

# Postdoctoral Fellow in Systems Neuroscience of Neural and Behavioral Algorithms of Pursuit

## 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

We are seeking an enthusiastic and highly motivated Post-doctoral Fellow with a background in neurophysiology and animal behavior to join the Whitlock group at the Kavli Institute for Systems Neuroscience. The position is financed by the Research Council of Norway's FRIPRO scheme and will **spearhead a new project investigating the neural population coding of active pursuit, including geometric decision-making**.

Your immediate leader will be Professor Jonathan Robert Whitlock.

Starting date: Starting date is negotiable.

The position offers a scholarship for full time for four years.

## About the project

The successful candidate will perform large-scale neural recordings in freely moving rats while tracking their behavior in detail in a novel, closed-loop pursuit task. They should have a good intuition for rodent behavior, steady hands, and a strong motivation for analyzing large neural and behavioral datasets. This project aims to uncover the fundamental "algorithms" the brain uses to predict and react to a dynamically moving agents, working at the intersection of ethology, systems neuroscience, and computation.

## Duties of the position

- Carry out high-quality, independent research within the project framework.
- Publish findings in high-impact academic journals and present at international conferences.
- Participate actively in the intellectual life of the research group and the institute.
- Contribute to the supervision of PhD and Master's students.

## Required selection criteria

- A doctoral degree in neuroscience, quantitative biology, bioengineering, relevant physical sciences or related fields.
- A strong academic background and a documented track record of productivity (e.g., publications, preprints, conference proceedings).
- Prior experience recording from awake, behaving animals, such as with silicon probes / Neuropixels or in vivo imaging.
- Demonstrated experience with computational, statistical analysis or modeling of large-scale behavioral and/or neurophysiological data.
- Excellent communication skills in English, both oral and written.
- Documented experience with scientific programming (e.g., Python, Matlab, R).
- You must meet the requirements for admission to a postdoctoral program at the Faculty of Medicine and Health Sciences.

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 [NTNU's guidelines for recruitment positions](#) and [Regulations concerning the degrees of philosophiae doctor \(ph.d.\) in artistic development work at the Norwegian University of Science and Technology \(NTNU\)](#) for general criteria for the position.

As a result of the new Act relating to universities and university colleges with associated regulations of 01/08/2024, NTNU has, during a

transitional period (for decisions on employment in recruitment positions before 1 August 2025), chosen to use the terms of employment in the old [regulations of 31 January 2006 no. 102 on terms of employment for positions such as postdoctoral fellow, research fellow, scientific assistant and specialist candidate](#)

## Preferred selection criteria

- Experience with surgical procedures in rodents (e.g., a certificate from a course in Animal Research or equivalent).
- Experience with optogenetics or other circuit manipulation techniques.

## Personal characteristics

In the evaluation of the best-qualified candidate, we will emphasize personal suitability, motivation for the position, and research potential. We are looking for a candidate with:

- Strong personal initiative, self-motivation, and work ethic.
- The ability to work both independently and collaboratively within a dynamic, interdisciplinary team.
- A solution-oriented mindset with strong problem-solving skills.
- Flexibility and openness to adjusting project plans as the research evolves.

## We offer

- An exciting and stimulating research project in a world-leading, international academic environment.
- Access to state-of-the-art infrastructure and resources.
- An open, supportive, and inclusive work environment with dedicated colleagues.
- Favorable terms in the Norwegian Public Service Pension Fund.

Employee benefits and access to NTNU's career guidance and mentorship programs

## 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 604 900,- 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 4 years.

The position is conditional on external funding.

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 [State Employees Act](#), and [Export control](#) (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 received by the application deadline. Therefore, make sure that your application clearly shows how your skills and experience meet the criteria described above.

The application and all attachments must be sent electronically via Jobbnorge.no. If you are invited to an interview, you must bring certified copies of certificates and diplomas upon request.

The application must include:

- CV, transcripts, and diplomas for all university degrees.
- A short letter of motivation (max 1 page) explaining your interest in the position and the relevance of your background.
- A list of any relevant publications.
- Recommendation letters from at least two 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 [Norwegian 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.

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.

NTNU recognizes a wide range of academic contributions and is committed to follow evaluation criteria for research quality according to [The San Francisco Declaration on Research Assessment DORA](#) and the obligations in [CoARA](#) (responsible assessment of research and recognition of a greater breadth of academic contributions in accordance with NTNU's social mission).

## 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 [current legislation](#). You will be notified if the exemption is not granted.

If you have any questions about the position, please contact Dr. Jonathan Whitlock, [jonathan.whitlock@ntnu.no](mailto:jonathan.whitlock@ntnu.no).

If you have any questions about the recruitment process, please contact HR-Advisor Camilla Perrin Wenaas, [camilla.p.wenaas@ntnu.no](mailto:camilla.p.wenaas@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: Rolling, 2026

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 Kavli Institute for Systems Neuroscience is part of the Faculty of Medicine and Health Sciences at NTNU. It was established as a Centre of Excellence in 2002, and designated as a Kavli Foundation Institute in 2007 ([www.kavlifoundation.org](#)). The scientific goal of the Institute is to increase the understanding of neural circuits and systems along with their role in generating psychological functions. Today, the Institute consists of the Centre for Neuronal Computation (CNC) as well as the Egil and Pauline Braathen and Fred Kavli Centre for Cortical Microcircuits. In 2014, the Nobel Prize in Physiology or Medicine was awarded to two of the Institute's professors, Edvard Moser and May-Britt Moser. The Institute is responsible for an international master's programme and is affiliated with a doctoral programme in medicine. Through our widespread network of international collaboration, we offer unique career opportunities. For further information, see: [www.ntnu.edu/kavli](#).

## Additional information

### Place of service:

Olav Kyrres gate 9 7030 Trondheim (Trondheim Municipality)