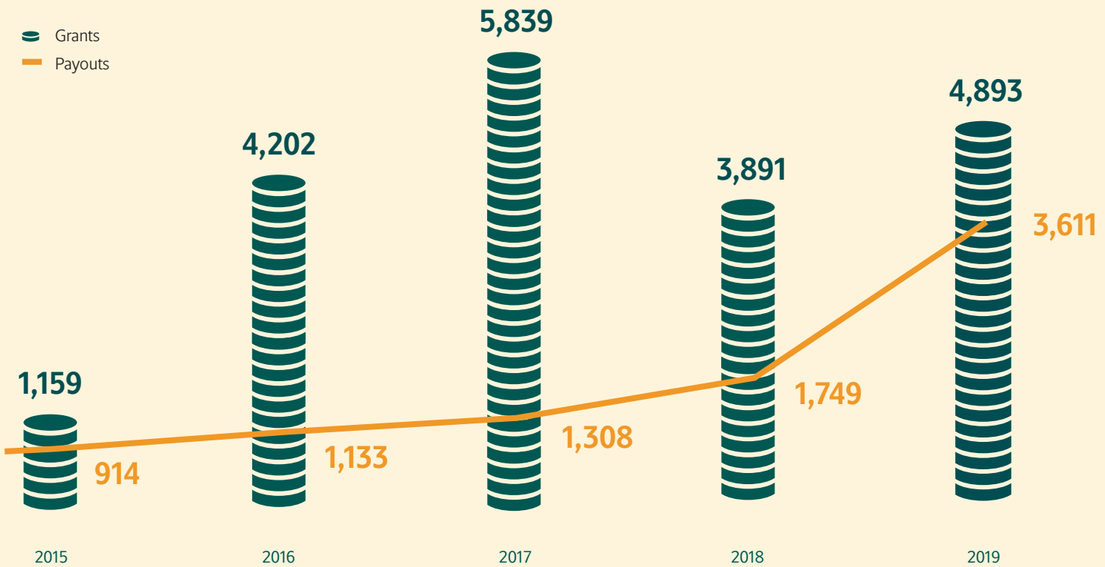


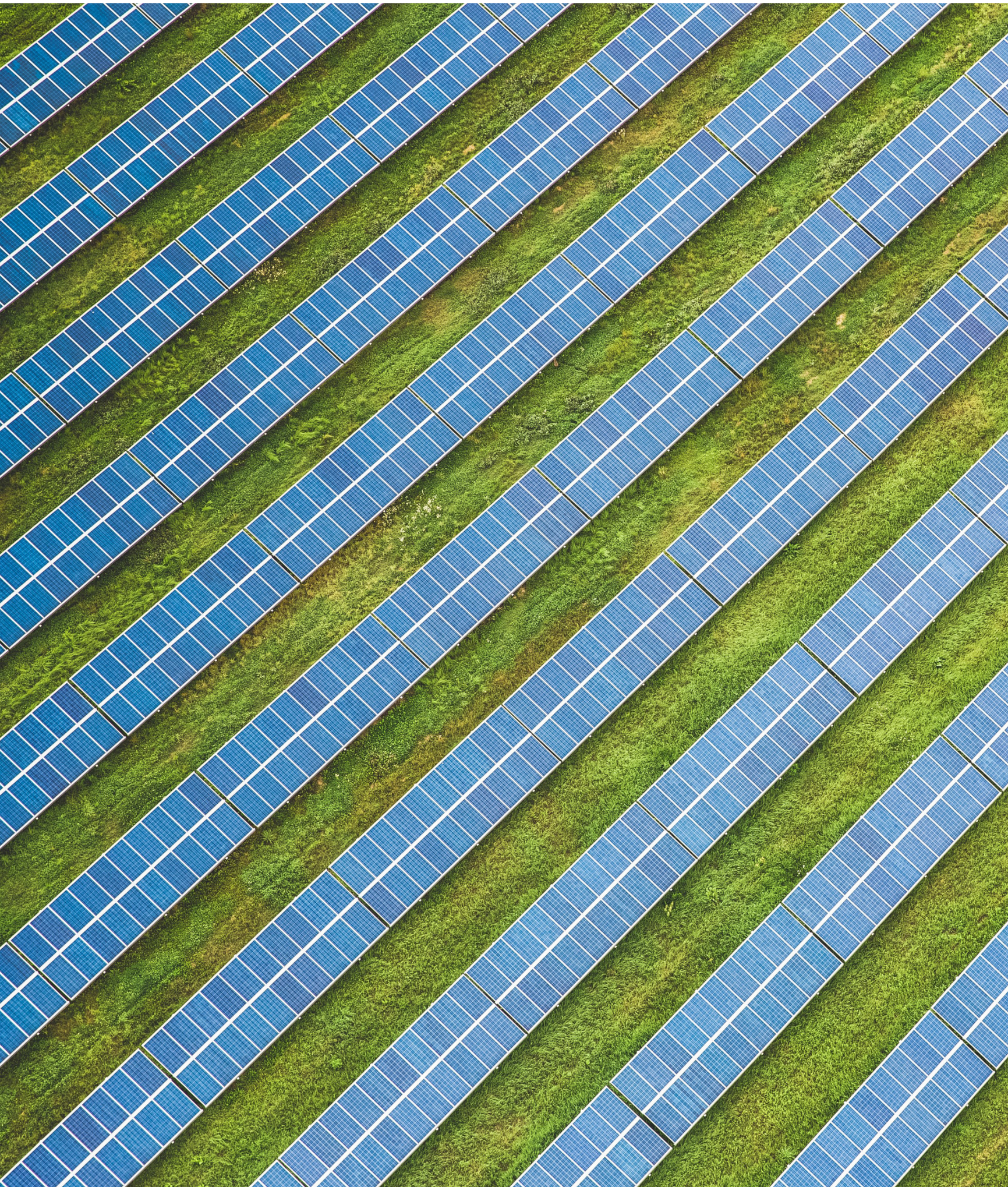
Number of employees either fully or partly funded by the Foundation grants, 2015–2019

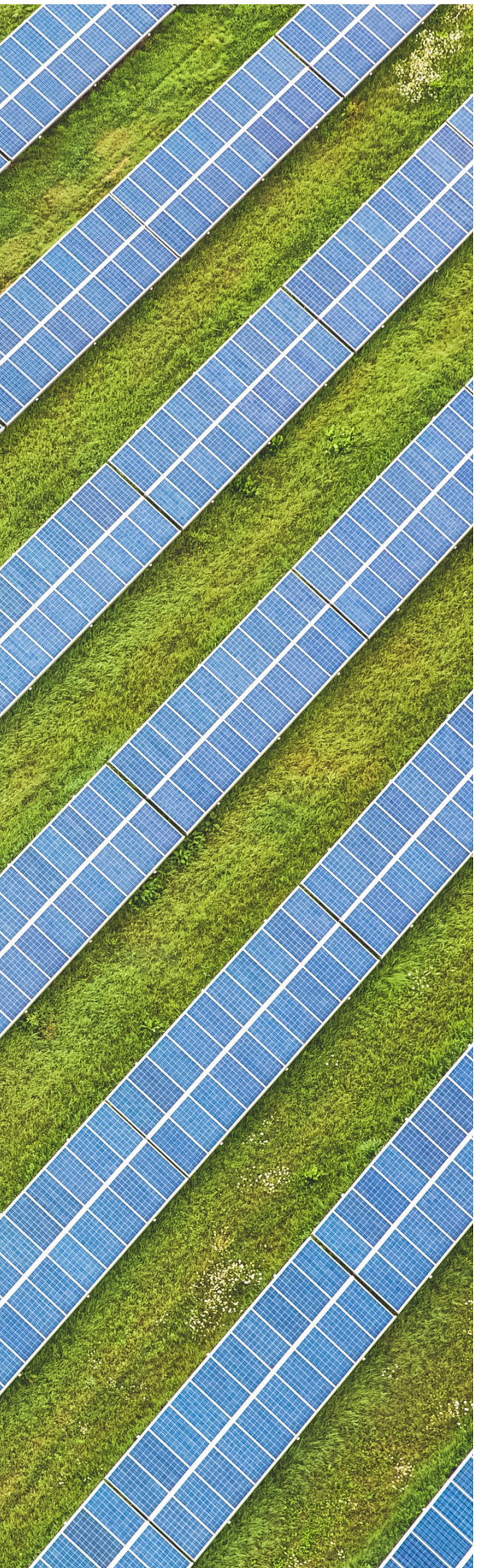


The Foundation's grants and payouts, 2015–2019

*DKK million







Transformation towards a sustainable society

Green transformation is considered to be one of the greatest challenges of the 21st century. This transformation includes reducing greenhouse-gas emissions from human activities by phasing out the use of fossil fuels, introducing sustainable solutions in industrial production and developing sustainable agriculture. Likewise, CO2 and other greenhouse gases must be removed from the atmosphere.

To contribute to this transition, the Novo Nordisk Foundation supports research that can create knowledge and technological breakthroughs that provide solutions to the major challenges and accelerate the transformation towards a sustainable society. This is one of the new funding areas to which the Foundation is giving priority as part of its strategy for 2019–2023.

The Foundation focuses on basic research but also on research that directly strives to solve the challenges society faces. In this area, the Foundation is especially willing to take on risks and wants to support very ambitious projects, both large and small. The Foundation expects this approach to contribute to developing completely new and pioneering technologies.

The grants are based on the global challenges described by the Intergovernmental Panel on Climate Change, the International Energy Agency and the Food and Agriculture Organization of the United Nations. Denmark will be the focal point of the research, which will seek to link Denmark's universities with international research institutions that lead within special niches.

In 2019, the Foundation awarded grants within biotechnology and transformation towards a sustainable society of just over DKK 700 million.

The Foundation's grants for research on such topics as plant science, agriculture and food can be awarded over a long-term horizon, so that the researchers have enough time to work on the challenges in depth. The objective is that dynamic research communities combined with good ideas will catalyse remarkable results. Denmark's research communities can potentially develop these further and reach an international level for research results that can help to solve such challenges as the climate crisis.

Further, the technologies must be aimed at a large scale, as profit margins are relatively small in food, agriculture and biofuels. The new technologies therefore need to be scaled up to megatonnes and megahectares before they are economically viable. Major investment from several actors will be required to boost these technologies to that level, but giving this priority will also provide numerous commercial opportunities for Denmark.

Read more about the Foundation's initiatives in this area on the following pages.

"This project, and the expertise the various actors bring to it, can pave the way for solving some of the very specific challenges we face globally. We hope that the project can help to create solutions for the agricultural sector that contribute to more environmentally-friendly production methods that are also economically sustainable."

Lars Hestbjerg Hansen, Professor, Department of Plant and Environmental Sciences, University of Copenhagen

Optimizing crops

In June 2019, the Foundation awarded a grant of DKK 203 million for a 5-year plant research project that will create new knowledge about the underlying biology of how the roots and leaves of plants interact with fungi and bacteria. These interactions can protect crops against drought, extreme temperatures, insects, pathogenic fungi and other stress factors. The project will be carried out by researchers the University of Copenhagen, North Carolina State University, the University of Aarhus and the Technical University of Denmark – each of which has strengths in agricultural or biological research.

Solving global challenges

The Foundation awarded DKK 120 million through its 2019 Challenge Programme for two research projects that focus on protecting crops from future changes in climate. One project is examining how to control fungal diseases in wheat and barley and the other is studying how to accelerate the breeding of resilient plants. The ambition is to create crops that combine the robustness of the wild plants with the high yield from the refined plants. The grants were awarded in October to two professors from the University of Copenhagen.

Since 2014, the Foundation has awarded more than DKK 1.6 billion through its Challenge Programme for research projects that seek answers to challenges within health or technology.

International educational collaboration

In August 2019, the Foundation awarded a grant of DKK 182.7 million to fund an international research and education collaboration between North Carolina State University and the Technical University of Denmark. The purpose is to create new industrial processes based on biotechnology and educational programmes for students and employees in the industry. These processes and skills will optimize biopharmaceutical production and accelerate the green transformation since they can be transferred and used by the whole biotech sector.

Improving treatment for patients

Many of the Novo Nordisk Foundation's grants target a wide range of research in the health sciences that will help to develop new and improved treatment for patients.

Although the Foundation has expanded its grant-awarding areas in recent years, research in the health sciences remains the Foundation's largest grant area. In 2019, the Foundation awarded grants totalling DKK 2,6 million in the health sciences. The Foundation's overall goal is to enable people to be healthier and to improve their lives by facilitating research promoting knowledge about health and disease that can be used to solve health challenges and to develop the healthcare system.

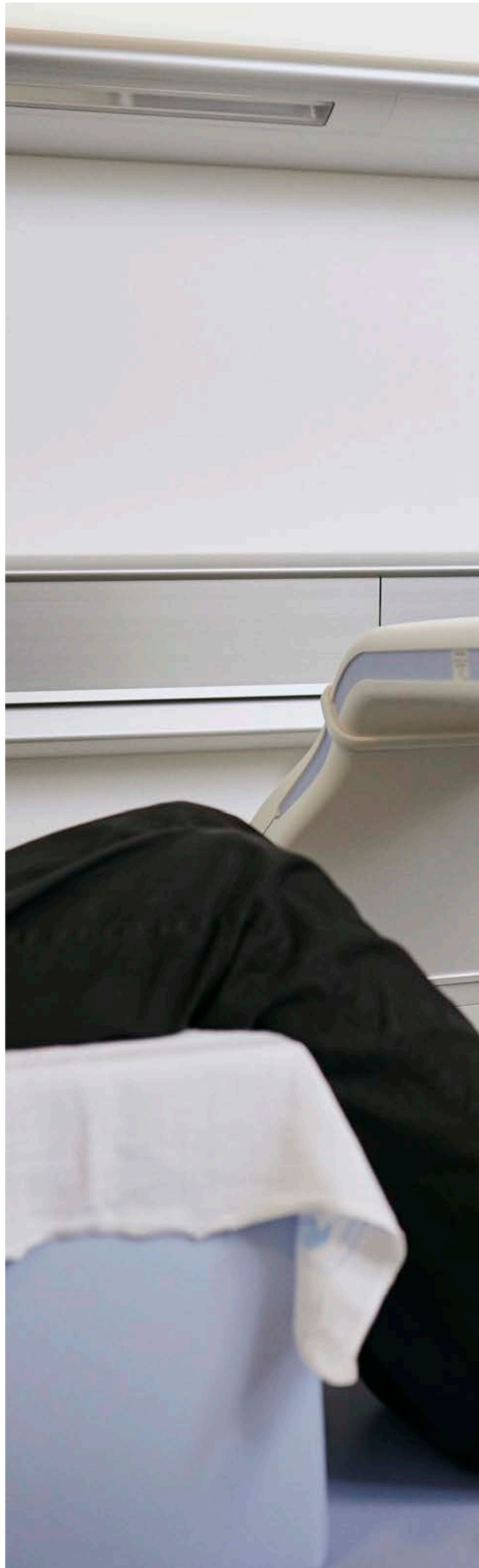
The grants are therefore quite diverse, including how to prevent older frail patients from being hospitalized numerous times, how to use artificial intelligence to improve treatment for children with leukaemia and a clinical trial on whether consuming fish oil during pregnancy can prevent childhood asthma.

In addition to the research grants, the Foundation has awarded a total of DKK 7.3 billion to establish a Steno Diabetes Center in each of Denmark's five administrative regions. The vision for the Centers is to create the prerequisites for reducing the number of new cases of diabetes and improving the quality of life and longevity for people with diabetes.

By funding the Centers, the Foundation wants to strengthen the quality of diabetes care and improve the prevention of complications to benefit both each individual with diabetes and society as a whole. The intention is that the patient-friendly and service-oriented clinics of the Centers will focus on the needs and self-care goals of individuals with diabetes.

Read more about the Foundation's initiatives in this area on the following pages.

You can also read about the results of some of the many research projects the Foundation supports at ***www.sciencenews.dk/en.***



"The grant from the Foundation means that Denmark will take one leap and boost the overall efforts to implement personalized medicine to a level that would otherwise take a long time to achieve in Denmark's healthcare system. Our effort is unique in three areas. We focus on personalized medicine that benefits people immediately. The public sector controls the use of information from people in Denmark. And we will develop personalized medicine nationwide so that everyone receives the same level of service regardless of which hospital they attend in Denmark."

Minister for Health and Member of Parliament for the Social Democratic Party, Magnus Heunicke

Genome sequencing is part of personal medicine for patients

When the Danish National Genome Center implements genetic sequencing in the coming years, up to 60,000 patients can look forward to improved diagnosis and more tailored treatment – also called personalized medicine. This is the ambition of Denmark's Ministry of Health.

More than 80% of Denmark's medical specialties could benefit from genetic analysis for diagnosis, and the Danish National Genome Center will ensure that whole genome sequencing and genetic analysis of uniform high quality can be performed wherever the patient lives in Denmark.

The Foundation has awarded DKK 1 billion to kickstart the Danish National Genome Center under the Ministry of Health and to pay for the Center's infrastructure and the first 60,000 whole genome sequences from patients who are to be examined for diseases.

Improving the quality of life for people with arthritis

Rheumatoid arthritis, arthritis in the spine and psoriatic arthritis are lifelong diseases. Although the options for treating people with these chronic diseases with medicine are better than ever, they are home alone most of the time. These people must learn to live with the effects of these diseases, including fatigue, pain, depression, anxiety and impaired physical functioning and quality of life. They also need to be familiar with the symptoms so that they can contact healthcare professionals when necessary.

A research project supported by the Foundation will help to improve the early response to people with chronic arthritis and to prepare them to manage their life with arthritis. The project will achieve this by giving nurses and other healthcare professionals new skills and tools to help people deal with sleep problems or how to continue with sports activities that accommodate their state of illness. The Foundation awarded a grant of DKK 7.5 million under its nursing research programme for the project to Bente Appel Esbensen, Senior Researcher, Center for Rheumatology and Spine Diseases, Rigshospitalet, Glostrup.

The Foundation awards up to DKK 21.3 million annually for nursing research.

Grants for surgical research

Each year, more than 235 million operations are performed worldwide. However, there is limited experimental evidence to support the effectiveness of these interventions and the methods used. Therefore, the Foundation has targeted a new programme for surgical research, with the overall goal of creating more research-based knowledge in this field.

The Foundation awarded project grants under the programme for the first time in 2019. The scientific content is very diverse, but several of the projects focus on collaboration across surgical departments in Denmark and the Nordic countries as well as across professions. Thus, these projects can help to build professional networks in surgical research.

One project that has been awarded a grant is based at Rigshospitalet, where researchers will conduct a clinical trial to determine the effect of using antibiotics after implant-based breast reconstruction, to avoid infection of the breast and implant after the surgery. The findings of this trial will be used to determine the best strategy to avoid implant infections in future patients undergoing breast reconstruction.

In 2019, the Novo Nordisk Foundation awarded DKK 20 million for nine surgical research projects. The programme runs for 3 years and has an overall budget of DKK 60 million.

The decisions of the Board of Directors on grants

The Board of Directors decides the Foundation's strategy, vision, payout ambition, the annual grant-giving budget and the grants. The decisions on grants are decided directly by the Board of Directors, or on behalf of the Board of Directors by 23 committees that advice and implement the Boards' decisions.

The Board of Directors decides all grants
The Board of Directors decides the purpose, the research field, the budget, the application and assessment criteria and the assessment process. The Board also decides the grant-awarding model; open competition, strategic awards, Steno Diabetes research hospital grants or grants for own initiatives.

The Board of Directors determines the financial framework
The Board of Directors sets the financial framework for each grant when deciding the annual budget.

The implementation of the decisions of the Board of Directors
A grant can either be decided directly by the Board of Directors or via annual mandate letters to expert committees. The expert committees implement the decisions of the Board of Directors by identifying projects and researchers among the received applications that fulfil the criteria the board has defined.

The Board of Directors approves the rules of procedure and the committee register
The Board of Directors appoints all the members of each committee and approves the rules of procedure of the committees. The rules of procedure and the annual mandate letter and committee register sets the scope and framework for how the committees' implement the Board's decision. The committees also serve as the Foundation's window to the research community for grants awarded in open competition.

The Board of Directors selects the committee members
The Board of Directors has decided that the rules of procedures for each committee follow the best international standards. Hence, committee members are internationally recognized experts in their field who often have national and international experience as members of research councils and academic assessment committees. New committee members are selected based on recommendations from the committee or the Secretariat describing the potential member's scientific credentials, thereby ensuring high expertise within the relevant scientific field.

The Board of Directors oversees the committees' work
On behalf of the Board of Directors, the Secretariat supervises the committees' activities within the framework decided by the Board.

The Board of Directors establishes the grant policy
The Board of Directors has established a policy on grants with grant-giving principles. The objective is to support projects of the highest quailty.


Transferpipetten · Transfer pipettes
BD Vacutainer
Safety-Lok
SARSTEDT
SARSTEDT
PIPPEGLAS

Policy on grants

The Board has established a policy on grant-giving. The objective is to support projects of the highest quality in accordance with the Foundation's strategy and national and international standards for assessment, evaluation and grant-awarding practices.

Grant awarding principles
The Board has set out the following overarching grant-awarding principles for what the Foundation will emphasize and seeks to uphold in all its grant-awarding activities.

Excellence
The Foundation pursues the highest standard of quality in all it does and supports. The Foundation is committed to excellence and quality in all its activities. Only by setting a high standard will real, sustainable impact be achieved. The Foundation will strive for excellence and expects the same of the people and institutions it supports and with which it collaborates, nationally and internationally. The Foundation is prepared to take risks in areas in which it sees excellence and support promising projects to create the basis for breakthroughs.

Interdisciplinarity
The Foundation facilitates connectivity across disciplines to generate new ways to discovery. The Foundation believes that interdisciplinary research will drive future waves of discovery and innovation. It advocates and supports the removal of barriers between traditional disciplines and fields of research. It seeks to find new and more effective ways to solve complex problems at the intersection of various disciplines and to apply interdisciplinary approaches in the search for solutions to significant global and societal problems.

Collaboration
The Foundation facilitates inclusiveness and collaboration to catalyze advances in national and international partnerships. The Foundation celebrates the coming together of unique and differing ideas and perspectives to tackle challenges and develop solutions in new ways. The Foundation fosters collaboration between people and organizations to improve results, including across universities, hospitals, schools and geographical borders. The Foundation supports strategic international collaboration and partnerships.

Innovation
The Foundation acknowledges and values the potential of new ideas. The Foundation supports new ways of addressing challenging problems facing people and society.

Supplementarity
The Foundation sponsors activities that complement and supplement current systems. The Foundation aims to create impact by supplementing existing activities, systems and funding.

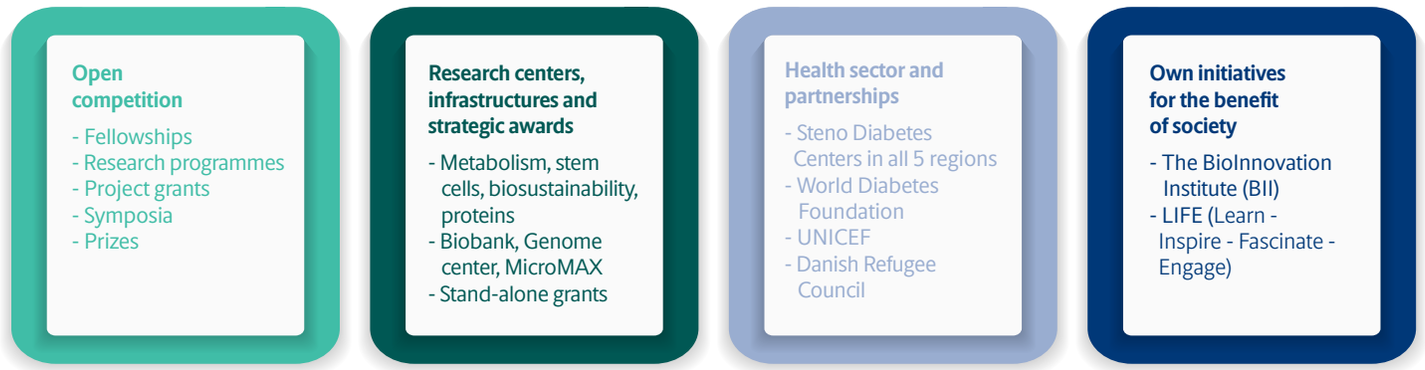
Respect
The Foundations supports free and independent research. The Foundation respects other people's ideas and understands that producing landmark results that benefit society can take time. It is prepared to listen to other people's views and advice, and to take time to explain the reasons for its priorities and decisions. The Foundation respects the freedom of research and does not claim rights to the results.

Accessibility
The Foundation champions broad dissemination and access to scientific knowledge and results. Making the scientific knowledge and results available to other people is pivotal to catalyzing further advances in any field. The Foundation believes in the value and importance of this and promotes this in all its grant-awarding activities.

Diversity
The Foundation will promote an inclusive culture through the formulation of specific expectations not only to ourselves but also to all key stakeholders, including research institutions, to explain how they and their organization promote diversity and inclusion. The individual applicant will not need to explain this in the application process.

The four grant-giving models

Applications and grants awarded are divided into the following four grant-awarding models.



Grants in open competition
The Foundation awards grants in open competition within: I) Biomedical and health science research, II) Patient-centred and research-based care, III) Life science research and industrial applications prompting sustainability, IV) Natural and technical science research and interdisciplinarity, V) Education and outreach, VI) Innovation, and VII) Social, humanitarian and development aid. In 2019, the Foundations awards in open competition amount to DKK 2,248 million and paid out DKK 1,279 million.

All grants awarded in open competition are peer reviewed by committees. Committee members are internationally recognized experts in their field, who ensure that the grants are awarded for the projects of the highest quality and with the most potential in accordance with the international peer-review standard. Grants are not awarded if the applications received do not meet the highest scientific and quality standards. Grants awarded in open competition generally follow a fixed annual cycle and are announced through open calls.

Strategic one-off grants, partnerships, research centres and Copenhagen Bioscience Cluster activities
The Foundation supports strategic one-off initiatives, partnerships and the Copenhagen Bioscience Cluster. National and international research experts assess the submitted project applications. All the applications submitted in the following grant-giving areas: humanitarian and social support, education, outreach and innovation are assessed partly by national and international experts and partly by the Secretariat's internal experts. Based on the expert assessments of applications or of strategic one-off initiatives, the Board decides whether to support the projects and partnerships. In 2019, the Foundation awarded grants in this category for DKK 2,644 million and paid out DKK 1,410 million.

Grants for health sector and partnerships
Since 2016, the Foundation has supported research hospital activities within diabetes in Denmark. Between 2016 and 2018, Steno Diabetes Centers were established in Copenhagen, Aarhus, Aalborg, Odense and in Region Zealand. The grant awarded by the Foundation's Board will lift treatment to a high international level, increase research activities and support the construction work. In 2019, the Foundation paid out DKK 796 million in this category, but did not initiate new public-private partnerships. In 2020, the Board is planning to develop and support the establishment of a Steno Diabetes Center in Greenland, which is part of the Kingdom of Denmark.

Own initiatives for the benefit of society
The two standalone initiatives BioInnovation Institute (BII) and LIFE were approved by the Foundation's Board in 2018 and have developed considerably during 2019.

The BioInnovation Institute (BII) helps innovative entrepreneurs and talented researchers develop research projects to the point at which they can attract crucial capital investment. BII combines incubation and support for early-stage, start-up companies with the hosting of top-level translational research by universities, hospitals and innovation units from large corporations.

LIFE, being a new major not-for-profit learning initiative, provide science education resources free of charge to schools throughout Denmark. During 2019, the LIFE initiative has matured and developed its learning packages that address real-world problems closely related to UN's Sustainable Development Goals. The packages are being developed based on input from and collaboration with public and private research environments.

The Foundation's own initiatives are always assessed national and international experts. Based on the expert assessments of own initiatives, the Board decides whether to award

a grant to the initiative. In 2019, the Foundation awarded grants in this category for DKK 430 million and paid out DKK 121 million.

A threat to modern medicine

Antimicrobial resistance is a ticking bomb under the foundation of modern medicine. This is expected to be the cause of 10 million deaths annually by 2050, more than currently die from cancer. This makes antimicrobial resistance one of the greatest threats to global health and development.

More and more common bacterial infections such as pneumonia, salmonellosis and tuberculosis are becoming increasingly difficult to treat because the bacteria are resistant to most or all types of antibiotics. This results in long hospitalizations, rising expenses for medicine and increased mortality. In addition, antimicrobial resistance may reverse many of the medical advances of the past century. Caesarean section, knee surgery, appendectomy and hundreds of other procedures now considered routine all require antibiotics to prevent subsequent infections. Without effective antibiotics, these interventions will be very risky.

Nevertheless, not enough new antibiotics are being developed, mainly because this is not financially attractive for the pharmaceutical industry.

The Novo Nordisk Foundation is therefore focusing on antimicrobial resistance as a special initiative area.

Since 2016, the Foundation has awarded a total of DKK 392 million for 20 research projects on antimicrobial resistance, including basic research, clinical research and cross-disciplinary and innovative projects that will create knowledge on such things as the prevalence of, trends in and transmission of antimicrobial resistance.

The Foundation has also allocated DKK 1 billion to establish the REPAIR Impact Fund. Through the Foundation's wholly owned subsidiary, Novo Holdings, the Foundation is investing in promising projects and companies with the aim of helping to develop new drugs to treat infections.

Read more about the Foundation's initiatives in this area on the following pages.

"REPAIR's commitment to funding the development of novel antibiotics will provide us with the essential support we need to accelerate our lead asset to where it is most needed – the clinic as we strive to bring new antibiotics to the market to combat the growing threat of drug-resistant bacteria."

Stéphane Huguet,Chief Executive Officer, Mutabilis

Developing new antibiotics

The Foundation has established the REPAIR Impact Fund to invest in companies involved in the early-stage development of therapies targeting resistant bacteria.

The ambition is the development of at least one new drug that can treat infections caused by bacteria that are currently or potentially resistant to the antibiotics available on the market today. REPAIR currently has eight companies in its portfolio and aims to invest a total of DKK 1 billion in about 20 projects in Europe and the United States. Most recently, REPAIR invested in French biopharmaceutical company Mutabilis, which is developing novel antibacterials against dangerous infections caused by gram-negative bacteria.

Ability of Salmonella bacteria to survive

In a new research project, Lotte Jelsbak, Associate Professor, Roskilde University, will characterize the mechanisms a specific type of Salmonella bacteria uses to increase its survival and thereby its virulence by using structural biology, molecular biological methods and pharmaceutical chemistry.

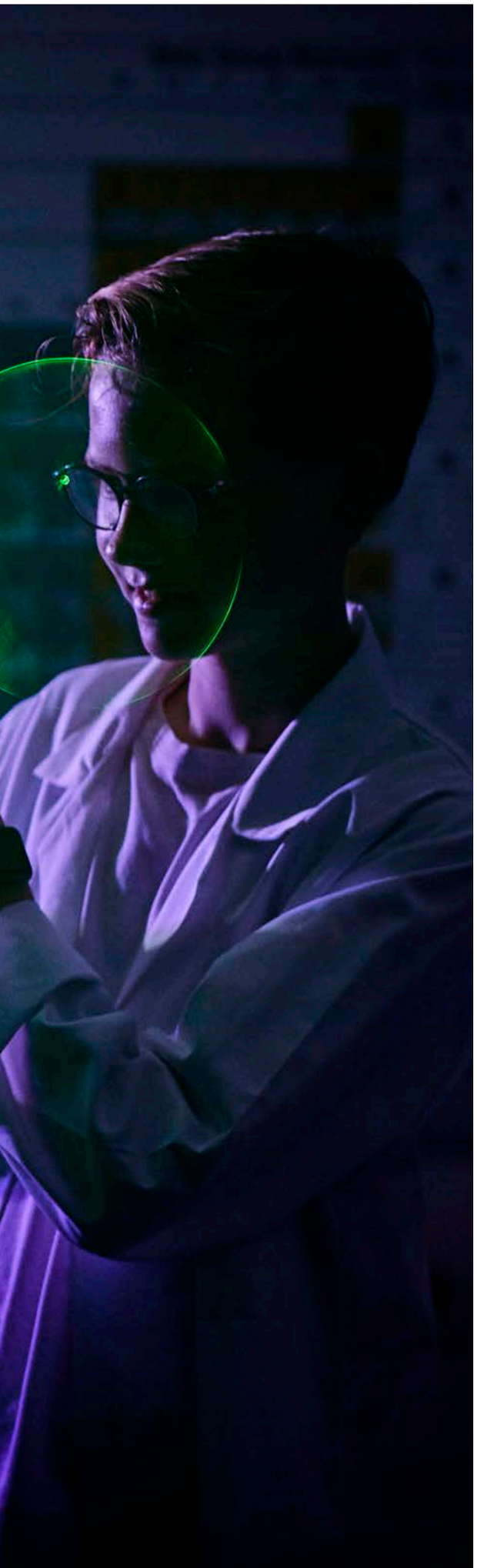
This knowledge and understanding are crucial to developing new antibiotics that can help us to combat bacterial infections. In 2019, the Foundation awarded Lotte Jelsbak a grant of DKK 1.5 million for the project.

The Foundation awards several hundred grants annually for large and small research projects based on applications submitted in open competition.

The secrets of wastewater

A research group at the National Food Institute, Technical University of Denmark is collecting and analysing untreated wastewater from more than 100 cities throughout the world with the aim of increasing knowledge on the global prevalence and acquisition of antibiotic resistance. By doing this, the group hopes to be able to create the basis for new procedures and methods for reducing antibiotic resistance globally and optimizing the use of the most effective antibiotics. The programme will improve understanding of the prevalence and transmission of antibiotic resistance as well as the precautions that each country should take. Professor Frank Aarestrup is leading the project and received a grant of DKK 60 million for the project as part of the Foundation's Challenge Programme.

The Foundation awards up to DKK 360 million annually through its Challenge Programme for research projects that seek answers to challenges within health or technology.



Educating the next generation

Denmark needs children and young people to engage in matters related to science and technology. Strong skills within the natural and technical sciences are essential for future cutting-edge research and developing new solutions that can improve people's lives and the sustainability of society.

Science education is important to give children and adolescents the opportunity to act in a world characterized by rapid technological development.

The Novo Nordisk Foundation therefore wants to strengthen the skills of children and adolescents within natural science and technology. The Foundation has launched several initiatives aimed at strengthening and maintaining the enthusiasm for and teaching of the STEM subjects (science, technology, engineering and mathematics).

The ambition is to inspire more children and adolescents to take an interest in the natural sciences and perhaps pursue a science career.

The Foundation supports large and small projects throughout Denmark and has awarded DKK 328 million to establish LIFE, a major learning initiative in Denmark that offers educational courses aimed at strengthening the teaching of science subjects in both primary and lower-secondary schools and upper-secondary schools.

The Foundation also supports other education and outreach projects that focus on developing materials, methods and events that contribute to inspiring STEM teaching or focus on providing children and adolescents learning opportunities and good experiences in the natural sciences – also during leisure time.

The Foundation has also established prizes that are awarded annually to recognize the important work of early-childhood educators and teachers in stimulating learning, interest and motivation for the natural sciences among children and adolescents – from the earliest experiences of nature and science in childcare centres to the theoretical and experimental challenges young people face during their education at upper-secondary schools and teacher colleges. Early engagement in the natural sciences is important to foster a knowledge-based society and to encourage young people to choose this path.

Read more about some of the initiatives and projects the Foundation supports on the following pages.

"The greatest strength of the Turbovækst learning course is that the students make enquiries completely differently from how they otherwise do in the Danish schools. Educational games and exploration enable the students to study subjects in depth, and they seem to have benefitted greatly from the course."

Kim Franck, natural science teacher at Amager Private School, who has tested the LIFE Turbovækst learning course as an interdisciplinary natural science course in physics/chemistry, biology and geography.

LIFE – experimental science education for children and adolescents

LIFE is a new large Danish non-profit learning initiative in the natural sciences funded by the Foundation. LIFE aims to set new standards for application-oriented, enquiry-based and experimental science education for children and adolescents throughout Denmark in both primary and lower-secondary schools and upper-secondary schools. All LIFE courses are based on real-life cases that support the United Nations Sustainable Development Goals and are developed in cooperation with businesses and researchers.

LIFE offers its learning courses to schools via four platforms. The teaching materials consist of a physical teaching kit (LIFE Kit) and a digital platform (MY:LIFE). To complete a learning course, school classes can visit the learning centre in Lyngby, LIFE Campus, or get a visit from the mobile laboratories established in custom-built trucks (LIFE Mobile Lab), which will travel out to schools across Denmark.

LIFE opened for schools to book and start using the first learning courses in 2020. The initiative is fully phased in when LIFE Campus opens for children and adolescents in 2021.

Junior researchers in the great outdoors

Hunting for small animals in nature is the basis of the Danish Rangers' Association Creepy Crawlies project. Through various activities, the project provides children in childcare facilities and schools with opportunities to get outside, look for creepy crawlies and explore nature. Studies show that many children do not get out to natural environments in their everyday lives. The vision of the project is to inspire children, whether living in the city or in the countryside, to investigate and explore their local natural environment and its inhabitants through exciting activities, inquisitiveness, play and learning. Creepy Crawlies targets children from 0 to 8 years and is being developed in cities, towns and villages throughout Denmark. The goals are to inspire both children and their parents to explore nature so that they want to investigate and examine the world around them and to motivate and equip early-childhood educators and teachers to initiate Creepy Crawley activities, courses and projects on their own. The Foundation has awarded a grant of DKK 17 million to the Danish Rangers' Association for the Creepy Crawlies project for 2019–2023.

The Foundation awards up to DKK 150 million annually in open competition for large and small projects promoting education and outreach in the natural sciences.

Increasing the number of skilled science teachers

The Copenhagen Honours College talent programme under University College Copenhagen annually recruits 15 particularly talented and motivated individuals studying to become science teachers. The supplementary education programme enables students to take a 2-year course equivalent to 6 months of full-time study (30 ECTS credit points) in addition to their standard programme. The supplementary programme supports the students in getting an extra scientific boost and strengthening their professional self-confidence. The students are trained in developing specific courses, participate in relevant research and development projects and focus in depth on disciplinary and interdisciplinary challenges. The overall aim of the programme is to get more extraordinarily skilled science teachers in primary school, which can stimulate the creativity, knowledge and interest of children and young people in science and technology.

The Foundation has awarded almost DKK 28 million over 5 years to University College Copenhagen for Copenhagen Honours College.

Helping Syrian refugees in Jordan

The global refugee crisis is one of the greatest current challenges. The United Nations High Commissioner for Refugees estimates that about 70 million people around the world have been driven from their homes as a result of war, persecution or conflicts.

Of these, the conflict in Syria is one of the most far-reaching humanitarian disasters in recent times. This began as demonstrations for democratic reform as part of the Arab Spring. The subsequent 9 years of armed conflict between rebel groups and the Syrian regime has left the country in ruins and forced millions of people to flee. Syrians who previously lived a well-functioning life are now refugees indefinitely.

The Foundation has decided to support especially the many children and young refugees in Jordan.

In 2019, in partnership with the Danish Refugee Council, UNICEF and the World Diabetes Foundation, the Novo Nordisk Foundation awarded DKK 165 million for three long-term projects to create better opportunities and future prospects for Syrian refugees in Jordan. The Foundation has allocated an additional DKK 40 million earmarked for Syrian refugees in Jordan for which organizations can apply in spring 2020.

The Foundation wants to implement wide-ranging initiatives that, among other elements, focus on giving refugees learning opportunities and helping them to acquire basic life skills and to become part of the labour market in Jordan, thereby improving their quality of life and future prospects.

Supporting learning and enhancing the capabilities of young refugees in Jordan is part of the Foundation's new strategy for humanitarian and development grants, which also includes efforts to combat noncommunicable diseases in selected countries in eastern Africa.

Read more about some of the projects the Foundation supports on the following pages.

"Syria's protracted crisis has put the lives of young Syrians at risk. To avoid losing an entire generation, we must carry out initiatives in education and training and develop employability among the 25,000 young people we seek to involve. We are proud to have been selected to carry out such a comprehensive project, which will be the largest privately funded project ever for the Danish Refugee Council."

Charlotte Slente, Secretary General, Danish Refugee Council.

Job market preparedness

Currently, most young Syrian refugees in Jordan lack education, and their unemployment rate is as high as 84%. In awarding a grant of DKK 120 million to the Danish Refugee Council, the Foundation wants to contribute to increasing young people's opportunities to integrate into society, participate in the labour market in Jordan and thereby improve their future prospects. The goal of the new project is to strengthen their self-sufficiency; one way this will be achieved is through education and developing skills that are in demand in the labour market.

More children to attend school

A total of 36% of Syrian refugees of school age are neither enrolled in Jordan's school system nor receive other types of education. This increases the risk of children being forced into child labour, child abuse or early marriage. The Foundation has therefore awarded more than DKK 19.9 million to the United Nations Children's Fund (UNICEF) to continue and further develop UNICEF's Makani centres that provide support for refugee children and adolescents, including helping them with reading, writing and arithmetic and tutoring for those attending school. By providing the grant, the Foundation aims to contribute to enabling more children to attend school and to reduce dropout.

Neglected non-communicable diseases

Noncommunicable diseases such as diabetes and cardiovascular diseases are given insufficient priority in relation to humanitarian crises. In awarding a grant of DKK 25 million to the World Diabetes Foundation, the Novo Nordisk Foundation wants to contribute to developing Jordan's first plan to integrate noncommunicable diseases into the overall humanitarian initiatives and to help to create global awareness of the challenges noncommunicable diseases present in humanitarian crises. The goal of the project is to reduce the burden of noncommunicable diseases, including especially diabetes and high blood pressure, among refugees and other vulnerable groups in Jordan, thereby improving their living conditions and future prospects.

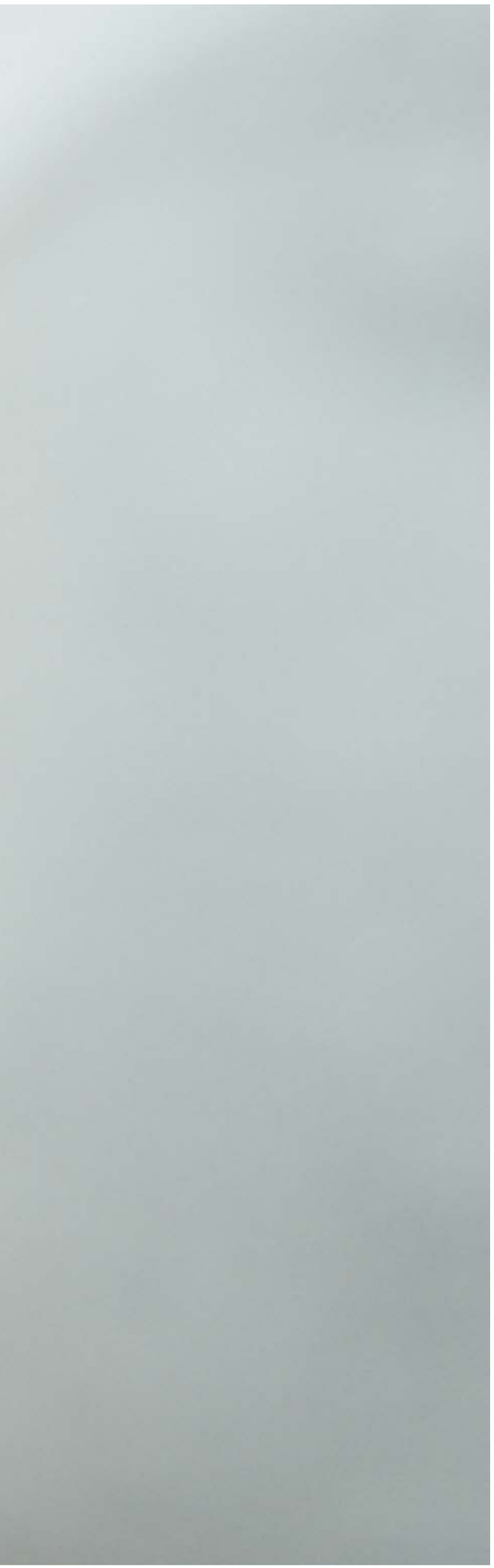
Code-of-conduct

Purpose
Novo Nordisk Foundation-affiliated persons must protect and comply with the principles covered by this Code of Conduct, and they must be able to work in a safe and nurturing working environment. To support this, the Foundation promotes an organization-based culture of integrity driven by respectful and ethical behaviour among the Novo Nordisk Foundation, its affiliated persons and the activities it funds.

Scope
This Code of Conduct applies to the Novo Nordisk Foundation (the "Foundation") and all persons associated with the Foundation, namely, members of the board of directors and employees in the Foundation, all grant recipients and personnel funded by grants from the Foundation, members of the Foundation's committees, individuals, institutions and organizations collaborating with the Foundation, the BioInnovation Institute and LIFE (hereinafter, the "Novo Nordisk Foundation-affiliated persons").

The Code of Conduct is part of the Foundation's grant terms and conditions and must be adhered to, together with the conditions in a specific grant agreement and the general terms and conditions for grants.

Read more on:
www.novonordiskfonden.dk/en/code-of-conduct/



Standards for good research practice

To be eligible for grants, applicants must comply with recognized standards for good research practice, national and international rules on the safety and rights of clinical trial patients and health volunteers, animal welfare and bribery and corruption.

Labour practice
The employees on the projects may not be discriminated against and must be treated with respect and dignity.

The employees must be paid in accordance with collective bargaining agreements, have working hours and holidays in accordance with the national rules and have the right to organize and negotiate collectively to the extent that this is standard practice or legally permitted.

Working environment
The institution hosting a project must provide a safe and healthy workplace.

Environment
The projects must minimize adverse impact on the environment to the greatest possible extent.

In case of non-compliance
If the Foundation learns that the standards have been violated, the grant recipient will be asked to respond.

If the Foundation deems that the standards have been violated, the Foundation may discontinue payments and may require the repayment of funding already disbursed. Moreover, the Foundation may decide to deny future funding.

Read more on:
www.novonordiskfonden.dk/en/about-the-foundation/standards-for-good-research-practice

Application process for grants awarded in open competition

1. Applicants submit their application through the Foundation's web-based application system.
2. The committee members individually read and score the applications on a scale from 1 to 6.
3. The committee members meet to discuss the applications (interviews can occur) and decide which applications to recommend for funding and which to reject. The Board of Directors approves grants.
4. The Foundation sends the applicant a letter accepting or rejecting the application (or invites the applicant for a second assessment round).

Rules for eligibility

Eligibility for receiving a grant
People disqualified from applying or receiving grants

A. Employees of the Foundation, Novo Holdings, Novo Nordisk, Novozymes and other companies in which the Foundation directly or indirectly has formal or actual control.

B. Members of the Board of Directors, their spouses and children residing in the family home.

C. Members of committees may, however, serve as collaborative partners or advisers on an application and may also be an applicant or co-applicant for grants under the auspices of committees other than the one or ones on which they serve.

Eligibility for assessing grant applications
Members and external assessors disqualified from assessing applications

A. Members of committees and external assessors are disqualified from assessing applications if they have a personal, professional or financial interest in the outcome of an application, including family relations such as children, siblings, cousins, grandchildren and grandparents.

B. Members who have co-published a book, article or similar with an applicant within the past five years are disqualified.

C. A committee member who is disqualified from assessing a specific application may participate in assessing the remaining applications if the number of applications is not too low.

Procedure in case of ineligibility

A. After receiving an application for assessment, committee members and external reviewers must notify the chair of the committee of any potential conflict of interest.

B. If a potential conflict of interest exists in connection with an application, the committee decides by a simple majority whether the conflict of interest disqualifies the committee member.

C. Ineligible committee members are prohibited from participating in assessing an application.

D. If a committee is not quorate or if there are serious misgivings about its ability to assess applications, the committee may decide to allow ineligible members to participate in assessing applications.

E. If a quorum cannot be achieved in the committee, the chair decides on a procedure and makes a decision in consultation with representatives from the Foundation.

Read more on:
novonordiskfonden.dk/en/about-the-foundation/rules-for-eligibility

Research funding and costs covered by NNF grants
The Novo Nordisk Foundation grants can stretch over a long period of time giving the universities certainty and maneuverability.

The Foundation supports a wide range of projects across research areas and using different instruments that are developed through ongoing dialogue with the research community. We also support activities other than research, such as teaching, infrastructure, knowledge-sharing, innovation, symposiums and maternity/paternity leave.

The Foundation covers both direct and indirect costs of the research projects, depending on the type of grant. We support short-term (2-4 years) as well as longer term (4-7 years) research programmes at universities, hospitals and other institutions, through open competition grant-giving and strategic awards. All applications are peer reviewed by experts.

The indirect costs covered by the Foundation may include bench fees, service contracts, operating and maintenance costs for equipment, IT costs, office expenses and other services. The costs must be specified and relate to the specific project.

In addition to the amount allocated to research, applicants may apply for up to 5% of this amount to cover financial management and follow-up of the grant, based on the Foundation's requirements for administering and reporting on the grant.

An example of the Foundations support for indirect research costs is our project and programme grants and our centre grants for advanced research infrastructure at Denmark's universities and hospitals. In general, the supported infrastructure facility or equipment must be made available to the general scientific environment, including from other institutions, SMEs and incubators.

Assessing the impact

The Foundation follows output, outcome and the impact of the grant recipients' projects.

Reporting
It is mandatory for all grant recipients to use the Foundation's web-based survey system for reporting on activities and results relevant to their grant. The grant recipients report annually for the duration of the project and 1–5 years after the project ends.

Impact assessment and evaluation
Based on reporting of the grant recipients, the Foundation assesses the outcome and impact of the grants. The Foundation has established a framework for how to measure its key achievements to society. It is based on 9 principles for the Foundation's contribution to society.

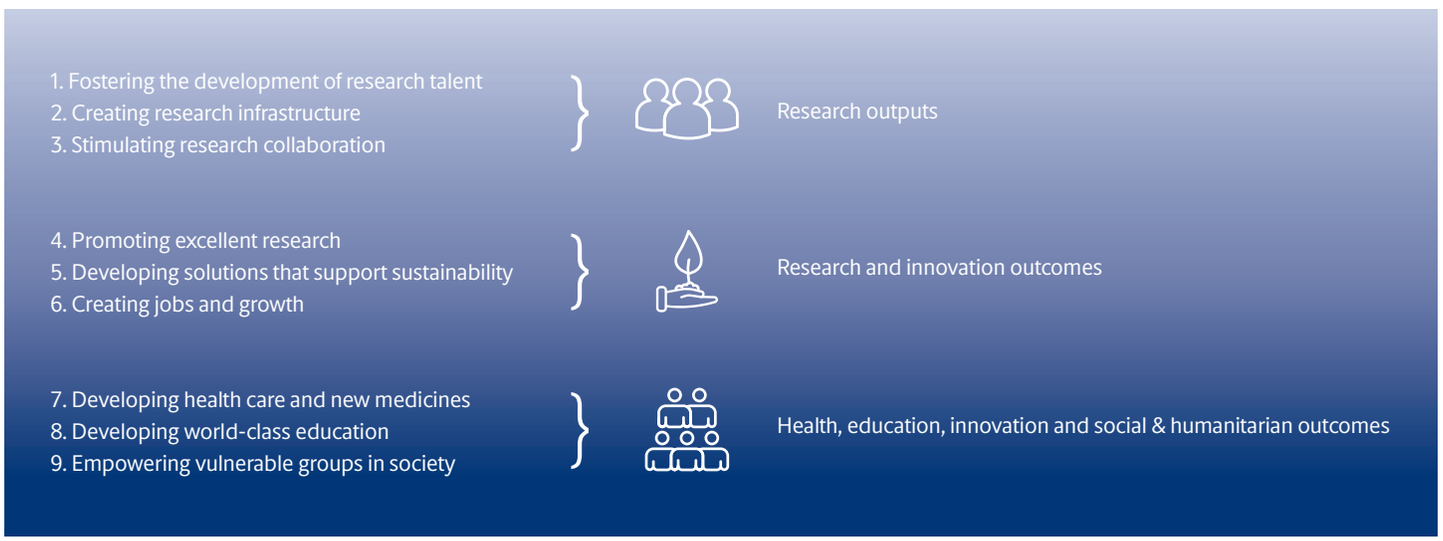
For large grants, such as research centres and hospital centres, the Foundation uses the reporting to produce an annual impact report for each centre. The annual centre report is the basis for an annual dialogue on progress between the centre leadership and the Foundation.

The Foundation uses data in evaluating types of grant and funding instruments – what works and what does not work – to support the Board in its decisions on grant policy and grant-awarding.

Finally, the Foundation provides an overview of how grant-awarding activities support the Foundation's grant-awarding objectives in its strategy and the subsequent effects on society on research, education, and health and collaboration activities between researchers and industry. The Foundation's annual impact report documents the grant recipients' overall reporting of output and outcome and their impact on society.

Read more on:
www.impact.novonordiskfonden.dk

Novo Nordisk Foundation's contribution to society



Diversity Policy for the Novo Nordisk Foundation

The Foundation's diversity policy is based on a comprehensive analysis regarding the gender distribution among committees, applicants and grantees. The share of applicants awarded a grant is equal for men and women. The Foundation continuously monitors the diversity in our activities and strives to improve the way we work.

Our belief
The Foundation believes that diversity and inclusion is key to achieving our vision to improve the lives of people and sustainability in society. Having varied perspectives and tapping into a broad talent base helps generate better ideas to solve the complex problems of a changing and increasingly diverse world. Diversity is closely linked to the core values of the Novo Nordisk Foundation. It is our overall aim to create and sustain an environment that actively embraces diversity and inclusion.

Our diversity objective
Our objective is to work proactively for diversity and inclusion in our grant-awarding activities. Therefore, the Foundation aims to:

- Ensure continued diversity in the Board of Directors, leadership and teams in the Novo Nordisk Foundation
- Secure fair and equal treatment and opportunities in all our activities
- Actively promote and emphasize diversity, openness and transparency
- Set the highest standards for equality and set new standards where necessary through our interactions with our stakeholders

Our diversity scope
This policy applies to all employees at the Novo Nordisk Foundation as well as our evaluation panels and committees. We will contribute to a development that ensures more diversity and inclusion in research, education, innovation and in society in general. The role of this policy is to describe the foundation's focus and efforts within this area, while it is not intended to replace the policies on diversity of any of our stakeholders.

Our diversity principles
The Novo Nordisk Foundation will follow international best practice and procedures, and in some cases take a lead in this work. The guiding principles are as shown in the box below.

Principle 1.
Broaden the access to global talent: We will actively work to encourage a diverse base of talent to pursue careers within research, education and innovation as well as within our commercial activities.

Principle 2.
Secure diversity of thinking: Boards, scientific expert committees, advisory bodies and the employees of the Novo Nordisk Foundation should have targets and action plans for diversity.

Principle 3.
Ensure fair processes: Irrespective of gender, nationality, cultural background, religion, age, sexual orientation etc., all applicants, employees and grant holders must always be treated and evaluated on a fair and equal basis in all processes.

Principle 4.
Promote an inclusive culture: We will formulate specific expectations not only to ourselves but also to all key stakeholders, including research institutions, to explain how they and their organization promote diversity and inclusion. The individual applicant will not need to explain this in the application process.

Committees

The Board of the Foundation has established committees to implement the grants that the Board has decided to award in support of research, symposia and honorary awards.

Biomedical and health science research applications

- **Committee on Endocrinology and Metabolism**
  Supports basic and clinical research within endocrinology and metabolism in the Nordic countries. The grant awarding was managed by the board of Nordisk Insulinlaboratorium and Nordisk Insulin Foundation until 1989.

- **Committee on Clinical and Translational Medicine**
  Supports fellowships and project grants in clinical, translational and general practice medicine research in Denmark.

- **Committee on Bioscience and Basic Biomedicine**
  Supports basic biomedicine and the natural sciences with subject matters that address biomedical issues in Denmark.

- **Committee on the Novo Nordisk Foundation Challenge Programme**
  These grants aim to develop and strengthen Denmark's research community within biomedicine and bio-technology. The focus is on in-depth research on specific challenges within annually selected research themes.
  In 2019:
  - Emerging infectious diseases

- **Committee on the Novo Nordisk Prize**
  The Prize is awarded to recognize unique medical research or other research contributions that benefit medical science.

- **Committee on Steno Research Collaboration**
  These grants target clinical research collaboration between research communities at the newly established Steno Diabetes Centers and research communities outside the Centers. The grants support clinical research, health promotion research, and education research in relation to patients and healthcare personnel.

- **Committee on Nursing Research**
  Supports projects and fellowships within nursing research in Denmark.

Life science research and industrial applications promoting sustainability

- **Committee on Biotechnology-Based Synthesis and Production Research**
  Supports project grants and postdoctoral fellowships for basic and applied research within biotechnology-based synthesis and production.

- **Committee on the Novo Nordisk Foundation Challenge Programme**
  These grants aim to develop and strengthen Denmark's research community within biomedicine and bio-technology. The focus is on in-depth research on specific challenges within annually selected research themes. In 2019:
  - Modern Plant Science – towards a sustainable world
  - How dietary factors affect the human microbiome

- **Committee on the Novozymes Prize**
  The Prize is awarded to recognize outstanding research or technology contributions that benefit the development of biotechnological science for innovative solutions.

- **Committee on International Research Leader Grants**
  Laureate Research Grants and Young Investigator Awards are aimed at promising research leaders who want to establish their research group in Denmark to carry out visionary research within biomedicine or biotechnology.

Natural and technical science research and interdisciplinarity

- **Committee on Interdisciplinary Research**
  Postdoctoral fellowships at Stanford Bio-X and the Interdisciplinary Synergy Programme grants support novel, cross-disciplinary research initiatives with high risk and high gain.

Innovation

- **Committee on Exploratory Pre-Seed Grants**
  This initiative targets the research community in the Nordic countries and aims to accelerate the commercialization of application-oriented research findings and ideas within biomedicine and biotechnology that have the potential to be turned into new diagnostic methods, therapies, medical devices and technologies.

- **BioInnovation Institute Board of Directors**
  The BII Board of Directors approves all grants and loans for the creation house programme, the proof of concept programme and the Business Acceleration Academy.

- **BioInnovation Institute, Incubator Committee**
  The BII Incubator Committee advice the BII Board of Directors in the evaluation and selection of loans and grants for the BII Creation House Programme which support early stage business start-up projects.

- **BioInnovation Institute, Proof of concept and Business Acceleration Academy**
  The BII Committee on Proof of Concept and on the Business Acceleration Academy supports projects that allows the establishment of preliminary proof of concept of ideas/ technologies in early-stage life science research projects.

Education and Outreach

- **Committee on Research in Art and Art History**
  Supports projects within art history research and fellowships in art history, art and curating for researchers affiliated with a research institution in Denmark.

- **Committee on Science Education and Outreach**
  Supports projects within natural science education, research on natural science education and natural science outreach.

- **Ad hoc Committee on Education & Outreach: Mathematics in natural science and technolog**
  The Foundation wants to strengthen the mathematics and natural science competencies of children and young people across the science, technology, engineering and mathematics (STEM) subjects and throughout the education chain.

- **Ad hoc Committee on Education & Outreach: Natural Science Communication and Debate using novel Communication Platforms**
  The Foundation wishes to contribute to engagement and interest in natural science and technology and to facilitate a qualified public debate on topics within natural science.

- **Committee on the Novo Nordisk Foundation Teaching Prizes**
  The Prizes are awarded in recognition of an extraordinary effort among early-childhood educators, primary and secondary schoolteachers and teachers at teacher colleges.

Members of committees and advisory panels

Committee on Endocrinology and Metabolism			
Title	**Members**	**Country**	**Joined (resigned)**
Professor	**Anna Christina Krook (Chair)** Department of Physiology and Pharmacology, Karolinska Institutet	Sweden	1 January 2014
Professor	**Lena Eliason** Department of Clinical Sciences, Lund University Diabetes Centre	Sweden	1 May 2018
Professor	**Mikael Rydén** Center for Clinical Metabolic Research, Karolinska Institute, Sweden and Karolinska University Hospital	Sweden	1 January 2017
Professor	**Laszlo Hegedüs** University of Southern Denmark, Denmark and Department of Endocrinology and Metabolism, Odense University Hospital	Denmark	1 January 2014
Professor	**Eystein Husebye** Department of Clinical Science, University of Bergen, Haukeland University Hospital, Bergen, Norway	Norway	1 January 2019
Professor	**Trine Bjøro** Department of Medical Biochemistry, University of Oslo, Norway and Oslo University Hospital	Norway	1 January 2010
Professor	**Lea Sistonen** Department of Biosciences, Åbo Akademi University	Finland	1 January 2010
Professor	**Mette M. Rosenkilde** Department of Neuroscience and Pharmacology, University of Copenhagen	Denmark	1 January 2009
Professor	**Taneli Raivio** Department of Physiology, Faculty of Medicine, The University of Helsinki and pediatric endocrinologist at the Children's Hospital, Helsinki University Central Hospital, Helsinki Finland	Finland	1 January 2019

Committee on Clinical and Translational Medicine			
Title	**Members**	**Country**	**Joined (resigned)**
Professor	**Lars Fugger (Chair)** Nuffield Department of Clinical Neurology, John Radcliffe Hospital, University of Oxford	United Kingdom	19 March 2013
Professor	**Jens Otto Lunde Jørgensen (Vice Chair)** Department of Endocrinology and Internal Medicine, Aarhus University Hospital	Denmark	1 October 2015
Professor	**Claus Nerlov** MRC Weatherall Institute of Molecular Medicine, John Radcliffe Hospital, University of Oxford	United Kingdom	1 January 2018
Professor	**Jan Gerstoft** University of Copenhagen, Denmark and Department of Infectious Diseases, Righshospitalet	Denmark	1 January 2017
Professor	**Jørgen Frøkiær** Department of Nuclear Medicine and PET Center, Aarhus University Hospital	Denmark	1 January 2017
Professor	**Henrik Toft Sørensen** Department of Health Research and Policy, Stanford University, USA and Aarhus University Hospital	Denmark	1 January 2017
Professor	**Lars Køber** Department of Cardiology, Heart Centre, Rigshospitalet	Denmark	1 October 2017
Professor	**Anders Juul** Consultant, Head of department, Department of Growth and Reproduction & EDMaRC, Rigshospitalet, Denmark	Denmark	1 August 2019
Professor	**Jørgen Vestbo** Division of Infection, Immunity & Respiratory Medicine, University of Manchester	Denmark	1 August 2019
Professor	**Kaare Christensen** Clinical Epidemiology, University of Southern Denmark and Odense University Hospital	Denmark	1 August 2019
Professor	**Lene Hjerrild Iversen** Department of Surgical Gastroenterology, Aarhus University Hospital, Denmark	Denmark	1 August 2019
Professor	**Gedske Daugaard** Department of Oncology, The Finsen Center, Copenhagen University Hospital, Rigshospitalet	Denmark	(30 September 2019)

Committee on Bioscience and Basic Biomedicine

Title	Member	Country	Joined (resigned)
Professor	**Birthe B. Kragelund (Chair)** Department of Biology, University of Copenhagen	Denmark	1 January 2017
Professor	**Anders Krogh** The Bioinformatics Centre, Department of Biology, University of Copenhagen	Denmark	1 August 2018
Professor	**Søren Kragh Moestrup** Department of Biomedicine, Aarhus University, Denmark and Institute of Molecular Medicine, University of Southern Denmark	Denmark	1 January 2017
Professor	**Thomas Lars Andresen** Nanotech, Department for Micro- and Nanotechnology, DTU	Denmark	1 January 2017
Professor	**Susanne Ditlevsen** Department of Mathematical Sciences, University of Copenhagen	Denmark	1 January 2017
Professor	**Ole Nørregaard Jensen** Department of Biochemistry & Molecular Biology, University of Southern Denmark	Denmark	1 January 2017
Professor	**Marja Jäättelä** Cancer Biology and Research Director, Cell Death and Metabolism Unit, Danish Cancer Society Research Center	Denmark	1 January 2017
Professor	**Jens Stougaard** Department of Molecular Biology, University of Aarhus	Denmark	1 January 2017
Professor	**Helle Waage Petersen** Department of Drug Design and Pharmacology, University of Copenhagen	Denmark	1 January 2017
Professor	**Christian Aalkjær** Department of Biomedicine, Aarhus University and Copenhagen University	Denmark	1 January 2017
Professor	**Tim Tolker-Nielsen** Department of Immunology and Microbiology, University of Copenhagen	Denmark	1 January 2017

Committee on the Novo Nordisk Foundation Challenge Programme

Emerging Infectious Diseases

Title	Member	Country	Joined (resigned)
Professor	**Giorgio Palu (Chair)** School of Medicine, Department of Molecular Medicine, University of Padova	Italy	1 January 2019
Professor	**David L. Heymann** London School of Hygiene and Tropical Medicine, London	United Kingdom	1 January 2019
Professor	**Jonathan Luke Heeney** Cambridge Infectious Diseases, University of Cambridge, UK	United Kingdom	1 January 2019
Associate Professor	**Mário Ramirez** Faculdade de Medicina da Universidade de Lisboa, Lisbon	Portugal	1 January 2019
Professor	**Andrew Edward Hemphill** Universität Bern	Switzerland	1 January 2019

Committee on the Novo Nordisk Prize			
Title	**Member**	**Country**	**Joined (resigned)**
Professor	**Jørgen Frøkiær (Chair)** Aarhus University, Denmark and Department of Nuclear Medicine and PET Center, Aarhus University Hospital	Denmark	1 May 2016
Professor	**Henrik Toft Sørensen** Department of Health Research and Policy, Stanford University, USA and Aarhus University Hospital	Denmark	1 May 2017
Professor	**Anne Tybjærg Hansen** Department of Clinical Medicine, University of Copenhagen	Denmark	1 May 2017
Professor	**Lars Fugger** Nuffield Department of Clinical Neurology, John Radcliffe Hospital, University of Oxford	United Kingdom	1 June 2013
Professor	**Marja Jäättelä** Cell Death and Metabolism Unit, Danish Cancer Society Research Center	Denmark	1 June 2013
Professor	**Thue W. Schwartz** Department of Neuroscience and Pharmacology, University of Copenhagen	Denmark	(31 May 2019)
Professor	**Liselotte Højgaard** Nuclear Medicine & PET, Rigshospitalet, and Professor of Medical Technology, Faculty of Health Sciences, University of Copenhagen	Denmark	1 June 2019
CEO	**Birgitte Nauntofte** Novo Nordisk Foundation	Denmark	1 August 2009

Committee on Steno Research Collaboration

Title	Member	Country	Joined (resigned)
Professor and Vice Rector	**Bo Ahrén (Chair)** Lund University	Sweden	1 January 2017
Professor	**Aslak Steinsbeek** Department of Public Health and Nursing, NTNU, Norwegian University of Science and Technology	Norway	1 August 2018
Professor	**Frode Vartdal** University of Oslo, Norway and Faculty of Medicine, University of Oslo	Norway	1 January 2017
Professor	**Linda Mellbin** Coronary artery disease and Coronary Care Unit, Department of Cardiology, Karolinska University Hospital	Sweden	1 January 2017
Professor	**Paul W. Franks** Department of Clinical Sciences, Lund University	Sweden	1 January 2017
Professor	**Tommy Olsson** Faculty of Medicine, Umeå University	Sweden	1 January 2017
Professor	**Per-Henrik Groop** University of Helsinki, Finland and Division of Nephrology, Helsinki University Central Hospital	Sweden	1 January 2017
Professor	**Mona Landin-Olsson** Department of Clinical Sciences	Denmark	1 January 2017

Committee on Nursing Research

Title	Member	Country	Joined (resigned)
Professor	**Kirsten Lomborg (Chair)** Department of Clinical Medicine, Aarhus University	Denmark	1 January 2014
Professor	**Erik Elgaard Sørensen** Department of Clinical Medicine, Aalborg University, Denmark and Clinical Nursing Research Unit, Aalborg University Hospital	Denmark	(8 October 2019)
Professor	**Tone Rustøen** Department of Research and Development, Emergency Department, Oslo University Hospital, Norway and Faculty of Medicine, University of Oslo	Norway	1 January 2017
Adjunct Professor	**Mary Jarden** Department of Public Health, University of Copenhagen and Center for Integrated Rehabilitation for Cancer Patients (CIRE), Rigshospitalet	Denmark	1 January 2017
Professor	**Ingrid Egerod** Faculty of Health and Medical Sciences, University of Copenhagen, Denmark and Trauma Centre, Copenhagen University Hospital, Rigshospitalet	Denmark	1 January 2014

Committee on Biotechnology based Synthesis and Production Research

Title	Member	Country	Joined (resigned)
Professor	**Henrik Callesen (Chair)** Department of Animal Science, Aarhus University	Denmark	12 April 2012
Professor	**David Robert Spring** Department of Chemistry, University of Cambridge	United Kingdom	1 January 2018
Professor	**Sara Snogerup Linse** Department of Biochemistry and Structural Biology and Department of Chemistry, Lund University	Sweden	1 January 2017
Professor and Director	**Stephen George Oliver** Department of Biochemistry, University of Cambridge, United Kingdom and Cambridge Systems Biology Centre	United Kingdom	1 January 2016
Professor	**Vincent G. H. Eijsink** Department of Chemistry, Biotechnology and Food Science, Norwegian University of Life Sciences	Norway	12 April 2012
Professor	**Merja Elisa Penttilä** VTT Technical Research Centre of Finland Ltd	Finland	12 April 2012
Professor	**Jan K. Schjørring** Department of Plant and Environmental Sciences, Faculty of Science, University of Copenhagen	Denmark	12 April 2012

Committee on the Novo Nordisk Foundation Challenge Programme			
Modern Plant Science – Towards a Sustainable World			
Title	**Member**	**Country**	**Joined (resigned)**
Professor	**Paul Christou (Chair)** Life & Medical Sciences, Universitat de Lleida	Spain	1 January 2019
Professor	**Marcel G.A Van der Heijden** University of Utrecht, the Nederlands, Agroecology and Environment, Agroscope, Schwitzerland	Switzerland	1 January 2019
Professor	**Raffaella Maria Balestrini** Institute for Sustainable Plant Protection, Italian National Research Council	Italy	1 January 2019
Professor	**Malcolm Hawkesford** Rothamsted Research	United Kingdom	1 January 2019
Professor	**Marinus J M Smulders** Plant Breeding, Wageningen Universitet	The Netherlands	1 January 2019
How Dietary Factors Affect the Human Microbiome			
Professor	**Yolanda Sanz Herranz (Chair)** Institute of Agrochemistry and Food Technology Spanish National Research Council (CSIC)	Spain	1 January 2019
Professor	**Dirk Haller** School of Life Sciences, Technical University of Munich	Germany	1 January 2019
Professor	**Vincenzo Fogliano** Dept. Agrotechnology and Food Sciences, Wageningen University and Research	The Netherlands	1 January 2019
Professor	**Wendy Russell** The Rowett Institute, University of Aberdeen	United Kingdom	1 January 2019
Associate Professor	**Hermie J.M. Harmsen** Department of Medical Microbiology, University of Groningen	The Netherlands	1 January 2019

Committee on the Novozymes Prize

Title	Member	Country	Joined (resigned)
Professor and Honorary Professor	**Bernard Henrissat (Chair)** Department of Glycogenomics, AFMB lab, University of Marseille, France and Department of Cellular and Molecular Medicine, University of Copenhagen	Denmark	1 January 2018
Professor	**Gunnar von Heijne** Department of Biochemistry and Biophysics, Stockholm University	Sweden	1 October 2018
Professor and CEO at BII	**Jens Nielsen** Chalmers University of Technology	Sweden	1 May 2017
Professor	**Johanna Buchert** Luke Natural Resources Institute Finland	Finland	1 January 2019
Professor	**Henrik Callesen** Department of Animal Science, Aarhus University	Denmark	1 October 2014
Professor	**Michael Broberg Palmgren** Department of Plant and Environmental Sciences, University of Copenhagen	Denmark	1 October 2014
CEO	**Birgitte Nauntofte** Novo Nordisk Foundation	Denmark	1 October 2014

Committee on International Research Leader Grants

Title	Member	Country	Joined (resigned)
Professor	**Lars Fugger (Chair)** Nuffield Department of Clinical Neurosciences, John Radcliffe Hospital, University of Oxford	United Kingdom	9 May 2012
Professor	**Vincent G. H. Eijsink** Department of Chemistry, Biotechnology and Food Science, Norwegian University of Life Sciences	Norway	1 January 2018
Professor	**Jens Otto Lunde Jørgensen** Department of Endocrinology and Internal Medicine, Aarhus University Hospital	Denmark	1 January 2017
Professor	**Søren Kragh Moestrup** Department of Biomedicine, Aarhus University, Denmark and Institute of Molecular Medicine, University of Southern Denmark	Denmark	1 January 2017
Professor	**Anna Christina Krook** Department of Physiology and Pharmacology, Karolinska Institutet	Sweden	1 January 2016
Professor	**Mette Marie Rosenkilde** Department of Neuroscience and Pharmacology, University of Copenhagen	Denmark	1 January 2015
Professor	**Henrik Callesen** Department of Animal Science, Aarhus University, Denmark	Denmark	9 May 2012

Committee on Interdisciplinary Research			
Title	**Member**	**Country**	**Joined (resigned)**
Professor	**Lars Fugger (Chair)** Nuffield Department of Clinical Neurosciences, John Radcliffe Hospital, University of Oxford	United Kingdom	1 June 2014
Professor	**Jens Otto Lunde Jørgensen** Department of Endocrinology and Internal Medicine, Aarhu**s** University Hospital	Denmark	1 January 2018
Professor	**Ole Nørregaard Jensen** Department of Biochemistry & Molecular Biology, University of Southern Denmark	Denmark	1 January 2017
Professor	**Thomas Lars Andresen** Department for Micro- and Nanotechnology, Technical University of Denmark	Denmark	1 January 2017
Professor	**Anna Christina Krook** Department of Physiology and Pharmacology, Karolinska Instituttet	Sweden	1 January 2016
Professor	**Ralf Metzler** Theoretical Physics, Institute for Physics & Astronomy, University of Potsdam, Germany	Germany	1 April 2019
Professor	**Asger Mortensen** SDU NanoOptics, Southern University of Denmark, Denmark	Denmark	1 April 2019
Teacher	**Sine Lo Svenningsen** Section for Biomolecular Sciences, Department of Biology, University of Copenhagen, Denmark	Denmark	1 April 2019
Professor	**Mette Marie Rosenkilde** Department of Neuroscience and Pharmacology, University of Copenhagen	Denmark	(30 April 2019)
Professor	**Henrik Callesen** Department of Animal Science, Aarhus University	Denmark	(30 April 2019)
Professor	**Jan K. Schjørring** Department of Plant and Environmental Sciences, University of Copenhagen	Denmark	(30 April 2019)

Committee on Exploratory Pre-seed Grants

Title	Member	Country	Joined (resigned)
Professor	**Lars Fugger (Chair)** Nuffield Department of Clinical Neurosciences, John Radcliffe Hospital, University of Oxford	United Kingdom	3 May 2013
Senior Associate	**Camilla Petrycher Hansen** Novo Seeds, Novo Holdings A/S	Denmark	1 September 2018
Principal	**Morten Graugaard Døssing** Novo Seeds, Novo Holdings A/S	Denmark	1 January 2017
Senior Associate	**Diana Muftic** Novo Seeds, Novo Holdings A/S	Denmark	1 January 2017
Professor	**Jakob Eyvind Bardram** Department of Mathematics and Computer Science, Technical University of Denmark, Lyngby, Denmark	Denmark	1 January 2019
Professor	**Simon Glerup** PhD in molecular biology,Associate Professor, Dept. of Biomedicine, Aarhus University, Denmark	Denmark	1 January 2019
Professor	**Ole Thastrup** Department of Drug Design and Pharmacology (SUND)., University of Copenhagen, Denmark	Denmark	1 January 2019
Professor	**Tue W. Schwartz** Institute of Molecular Medicine, University of Southern Denmark, Denmark and Department of Neuroscience and Pharmacology, University of Copenhagen	Denmark	(31 December 2018)

BioInnovation Institute Board of Directors

Title	Member	Country	Joined (resigned)
Board member	**Sten Scheibye (Chair)**	Denmark	1 July 2018
Professor	**Bo Ahrén (Vice Chair)** Lund University	Sweden	1 July 2018
CEO	**Hans Schambye** Galecto, Biotech AB	Denmark	1 July 2018
CEO	**Martin Bonde** Vaccibody	Denmark	1 July 2018
PhD	**Robert Urban** Board member	United States	1 February 2019
EVP	**Thomas Schäfer** Chr. Hansen A/S	Denmark	1 July 2018
CEO	**Jens Nielsen** BioInnovation Institute	Denmark	(31 January 2019)

BioInnovation Institute, Incubator Committee			
Title	**Member**	**Country**	**Joined (resigned)**
Board member	**Chris Newton (Chair)** Inventia Pharma	United Kingdom	1 September 2018
CEO	**Anker Lundemose** MISSION Therapeutics	Denmark	1 September 2018
Senior Partner	**Sten Verland** Sunstone Capital	Denmark	1 September 2018
Partner	**Anne Osdoit** Sofinnova Partners	France	1 September 2018
Vice president	**Finn Ketler** Wound Care at Biotech Pharmacon ASA	Denmark	1 September 2018
Vice president	**Sebastian Søderberg** Novozymes A/S	Denmark	1 September 2018
Director	**Neil Goldsmith** BaseLaunch	Denmark	1 September 2018
Partner	**Emmanuelle Coutanceau** Novo Holdings A/S, Novo Seeds	Denmark	1 September 2018

BioInnovation Institute, Proof of concept and Business Acceleration Academy			
Title	**Member**	**Country**	**Joined (resigned)**
Professor	**Mette Marie Rosenkilde (Chair)** Department of Neuroscience and Pharmacology, University of Copenhagen	Denmark	1 September 2018
Director	**Poul Nissen** DANDRITE, Aarhus University	Denmark	1 September 2018
Professor	**Thomas Helleday** University of Sheffield	United Kingdom	(1 January 2019)
CSO	**Henrik Harboe** Innobooster	Denmark	1 September 2018
Partner	**Peter Birk** Accelerace Management A/S	Denmark	1 September 2018
CTO	**Charlotte Vedel** Lactobio	Denmark	1 September 2018
Head	**Niels-Henrik von Holstein-Rathlou** Novo Nordisk Fonden	Denmark	1 September 2018
Senior Associate	**Jeroen Bakker** Novo Holdings A/S, Novo Seed	Denmark	1 September 2018

Committee on Research in Art and Art History

Title	Member	Country	Joined (resigned)
Professor	**Jacob Wamberg (chair)** School of Communication and Culture, Aarhus University	Denmark	1 January 2012
Associate Professor	**Maria Fabricius Hansen** Department of Arts and Cultural Studies, University of Copenhagen	Denmark	1 January 2016
Senior Research Curator	**Marianne Torp** The Collection & Research Department, National Gallery of Denmark	Denmark	1 January 2016
Adjunct Professor	**Mads Øvlisen** Corporate Social Responsibility, Copenhagen Business School, Denmark and Mediation and Complaints-Handling Institution for Responsible Business Conduct	Denmark	1 January 2016
Professor	**Ulla Gertrud Maria Sandqvist** Malmö Art Academy, Sweden	Sweden	1 January 2019
Associate Professor	**Øystein Sjåstad** Department of Philosophy, Classics, History of Art and Idea, University of Oslo, Norway	Norway	1 January 2019

Committee on Science Education and Outreach

Title	Member	Country	Joined (resigned)
Principal	**Hanne Hautop (Chair)** Rosborg Gymnasium & HF	Denmark	1 July 2018
CEO	**Desiré Christoffersen** Skive College	Denmark	1 July 2018
Professor	**Anja Cetti Andersen** Niels Bohr Institute, University of Copenhagen	Denmark	1 July 2018
Associate Professor	**Jan Alexis Nielsen** Department of Science Education, University of Copenhagen	Denmark	1 July 2018
Associate Professor	**Jan Sølberg** Department of Science Education, University of Copenhagen	Denmark	1 July 2018
Associate Professor	**Thomas Dyreborg Andersen** University College Copenhagen	Denmark	(30 September 2019)
Professor	**Lars Brian Krogh** VIA University College Aarhus	Denmark	1 October 2019
CEO	**Hanne Serine Finstad** Science Factory	Norway	1 July 2018
Associate Professor	**Sonja Merethe Mork** The Norwegian Centre for Science Education, University of Oslo	Norway	1 July 2018

Ad hoc Committee on Education & Outreach: Mathematics in natural science and technology

Theme 1, 2019: Mathematics in natural science and technology

Title	Member	Country	Joined (resigned)
Principal	**Hanne Hautop (Chair)** Rosborg Gymnasium	Denmark	1 January 2019
Associate Professor	**Professor Jan Alexis Nielsen** University of Copenhagen	Denmark	1 January 2019
Associate lecturer	**Thomas Dyreborg Andersen** University College Copenhagen	United Kingdom	1 January 2019
Upper secondary school teacher	**Kim Vedel Pedersen** Nørre Gymnasium	Denmark	1 January 2019
Primary and lower secondary school teacher	**Gitte Bailey Hass** Ølstykke Distriktsskole - Toftehøj afdeling	Denmark	1 January 2019

Theme 2, 2019: Natural science communication and debate using novel communication platforms

Professor	**Anja Cetti Andersen (Chair)** University of Copenhagen	Denmark	1 January 2019
Professor	**Minik Thorleif Rosing** University of Copenhagen	Denmark	1 January 2019
Author and editor	**Peter Hesseldahl** Ugebrevet Mandag Morgen	Denmark	1 January 2019
Former director of corporate affairs, NNAS and senior advisor	**Mike Rulis** mikerulis.com	Denmark	1 January 2019
Journalist	**Gunver Lystbæk Vestergård** Weekendavisen	Denmark	1 January 2019

Committee on the Novo Nordisk Foundation Teaching Prizes

Title	Member	Country	Joined (resigned)
Professor and Director	**Claus Michelsen (Chair)** Denmark and Laboratory for Coherent Learning and Education, University of Southern Denmark	Denmark	1 January 2018
Associate Professor	**Lars Brian Krogh** VIA University College	Denmark	(30 September 2019)
Professor	**Nynne Afzelius** Gefion Gymnasium	Denmark	1 October 2019
Associate Professor	**Thorleif Frøkjær** University College Copenhagen	Denmark	1 January 2018
Associate Professor	**Jan Sølberg** Department of Science Education, University of Copenhagen	Denmark	1 January 2018
Associate Professor	**Hanne Møller Andersen** Aalborg katedralskole	Denmark	1 January 2018
Teacher	**Marianne Johansson** Nordsjællands Grundskole og Gymnasium	Denmark	1 January 2019

The Novo Nordisk Foundation's grant-awarding activities lead to actions that support 14 of the 17 UN Sustainable Development Goals (SDGs). Most grants have relevance for up to three SDGs each.

SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY
50 # grants
19.5 DKK million

6 CLEAN WATER AND SANITATION
22 # grants
4.3 DKK million

12 RESPONSIBLE CONSUMPTION AND PRODUCTION
52 # grants
63.7 DKK million

2 ZERO HUNGER
49 # grants
16.7 DKK million

8 DECENT WORK AND ECONOMIC GROWTH
237 # grants
679.7 DKK million

13 CLIMATE ACTION
20 # grants
176.8 DKK million

3 GOOD HEALTH AND WELL-BEING
372 # grants
522.8 DKK million

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
541 # grants
1654.3 DKK million

15 LIFE ON LAND
21 # grants
17.6 DKK million

4 QUALITY EDUCATION
325 # grants
506.3 DKK million

10 REDUCED INEQUALITIES
49 # grants
95.2 DKK million

17 PARTNERSHIPS FOR THE GOALS
58 # grants
1133.1 DKK million

5 GENDER EQUALITY
4 # grants
1.2 DKK million

11 SUSTAINABLE CITIES AND COMMUNITIES
7 # grants
1.0 DKK million

Grants and payments in 2019

Classification of grants and payments in 2019 according to the main scientific orientation of grant-awarding

Main scientific orientation	Field of science & technology (OECD)	Amount awarded (DKK million)	Share of awarded amount	Payouts (DKK million)	Share of total payout	# of grants in 2019
Scientific purpose						
Public health medicine and public health	Medical and health science	0.0	0%	842.0	23%	0
Clinical medicine	Medical and health science	1003.0	21%	776.6	22%	204
Other health science	Medical and health science	130.6	3%	506.8	14%	71
Basic medicine	Medical and health science	2028.5	41%	310.8	9%	112
Medical biotechnology	Medical and health science	154.5	3%	236.2	7%	18
Biochemistry	Natural science	0.0	0%	202.4	6%	0
Agricultural biotechnology	Agricultural science	517.6	11%	95.4	3%	8
Other natural science	Natural science	153.9	3%	59.7	2%	26
Industrial biotechnology	Engineering and technology	156.3	3%	42.8	1%	31
Art and architectural sciences	Humanities	32.2	1%	31.8	1%	20
Geology and physical geography	Earth and related environmental sciences	0.0	0%	25.9	1%	0
Economics and business	Social science	11.3	0+%	18.5	1%	1
Physics (incl. Biophysics)	Natural science	0.0	0%	15.4	0+%	0
Interdisciplinary science	N/A	94.5	2%	12.3	0+%	14
Biology	Natural science	0.0	0%	11.3	0+%	0
Educational science	Social science	34.9	1%	5.9	0+%	6
Pharmaceutical science, Pharmacology and Medicinal chemistry	Medical and health science	0.0	0%	4.2	0+%	0
Other purposes	Other scientific purposes	0.0	0%	2.2	0+%	0
Other social science	Social science	0.0	0%	1.0	0+%	0
Total payout for scientific purposes:		**4317.4**		**3201.2**	**89%**	**511**
Non-scientific purposes						
Non-scientific purposes	Educational and outreach	353.6	7%	322.3	9%	55
Non-scientific purposes	International humanitarian purposes	208.0	4%	45.6	1%	52
Non-scientific purposes	Social purposes	12.2	0%	32.8	1%	4
Non-scientific purposes	Other purposes	1.0	0%	4.0	0+%	1
Total payout for non-scientific purposes:		**574.9**	**12%**	**404.7**	**11%**	**112**
Grand Total		**4892.2**	**100%**	**3605.9**	**100%**	**623**

Source: Novo Nordisk Foundation - Annual statistics reporting to Statistics Denmark.

Classification of grants and amount awarded in 2019 according to NNF grant-giving areas

Biomed			
Grant type	**Grant instrument**	**Number of grants**	**Amount awarded (DKK M)**
Conferences, Symposia and Workshops	Challenge programme and symposium	1	0.3
	Novo Nordisk Foundation Symposia	1	0.4
	Sponsorship	2	1.0
	Symposium for the International Common Disease Alliance	1	0.2
	The Novo Nordisk Foundation Symposia	26	7.1
Infrastructure	Nationalt Genom Center	1	890.0
	Research Infrastructure	6	75.0
Investigator grant	Ascending Investigator Grant	4	38.5
	Clinical Ascending Investigator	4	34.3
	Clinical Emerging Investigator	3	20.3
	Distinguished Investigator Grant	11	103.7
	Excellence Emerging Investigator Grant	4	39.1
	Hallas-Møller scholarship	8	75.1
	Laureate Research Grants	3	150.0
	Research Stipends in General Pratice	2	3.2
	Young investigator award	3	74.9
Network	Copenhagen Bioscience Conferences	3	62.4
PhD scholarship	PhD Scholarships in Nursing Research	3	5.4
	Research Education: Copenhagen Bioscience PhD Programme	1	2.8
	Research Education: Copenhagen Bioscience PhD Programme - CBMR and DanStem	2	16.8
Postdoctoral scholarship	Postdoctoral fellowships for Research Abroad	10	39.4
	Postdoctoral fellowships in Nursing Research	3	5.4
Pre-graduate scholarship	Scholarship	29	3.7
Prizes and prize symposium	Hagedorn Prisen 2020	4	3.4
	Jacobæusprisen 2019	2	1.7
	Marie og August Krogh Prisen 2019 + 2020	2	3.0
	Novo Nordisk Foundation Lecture	2	0.7
	Novo Nordisk Prize and Prize Symposium (2019 and 2020)	5	7.0
	Strategic award	1	0.2
Programme	Challenge programme and symposium	3	179.9
	Investigator Initiated Clinical Trials (IICT)	11	80.0
	Nursing Research Programme	1	7.5
	Synthetic data - a safe and innovative way of using health data	1	7.5
	Tandem Programme	3	35.3
	Translational Research at Danish Center for Particle Therapy (DCPT)	1	26.0
Project	Endocrinology and Metabolism - Nordic Region	49	80.0
	Bioscience and Basic Biomedicine	46	83.0
	Clinical and Translational Medicine	24	56.7
	Nursing Research	9	3.0
	Surgical Research	9	20.0

Biotech			
Grant type	**Grant instrument**	**Number of grants**	**Amount awarded (DKK M)**
Conferences, Symposia and Workshops	Sponsorship	2	1.9
Investigator grant	Ascending Investigator Grant	3	30.0
	Distinguished Investigator Grant	3	29.1
	Emerging Investigator Grant	4	39.8
PhD scholarship	Research Education: Copenhagen Bioscience PhD Programme - CFB	2	12.2
Postdoctoral scholarship	Postdoctoral fellowship within for Biotechnology-based synthesis and production research	8	14.5
Prizes and prize symposium	Novozymes Prize and Prize Symposium (2019 and 2020)	4	7.0
Programme	Challenge programme and symposium	2	120.0
	Collaborative Crop Resiliency Programme (CCRP)	4	325.5
	Professorship in Glycoengineering and Innovation at DTU Bioengineering	1	10.0
	Strategic award	1	62.5
Project	Biotechnology-based synthesis & production research	16	45.0
Support	Strategic award	1	1.0

Nat-Tech			
Grant type	**Grant instrument**	**Number of grants**	**Amount awarded (DKK M)**
Cluster centre	Cluster Centre: Centre for Protein Research	1	700.0
Infrastructure	Proteomics Research Infrastructure	1	100.0
PhD scholarship	Research Education: Copenhagen Bioscience PhD Programme - CPR	1	10.5
Postdoctoral scholarship	Visiting Scholar / Visiting Postdoc Fellowships at Stanford Bio-X	1	4.0
Programme	Exploratory Interdisciplinary Synergy Programme	10	48.1
	Interdisciplinary Synergy Programme	3	44.9

Patient care			
Grant type	**Grant instrument**	**Number of grants**	**Amount awarded (DKK M)**
Conferences, Symposia and Workshops	Sponsorship	1	0.2
Infrastructure	A new Danish diabetes register	1	3.2
Prizes and prize symposium	EASD-Novo Nordisk Foundation Diabetes Prize for Excellence	2	6.0
	EFSD/Novo Nordisk Foundation Future Leaders Awards	3	14.9
	Strategic award	1	6.0
Programme	Professorship in the physiology of gut peptides	1	15.0
Project	Steno Collaborative Grants	8	50.0
	Strategic award	1	0.8

Education & Outreach

Grant type	Grant instrument	Number of grants	Amount awarded (DKK M)
Conferences, Symposia and Workshops	Common vision for the Danish Universities	1	0.5
Education Programme	Strategic award	1	9.2
Investigator grant	Art History Research	2	8.0
Other	Education programme	1	15.0
	Royal Run 2020	1	2.5
PhD scholarship	Mads Øvlisen PhD Scholarship	5	9.9
Postdoctoral scholarship	Mads Øvlisen Postdoctoral Fellowship	4	6.0
Prizes and prize symposium	Teaching prizes	9	2.0
Programme	Science Capital among Children and Young People in Denmark	1	10.7
	The Impact of Inequality on Growth, Human Development and Governance	1	11.3
	Visiting Professorship in Art & Art History	1	0.7
Project	Art History Research	7	2.0
	Mathematics in Natural Science and Technology	16	45.0
	Natural Science Communication and Debate using Novel Communication Platforms	10	30.0
	Natural Science Education and Outreach	31	75.0
Support	Novo Nordisk Foundation Constructive Fellowships	1	6.0
Education Programme	LIFE: Learning. Ideas. Fascination. Experiments	2	213.6

Social & Humanitarian

Grant type	Grant instrument	Number of grants	Amount awarded (DKK M)
Humanitarian	Acute humanitarian	43	34.5
	Partnership with Danish Refugee Council (DRC)	1	120.0
	Partnership with UNICEF Danmark	1	20.0
	Partnership with World Diabetes Foundation	1	25.0
	Novo Nordisk Haemophilia Foundation	1	0.1
	Eir Org	1	1.0
	Danmarks Indsamling 2019 & 2020	2	5.0
	PlanBørnefonden	1	2.0
Social	Healthy Weight Alliance	1	5.2
	Social projects	2	4.5

Innovation

Grant type	Grant instrument	Number of grants	Amount awarded (DKK M)
Conferences, Symposia and Workshops	iGem sponsorship (UCPH and DTU)	2	0.4
	Sponsorship	1	4.5
	TechBBQ	1	4.5
Project	Exploratory Pre-seed grants (XPS)	29	14.5
	Pre-seed grants	11	38.5
Support	Business Acceleration Academy (BII)	12	3.0
	Creation House (BII)	7	69.0
	Creation House - Fast Track (BII)	3	30.0
	Development Projects (BII)	2	36.0
	Incubator Program (BII)	0	0.0
	Proof of Concept Program (BII)	16	15.0
Other	BioInnovation Institute (BII)	1	67.1

The Grant Report 2019 is part of the Novo Nordisk Foundation Group's report to comply with Section §77 of the Danish Financial Statements Act.

The Novo Nordisk Foundation is subject to the Act on Commercial Foundations, and the Danish Business Authority therefore supervises the Foundation. In addition, the Foundation must comply with the recommendations of the Committee on Good Foundation Governance.

The Foundation organizes its commercial and grant-awarding activities separately.

- The Novo Nordisk Foundation is responsible for awarding grants, and the Foundation's Board decides the strategy for the grants and which grants to award.
- Novo Holdings A/S manages the commercial activities within the overall financial strategy set by the Foundation's Board, which has also laid down the Charter for the Novo Nordisk Foundation Group. Through its ownership of Novo Holdings A/S, the Foundation's Board approves the annual report of Novo Holdings A/S' and the appointment of members to its Board.

The Foundation funds its grants from income that primarily comprises dividends from Novo Holdings A/S. The Foundation's Board ensures reasonable consolidation through suitable appropriation of funds, possibly in Novo Holdings A/S. This is to enable the Foundation to participate as necessary in future capital increases of Novo Nordisk A/S and Novozymes A/S or other companies in which Novo Holdings A/S has a substantial ownership stake.

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