Net4Brain
Let's beat brain cancer together

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March 2025

Spring issue

A COMPREHENSIVE NETWORK AGAINST BRAIN CANCER

Editorial

The new year is already completely forgotten, and everyone has started to devote themselves to activities that were waiting for the "enough time". January flew by, and even February was not far behind. And so here we are with a new edition of the Newsletter full of information about what happened, but especially about what we have planned for this year.

As we know, Net4Brain is a dynamic community full of activities. Except for laboratory work, we meet online to discuss the problems that should be resolved, we plan manuscripts with the newest results, we exchange a bunch of emails until we reach the desired result. Young people try to catch up on their opportunities to visit other laboratories, and we have already spent the whole STSM budget to support them.

So, what can we look forward to this year?

First, you can look forward to many webinars. We also plan Training School in Stockholm, Sweden in June and of course, Annual meeting 2025 in Bucharest, Romania at the beginning of July. You can try to get many kinds of grants for the conferences and collaborate with other members of our community.

Best regards,

Dr. Terezia Kiskova
Science Communication Coordinator

International Day of Women and Girls in Science 11st February

Gender equality in science is crucial for building a better future for all, yet women and girls continue to face systemic barriers and biases in pursuing scientific careers.
It is already a long long ago when the first women were involved in the science, such as Aganice, also known as Athyrta. She was an Egyptian princess during the Middle Kingdom (about 2000–1700 BCE) working on astronomy and natural philosophy. From the whole history, despite less-than-ideal conditions, women continued to participate in research.

The first woman of modern science was Marie Curie. She was a pioneering physicist and chemist whose work focused on radioactivity. She was the first woman to win a Nobel Prize, the first person and only woman to win it twice, and the only person to win the prize in two sciences.

In Net4Brain COST action there is a lot of excellent women, and we chose only very few of them to introduce you their work, how they started their carrier and what they describe as their success.

Vanessa Vermeirssen

Growing up, I loved reading books and learning about all kinds of things. In high school, my favorite subjects were mathematics and biology and therefore I embarked on the study of bioengineering at university. My curiosity in life sciences sparkled with my master thesis on gastrointestinal microbial ecology. I loved performing wet lab experiments, data analysis, brainstorming on novel research ideas after reading scientific research papers and interacting with people from all over the world. Continuing scientific research in a PhD was the natural flow. In my postdoc, I particularly got fascinated by systems biology: taking a helicopter-view on biological systems, while zooming in with a molecular lens fitted me like a glove. The revolution in omics technologies went hand in hand with an explosion in data, which triggered my analytical mind. The field of computational biology continues to be my favorite scientific playground.

I was lucky to experience several successes in science. I conducted research in different research areas, and while the transitioning of research fields and environments was challenging, I was able to leave significant scientific footprints behind in all of them. The completion of a PhD is always a major achievement. Going to the US for a three-year postdoc was a lifetime experience: not only scientifically with high impact papers, but also personally with a circle of international friends. Even today, a small, novel scientific finding brings me joy. I also find fulfilment in guiding the PhD students in my team. In all this, I always feel supported by my family, my partner and three kids.

Milica Pesic

My journey into science began at a young age, fueled by an innate curiosity about the world around me. As a child, I often found myself pondering the origins of life, imagining how everything was interconnected. This fascination developed into a love for mathematics, where I was drawn to the elegance of numbers and their ability to explain complex phenomena. My interest deepened when I began experimenting with different forms of art and music, but the world of molecular biology truly captured my heart. I began working in the field at 16 during high school, which marked the start of a fulfilling career in experimental research.

One of my proudest scientific achievements came when I defended my PhD thesis after nearly a decade of hard work. Completing this milestone while navigating the demands of motherhood was both challenging and rewarding. I remember the overwhelming sense of accomplishment I felt, knowing I had managed to balance the responsibilities of raising five children with my academic pursuits. This experience didn't just reflect my personal dedication; it also highlighted the collaborative spirit of my research team and the support I received from my family. It was a testament that motivation and perseverance can lead to remarkable success, even in the face of adversity. That moment solidified my commitment to both my family and my passion for science, reinforcing my belief in the importance of striking a balance between the two.

Barbara Breznik

While I was working on my master's thesis, I started to think about the process of cancer cell invasion. This led me to my PhD studies, and I became fascinated by cancer research and the creativity and excitement that comes from testing hypotheses in the lab.

Mentoring and passing knowledge to younger generation and connecting with scientists of different fields to advance knowledge on brain tumor microenvironment and therapy resistance.

Claudia Mazo

Since I was a child, curiosity has driven me to look beyond what exists and ask, Why not? I never wanted to simply use technology—I wanted to be the one creating it, shaping ideas that could make a real difference. Computer science became my tool to turn curiosity into impact. The thought of designing solutions that could help people, improve healthcare, and push the boundaries of what's possible fascinated me. That passion led me to research, where I could not only understand the world but also contribute to shaping its future.

One of my greatest achievements in science has been securing highly competitive fellowships in Colombia, Spain, and Ireland, each opening doors to incredible research opportunities. The most significant, the Marie Skłodowska-Curie Individual Fellowship, was a milestone in my career. As one of the most prestigious and competitive fellowships in Europe, it was a testament to years of dedication and resilience. It gave me the platform to work on cutting-edge AI applications in healthcare, collaborate with top researchers, and advance knowledge in ways that have a real-world impact. More than just an award, it was validation that my curiosity and drive to help others through science were leading me in the right direction.

Anastasia Antoniou

From the start of my academic journey, my curiosity about the fundamental principles of the world led me to pursue a bachelor's degree in physics at the University of Cyprus. However, I soon realized that I wanted to translate this knowledge into practical solutions for improving human health, which inspired me to shift toward biomedical engineering for my master's degree. During this time, I developed a strong interest in Therapeutic Ultrasound, recognizing its potential to revolutionize medicine. This passion drove me to pursue a PhD at the Cyprus University of Technology's Laboratory of Therapeutic Ultrasound, focusing on MRI-guided therapeutic ultrasound for treating brain diseases. Now, as a postdoctoral researcher at the same lab, I continue to explore and deepen my expertise in this field.

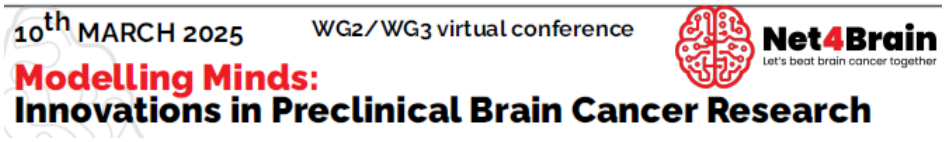
Tell us your story and send us more about you on terezia.kiskova@upjs.sk and we will create a book of **Net4Brain Ladies in Science**.

Past events

World Cancer Day 4th February

Net4Brain launched a video during World Cancer Day and streamed it via social media.

WG2 and WG3 Joint Meeting: Modelling Minds: Innovations in Preclinical Brain Cancer Research



Working Groups 2 and 3 (WG2 & WG3) joined forces to assess the current state-of-the-art in brain tumor modeling through a collaborative and forward-thinking meeting. The discussions focused on three core areas:

1. In vitro and ex vivo preclinical modeling
2. Advanced co-culture systems and organ-on-chip technologies
3. In vivo modeling approaches

Invited speakers, along with NET4BRAIN members, delivered insightful presentations covering a wide range of technological innovations across diverse brain tumor types. This exchange of knowledge laid the groundwork for the formation of three dedicated WG2 task forces, each aiming to critically evaluate current methodologies and drive the development of next-generation models.

The meeting concluded with a specialized workshop on in vivo modeling, offering a historical perspective on rodent models, recent advancements in patient-derived xenografts, and emerging alternatives such as zebrafish-based systems.

This event marks the beginning of a concerted effort by WG2 and WG3 to establish a comprehensive and clinically relevant framework for preclinical brain tumor modeling—paving the way for deeper biological insights and translational impact.

Calls

ITC grants

The ITC Conference Grant aligns with COST's commitment to promoting excellence and inclusiveness by providing financial support for participation in high-level conferences organized by third parties. Recipients of this grant will be required to deliver an oral presentation or speech at the conference, showcasing their work related to the objectives of the Net4Brain initiative. It is essential that grant recipients are featured in the official conference program, ensuring that their contributions are recognized. Grant funding of up to EUR 2,500 is available for face-to-face conferences, while online conferences will receive EUR 500.00. This funding can be used to cover travel, accommodation, subsistence expenses, and registration fees. By participating in this grant opportunity, you will not only share your research findings but also gain invaluable insights and knowledge from your peers in the field. The ITC Conference Grant serves as a vital platform for enhancing the visibility of individual researchers and Net4Brain's overarching goals. We encourage all eligible researchers to apply for this exciting opportunity to elevate their work and contribute to the global research community. Don't miss out on the chance to gain recognition and further your academic career!

Virtual mobility grants

As a VM grantee, you will develop your capacity for online collaboration and networking. Activities that can be undertaken include virtual mentoring schemes focusing on capacity-building and new skill development, particularly for Young Researchers and Innovators. You could also engage in activities aimed at harmonizing methods within the Action, such as setting up surveys to gather diverse results from various labs, coordinating discussions to create standard protocols, or preparing questionnaires for online networking. Additionally, the grant supports research coordination activities that do not require in-person presence, such as computational tasks or data analysis for specific reports. Each grant provides funding of up to EUR 1,500.00 (we have allocated EUR 500.00 within Net4Brain), with an amount reflecting the task's duration, scope, and complexity. We encourage interested participants to submit their proposals outlining their intended activities and how they will achieve the grant's objectives. We look forward to your applications and to fostering collaborative efforts together.

Closed calls

Short term scientific mission (STSMs)

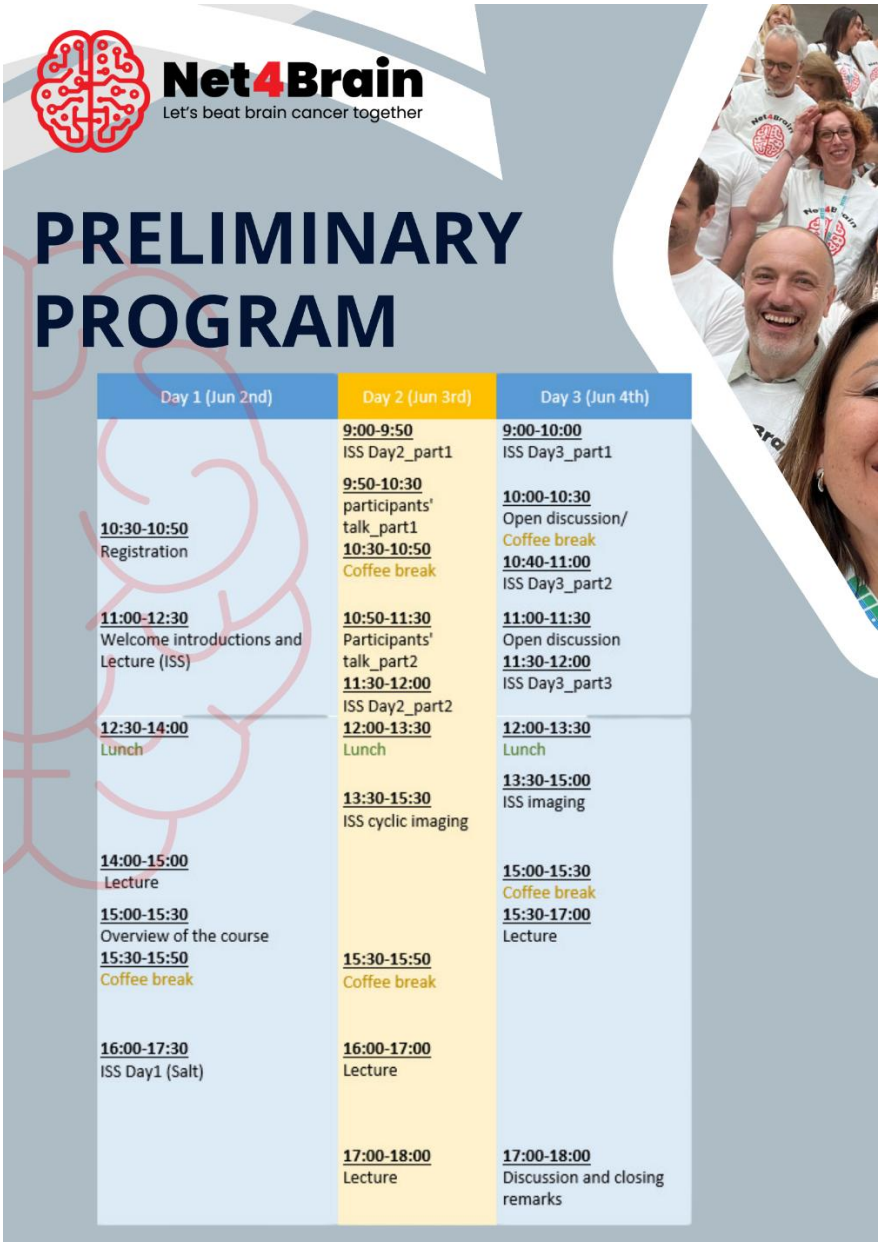
This year, we approved six STSMs. The total funding for these six STSMs is 14,500 EUR, so we have closed the Call for STSMs.

Congratulations to all grant holders!

Catarina Passarinho	Leveraging Radiomics for Magnetic Resonance Spectroscopy analysis
Khuraman Sayin	Identifying and creating deep learning models on brain tumor data (MRI) that determine patient survival time and the probability of tumor recurrence.
Ahmet Azgın	Quantitative MRSI of Gliomas: Improvement of data processing pipeline integration
Simona Katrin Galun	Imaging of 3D glioblastoma models with light-sheet microscopy
Bárbara Marques	Establishment of biomimetic glioblastoma patient-derived models
Hamed Allahverdi	Decoding tumor plasticity and evolution in glioblastoma through spatial transcriptomics in patient avatar models

Upcoming events

Organizing Committee: Aurélie Tchoghandjian; aurelie.tchoghandjian@univ-amu.fr



Day 1 (Jun 2nd)	Day 2 (Jun 3rd)	Day 3 (Jun 4th)
	9:00-9:50 ISS Day2_part1	9:00-10:00 ISS Day3_part1
	9:50-10:30 participants' talk_part1	10:00-10:30 Open discussion/ Coffee break
10:30-10:50 Registration	10:30-10:50 Coffee break	10:40-11:00 ISS Day3_part2
11:00-12:30 Welcome introductions and Lecture (ISS)	10:50-11:30 Participants' talk_part2	11:00-11:30 Open discussion
	11:30-12:00 ISS Day2_part2	11:30-12:00 ISS Day3_part3
12:30-14:00 Lunch	12:00-13:30 Lunch	12:00-13:30 Lunch
	13:30-15:30 ISS cyclic imaging	13:30-15:00 ISS imaging
14:00-15:00 Lecture		15:00-15:30 Coffee break
15:00-15:30 Overview of the course		15:30-17:00 Lecture
15:30-15:50 Coffee break	15:30-15:50 Coffee break	
16:00-17:30 ISS Day1 (Salt)	16:00-17:00 Lecture	
	17:00-18:00 Lecture	17:00-18:00 Discussion and closing remarks

Organizing Committee: Chika Yokota; chika.yokota@scilifelab.se
Stockholm University; Science for Life Laboratory

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Annual meeting 2025

Day 1. Wednesday, July 2

8.30 – 9.30	*Registration and Welcome Reception*
9.30 – 11.00	**Net4Brain Core Group Meeting PART I**
11.00 – 11.30	*Finger Foods and Tasty Bites*
11.30- 13.00	**Net4Brain Core Group Meeting PART II**
13.00 – 14.00	**Welcome Reception** of all attendees/ Meet and greet *Registration Desk*
14.00-14.05	**Institutional Welcome**
14.05 – 15:00 Session Chair: Viorel Jinga and Luiza Spiru	**Opening Keynote Session Speakers** Moderators: Professor Viorel Jinga Professor, Professor Rodica Anghel and Professor Cornelia Nițipir Prof. Dr. Anca L. Grosu: *Whole-brain irradiation with hippocampal sparing and dose escalation on metastases: neurocognitive testing and biological imaging (HIPPORAD) – a prospective randomized multicenter trial (NOA-14, ARO 2015–3, DKTK-ROG)* Professor Dr. Liviu Bîlteanu: *FLASH Effect by Plasma-generated Carbon Ions within a Large Scale Romanian National Laser Project (DR. LASER) - Perspectives Towards High Precision Neuroradiosurgery*
15:00 – 15:45 Session Chair: Xinzhong Li	Professor Paul Brennan: *Journey from Bench to Actual Bedside for Dxcover(R) brain tumour liquid biopsy.*
15:45 – 16:30 Chair: Aida Hajdarpasic	**Keynote Talk 1: Alexandru Floares**
16:30 – 16:40	**WG1 Dialog on! (10 mins)**
16.40 – 17:00	*Refreshments and Networking*
17.00 – 17.45 Chair: Barbara Breznik	**Keynote Talk 2: Bozena Kaminska-Kaczmarek**
17.45 – 18.25	Session 2 (20mins) – Barbara Breznik Short talk (10mins) **WG2 Dialog on! (10 mins)**
18.25	***Surprise Walking Tour***

Day 2. Thursday, July 3

8.15 – 9.00	*Registration/ Greetings/ Coffee*
9.00 – 9.05	*Welcoming to the second day*
9.05 – 9.50	**Keynote Talk 3: Gaetano Gargiulo**
Chair: Tugba Bagci Onder	
9.50 – 11.00	Session 3 Talk (20 mins) – Tugba Onder
	Short Talk 1 (10 mins)
	Short Talk 2 (10 mins)
	Short Talk 3 (10 mins)
	WG3 Dialog on! (20 mins)
11.00 – 11.30	*Coffee Break. Finger Foods and Tasty Bites*
11.30- 12.50	**Mega Talk**
Chair: Radim Jancalek	Session talk - (20 mins)
	Short Talk 1 (20 mins)
	Short Talk 2 (10 mins)
	Short Talk 3 (10 mins)
	Short Talk 4 (10 mins)
	Short Talk 5 (10 mins)
12.50 – 14.00	Break / Ending of the first part of the second day
14.00 – 14.45	**Keynote Talk 4: Neibla Priego**
Chair: G. Fernandez Calvo	
14.45 – 15.50	Session 4 Talk (20 mins)
	Short Talk 1 (10 mins)
	Short Talk 2 (10 mins)
	Short Talk 3 (10 mins)
	WG4 Dialog on! (15 mins)
15.50 – 16.30	*Coffee Break. Finger Foods and Tasty Bites*
16:30 – 18:00	***MC MEMBERS MEETING (Strictly MC)***
Xinzhong Li/Radim Jancalek	
16.30- 18:15	**Poster presentation (All Members)**
	Ending of the second part of the second day

Day 3. Friday, July 4

8.30 – 9.00	*Registration/ Greetings/ Coffee*
9.00 – 9.45	**Keynote Talk 5: Mauricio Reyes**
Chair: TBC	
9.45 – 10.50	**Session 5 Talk (20 min)**
	Short Talk 1 (10 mins)
	Short Talk 2 (10 mins)
	Short Talk 3 (10 mins)
	WG5 Dialog on! (15 min)
10.50 – 11.30	*Coffee Break. Finger Foods and Tasty Bites*
11.30- 12.35	Session 6 Talk (20 min)
Terézia Kisková	
Claudia Mazo	
	Short Talk 1 (10 min)
	Short Talk 2 (10 min)
	Short Talk 3 (10 min)
	WG6 Dialog on! (15 min)
12:35 – 13:00	**Poster Award Presentation & Closing Remarks**
LOC/Xinzhong Li	
13.00 – 14.00	*Break / Ending of the first part of the third day*

The final program will appear soon.

Organizing Committee: Cosmina Paul; cosmina.paul@anaaslanacademy.ro
Faculty of Medicine and Dr. Luiza Spiru from the Ana Aslan International Foundation

Contacts

Chair: Prof Xinzhong Li x.li@tees.ac.uk

Further contacts see:

https://www.cost.eu/actions/CA22103/#tabs+Name:Main%20Contacts%20and%20Leadership

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