AUGUST TO OCTOBER, 2026

COST ACTION 24123

NEWSLETTER



neuroXRehab Core Group Meeting

On September 17th, the Core Group met at Het Trippenhuis in Amsterdam to strengthen the connections across our Working Groups (WG1–WG5). The day featured a session on grant-awarding procedures, a review of interdependencies between WGs, and a discussion on science communication strategies. A productive day of strategic planning for the future of technology-mediated neurorehabilitation research across Europe.

WG1: Meta study on latest knowledge on methodology and scientific evidence

Accomplished tasks

- ***Training School on AI for Research*** (Universidade da Madeira, 18 May 2026): a hands-on day covering prompt construction, AI tools for systematic reviews, qualitative analysis and workflow automation.
- **Three review subgroups formed:** Assessment, Treatment and Tools. The Tools review has started testing LLM prompting in a collaborative spreadsheet.
- **A living review platform is in development:** it will support the reviews and keep them up to date as new studies appear. Some members are testing an early version.

Upcoming tasks

- **Izmir Meeting** (16-17 November 2026)

Day one: subgroups report progress, confirm roles and finalise review methods, including search strategies and screening criteria.
Day two: launch of the living review platform with a hands-on tutorial.

The subgroups start their first reviews after the Izmir meeting, so now is a great time to get involved. Join a review subgroup by contacting their leader:
Assessment review: Andreia Geraldo and Turhan Kahraman
Treatment review: Yusuf Emuk
Tools review: Bastian Ilsø Hougaard

AUGUST TO OCTOBER, 2026

WG 2 & 3: Assessment and treatment of spatial neglect and related disorders

Accomplished tasks

- The **Stakeholder subgroup** (led by Kathleen Vancleef and Maria Nordfang) has already mapped the relevant stakeholders and prepared the questions for the stakeholder survey. The aim is to complete the stakeholder survey next spring.
- The **STSM subgroup** (led by Andreia Geraldo) has launched a survey and has already identified a number of potential host institutions. This will be particularly valuable in the coming Grant Period, when targeted STSM calls will run alongside open calls.
- **Delphi subgroup** (led by Eleftheria Giannouli and Elpidio Attoh-Mensah): the subgroup has grown into a dedicated team of 13 members, who are currently working on designing the Delphi study. To support this work, we will hold a training session on Delphi methodology at the Izmir meeting, led by Ilaria Valentini, an expert in Delphi studies.

Upcoming tasks
All subgroups will present their progress at the Izmir meeting. This will be a good opportunity to see how the stakeholder, STSM and Delphi activities fit together.

Get involved

- Attend the Delphi training school. It is open to all members, not only to the Delphi subgroup, and is a great chance to learn more about Delphi methodology from an expert.
- Watch out for the STSM calls. Both open and targeted calls will be launched in the coming Grant Period, so keep an eye on your inbox.

WG 4: Creation of a data collection and sharing policy/platform

Accomplished Tasks

WG4 has launched an initiative to make data from XR-based rehabilitation systems more comparable, interpretable and reusable. The goal is a shared framework for describing XR rehabilitation data, task context, technical characteristics and derived features, supporting comparison and aggregation across systems and sites.

A call for volunteers drew a positive response, with several researchers already joining. Two subgroups are driving this work:

- **Minimum Viable Dataset (MVD) and Data Standardisation**: common data elements, terminology and metadata, and how raw data, derived features and clinical outcomes relate.
- **Platforms, Formats and Existing Standards**: a review of relevant standards, ontologies, interoperability frameworks and data-sharing infrastructures, including technical, legal and governance aspects.

Get involved

- Volunteers are welcome to join either subgroup.
- Examples of XR rehabilitation data structures and datasets are welcome, such as variable dictionaries, log-file structures, synthetic datasets, CSV, Excel or SPSS files, and published datasets. WG4 is not requesting patient data.

Short-Term Scientific Missions spotlight: bridging XR and neglect rehabilitation across Europe

Università degli Studi di Milano-Bicocca
22–30 June 2026



Ali Geris (Lund University) carried out an STSM at the Department of Psychology and the MIBTEC facilities, hosted by Daniele Romano. The aim was to bridge XR-AI engineering and clinical neuropsychology through a conceptual framework for assessing spatial neglect and related cognitive-motor disorders. Dr Geris held multidisciplinary meetings with Daniele and clinical experts Roberta Daini, Giorgia Tosi and Silvia Gobbo, along with technical discussions with MIBTEC engineers. Together, they critically reviewed conventional paper-and-pencil assessments to identify the specific clinical value XR could add. The STSM strengthened collaboration between MCBU XRLab and MIBTEC and linked WG2 assessment priorities with WG4 data collection.

HEI-Lab
Porto and Lisbon

October 2026



Britta Stammler (University Hospital Tübingen) carried out an STSM hosted by Andreia Geraldo at the HEI-Lab of Lusófona University. She learned about XR-based and neurophysiological approaches to spatial neglect rehabilitation and toured the lab's neurophysiological and XR infrastructure. The visit produced two collaborations:

- NEGAMI on AR glasses: The teams will test whether a hands-free headset version of the NEGAMI augmented reality training for neglect can improve accessibility, especially for patients with hemiparesis.
- Neglect intervention in Portugal: Andreia Geraldo will map how neglect intervention is currently delivered in Portugal, using the same questionnaire already applied in Germany.

AUGUST TO OCTOBER, 2026

WG4 co-lead **Hendrik Knoche** (Aalborg University) visited the Eye Tracking Research Centre at the Warsaw School of Social Psychology to work with Izabela and Krzysztof Krejtz on making XR eye-tracking data comparable across sites.



The team recorded data on two HTC headsets with two software stacks. They found that accuracy drops at the edges of the headset's field of view, which matters for spatial neglect studies, where targets sit in the periphery. They also confirmed that absolute pupil size cannot be compared across devices.

The visit produced a three-tier draft of a minimum dataset (signals and metadata, derived features, constructs), a reporting checklist for calibration and coordinate systems, and a worked example mapping XR and clinical data to BIDS and HED, which will be presented at the WG4 workshops in Izmir.

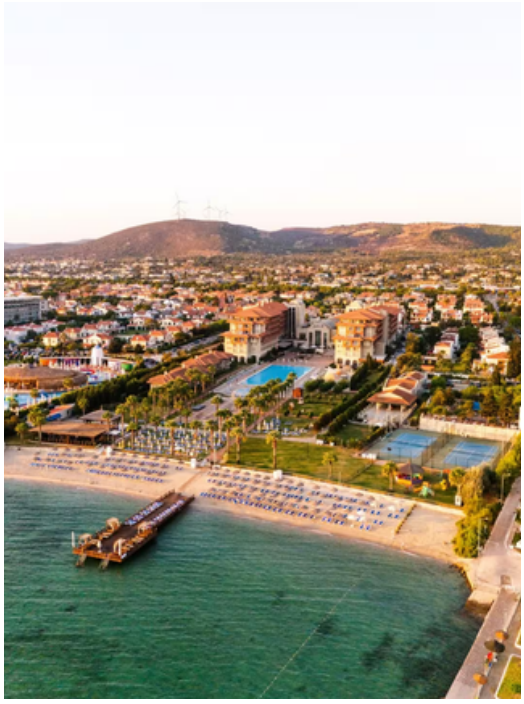
Eye Tracking Research Centre at Warsaw School of Social Psychology

26 - 31 October 2026



Bastian Ilsø Hougaard (Aalborg University), STSM at the same institution, focused on WG1's literature review of XR tools, particularly how eye-tracking features can indicate spatial neglect. He collaborated with the hosts on XR eye-tracking tools and discussed synergies between WG1 and WG4. He also explored the clinical use of mobile eye tracking with patients with neglect and tested Whack-A-Mole tasks across two XR headsets. The visit established next steps for patient testing and covered data-processing methods for XR rehabilitation, including calibration, movement analysis, and visualisation.

neuroXRehab meets in Izmir, Türkiye 16-17 November 2026



Members of the neuroXRehab COST Action will gather on 16-17 November 2026 for their next meeting in the Izmir region (Çeşme), Türkiye. Yusuf Emuk and Mahbube Dogru of İlzmir Katip Çelebi University are organising the meeting, together with Martin Edwards and Lars Evald.

The meeting has 92 confirmed delegates: 60 attending in person and 32 joining online. Of those attending in person, 10 are members of the Core Committee, and 2 are local organisers.

About 30% of delegates are based in Turkey, making this a great opportunity to strengthen the network's links with the host country.



This meeting will focus on the ongoing work of the Action's working groups. Both days are devoted to parallel WG1-4 sessions, with moments when all participants come together to summarise and share progress across groups.

Full details on the venue, travel and the programme are on the meeting page on the neuroXRehab website.

Survey on clinical use and awareness of XR

We are conducting a European survey to explore current practices, experiences, barriers, and opportunities related to Extended Reality (XR) technologies in stroke and acquired brain injury rehabilitation.

🔗 https://redcap.au.dk/surveys/?s=9LALCFYPC8E73TPA
Your contribution will help inform future research and recommendations in neurorehabilitation.

Ana Lúcia Faria
Bastian Ilsø Hougaard
Science communication coordinators