

Jobbnorge ID: 286386
Deadline: 10/13/2025
Website: <http://www.ntnu.no>
Scope: Fulltime
Duration: Temporary

Join NTNU's inclusive culture as a PhD Candidate in Design, advancing user-centered healthcare solutions!

PhD - User-centred design of clinical decision support system for Lung cancer - EMPOWER

This is NTNU

NTNU is a broad-based university with a technical-scientific profile and a focus in professional education. The university is located in three cities with headquarters in Trondheim.

At NTNU, 9,000 employees and 43,000 students work to create knowledge for a better world.

You will find more information about working at NTNU and the application process [here](#).

Video: <https://youtu.be/Xt-yHCN5QS0>

About the position

[The Department of Design](#) at NTNU is offering a fully funded 3-year PhD position, starting on **January 15th, 2026**. This position is part of an innovative research project focused on the **human-centered design of Clinical Decision Support Systems (CDSS)** for **multidisciplinary teams (MDTs)**, in collaboration with the **Lung Cancer Department at St. Olav's Hospital, Trondheim**. The PhD candidate will contribute to developing novel, user-centered digital solutions that enhance clinical decision-making, reduce errors, and improve patient outcomes. The work will generate new knowledge in design research and healthcare innovation. This is a highly collaborative project involving experts from NTNU, St. Olav's Hospital, and other stakeholders in healthcare and technology. The candidate will be part of a dynamic, interdisciplinary team working toward impactful and practical solutions.

If you're excited about shaping the future of healthcare services, we invite you to be a part of our team. For a position as a PhD Candidate, the goal is a completed doctoral education up to an obtained doctoral degree.

The position's working place is at the Department of Design, [Faculty of Architecture and Design](#), Trondheim.

Your immediate leader is the Head of Department.

About the project

The project aims to design and test a CDSS tailored for lung cancer treatment, supporting expert clinicians in making informed, personalized decisions through evidence-based recommendations and streamlined access to relevant data. Using a **User-Centered Design (UCD)** approach, the project will apply co-design and participatory design methods to deeply understand clinical workflows and stakeholder needs. The research will involve: Literature reviews, Surveys and interviews, Co-design workshops and Proof-of-concept development and validation. The project integrates perspectives from clinicians, designers, technologists, and health researchers, and aligns with several **UN Sustainable Development Goals**. It adopts design **action research** methodology, emphasizing innovation through **Human-Centered Design, service design, and participatory design**.

Duties of the position

- Conducting high-quality research within the CDSS-Lung project and reporting progress regularly and in agreement with the supervisors.
- Documenting the research findings in the form of scientific papers.
- Disseminating and presenting the research findings at internal project meetings and scientific conferences.
- Undertaking the necessary courses (30 ECTS) as part of the PhD program in Design.

Be prepared for changes to your work duties after employment.

Required selection criteria

- **Educational Background:**
A professionally relevant background in interaction design, industrial design, service design, human-centered design, or related fields.
- **Academic Qualifications:**
A degree equivalent to a five-year Norwegian education program, with at least 120 ECTS credits at the master's level.
- **Academic Performance:**
A strong academic record, with an average grade of B or better (according to NTNU's grading scale) in the master's program or equivalent. Applicants without letter grades must demonstrate an equivalent academic standard. Candidates with lower grades may be considered if they can document strong suitability for PhD studies.
- **Language Proficiency:**
Excellent written and spoken skills in both Norwegian or another Scandinavian language and English is mandatory. Applicants from outside Scandinavia and non-English-speaking countries must provide documentation of language proficiency in both languages.
- **Health Domain Experience:**
Prior experience in designing and innovating clinical decision support systems, particularly in areas such as lung cancer or other healthcare contexts.
- **Co-Design and Communication Skills:**
Demonstrated experience in co-design processes with healthcare professionals and clinical experts, including effective interdisciplinary collaboration.

Additionally, candidates must meet the requirements for admission to the faculty's [_doctoral degree program - NTNU](#)

The appointment is to be made in accordance with [NTNUs guidelines for recruitment positions](#) and [Regulations for the degrees philosophiae doctor \(ph.d.\) and philosophiae doctor \(ph.d.\) in artistic development work at the Norwegian University of Science and Technology \(NTNU\)](#) for general criteria for the position.

Preferred selection criteria

- **Proficient in Research Methods:** Possesses knowledge of both qualitative and quantitative user research methods.
- **Skilled in Digital Prototyping:** Has expertise in using software tools to develop high-fidelity digital intervention prototypes.
- **Collaborative Team Member:** Brings experience in working within multidisciplinary teams and engaging with various stakeholders.

Personal characteristics

- **Scientifically Curious and Open to Challenges:** Demonstrates a keen interest in new research challenges relevant to the position, maintains scientific curiosity, and possesses good scientific writing skills.
- **Independent and Persistent Problem-Solver:** Shows independence and persistence in addressing problems, ensuring thorough and effective solutions.
- **Flexible and Reliable Team Player:** Exhibits flexibility and reliability, working effectively both independently and as part of a team, and maintaining close contact with project partners around Norway.
- **Strategic Planner:** Develops comprehensive and realistic plans with both short- and long-term time horizons, ensuring well-organized project execution.
- **Goal-Oriented and Hardworking:** Sets challenging goals and works diligently to achieve them, demonstrating a strong work ethic and commitment to success.

We offer

- Exciting and stimulating tasks in a strong international academic environment
- An open and [inclusive work environment](#) with dedicated colleagues
- Favourable terms in the [Norwegian Public Service Pension Fund](#) [employee benefits](#)

Diversity

Diversity is a strength, and at NTNU we aim to be an employer that reflects the diversity in society and that makes use of the potential of the population's collective skills. Our vision is [Knowledge for a better world](#) and [our values are creative, critical, constructive and respectful](#). We believe that an organization that is equal, diverse and gender-balanced is essential for us to achieve our goals.

We strive to attract employees with different skills, life experiences and perspectives to contribute to even better problem solving of our societal mission in research and education.

If you think this position is relevant and interesting, we encourage you to apply, regardless of gender, functional ability and cultural background, or whether you have been out of work for a period of time.

Salary and conditions

As a PhD candidate 1017 you are normally paid from gross NOK 550.800 per annum before tax, depending on qualifications and seniority. From the salary, 2% is deducted as a contribution to the Norwegian Public Service Pension Fund. The period of employment is 3 years.

Appointment to a PhD position requires that you are admitted to the [PhD programme in Design](#) within three months of employment, and that you participate in an organized PhD programme during the employment period.

The engagement is to be made in accordance with the regulations in force concerning [State Employees and Civil Servants](#), and the acts relating to Control of the Export of Strategic Goods, Services and Technology. Candidates who by assessment of the application and attachment are seen to conflict with the criteria in the latter law will be prohibited from recruitment to NTNU.

The position is subject to external funding.

It is a prerequisite you can be present at and accessible to the institution on a daily basis.

About the application

The application and supporting documentation to be used as the basis for the assessment must be in English. Publications and other scientific work must be attached to the application. Please note that your application will be considered based solely on information submitted by the application deadline. You must therefore ensure that your application clearly demonstrates how your skills and experience fulfil the criteria specified above.

The application must include

- Statement of purpose/ motivation letter
- Project proposal maximum 4 pages
- CV with a digital portfolio link and certificates
- Transcripts and diplomas for bachelor's and master's degrees.
- A copy of link to the master's thesis.
- Name and contact information of three referees
- If you have publications or other relevant research work

If all, or parts, of your education has been taken abroad, we also ask you to attach documentation of the scope and quality of your entire education, both bachelor's and master's education, in addition to other higher education. Description of the documentation required can be found [here](#). If you already have a statement from NOKUT, please attach this as well.

We will take joint work into account. If it is difficult to identify your efforts in the joint work, you must enclose a short description of your participation.

In the evaluation of which candidate is best qualified, emphasis will be placed on education, experience and personal and interpersonal qualities. Motivation, ambitions, and potential will also count in the assessment of the candidates.

NTNU is committed to following evaluation criteria for research quality according to [The San Francisco Declaration on Research Assessment - DORA](#).

General information

[Working at NTNU](#)

NTNU believes that inclusion and diversity is our strength. We want to recruit people with different competencies, educational backgrounds, life experiences and perspectives to contribute to solving our social responsibilities within education and research. We will facilitate for our employees' needs.

NTNU is working actively to increase the number of women employed in scientific positions and has a number of resources [to promote equality](#).

[The city of Trondheim](#) is a modern European city with a rich cultural scene. Trondheim is the innovation capital of Norway with a population of 200,000. The Norwegian welfare state, including healthcare, schools, kindergartens and overall equality, is probably the best of its kind in the world. Professional subsidized day-care for children is easily available. Furthermore, Trondheim offers great opportunities for education (including international schools) and possibilities to enjoy nature, culture and family life and has low crime rates and clean air quality.

As an employee at NTNU, you must at all times adhere to the changes that the development in the subject entails and the organizational changes that are adopted.

A public list of applicants with name, age, job title and municipality of residence is prepared after the application deadline. If you want to reserve yourself from entry on the public applicant list, this must be justified. Assessment will be made in accordance with [current legislation](#). You will be notified if the reservation is not accepted.

If you have any questions about the position, please contact: Ashis Jalote Parmar, Associate Professor, E-mail: ashis.jalote.parmar@ntnu.no. If you have any questions about the recruitment process, please Marion Wohlen, Senior HR consultant, E-mail: marion.s.wohlen@ntnu.no

If you think this looks interesting and in line with your qualifications, please submit your application electronically via jobbnorge.no with your CV, diplomas and certificates attached. Applications submitted elsewhere will not be considered. Upon request, you must be able to obtain certified copies of your documentation.

Application deadline: October 13th 2025

NTNU - knowledge for a better world

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The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life.

Department of Design

We are located in both Trondheim (industrial design) and Gjøvik (graphic design and web technology). Both groups have expertise in interaction design and share research interests in health and welfare technology. The design environment links many technology communities at NTNU, and nationally the Department has extensive collaboration with Norwegian industrial companies. [The Department of Design](#) is one of four departments in the [Faculty of Architecture and Design](#).

Additional information

Contact persons:

- Ashis Jalote Parmar, Professor
Phone: | E-mail: ashis.jalote.parmar@ntnu.no
- Marion Sandnes Wohlen, HR
Phone: | E-mail: marion.s.wohlen@ntnu.no

Place of service:

- Høgskoleringen 1 7491 Trondheim (Trondheim Municipality)
- Kolbjørn Hejes vei 2 B, Trondheim 7491 Trondheim (Trondheim Municipality)