

RESEARCH STRATEGY 2024

BACKGROUND

Development of Heart Lung Research

The vision of the Swedish Heart Lung Foundation is "A world free from heart and lung diseases."

The mission of the Swedish Heart Lung Foundation (HLF) is to raise funds and distribute them for high-quality heart and lung research that leads to improved diagnosis, treatment, and care, providing current knowledge for a healthier lifestyle. The foundation supports research aimed at giving more people a longer and healthier life and actively works to increase awareness of the importance of research.

The Swedish Heart Lung Foundation was established in 1904 when tuberculosis was widespread and was the most common cause of death in Sweden. Since its inception, the foundation has considered research a central tool in the fight against major public health issues related to the heart and lungs. Essentially, everything we know about risk factors, diagnostic methods, medical technology, care, and treatment is based on solid research.

Cardiovascular research has experienced exceptional success in recent decades. For instance, the mortality rate from heart attacks has more than halved in Sweden in just 15 years. The risk of recurrent cardiovascular events after an acute episode has significantly decreased.

The positive development is due to changing lifestyle patterns, but also to increasingly better treatments both acutely and for secondary prevention. Balloon dilation in acute heart attacks, antiplatelet medications, and a more effective treatment of cholesterol and high blood pressure are some examples.

Even within the field of Pulmonary medicine, there has been significant improvement in diagnosing and treating patients with asthma in recent years. This has resulted in a better quality of life for children and adults with asthma. Knowledge about risk factors and the diagnosis of chronic obstructive pulmonary disease (COPD) has markedly increased, leading to improved diagnosis and follow-up care for these patients.

The advancements, grounded in solid research, have collectively had a significant impact on overall mortality, quality of life, and life expectancy.

Financing of Cardiovascular, and Lung Research in Sweden

The Heart Lung Foundation has long been the largest independent funder of research in the field of Cardiovascular, and lung diseases in Sweden. A significant portion of the independent research in the area is funded wholly or partially by the foundation.

Since 1980, the Heart Lung Foundation has distributed an estimated 4.4 billion Swedish kronor for research. Most of the annual allocation is distributed in the form of project grants for essential research projects in the field of Cardiovascular, and lung diseases.

The Heart Lung Foundation's grant also contributes to primarily clinically active researchers having time to conduct research, fostering an environment where research with clinical relevance can thrive.

Research needs

Cardiovascular disease continues to stand as the foremost cause of mortality in our society. Additionally, around two million people, or 20 percent of the population in Sweden, are currently living with some form of cardiovascular disease. The fact that more people are living with chronic conditions is partly a result of the success in managing acute conditions such as heart attacks and strokes. Lung diseases are also highly prevalent – approximately 1.3 million Swedes are estimated to be living with lung diseases. Globally, over a million people die from tuberculosis, where multidrug resistance is increasing at an alarming rate in our vicinity.

Against this backdrop, research must continue with clarity. Here are some examples of important overarching challenges where research can contribute to solutions:

- An increasing number of elderly individuals with chronic heart and lung diseases, such as heart failure and COPD, require new types of care and treatment.
- There is much evidence suggesting that significant parts of the positive developments in the cardiovascular field may be on the verge of reversing, given the substantial recent changes in our lifestyle patterns. Sedentary behavior, obesity, and diabetes – all risk factors for cardiovascular diseases – are currently on the rise in society. Over half of the population in Sweden is living with obesity or overweight.
- Diagnosis methods and treatments traditionally follow certain patterns, and patients are often grouped in a simplified and unnuanced manner. Recent research has highlighted the need to identify and characterize subgroups of patients due to partially different disease mechanisms within these subgroups. This can have significant implications for determining the most effective treatment. This is evident in umbrella diagnoses such as asthma and COPD. A persistent medical challenge is that currently, most medications used in COPD were originally developed for asthma, where they show good efficacy. This likely explains the inadequate effectiveness of these medications specifically in COPD, emphasizing the need for new research into the mechanisms behind COPD that could serve as targets for new treatments.
- Large disparities in heart and lung health persist in society.
- New diseases with a strong connection to heart and lung conditions, such as Covid-19, pose new challenges. We must be prepared for new pandemics where airborne infections are a serious threat, causing secondary diseases.

The Heart Lung Foundation aims to encourage research across the entire cardiovascular and lung fields. The foundation must provide support that caters to both new, young promising researchers and established, world-leading research groups. However, the supported research must be of high quality and have the potential to contribute to medical advancements. The Heart Lung Foundation strives to introduce new forms of support that align with the developments in society.

The Heart Lung Foundation aims to meet the needs of researchers by offering a broad and well-thought-out program of support. This provides us with the conditions to support the best cardiovascular and Lung researchers in Sweden, thereby creating favorable conditions for successful research.

RESEARCH STRATEGY

What we want to contribute to – two focuses

The vision of the Heart Lung Foundation is a world free from heart and lung diseases. To achieve this vision, we collect and distribute funds for selected heart and lung research.

Research leads to improved diagnostics, treatment, care, and increased knowledge about the causes of diseases and a healthier lifestyle. We support research that saves lives and provides more people with a longer and healthier life. We aim to provide researchers at all career stages with support and optimal conditions for their work. Additionally, we actively work to increase awareness of the importance of research.

It is also possible to break down the vision into more concrete goals for what heart and lung research should achieve. We have formulated several goals based on the perspectives of patient benefit and research excellence:

Patient Benefit:

- Increase knowledge about who is at risk of being affected – and why. We strive to minimize the risk of developing Cardiovascular, and lung disease.
- Increase knowledge about disease mechanisms and diagnostics and develop new treatment modalities.
- Prolong the survival and improve the quality of life for patients with Cardiovascular, and lung disease.

Excellent Cardiovascular, and lung research

- Support high-quality Swedish research and create the best conditions for researchers at all stages of their careers.
- High awareness of and trust in research funded by HLF and its results.



How – main principles for the highest quality and sustainability

Support for research of the highest scientific quality within cardiovascular and Lung research.

BEST RESEARCH QUALITY The Heart Lung Foundation provides grants for the best research. This is done by announcing funds for research applications in an open competition, where the best research ideas and projects are compared and evaluated against each other. The Heart Lung Foundation invests in research judged to have the best potential for success and that can truly benefit the patients.

CLINICALLY RELEVANT RESEARCH The Heart Lung Foundation primarily invests in research assessed to benefit patients and society in the foreseeable future. The foundation defines clinically relevant research as projects rooted in pressing clinical questions and illuminated through studies on humans, human material, databases, registries, and, in some cases, experimental models. The results of the studies are expected to have significant implications in the fight against cardiovascular and lung diseases.

Heart Lung Foundation has not decided on any allocation among different research directions and disease areas but lets the quality requirement for applications guide the outcome.

The supported overarching research directions include:

- **Basic research:** Early, hypothesis-generating research. The primary goal is to increase theoretical and mechanistic understanding of disease processes. Support for basic research can be provided if it is based on clinical issues or if the results could be of significance for clinical practice in the foreseeable future.
- **Translational Research** – Research primarily focused on disease mechanisms and new treatments where the results are expected to be transferred to clinical research to lead to patient benefits.
- **Clinical and Epidemiological Research** – Research based on patients, where aspects such as disease prevalence, treatment outcomes, and prognosis are studied. This also includes registry research.
- **Prevention Research** – Involves studying the possibilities for preventing the onset of a disease in a healthy individual (primary prevention) or avoiding the worsening of a disease condition (secondary prevention).
- **Nursing Research** – Nursing research primarily refers to patient-centered research with a focus on care and rehabilitation.

The foundation annually monitors the investment distribution across various research directions. The outcomes and developments are discussed in both the research council and the board.

INITIATED RESEARCH The Heart Lung Foundation believes in independent research, where researchers define their ideas and projects, which are then evaluated by the foundation's Research Council. Statistics for defined research areas are annually monitored, and the results are discussed by the Research Council and the board.

PATIENT PERSPECTIVE The Heart Lung Foundation strives for increased patient involvement to better understand the research needs. As a first step, this will be achieved through enhanced collaboration with patient organizations.

Sustainability – We contribute to the UN’s global goals through research support with active communication and advocacy efforts.

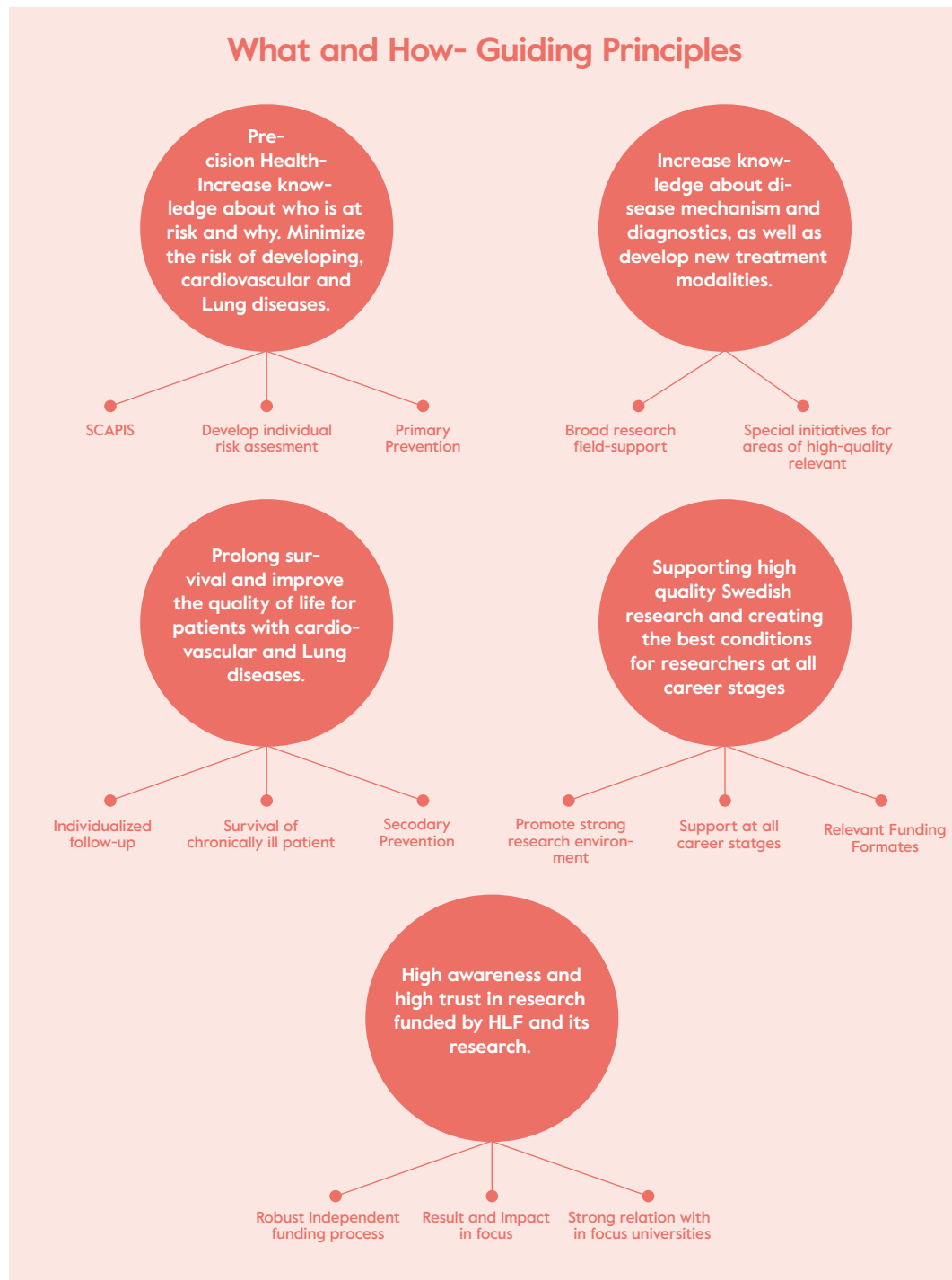
The Heart Lung Foundation works towards sustainable development throughout its operations. Agenda 2030 reinforces the ambition to reduce deaths from non-communicable diseases while recognizing good health and well-being as fundamental prerequisites for sustainable societal development. Achieving this requires conditions and efforts that align with several other areas in Agenda 2030, including tobacco use, air pollution, overweight and obesity, physical activity, sustainable and healthy food production, reducing inequality, gender equality, infrastructure, and sustainable cities. Agenda 2030 also aims for a global halt to the spread of tuberculosis.

Research, healthcare, and prevention are areas that the Heart Lung Foundation works with and are crucial building blocks in the effort toward sustainable development. The work on the research strategy has chosen to focus on three of the UN’s Global Goals which we believe the Heart Lung Foundation, through our activities, has the greatest opportunity to contribute.

- **Goal 3 Good Health and Well-being** – Specifically target 3.4, through preventive efforts and treatment, reduce the number of premature deaths from non-communicable diseases and tuberculosis, as well as promote mental health and well-being. Research leads to improved diagnosis, treatment, and care, as well as knowledge of preventive measures against diseases.
- **Goal 5 Gender Equality** – We consistently work to highlight and counteract structural issues that may lead to gender or diversity-related challenges.
- **Goal 10 Reduced Inequality** – We provide research results demonstrating how lifestyle habits affect the conditions for living a healthy life. We raise awareness about health inequalities related to lifestyle, for example, based on SCAPIS results.

How – Strategies for patient benefit and research excellence

Five main strategies and 14 sub-strategies have been identified to guide the Heart Lung Foundation in its work towards the vision while also contributing to patient benefit and excellent cardiovascular and Lung research.



What and How

WHAT: PRECISION HEALTH – INCREASE THE UNDERSTANDING OF WHO IS AT RISK AND WHY. WE AIM TO MINIMIZE THE RISK OF DEVELOPING CARDIOVASCULAR AND LUNG DISEASES.

HOW: CONTINUED INVESTMENT IN SCAPIS

The Heart Lung Foundation continues to support SCAPIS: SCAPIS 1, SCAPIS 2, and the study's management.

SCAPIS is a research resource that develops and provides unique and detailed data from approximately 30,000 Swedes aged 50-64. This enables researchers to generate knowledge for better public health and understand the origins of certain diseases. SCAPIS is Sweden's largest research study on cardiovascular and lung diseases to date. Six universities and university hospitals lead and conduct SCAPIS in close collaboration with the Heart Lung Foundation, the main financier of the study. SCAPIS represents the Heart Lung Foundation's largest individual research investment in history. The SCAPIS database is open to all Swedish researchers at universities across Sweden. The quality of research and researcher-initiated investigations are the main principles guiding the allocation of support from the Heart Lung Foundation. However, this does not exclude specific initiatives like SCAPIS, whose research questions originate from the scientific community.

HOW: PRIMARY PREVENTION

The Heart Lung Foundation aims to strengthen lifestyle-related research in primary prevention. The concept of primary prevention involves interventions that aim to prevent the onset of diseases and the early detection of illnesses.

Swedes are becoming increasingly sedentary, engaging in less physical activity, and not maintaining sufficiently healthy diets. Due to these deteriorating lifestyle habits and the increased risk of cardiovascular disease, the Heart Lung Foundation is undertaking a major initiative in lifestyle-related research, supported by the Inger and Sixten Norhed Foundation. This funding complements the Heart Lung Foundation's regular financing of prevention and treatment research in the cardiovascular field. The foundation has also contributed support to an additional grant in prevention research.

The Heart Lung Foundation views research conducted in primary care positively, as it is the primary setting for carrying out primary prevention efforts. Funding is also allocated to behavioral research aimed at changing risk behaviors.

HOW: DEVELOP INDIVIDUAL RISK ASSESSMENT

Development in areas such as precision medicine and life science, coupled with data-driven innovative solutions and unique Swedish registries, enable significant progress in research. The Heart Lung Foundation deems it crucial that national quality registries are utilized in research. The foundation supports research aiming to identify individual risk factors and research that clinically tests these factors.

WHAT: INCREASE KNOWLEDGE ABOUT DISEASE MECHANISMS AND DEVELOP DIAGNOSTICS AND NEW TREATMENT METHODS.

HOW: BROAD RESEARCH FIELD – SUPPORT FOR RELEVANT RESEARCH AREAS OF HIGH QUALITY AND INNOVATION.

Cardiovascular and lung research, by its nature, is broad, spanning multiple scientific areas and operating with a long-term perspective. The Heart Lung Foundation supports a variety of crucial research areas.

Over the past five years, atherosclerosis, heart attack, and heart failure have been the three disease areas granted the largest share of project funding within heart research. In the field of lung diseases, research on asthma, COPD, and tuberculosis has received most of the allocated funds. Research in the cardiovascular domain has been granted 64% of the total distributed funds during this period, while in the lung domain, it has been 36%.

The fundamental idea of the Heart Lung Foundation is to encourage and motivate researchers in Sweden to submit their applications for research support. The foundation annually monitors the submissions, allocations, and outcomes related to research focuses. The results are discussed in the Research Council and the board, and the list of disease areas evolves over time.

Research focuses for applications in 2024 are defined as follows:

Research orientation – mandatory to specify in the application are:

- Basic Research
- Translational Research
- Clinical and Epidemiological (including registry research)
- Nursing Research
- Prevention Research

Since some research may involve more than one disease area, it is possible to choose a primary area and then include an additional two disease areas in the application.

Disease areas:

Heart - mandatory to specify in the application	LUNG – mandatory to specify in the application
Aortic Disease	Asthma
Atherosclerosis	Bronchiectasis
Pediatric Heart Disease	Inflammatory Diseases with Lung involvement (e.g., rheumatic diseases)
Stroke	Chronic Obstructive Lung Disease (COPD)
Heart Attack	Sleep Apnea
Heart Valve Disease	Tuberculosis
Cardiomyopathy	Lung Fibrosis
Heart Failure	Sarcoidosis
Arrhythmias	Hereditary Lung Diseases (e.g., cystic fibrosis, LAM)
Cardio-oncology	Lung Failure
Coronary Artery Disease	Pleural Diseases
Sudden Cardiac Arrest	Lung Hypertension
Lung Hypertension	Hypoventilation
Adults with Congenital Heart Disease	Lung Transplantation
Heart Transplantation	Pediatric Lung Disease
Deep Vein Thrombosis / Lung Embolism	Deep Vein Thrombosis / Lung Embolism
Peripheral Artery Diseases	

Subgroups – voluntary to specify in the application

Risk factors (e.g., diabetes, blood lipids, hypertension) Diagnostics (including imaging)
Treatment research
Genetics Behavioral research Implementation research, i.e., the outcome of an implementation can be studied through Registry research
Treatment studies
Artificial intelligence
Biomarkers Telemedicine
Medical equipment/treatment methods
Symptoms Drug side effects.

HOW: SPECIAL INITIATIVES BASED ON NEW NEEDS AND CHALLENGES

Based on active monitoring of the external environment, there should be flexibility to address new research needs and make targeted tailored investments. The development in our surroundings is moving towards an increasingly rapid pace of change where new technologies and methods can quickly provide opportunities to advance research in a specific area. New diseases such as Covid-19 affect us. Some important research areas may have developed less well over time and need stimulation. Historical examples of the Swedish Heart Lung Foundation's special initiatives include research on COVID-19 (examples of new diseases) and children's hearts (examples of stimulation initiatives).

These calls for proposals should be based on funding forms sought in competition among researchers within their respective fields, but with maintained quality requirements for grant approval. Innovation and creativity should be prioritized. The percentage of funds allocated to special initiatives may vary between different years and depends partly on a recurring assessment of the needs of research areas and partly on the total budgeted funds for grant distribution in the current year. An amount is allocated each year as part of the total budget for special initiatives, or the foundation may announce extra research support.

WHAT: PROLONG SURVIVAL AND QUALITY OF LIFE IN PATIENTS WITH CARDIOVASCULAR AND LUNG DISEASES

HOW: SECONDARY PREVENTION

The Swedish Heart Lung Foundation supports research aimed at increasing knowledge about disease mechanisms, interventions to prevent a recurrence, the development of new treatments, and improved quality of life for those affected. It is common today for patients who have experienced a stroke, heart attack, or exacerbation of COPD, for example, to face some form of additional event.

Heart and lung research also supports studies on evidence-based and equitable healthcare. Currently, the diagnosis and treatment vary across different regions in Sweden.

HOW: SUPPORT FOR INDIVIDUALIZED FOLLOW-UP

The research can contribute to individualized follow-up and treatment, leading to improved quality of life and extended survival. New treatments and personalized therapy – precision medicine, require healthcare and research to find new ways to interact. Knowledge of genetics and underlying mechanisms forms the basis for precision medicine. Relatively few precision medicine applications currently take place in the care of patients with complex diseases such as cardiovascular disease. Implementation research that increases knowledge about healthcare and patients' adherence to knowledge support and guidelines should contribute to evidence-based and equitable care.

HOW: EXTENDED SURVIVAL OF CHRONICALLY ILL PATIENTS

The Swedish Heart Lung Foundation supports both prevention and treatment studies for chronically ill patients. The foundation also backs projects that shed light on comorbidity between cardiovascular and lung diseases, as well as other diseases such as cancer, diabetes, and kidney disease, where it is clearly stated that the research addresses its significance for cardiovascular and lung diseases. The foundation does not support research on lung cancer.

The Heart Lung Foundation supports healthcare research aimed at improving the care and nursing of patients with cardiovascular and lung diseases. The foundation also supports research to enhance rehabilitation. Rehabilitation involves medical, psychological, educational, and social measures aimed at helping the sick or injured regain the best possible functional ability and conditions for a normal life. Medical rehabilitation cannot be sharply separated from purely medical care measures. Rehabilitation primarily focuses on the consequences of the disease.

WHAT: SUPPORT SWEDISH RESEARCH OF THE HIGHEST QUALITY AND CREATE THE BEST CONDITIONS FOR RESEARCHERS AT ALL CAREER STAGES

HOW: PROMOTE STRONG RESEARCH ENVIRONMENTS

The Swedish Heart Lung Foundation aims to promote exchange and collaboration between different research environments internationally and nationally, as well as between knowledge areas and disciplines.

The Swedish Heart Lung Foundation prioritizes strong, combined expertise within a robust infrastructure, i.e., competent researchers in a strong environment. Grants are awarded to research environments with the best conditions for conducting projects within universities, hospitals, and primary care.

The highest scientific quality and clinical relevance are always crucial in assessing applications. A thorough evaluation is conducted annually before allocating grants, which includes statistical tracking, researcher reports, and overall bibliometrics.

HOW: SUPPORT AT ALL CAREER STAGES

Through a program of various grants, the Swedish Heart Lung Foundation aims to support the best cardiovascular and lung researchers in Sweden at different stages of their careers. The foundation provides support to researchers from doctoral candidates to professors. Assistance for younger researchers and the next generation of research leaders receives particular attention, and the Swedish Heart Lung Foundation evaluates and monitors the progress of the younger researchers who receive grants. See below for the range of support available.

Through various funding mechanisms, the Heart Lung Foundation aims to support the best cardiovascular and lung researchers in Sweden at various career stages. The foundation provides support from doctoral candidates to professors. Support for younger researchers and the next generation of research leaders is a particular focus, and the Heart Lung Foundation evaluates and monitors the progress of the younger researchers who receive grants. See below for the various grants.

HOW: RELEVANT GRANT FORMS

The Heart Lung Foundation aims to provide funding formats that align with society and the various needs of researchers.

In addition to targeted initiatives, a range of grant formats is offered:

- Three major grants are awarded each year: the Heart Lung Foundation's major research grant, Prince Daniel's research grant for younger promising researchers, and Norhed Foundation's prevention grant through the Heart Lung Foundation (where a smaller grant of 3 million SEK is also awarded by the Heart Lung Foundation).
- Most of the total allocation goes to various types of project grants.
- Support for research time, ranging from positions to months, is also a significant portion of the allocated funds.

A smaller portion of the allocation is reserved for travel grants/congress grants for participation in conferences or shorter stays with international groups, organizing scientific meetings, network support, postdoctoral scholarships abroad, and return grants.

Quality and needs are prioritized foremost, and the assessment group determines which research receives funding and in what amount. The Heart Lung Foundation aims for a balance between large grants for a few researchers and lower-level grants for many researchers. Currently, the recommended minimum amount awarded is 400,000 SEK, and the maximum is 1.9 million SEK. The general rule is to provide 3-year grants, but 1 or 2-year grants can also be given. Examples of when shorter grants are given include when the progress has been slow or if it is an entirely new project that needs a year or two to be further clarified. Another reason could be that it is unclear how the experience and expertise will be passed on to younger researchers, especially if the applicant is more senior.

GRANT 2024

Anniversary grant 2024

- To mark the Heart Lung Foundation's 120th anniversary in 2024, the foundation will announce a jubilee grant. The jubilee grant is aimed at researchers who completed their doctorate 7–15 years ago (main applicants) and who have not yet qualified for a final position as a professor.
- The grant is awarded to collaborative projects for researchers in mid-career stages. The collaborative project must involve a clinical researcher and a translational researcher. National collaboration is encouraged.
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The Swedish Heart Lung Foundation's Major Research Grant

- The objective of this grant is, through a robust investment over a limited time, to create conditions for a significant research breakthrough in a crucial research area.
- The grant consists of 5 million SEK per year for three years, totaling 15 million SEK. The main applicant can only be awarded this grant once.

Prince Daniel's Research Grant for Young Promising Researchers

- The Swedish Heart Lung Foundation aims to promote the growth of younger researchers by, among other things, announcing a grant specifically for promising younger researchers.
- The grant consists of 2 million SEK per year for three years, totaling 6 million SEK. The main applicant can only be awarded this grant once.

The Norhed Foundation's prevention grant via the Swedish Heart Lung Foundation and The Swedish Heart Lung Foundation's prevention grant

- With the support of the Inger and Sixten Norhed Foundation, a prevention grant has been established primarily focused on diet and physical activity. It applies to both primary and secondary prevention but also emphasizes lifestyle-oriented measures as part of treating cardiovascular disease.
- The grant consists of 2 million SEK per year for three years, totaling 6 million SEK, along with an additional grant of 1 million SEK per year for three years, totaling 3 million SEK. The main applicant can only be awarded this grant once.

Project Grant

- The Swedish Heart Lung Foundation provides support for research projects that can be applied for a project period of one to three years and for purposes specified in the application.
- National Collaborative Project
- A national collaborative project is a project with a planning group nationally anchored, led by a national project manager. It is a project that adds clear value by being conducted as a national collaborative project and involves close collaboration between all parties.

Research positions

- Heart Lung Foundation provides support for a limited number of multi-year research positions (up to 6 years). These positions are primarily intended as career development roles for younger researchers who are expected to attain leading scientific positions in the future.

Research Months for Doctoral Students and PhD Candidates

- The main focus of the Swedish Heart Lung Foundation's Research Months is to provide more researchers with the opportunity for dedicated research time. Grants can be awarded for up to three years.

Postdoctoral Position

- The Heart Lung Foundation provides support for several multi-year postdoctoral positions, intended as career development opportunities. These positions are designed for younger researchers aspiring to pursue an academic research career.

Postdoctoral Scholarship Abroad, Return Grant, Travel Grant/Congress Grant, Scientific Meetings

- Several grants aim to stimulate scientific development within the research areas prioritized by the foundation and to create networking opportunities among researchers.

WHAT: HIGH AWARENESS OF AND TRUST IN HLF-FUNDED RESEARCH AND ITS RESULTS

HOW: THOROUGH INDEPENDENT GRANTING PROCESS

The Swedish Heart Lung Foundation's Research Council, along with a group of expert reviewers, evaluates applications for research funding. An exception is made for the Swedish Heart Lung Foundation's Major Research Grant and the Prevention Grant, as these grants are assessed by a Nordic evaluation committee without Swedish representation.

The Research Council of the Swedish Heart Lung Foundation possesses extensive expertise in the research areas supported by the foundation. The council comprises 24 highly regarded researchers from various universities in Sweden.

The principle is that applications within each category are assessed and prioritized through a process where the quality of the applications is evaluated through separate scoring by at least 3 experts, known as "peer review." This is followed by an assessment meeting where the independent evaluations are consolidated, and the applications are reviewed with the assessment group. Clear conflict of interest rules are in place.

The Research Council proposes the allocation of funds to the Swedish Heart Lung Foundation's board, which makes decisions regarding fund allocation.

The Research Council operates based on a structured scoring model where quality and innovation are crucial factors. Relevance to the foundation's mission is also assessed by the evaluators. The Research Council also emphasizes:

- Distributing grants to maintain a reasonable breadth across different research fields, types of diseases, and the allocation of funds to various universities/hospitals.
- Allocating major grants to nationally leading researchers with resource-intensive projects.
- Accounting for continuous renewal of research by annually approving funds for a reasonable number of new researchers/projects.

An external observer participates in the assessment meetings to ensure the quality of the work and to ensure that no informal information is shared.

HOW: RESULTS AND EFFECTS IN FOCUS

The foundation annually tracks statistics from the application system, year-end and final reports from funded researchers, and outcomes from research through, for example, bibliometric analyses. Importance is given to monitoring applications and awards based on gender, age, institution, research focus, and disease area. The results are discussed in the Research Council and the board for any adjustments to strategy and guidelines.

HOW: STRONG RELATIONSHIP WITH UNIVERSITIES/REGIONS

Ongoing dialogue and collaboration with prioritized stakeholders should be prioritized. Site visits should be conducted regularly with a clear focus on opportunities for clinically and transnationally active researchers to conduct research. The effort to showcase HLF and the excellent results of research should continue with undiminished strength through consistent and high-quality communication efforts.

SUMMARY

Heart Lung Foundation's Research Strategies – Our HOW:

- Continued focus on SCAPIS.
- Creating knowledge for better public health.
- Develop individual risk assessment.
- Prevention research, both primary and secondary.
- Broad research field – support for relevant research areas.
- Special Initiatives based on new needs and challenges.
- Support for individualized follow-up and treatment.
- Survival of chronically ill patients.
- Leveraging our position to strengthen research environments.
- Support for researchers at all career stages.
- Relevant forms of grants.
- Robust independent grant process.
- Result and effects in focus.
- Strong relationships with universities and regions.