

Kunnskap for en bedre verden

Jobbnorge ID: 280309 Deadline: 6/15/2025 Website: http://www.ntnu.no

Scope: Fulltime Duration: Project

The Department of Clinical and Molecular Medicine has a vacancy for a

Postdoctoral Fellow in artificial intelligence-based image analysis

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 can find more information about working at NTNU and the application process here.

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

About the position

A new postdoctoral position is available in the research group AICAN (Artificial Intelligence and digital pathology in CANcer) at the Department of clinical and molecular medicine at NTNU.

The position is a full time (100 %) position for three years starting autumn 2025. The post doc will develop and validate Al-based methods able to predict clinical course and biological properties in breast cancer. The position offers challenging and varied tasks in an environment characterized by active, committed and skilled researchers.

Are you ready to take your research career to the next level? We offer a postdoctoral position that gives you the opportunity to develop a strong profile as researcher. You will also gain valuable experience that might be relevant for your further career. The purpose of a postdoctoral position is to build up a researcher profile that qualifies for a position as associate professor. The position may also offer additional skills that are relevant to the postdoctoral fellow's future career. Apply for this position to become part of our research environment and take the next step in your career with us.

Your immediate leader will be the Head of Department.

About the project

AICAN is a cross disciplinary research group involving NTNU, St. Olavs hospital, Levanger hospital and SINTEF. The group includes pathologists, clinicians, medical technologists, a social scientist, a biomedical engineer, and interaction designers. We focus on software development and AI based methods for automatic interpretation of digital tissue slides and complementary tumour and patient data in breast and lung cancer.

The basis of the project will be digitized whole slide images and supplementary data from established, large, well-described cohorts of breast cancer patients.

We seek a highly motivated new colleague with preferred experience in digital pathology and Al-based image analysis, who will complement our cross disciplinary team of researchers, work independently, and participate and contribute to other research projects in our group.

Duties of the position

- Work independently with digital pathology and development of Al-based methods
- · Academic publications and popular science dissemination
- Participate in the activities of the research group AICAN
- . Mentoring PhD students, helping them with their research projects, and advising on methodology and academic writing

Required selection criteria

You must have completed a doctoral degree, or:

- If you are in the final phase of your doctorate and can document that the thesis has been submitted or that the defense will take place before starting the position, your application can be considered even if you have not defended. NOTE: Documentation of the obtained doctorate must be presented before you can start the position.
- The following expertise is required: substantial experience in machine learning and image analysis, experience and knowledge in Python and/or R programming, and familiarity with deep learning packages
- Good oral and written presentation skills in English

PLEASE NOTE: For detailed information about what the application must contain, see paragraph "About the application".

If you do not already have educational competence that meets the requirements for a position as associate professor in Norway, NTNU will arrange for you to acquire such competence during the employment period. In such cases, you will also be assigned relevant teaching as part of the career-promoting work.

The appointment is to be made in accordance with <u>Regulations for the Universities and Colleges Act (university and colleges regulations) and Regulations for the degrees philosophiaedoctor (ph.d.) and philosophiaedoctor (ph.d.) in artistic development work at the Norwegian University of Science and Technology (NTNU) for general criteria for the position.</u>

Preferred selection criteria

- Experience and knowledge in digital pathology and AI analysis of digital pathology sections
- Experience with working on Linux servers through SSH
- · Experience with git revision control system and GitHub
- Experience with multiple instance learning methods
- Experience with collaborative work in cross-disciplinary teams

Personal characteristics

Working as a Postdoctoral fellow requires that you

- · Work independently and efficiently
- · Are highly motivated for the position
- · Set goals and make plans to achieve them
- · Present and discuss your research with other members of our cross disciplinary team
- Analyze data, assess different perspectives and draw well-founded conclusions

Emphasis will be placed on personal qualities.

We offer

- An exciting job with an important social mission
- · Career guidance throughout the postdoctoral program
- · Open and inclusive working environment with committed 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.

At NTNU we want to increase the proportion of women in scientific positions. We have a number of measures to promote equality.

Salary and conditions

As a Postdoctoral Fellow (code 1352) you are normally paid from gross NOK 594 500,- 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 three years.

As an employee at NTNU, it is important to keep yourself up to date with academic and organizational changes and to adapt to them.

For the necessary professional and social interaction, it is a prerequisite that you are physically present and available to the institution on a daily basis.

The appointment is carried out in accordance with the principles of the <u>State Employees Act</u>, and <u>Export control</u> (legislation that regulates the export of knowledge, technology and services). Candidates who, after assessment of the application and attachments, are considered to be in conflict with the criteria in the latter act, will not be able to be employed.

About the application

The attachments (including a description of your scientific work) must accompany the application as these documents form the basis of the application assessment. The documents must be in Norwegian/a Scandinavian language or English.

Please note: the application will only be assessed on the basis of the information we have by the application deadline. Therefore, make sure that your application clearly shows how your skills and experience meet the criteria described above.

The application must include:

- Transcripts and diplomas for Bachelor's-, Master's- and PhD degrees. If you have not yet completed your PhD, you must provide confirmation on your estimated date for the doctoral dissertation, or confirmation that your PhD thesis has been submitted. Documentation of a completed doctoral degree must be presented before starting the position.
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- A copy of the doctoral thesis. If you are close to submitting, you can attach a draft of the thesis.
- · Academic works published or unpublished
- Name and contact information of three references

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. Description of the documentation required can be found here. If you already have a statement from horwegian Directorate for Higher Education and Skills (HK-dir), please attach this as well.

Joint works will be considered. If it is difficult to identify your contribution to joint works, you must attach a brief description of your participation.

If you have had leave or another break in your career, it is important that this is stated in your application so that the selection committee can take this into account and that the amount of your research may be reduced as a result.

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

General information

A public list of applicants with name, age, job title and municipality of residence is prepared after the application deadline. If you wish to be exempt from entry on the public list of applicants, this must be justified. Assessment will be made in accordance with <u>current legislation</u>. You will be notified if the exemption is not granted.

If you have any questions about the position, please contact Associate professor/consultant pathologist Marit Valla, marit.valla@ntnu.no. If you have questions about the recruitment process, you can contact HR consultant Vebjørn F. Andreassen, email: vebjorn.andreassen@ntnu.no.

If you find this position interesting, and in accordance 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: 15.06.2025

For practical information about working at NTNU, please visit this webpage.

The city of Trondheim is a modern European city with a rich cultural scene. Trondheim is the tech 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.

NTNU

NTNU - knowledge for a better world

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

The Department of Clinical and Molecular Medicine (IKOM):

The Department of Clinical and Molecular Medicine (IKOM) is NTNU's largest department, with 450 employees. Our research and teaching help to improve treatment and health.IKOM has expertise in basic, clinical and translational research within broad disciplinary areas. We study children's and women's health, cancers, blood disorders and infectious diseases, gastroenterology, inflammation, metabolic disorders, laboratory sciences and medical ethics. The Department offers teaching in medicine at master's and PhD level. We also offer continuing education for employees in the health services.

Additional information

Place of service:

Øya 7491 Trondheim (Trondheim Municipality)