COST Action CA24123

"Extended Reality Neurorehabilitation of Spatial Neglect and Related Disorders After Brain Injury (NeuroXRehab)"

For implementation from November 2025 to October 2026

Call for applications for NeuroXRehab short-term scientific missions (STSM)

Call 1

1. About NeuroXRehab

NeuroXRehab addresses the important need for improving health and function in a large group of people with acquired brain injuries (ABI) by leveraging extended reality (XR) technology for personalised and cost-effective neurorehabilitation of spatial neglect (SN) and related disorders. Extended reality, an umbrella term for virtual, mixed, and augmented reality, offers exciting new possibilities for assessment and treatment of SN, a common cognitive disorder after ABI. Individuals affected by SN pay no or insufficient attention to the side of space opposite to the injured brain hemisphere. SN independently predicts prolonged hospitalisation, poor rehabilitation outcomes, and slows recovery. Thus, SN constitutes a substantial burden for the individual, their caregivers, and health services. Conventional assessment and treatment of SN have insufficient diagnostic accuracy and efficacy.

Advances in XR technology allow for combined cognitive-motor assessment and treatment that is cost-effective and reduce the impairment of ABI survivors and the financial burden to society. NeuroXRehab will improve the assessment of SN and related disorders (differential diagnostics) and individually tailored treatment (precision medicine) to increase specificity and intensity of neurorehabilitation across the continuum of care, including self- and telerehabilitation. This collaboration of experts such as researchers, clinicians, developers, patients and caregivers will result in a platform for sharing knowledge, defining XR guidelines, promoting coordinated research projects and increasing the technical readiness level of XR neurorehabilitation. NeuroXRehab will drive the technological and scientific development in XR applications for neurorehabilitation and contribute to positioning the EU as a major player in health technologies.

The objective of NeuroXRehab

The main aim and objective of the Action is to investigate how XR neurorehabilitation effectively can reduce the impact of SN and related disorders, improve the health, function, and well-being of patients with ABI, enhance the quality of life for family caregivers, and reduce the burden on society by increasing clinical efficacy.

Five working groups (WG) focus on the following topics

1. Meta study on latest knowledge on methodology and scientific evidence. The main task of the meta-study group is to systematically collect theoretical and empirical evidence from the literature, technical and clinical expertise from the Action members, and knowledge on the latest XR technology for the assessment and treatment of SN and related disorders.

2. Assessment of spatial neglect and related disorders. The main task of WG2 will be to operationalise methodologies for assessment of SN and related disorders using XR. The aim is to improve the diagnostic accuracy of the many sub-symptoms of SN and differentiate diagnostics of related disorders and define common data elements.

3. Treatment of spatial neglect and related disorders. WG3 will standardise methodologies for implementing treatment methods in XR for SN and related disorders. The aim will be to implement conventional and novel treatment approaches with XR that are more flexible allowing for individualised neurorehabilitation.

4. Creation of a data collection and sharing policy/platform. WG4 will facilitate data sharing for multicentre studies on diagnostic accuracy and treatment efficacy of SN and related disorders. The main task is to define data policies, agree on best practices, identify and extend suitable ontologies for data sharing and re-use, and create a data storage/sharing platform

5. Multicentre Project Planner. The main task of WG5 is to prepare protocols for future multicentre studies based on the activities and deliverables from WG1 (meta study), WG2 (assessment), WG3 (treatment), and WG4 (data policy). Defining study objectives, design, and methods for investigating diagnostic accuracy and treatment efficacy of XR neurorehabilitation of SN and related disorders.

2. What is a short-term scientific mission (STSM)

A short-term scientific mission (STSM) is a visit to a host organization located in a different country to the researcher or innovator with the objective to conduct a specific piece of work for a determined period. A STSM grantee receives funding for this work within an international team allowing the grantee to gain new knowledge or access equipment or techniques not available in their home institution.

STSMs serve several key purposes in EU COST Actions. COST networks encourage international collaboration among researchers and innovators in various scientific fields. The STMSs are an integral part of every COST Action. They:

• Facilitate the international mobility of researchers, especially early-career scientists, to foster new collaborations and sharing knowledge across borders.

• Enhance research skills by transferring new techniques and using equipment in different environments.

• Build and strengthen networks that lead to long-term collaborations, joint publications, and other research activities.

• Boost research projects by providing essential skills, data, and collaborations that support the Action.

• Foster development of early career researchers, including through the establishment of a research profile and gaining international experience.

• Encourage collaboration and knowledge sharing. STSMs contribute to the overall scientific excellence of the research community involved in COST Actions.

• Support COST policies by promoting gender balance, enabling young researchers, and broadening geographical inclusiveness. Grantees will be selected in an open and transparent way.

• Advance COST Excellence and Inclusiveness Policy and Principles of Openness.

3. This call:

Applications are invited from researchers and innovators for STSMs that support the neuroXRehab objectives and Working Groups as described in this document.

This call is open-ended. There is no set deadline. Each application will be processed on a first-come first-served basis. It is especially aimed at STSMs that will be implemented from November 2025 to October 2026.

Financial support

The financial support provides a contribution for travelling, accommodation, subsistence expenses, and insurance costs.

The financial support is provided in the form of a grant. Receipts for travel and accommodation are required. The maximum grant amount is 2,000 EUR.

4. Eligibility

STSM grants are available to applicants employed by, or affiliated to, an institution, organization, or legal entity in a **COST full/cooperating member country** or a legal entity in a **near neighbour country (NNC)**.

The eligible countries are listed here: https://www.cost.eu/funding/documents-guidelines/

5. Financial support

Before applying, candidates must read **Annex 2** of the Annotated Rules for COST actions. They can be found here: Annotated rules

STSM grants provide a contribution for travelling, accommodation and subsistence expenses, and for miscellaneous expenses arising from the implementation of the project and the delivery of the report to the COST Action Management Committee. There is no limit to the duration of the STSM, but the STSM must be completed before October 2026. Up to a maximum of EUR 2,000 in total can be awarded per grant. Participants are reminded that cancellation insurance fees are an eligible expense. Grants are paid by the Grant Holder after the completion of the activity and after approval of all required report/documentation.

The final amount of financial support is decided by the Action Chair/Grant Holder based on the advice of the Grant Awarding Coordinator. The request of the applicant should reflect the duration and location of the STSM.

6. The grant awarding process

The supported activity, including reporting and payment, must be carried out entirely within one Grant Period. Each Grant Period runs from the 1 November until the 31 October of the following year.

The grant awarding process for STSMs starts with a call under a strict (annual) budget. Each application is reviewed by two (or three in case the outcome is not consistent) COST Action members who are guided by the Grant Awarding Coordinator. The Grant Awarding Coordinator advises the Action Chair who acts on the advice if the budget allows. An STSM ends when the payment is recorded. Missions must be complete by 31 October.

7. Application procedure

Applicants must have an e-COST profile, and applications must be submitted online in e-COST via https://e-services.cost.eu/user/login

Applications comprise:

1. An online Grant Application (found at https://e-services.cost.eu/stsm) which includes:
   - A project title for the mission that communicates the content and purpose of the work.
   - Start and end date of the STSM (within the active grant period up to 31 October 2026, i.e., no overlap across two consecutive grant periods).
   - Grant requested.

- Basic information about the host institution and contact person.

2. A completed Application Form (Application template) describing goals, description of the work to be carried out by the applicant, expected results (outcomes) and description of the contribution to the Action MoU objectives.

3. Confirmation from the host institution of its availability to receive the applicant.

4. A justification document setting out:

- The statement describing applicant's motivation (1-2 pages).
- The financial plan (about 1 page) clearly indicating the expected costs (e.g., transport, accommodation, living costs) following COST rules and the amount of support already received from other sources.
- Applicant's curriculum vitae.
- In the case of students, a support letter from the home institution.

Any documents that cannot be uploaded via the e-COST interface should be sent directly to the Grant Awarding Coordinator Iris Brunner (iris.charlotte.brunner@helse-bergen.no) and the Chair of COST action Lars Evald (Lars.Evald@midt.rm.dk).

8. Evaluation of applications

Applications will be evaluated for their quality and for their relevance to the objectives of neuroXRehab and its Working Groups. To avoid time-wasting, each application will be first screened by the Grant Awarding Coordinator to check that it is complete and that it is relevant to the Action. Incomplete applications are rejected with the possibility to resubmit one time. Irrelevant applications will be rejected. Any rejected applications cannot be resubmitted.

Following passing of the screen, STSM applications are evaluated by independent experts guided by the Grant Awarding Coordinator on behalf of the Management Committee (MC). External advice may be sought. The Grant Awarding Coordinator manages the process so that evaluators have no personal or financial interest in the application. An evaluation score is given considering the proposal clarity, relevance for the Action, feasibility, planning, and expected outputs. Scores are from 1 to 6. The final evaluation outcome is announced within one month of submission.

Scores:

1 (very poor): proposal is not logical and not understandable. Not clearly linked to any working group.

2 (poor): proposal with limited understanding, planning and no clear objectives. Weakly linked to any working group.

3 (fair): proposal with some understanding, planning and objectives. Moderate links to at least one WG.

4 (good): good proposal but would benefit from refinement. Well-linked to at least one WG.

5 (very good): clear and effective plan that is well-linked to at least one working group.

6 (excellent): the proposed work plan is well-designed and planned, is feasible with good projected outputs. Strongly linked to at least one WG.

A score is given (from 1 to 6 as above) for proposal clarity, feasibility, planning and expected outputs.

Each reviewer scores each proposal independently. The STSM Grant Awarding Coordinator collates the outcomes of the independent evaluations and communicates the final scoring (range 4-24 points) after confirming the fulfilment of requisites to the Chair and Vice-Chair of the Action.

Proposals with high scores (≥ 20 points) will be financed, but only when all other evaluation criteria are acceptable, and the available budget suffices. If one or more proposals get the same classification, early career researchers will be prioritized. The outcome will be communicated to the applicant by email. The results will be published in the COST Action website.

Summary of the evaluation criteria

Category	Notes	Scoring
Requisites		
Support letter - home Institute	Required for students only	Y/N
Support letter - host Institute	Y/N	
Evaluation		
Motivation letter	Convincing	Y/N
Work plan		
Clarity and relevance	Score	1-6
Feasibility	Score	1-6
Planning	Score	1-6
Expected outputs	Score	1-6

Suitability of the candidate from the curriculum vitae and list of publications

Grant request

Travel	Acceptable	Y/N
Accommodation	Acceptable	Y/N
Subsistence	Acceptable	Y/N
Miscellaneous	Acceptable	Y/N

9. Submission of the STSM report and payment

• Once the activity has ended, the applicant claims the payment of the grant via e-COST. For this, the grantee submits the short STSM report using the STSM report template, and relevant documentation within 15 working days of the completion of the mission.

• The report includes a short description of the work, and main achievements of the STSM and planned future follow-up activities.

• Grants are paid by the Grant Holder after the completion of the activity and approval of all required report/documentation.

In addition to providing the STSM report, the applicant must upload a Scientific Report for use in communications that includes:

• The background and a full description of the work and the main scientific findings.

• The effect of the visit on personal development, networking, and capacity building (e.g., collaborations).

• Foreseen publications/articles resulting from the STSM (if applicable).

• The summary of the report will be published on the neuroXRehab website.

• In addition to the Mission Report, a document confirming the host institution of the execution of the STSM and

• Proof of evidence of the stay (a picture of the grantee working at the host institution facilities and a picture with the collaborators) that might be published in social media and website.

Documents that cannot be uploaded via the e-COST interface should directly be sent to the Grant Awarding Coordinator Iris Brunner (iris.charlotte.brunner@helse-bergen.no) and the Chair of COST action Lars Evald (Lars.Evald@midt.rm.dk).

10. Frequently asked questions

1. Can I postpone my STSM? If the originally intended period is not feasible, STSM could be postponed after consultation with the Grant Awarding Coordinator and Action Chair. Grantees

should keep in mind that the approved STSM must be completed within the actual Grant Period, i.e. before 31 October 2026.

2. **I am uncertain about the exact dates for my trip. Can I apply for a flexible three-week period within a one-month timeframe, for example?** Yes, it is possible. However, STSMs require specific start and end dates, therefore, supporting documents must state the period in which the applicant is considering doing the STSM.

3. **Where do I upload receipts for accommodation or meals after I have returned from the STSM?** You do not have to provide any receipts for accommodation or meals. The financial support is paid in the form of a grant. However, travel expenses and accommodation invoices must be presented in the case of cancellation by force majeure.

Notes:

Each publication produced with support of a STSM must acknowledge the support of the COST Action and whenever possible use the COST and neuroXRehab logos (on slides and posters).

Acknowledgement text:

"This publication is based on work supported by the COST Action CA24123: "Extended Reality Neurorehabilitation of Spatial Neglect and Related Disorders After Brain Injury (NeuroXRehab)"