

Odense Respiratory Research Unit (ODIN)



Research Strategy 2022-2026

Introduction

At the Department of Respiratory Medicine, Odense University Hospital, and Odense Respiratory Research Unit (ODIN), Department of Clinical Research, University of Southern Denmark, we have a common ambition to ensure an up-to-date and evidence-based practice at the highest international level in our daily, clinical meeting with patients with respiratory symptoms or disease. An important aspect in achieving this ambition is to ensure the research being conducted at an international level, the research processes are intimately integrated with the everyday clinical practice of both health care professionals, students at the department, as well as the everyday of the patients and their relatives. As such the department, ODIN and patient representatives have a mutual responsibility to ensure the overall development of the research and research environment at ODIN. The ODIN research strategy for 2022 – 2026 is as such a joined effort to identify key goals and actions to ensure the continuous pursuit of achieving the overall ambition.

Apart from supporting the Department of Respiratory Medicine and ODIN, the strategy also aims to support the ambitions, actions, and goals of the overall and joined research strategy of Odense University Hospital and Department of Clinical Research at University of Southern Denmark. In order to facilitate this goal, the strategy has been developed and structured using the following subtopics:

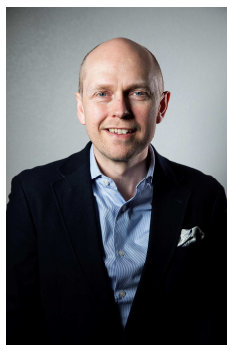
- Patient and their relatives' involvement in research
- Evidence-based medicine
- Trial Nation
- Excellent research collaboration
- Strong research culture
- Attractive careers for clinical researchers
- Research areas

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Vision

We conduct research to improve the everyday life of patients and health-care professionals within the field of respiratory medicine.

Mission

Our mission is to achieve respiratory medicine research at an international level, which is fully integrated with the everyday clinical practice of both health care professionals, students at the department as well as the everyday life of the patients and their relatives. By achieving this goal we hope to contribute to an improvement in the well-being of patients with respiratory symptoms or disease.

Patient and their relatives' involvement in research

Patient involvement in research ranges from a passive (patient as a data point) to an active approach (patient involvement in the research process). The active participation from patients and relatives in research can potentially lead to improvement in the credibility of results (higher rates of enrolment and retention) and in the direct applicability to patients (by asking pertinent questions about patient-important outcomes). Patient involvement in the planning and execution of research could also improve its translation into clinical practice.

Our ambition is to actively involve patients and relatives in all parts of the research process.

As research often aims to improve conditions for patients, it is important that patients and relatives have an influence on the research process and not just be the subject of the research. The patient's needs, experiences, attitudes, and observations from everyday life with illness, contributes with valuable knowledge and new perspectives into research.

We strive for close and equal collaboration with patients and relatives in all parts of the research, from the idea phase to the dissemination of the research results. With the researcher as a professional expert, patients and relatives will be actively involved in the research process as much as possible and have the opportunity to influence and take responsibility for how processes and activities are planned.

At the same time, we aim to be good at communicating our research results not only by publishing results international but also directly to patients and relatives.

Actions

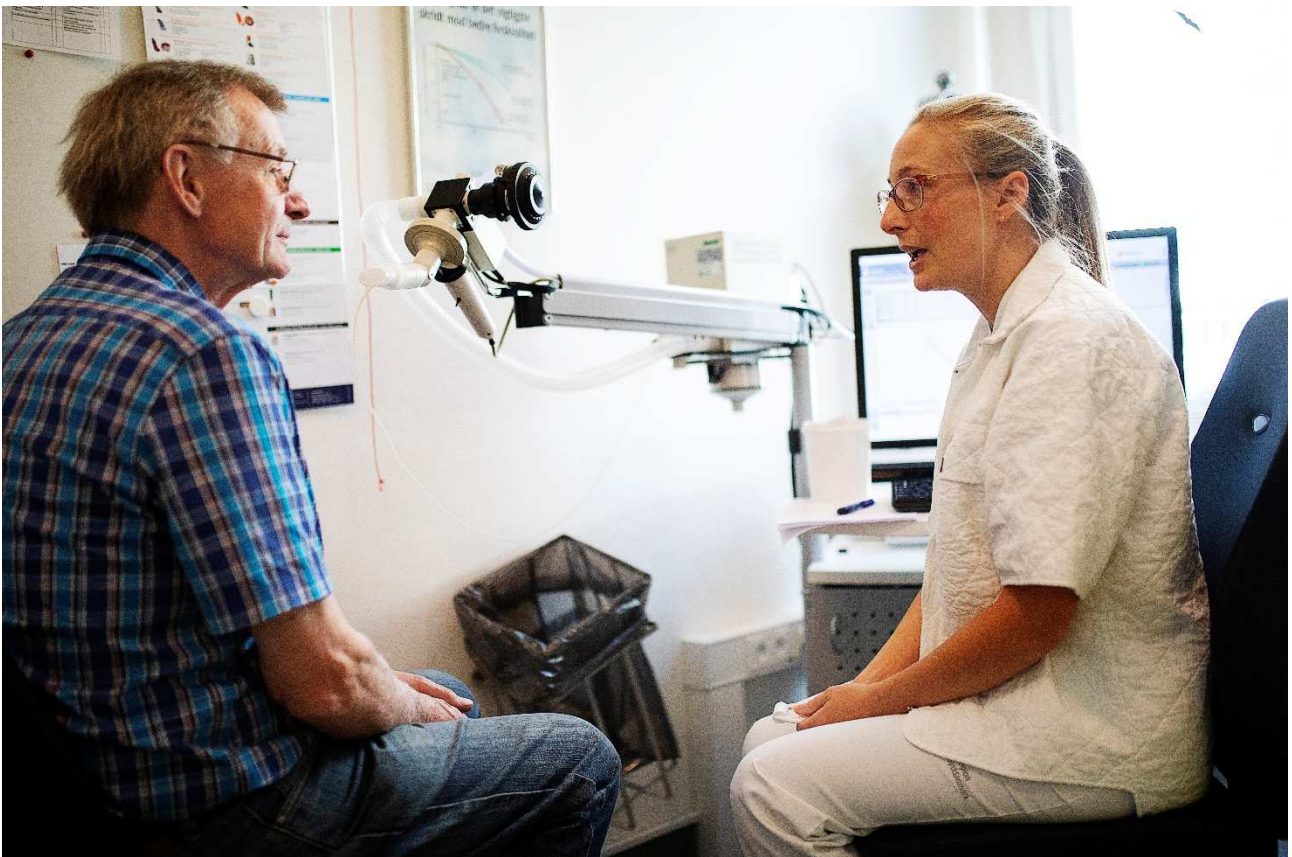
- We will develop a model in which patients and relatives have the opportunity of being actively involved in all phases of research studies conducted at ODIN
- We will develop a model in which patients and relatives can be actively involved in all applications for internal and external funding in the Department of Respiratory Medicine by 2021
- Patient involvement will be considered for all research studies associated with ODIN
- ODIN will initiate research projects based on patient involvement in order to develop clinical practice based on patient perspectives



- Development of a standard operating procedures for recruitment of patients and relatives for involvement in research projects
- Development of a standard operating procedures for recruiting patients for participation in sponsor as well as investigator-initiated research studies

Goals

- Patient representatives will participate in our monthly research committee meetings
- More than 75% of ODINs investigator-initiated research projects have included patient and relative involvement in all phases of the project
- More than 75% of the patients seen in the outpatient clinic of the Department of Respiratory Medicine are actively invited to participate in a research project or has the possibility to sign up for future research projects



Evidence-based medicine

ODIN has a strong tradition for focusing on clinical research that continuously support development and implementation of evidence-based medicine within the field of respiratory medicine. Our research covers not only development of evidence-based treatments, but also optimising existing diagnostics, diagnostic pathways, education, and training.

In previous years, ODIN has successfully implemented a structured approach for conducting systematic reviews as part of PhD-projects. Since the Nordic Cochrane Centre was recently moved to OUH and SDU an opportunity exists to further develop the current approach at ODIN ensuring conductance of systematic reviews in accordance with the highest quality standards. We intend to establish a formal collaboration with the Nordic Cochrane Centre for the purpose of consolidating the quality of future systematic reviews and some of which being published as Cochrane reviews, and Cochrane training being implemented as standard at ODIN.

In order to practice evidence-based medicine, the distance from the researcher to clinical practice needs to be as short as possible so as to obtain a prompt implementation of research results and help ensure the conducted research is clinically relevant. To ensure this, the Department of Respiratory Medicine and ODIN aim to further integrate the research activities in clinical practice.

Actions

- ODIN will establish a formal collaboration with the Nordic Cochrane Centre
- Cochrane training is established as part of the formal training of PhD-students at ODIN
- Involvement in international-, national- and local guideline development is registered as part of ODIN's activities alongside peer-reviewed publications
- A standard for coordination between ODIN and the Department of Respiratory Medicine ensuring post-study implementation of research projects

Goals

- More than 50% of the PhD-students conduct a systematic review prior to or as part of their PhD-project
- More than 50% of the PhD-students conduct a clinical trial as part of their PhD-project
- A annual increase in the number of clinical trials being conducted at ODIN
- All ODIN researchers are actively involved in the development of guidelines / statements from the Danish Society for Respiratory Medicine or European Respiratory Society
- All ODIN researches are actively involved in the development of the department's clinical practice guidelines



Trial Nation

Since 2017, ODIN has been one of six research sites in Denmark committed to the establishment of the NeXT core network within respiratory medicine and contributed to more than 25 sponsor initiated clinical trials (Phase I-III). The focus of these research studies have evolved from severe asthma and COPD to include more rare diseases such as idiopathic pulmonary fibrosis, connective-tissue-disease related interstitial lung disease, non-cystic fibrosis bronchiectasis, and, more recently, COVID-19.

In 2020, NeXT was reorganized and renamed Trial Nation. Through Trial Nation we will continue to focus on the early phase studies and studies that resemble the patient population at the outpatient clinic at the Department of Respiratory Medicine. This will give our patients the opportunity to contribute to the development of new treatments and to ensure them the best medical treatment in- and outside the scope of the studies in the future.

By conducting clinical trials using good clinical practice (GCP) and the dedicated study protocols, we aim to perform at the highest level. We aim at fulfilling trial commitments, being the first, fastest and most accurate site, without compromising the well-being of our patients as our primary focus. We strive to follow them through the study in the most comfortable, professional, and flexible way.

Actions

- Establishment of a standardised screening process for identifying patients eligible for participation in current or future Trial Nation studies
- Process mapping and development of standard operating procedures for generic steps in Trial Nation studies
- Development of a model ensuring continuous assessment and adjustment of the Trial Nation structures and processes in ODIN and the Department of Respiratory Medicine
- Integration and standardisation of Trial Nation in ODIN's overall communication to the Department of Respiratory Medicine
- Establishment of an information platform for the patients in the Department of Respiratory Medicine on ongoing, future and past Trial Nation trials
- Status of conducted Trial Nation activities are included in ODIN's annual rapport

Goals

- An overall increase in number of health-care staff involved in Trial Nation at ODIN
- All postgraduate researches at ODIN are involved in Trial Nation activities
- All units at the Department of Respiratory Medicine involved in treatment with drugs are involved in one or more Trial Nation studies



Excellent research collaboration

Based on number of researchers, research areas, publications, and funding, ODIN has persistently grown and developed each year since the 2010's. In the same period, the level of national and international research collaboration has been expanded significantly. ODIN has a clear future focus to improve the quality of the research originating from the unit. This aim requires a systematic plan involving long-term financing and clear strategic priorities in order to be part of the international scene within clinically oriented respiratory research.

At ODIN, we are aware that a prerequisite to conduct excellent clinical research contributing to the highest quality in patient management, among other things, is through establishment of a research environment with excellent research collaborations. Such collaborations will not only raise the level of research through exchange of knowledge and experience, but also support the implementation of new research methodologies, innovation, and recruitment of international researchers. The collaborations are also essential for ensuring research and development of new highly specialized treatments and functions at the Department of Respiratory Medicine.

Ultimately, one of ODIN's paramount goals within the 5-year period is to establish and/or act as a partner in excellent elite centres at OUH within highly specialized functions that are governed by evidence-based patient management and research.

Actions

- All ODIN researchers participate in the national or international research networks within the major fields of respiratory medicine
- All ODIN researchers actively participate in the yearly, international European Respiratory Congress
- All ODIN researchers are active members of relevant European Respiratory Society assemblies
- New projects at ODIN are strategically used to establish new local, national, and international research collaborations
- ODIN and the Department of Respiratory Medicine proactively encourage and support ODIN researchers to plan international research stays
- ODIN and the Department of Respiratory Medicine are actively involved in organising OUH based research meetings (e.g. symposia, webinar) within the field of respiratory medicine



Goals

- All ODIN PhD-students have at least one PhD-supervisor not based at Odense University Hospital or University of Southern Denmark
- All ODIN PhD-students have an international PhD-supervisor or international collaboration as part of the planned studies
- Affiliation of at least three adjunct professors with international background within selected respiratory disease categories
- To increase the number of European Respiratory Society Clinical Research Collaborations in which ODIN is actively involved
- More than 75% of peer-reviewed ODIN publications have one or more international co-authors
- To participate as of the core members in the establishment of a Center for Clinical Excellence in the Region of Southern Denmark
- ODIN and Department of Respiratory Medicine host at least one national or international research meeting on a yearly basis



Strong research culture

Respiratory medicine has a long history of clinical research. Research developed and tested in a clinical setting produces results that are very applicable for practitioners and patients. This type of research is highly dependent on a strong research culture at the department. It is therefore our goal to further support and promote the full integration of ODIN and the clinical practice at the Department of Respiratory Medicine. In new project developments, we aim to minimize the added workload of the research project on the clinical staff. We thereby hope to facilitate easier implementation of clinical trials, improve the patient recruitment process and implementation of our results in the daily clinical setting. Such an integration will help facilitate a shorter distance from research result to clinical implementation.

Furthermore, we want to establish more positions combining research and clinical work. This will ensure that our projects are inspired from and founded in the clinical challenges.

We hope to recruit personnel with interest in several fields within respiratory medicine for a broad representation of the specialty in ODIN.

ODIN is currently the leading research unit in Scandinavia based on field-weighted-citation-impact. The most valuable resource for most modern clinical researchers is time for research. In order to endorse the continuous development of a strong and creative research culture, we wish to streamline and continuously develop the different parts of the research process. By this we hope to ensure that the society and funders of our research will benefit of considerably high-quality research for their financial support as possible, and at the same time ensure the individual researcher at ODIN can use as much as their time and focus on core aspects of research itself.

In 2020, ODIN devised a SoMe-strategy with a broad outreach in mind. Through content of both informative and humorous nature, we aim to engage not only fellow health care professionals and patients, but also the average citizen with an interest in respiratory medicine. Currently, our primary social media platform is Facebook where we have become the largest research unit at OUH based on likes and followers. We will use this established platform to further develop a modern and open research culture, actively communicating and involving the society in respiratory medicine research.

Actions:

- Sharing results and stories from our daily practice on social media and similar platforms
- Strategic planning of new projects and funding in accordance with ODIN's, OUH's and SDU's research strategy
- The implementation and use of tools ensuring a "plan, do, study, act approach" for implementing and assessing research processes at ODIN
- Development of standard operating procedures for core ODIN workflow and processes
- Development and use of boards to ensure a goal-directed approach to strategic goals as well as everyday workflow
- Continuously assessment and improvement of factors ensuring a high number of workdays being rated as excellent (d'Oro days) by the researchers and staff at ODIN
- ODIN research writing retreats being held twice annually



Goals

- When benchmarked, ODIN is among the leading respiratory research units in Scandinavia
- All publications are accessible to the public (e.g. OPEN access)
- ODIN remain the leading research unit at OUH when based on social media attention
- More than 40% of ODIN publications are in top ten journals within the given field
- All ODIN staff have an overall high d'Oro score
- The Department of Respiratory Medicine use 3% of its annual budget on research
- Annual increase in the total amount and proportion of funding obtained from external sources
- Transition from a research unit in organizational phase II to phase III



Attractive careers for clinical researchers

A strong research culture is dependent on the recruitment, training, and further qualification of young as well as experienced and skilled researchers. For clinical researchers this development usually takes place simultaneously with a career as clinical health care staff, independent of the researchers' background (e.g. nurse, physiotherapist, physician or other). As such, attractive careers for clinical researchers need to include aspects of being a researcher as well as being a clinician. Planning an optimal and attractive career thus needs involvement of the researcher, the head of the clinical department, and the head of research in order to agree on an overall career plan. An integrated career plan is optimal for strategic coordination between the Department of Respiratory Medicine and ODIN and increases the possibility to ensure the researcher an integrated and permanent position as researcher and clinician.

In recent years, we have expanded ODIN with several PhD-students, pregraduate research-career stays, and research nurses. We intend to continue this development as well as making a career as clinical researcher in the field of respiratory medicine more attractive. Our strategy for recruitment is based on targeting interested and talented employees and students. Not all persons will thrive in the at times chaotic and demanding career as clinical researcher. Early identification of whether a career as clinical researcher should or should not be pursued is therefore an essential part when reassessing and adjusting a career plan.

Continuing a career in research after completing one of the educational steps for becoming a researcher (e.g. pregraduate training, master thesis, PhD thesis) is a challenging obstacle with many failing to reach the next step. Obtaining funding and developing new research projects are typically done alongside a full-time clinical employment. It is especially challenging after having completed a PhD study, since funding opportunities to support further career development are scarce. The difficulties of this transition phase can be minimized by ensuring each PhD-student during their PhD training obtains as many of the qualifications needed for a post.doc-position as possible and, at a later stage, as associate professor. Coordinated support by ODIN and Department of Respiratory Medicine is essential during these transition phases.

Actions:

- Individual ODIN career plans are developed for all pregraduate research students
- Combined ODIN and Department of Respiratory Medicine career plans for all clinical researchers at ODIN
- Establish an opportunity for staff at the Department of Respiratory Medicine or ODIN to apply for dedicated research days in transition phases
- All junior researchers (e.g. pregraduate, PhD-students) beginning at ODIN are assigned another, more experienced junior researcher as mentor
- Develop a template with essential career milestones to be achieved during each research training step
- Develop a board for monitoring the progression of research, educational activities, and career milestones for PhD-students and pregraduate students



Goals

- All research year students following completion of their ODIN stay have met predefined career milestones and are qualified to apply for a PhD-student position
- All PhD-students completing their PhD education have met predefined career milestones and are qualified to apply for a post.doc-position
- All clinical researchers at ODIN have a combined clinical and research career plan
- Increase in the total number of “non-physician” clinical researchers at ODIN
- Increase in the total number of PhD-students at ODIN to seven
- Increase in the total number of pregraduate research students at an annual level corresponding to the number of PhD-students at the unit
- Increase in the total number of combined positions as clinical researchers at a senior researcher level (e.g. post.doc., associate professor)
- Increase in the total number of clinical professors at ODIN to three



Research areas

Within specific areas of respiratory medicine the research being conducted at ODIN is at a high internationally level, but research within all major areas of respiratory medicine is not yet fully established. The challenge in the period from 2022-2026 will be to strike a balance between ensuring a continuous development of existing research areas at an international level, and at the same time ensuring and supporting the development of less established areas. When choosing which new research projects, areas and methods ODIN should prioritize, opting out some possible new projects and research areas will be equally important.

The following main criteria will be used when selecting which new research areas should be established:

1. Highly specialized functions (HSF) as defined by the National Board of Health: A core function for the Department of Respiratory Medicine is to serve as a tertiary referral centre for HSFs for citizens living in the Region of Southern Denmark. To ensure a continuous development of this function and the strategic development of new regional and national functions being placed at OUH, new research areas supporting this function is a priority.
2. Clinical research with a strong patient involvement: ODIN has a strong tradition for clinical research being intimately integrated with the clinical practice at the Department of Respiratory Medicine. Several of the subtopics mentioned previously will hopefully strengthen and develop this culture and tradition even further, particularly with a more active patient involvement. An important basis for such a culture is a close collaboration between researcher, clinician, and patients. Therefore, new research areas with such a collaboration will be a priority.
3. Evidence-based respiratory medicine: Clinical research within a given field of respiratory medicine can help to ensure and develop an up-to-date evidence-based practice in the given field. As such clinical research at a high level should be performed within all the major areas of respiratory medicine in which the Department of Respiratory Medicine has a corresponding clinical function. It is a priority to ensure new research supporting an area or patient group seen at the Department of Respiratory Medicine currently lacking a dedicated researcher.
4. Research talents and careers: Recruitment of talented new researchers and clinicians is a high priority to ensure respiratory medicine at OUH being at the highest possible level. New research areas supporting obvious research talents or the continuous progression of research careers are a priority. Employment of staff with a research background or research potential is a priority when recruiting staff for positions at the Department of Respiratory Medicine.
5. Education: Education and training are fundamental functions for a university hospital. Evidence-based training has in many studies been demonstrated to have a positive effect on clinically relevant outcomes for trainee as well as patient. ODIN has a strong tradition for educational research, and maintaining this tradition is a priority.

Actions:

- Integrate strategic considerations when selecting new research areas and projects
- Strategic coordination between establishment of new highly specialised functions and corresponding research
- Strategic coordination between the heads of the department and research leader when opening new positions at the department and at ODIN



- Strategic coordination between ODIN and local (e.g. TechSim), national (e.g. CAMES), and international collaborators (e.g. ERS) in educational research within the field of Respiratory Medicine

Goals

- Senior researchers with dedicated time to research within all subunits at the Department of Respiratory Medicine
- Ongoing or planned PhD-projects within all subunits at the Department of Respiratory Medicine
- Ongoing or planned pregraduate research students within all subunits at the Department of Respiratory Medicine
- All clinical functions and units at the Department of Respiratory Medicine are supported by ongoing research
- All new highly specialised clinical functions are supported by ongoing research
- Monthly strategic coordination between heads of the Department of Respiratory Medicine and ODIN
- Evidence-based educational programs established within all respiratory medicine procedures

