

STEM Research Equality, Diversity and Inclusion

STEP Newsletter ISSUE 5 | AUGUST 2025



step.ipb.pt















Dear STEP Community,

It is with great pleasure that I present the fifth issue of the STEP Newsletter, highlighting the project's recent achievements and ongoing efforts to promote innovation, collaboration, and inclusivity within our academic and professional networks.

This edition features the outcomes of our workshops, talks, and international initiatives, as well as the success of our IMFAHE Talent Network participants and the Blended Intensive Program on Equality, Equity, Diversity and Inclusion.

Looking ahead, we invite you to join us at upcoming events, including the 2nd STEP Summer School, to be held in Bragança, Portugal, as we continue to strengthen our community and drive impactful and globally connected research.

Ana Isabel Pereira STEP Project Coordinator

WEBSITE





SOCIAL MEDIA

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STEM RESEARCH CONNECTING IMAGINATION AND REALITY

STEP PAST EVENTS

STEP Workshops

Registering with the IPB Research Data Repository: how to do it?

20 February 2025 | 32 🕰

The hands-on training session on the IPB Research Data Repository successfully guided participants through identifying the repository's role in the scientific ecosystem and its practical use. Led by Clarisse do Céu Pais, Coordinator of Documentation and Library Services at the Polytechnic Institute of Bragança, the session covered essential steps for registering and depositing research data while following best practices in organization, metadata management, and access policies. With Clarisse's extensive expertise in managing IPB's digital resources and delivering research-focused training, participants gained valuable skills to effectively use the repository and enhance the visibility and management of their scientific data.



Project Management

18 March 2025 | 26 👫

The workshop on project management for EU-funded initiatives equipped participants with essential skills to enhance project efficiency and sustainability. Conducted by Cinzia Leone, Researcher at the Italian Institute of Technology (IIT), the session introduced key project management principles, including budgeting strategies, risk identification and mitigation, and solutions to common management challenges.

Intellectual Property Rights Management in Research Project: Legal Issues

10, 11 April 2025 | 38 🎎

The STEP Workshop on Intellectual Property Rights Management in Research Projects explored the legal frameworks and challenges of managing IPR in EU-funded initiatives. Led by Professor Roberto Cippitani, Jean Monnet Chairholder and renowned expert in Biolaw and Data Law, the two-session workshop (April 10-11, 2025) provided participants with a solid understanding of the rules governing research results and background, as well as key legal instruments and agreements for effective IPR management in collaborative projects.

STEM RESEARCH CONNECTING IMAGINATION AND REALITY

STEP PAST EVENTS

STEP Talks!

Relational Lab: Building Relationships for Organisational and Community Well-Being 05 February 2025 | 44

The first STEP Talk of 2025 took place online with 44 participants and had the presence of Rui Marques, coordinator of Relational Lab. The session highlighted the Relational Lab's mission to improve the quality of human relationships as a basis for individual, organisational and community well-being. The engaging discussion set an inspiring tone for all participants, emphasising the transformative power of constructive relationships.

More details about Relational Lab: relationallab.pt

Every STEP counts for bringing DeepTech innovation in Musculoskeletal Health 26 March 2025 | 18

In this talk, Joana Figueiredo, Biomedical Engineer and co-founder of the startup eDynamics, shared how her team is revolutionising musculoskeletal health through AI-powered wearable technology. As a woman leading a DeepTech startup, Joana discussed the challenges navigating the journey from research to market, and the vital role of female leadership in innovation.

FundingBox Infosession

07 May 2025 | 41 👫

The seminar had the presence of FundingBox, a leading European facilitator of cascade funding for EU grants. The session presented key tools and opportunities, including OnePass for accessing open calls and investment programs, Techfinders for connecting European innovations with SMEs, AIDEAS Solutions for boosting industrial agility and sustainability, and avenues for becoming supportive partners in projects. Participants explored a variety of funding opportunities designed to foster innovation and collaboration.

More details about FundingBox: fundingbox.com





Watch the STEP Talks and Workshops on our YouTube Channel

STEM RESEARCH CONNECTING IMAGINATION AND REALITY

STEP PAST EVENTS

STEP Talks!

Make It Happen: Lessons from an (Un)Probable Entrepreneur

14 May 2025 | 21 👗

In this STEP Talk session, Edite Ravella, nurse and cofounder of SafeCaring, shared her non-linear journey of creating technological solutions to improve healthcare. Through stories of doubts, courage, and improvisation, she offered practical and human lessons on entrepreneurship, risk-taking, and leading as a woman. The talk highlighted authenticity, intuition, and an inspiring message for anyone feeling the urge to start something new without having all the answers upfront.



Artificial Intelligence Tools for Writing and Research

23 June 2025 | 51 🎎

This online session of STEP Talk explored how artificial intelligence is shaping research and scientific writing, offering participants a clear view of its practical uses and challenges. Dr. David Peralta, Editor-in-Chief at Wiley-VCH, guided the session, introducing the fundamentals of large language models, ways to evaluate emerging AI tools, and free online resources that support research and writing. The discussion also examined the future of AI in scientific publishing, providing Wiley's perspective on how these technologies are changing the landscape of scholarly communication.

Due to commercial reasons, this webinar is not public on YouTube.

The Swedish Model for Student Support

25 June 2025 | 14 🍂

The last STEP Talk session of this semester focused on the Swedish Student Support Model, offering insights into how Södertörn University helps international students navigate academic life in Sweden. Andrea Didon and Peter Armstrong Wedborn outlined the university's approach to student health services, recruitment initiatives, and resources designed to make the transition to higher education smoother. Together, they highlighted the comprehensive support system available to students, from well-being to legal guidance and inclusion policies.

STEP Lectures

Data Sonification

07 May 2025 | 10 🌋

This STEP Lecture session addressed the use of sonification as an alternative to data visualisation, discussing how the integration of auditory information can complement visual perception and improve data comprehension. Kai-Mikael Jää-Aro, professor and researcher at Södertörn University, presented the differences between sonification and visualisation, the advantages of each approach and the tools available to create sonifications, with a focus on practical applications in human-computer interaction and interactive visualisation.

STEM RESEARCH CONNECTING IMAGINATION AND REALITY

STEP PAST EVENTS

STEP Science Dates

The STEP Science Dates program is designed to foster collaboration among STEM and EDI research projects within IPB and its four partner institutions, while also promoting researcher mobility across the consortium. To support this goal, mobility grants were made available for the best collaboration proposals. In this first edition, 40 projects were shared, and after evaluation by an international jury, six mobility grants were awarded to five projects.

From January 31 to March 3, participants were invited to submit project proposals in a collaborative environment, organized into four thematic areas: A. Digitalization; B. Equity, Diversity, and Inclusion and STEM; C. Socio-Ecological Systems, Sustainable Processes, and Products; D. Sustainable Construction.



Following this phase, researchers scheduled bilateral meetings (February 21–March 31) to develop joint proposals between IPB and a partner institution. Each proposal included a plan for one or two short-term mobility grants (minimum of five days).

STEP Data Science Course

01 March to 28 May 2025

The Data Science Course – Hands On! concluded with 23 students completing the training. Held weekly from March to May, the course provided practical instruction on Python programming, data visualization, feature selection, clustering, supervised and unsupervised machine learning, deep learning for image processing, synthetic data generation, autoencoders, and digital twin applications.

Sessions combined theoretical explanations with guided exercises. The course aimed to give students a working understanding of key data science techniques and tools applicable to research and professional contexts, and participants received certification.



STEM RESEARCH CONNECTING IMAGINATION AND REALITY

IMFAHE PLATFORM OF TALENT 2024-2025



The Polytechnic Institute of Bragança (IPB), for the second consecutive year with funding from the STEP IPB Project, proudly collaborates with the IMFAHE Foundation to promote global collaboration, innovation, and the development of high-achieving academic and professional profiles among its students and faculty.

At the start of this academic year, 15 students and 5 professors from IPB were selected through a competitive internal call to join the IMFAHE Talent Network. The participants gained access to exclusive programs, global resources, and professional networks that foster the development of transversal skills and complement the academic training offered by IPB. In addition, IMFAHE provides open-access online courses and international workshops, available to the entire IPB community and led by leading experts from around the world.

On May 26, the XI International Conference of the IMFAHE Foundation – Innovation Camp, titled "The Great Impact of Global and Multidisciplinary Talent", marked the closing event of the 2024–2025 academic year. At the opening session of the conference, dedicated to the theme Internationalisation and Professional Opportunities in Times of Global Crisis, IPB was represented by the professor, researcher and coordinator of the Peer-Mentoring/Tutoring program at the IPB and co-coordinator of STEP Project, Maria de Fátima Pacheco.

During the closing ceremony, the prestigious IMFAHE Excellence Fellowships were awarded to the most outstanding students across 10 universities and organisations. With great pleasure, we congratulate the PhD student Liege Aguiar Pascoalino, winner of the prestigious Portugal Global Fellowship 2025, who will undertake an international experience at Syracuse University (USA), in recognition of her academic merit and scientific contribution.



https://www.imfahe.org

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IMFAHE PLATFORM OF TALENT 2024-2025



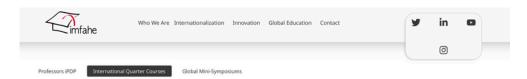
In the innovation session, IMFAHE Global Idea Competition – Shark Tank, IPB demonstrated remarkable entrepreneurial spirit. Five students and one professor participated across six finalist teams, collectively winning \$5,080 in prizes.

- Toufiq Soale Yussif, participant in the projects Wast2Wellness and Al4Microbes
- Elizandra Noely Grinfelder Ardohain, participant in the project Wast2Wellness
- Professor Oliva M. D. Martins, participant in the projet Transparent Bites Social Innovation Team

Other recognized finalists included Luan Carlos Klein with SciSpheres (combating fake news), Liege Aguiar Pascoalino with FloraMind (a neuroprotective synbiotic supplement), and Marlon Silva de Sousa with IT Without Borders (supporting IT professionals' international careers).

IPB members also arrived to the final of the IMFAHE Spotlight Competition, which promotes open science through educational and engaging video presentations.

We congratulate all the IPB participants on their excellent presentations and the commitment they showed throughout the programme. This distinction highlights the transformative impact of the STEP Project in promoting a more international, innovative higher education connected to the global market.



Set up Your Future for Success



Prepare yourself to successfully face your next professional challenges through our three inclusive, global, and open online International Quarter Courses about Professional Development, Innovation, Entrepreneurship and Leadership and Scientific Careers.

https://www.imfahe.org

STEM RESEARCH CONNECTING IMAGINATION AND REALITY

STEP BLENDED INTENSIVE PROGRAM

STEP BIP on Equality, Equity, Diversity and Inclusion in STEM

06 December 2024 - 21 January 2025 (Online)

10-14 February 2025 (Face-to-face Week)

The Blended Intensive Program (BIP) on promoting EEDI principles in STEM areas successfully concluded after an engaging series of online sessions and a dynamic face-to-face week. Bringing together 46 in-person participants and representatives from over 10 institutions, the program provided a rich discussion to learn from experts, exchange ideas, promote collaboration and foster inclusivity in STEM fields. Across its five online talks and seven on-site sessions, participants explored topics from feminist actions in science, anti-racist education, and inclusion of students with functional diversity to addressing biases in AI and enhancing equity in research environments.

A highlight of the week was the Global Women's Breakfast, held on February 11 at the Museu Graça Morais, which brought together participants to celebrate and discuss women's contributions to science and technology.

The BIP not only facilitated essential conversations on diversity, equity, and inclusion but also strengthened a collaborative network dedicated to driving meaningful change in education and the professional environment.





You can find all online sessions on our YouTube channel: <u>STEP BIP Playlist</u>

STEM RESEARCH CONNECTING IMAGINATION AND REALITY

COMMUNICATION AND DISSEMINATION

STEP at Universidad Nacional de Colombia, Medellín: A Collaborative Dialogue on Equality, Diversity and Inclusion

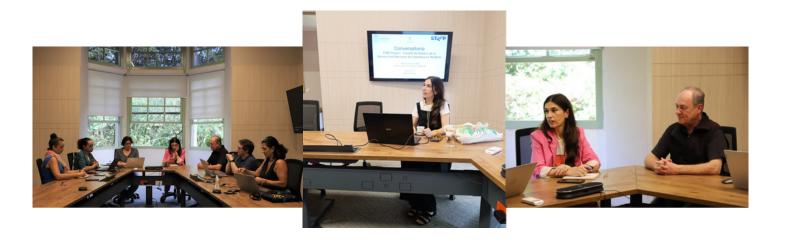
23-29 January 2025

From January 23 to 29, Juan Pavón and Yanna Franco, from the UCM, visited the Universidad Nacional de Colombia in Medellín. The visit provided a valuable opportunity to share experiences and strategies, discuss best practices, and build transnational networks devoted to creating inclusive educational environments.

During the stay, they engaged in a dynamic conversation with the university's Gender Committee, exploring key topics such as the gender structure at the Universidad Complutense de Madrid, strategies for mainstreaming gender perspectives across curricula, and the importance of inclusive language in academic and institutional settings. The discussion was enriched by the participation of faculty members, students, and gender experts, who shared insights and challenges from their local context.

One of the highlights of the visit was the opportunity to present ongoing research on the manosphere, a digital ecosystem that serves as a breeding ground for misogyny, antifeminist narratives, and broader hate culture. These online spaces, spanning forums, social media, and content platforms, not only reinforce gender-based misinformation but also legitimize hostility toward women, feminism, and gender diversity. The presentation shed light on how the manosphere fuels radicalization, fosters a backlash against gender equality, and increasingly influences public discourse, highlighting the urgent need for critical engagement in digital communication studies.

We extend our gratitude to our colleagues at Universidad Nacional de Colombia for their warm welcome and insightful discussions. The STEP Project looks forward to continuing this collaboration and furthering the conversation on gender equity in education.



STEM RESEARCH CONNECTING IMAGINATION AND REALITY

COMMUNICATION AND DISSEMINATION

Vision 2025: Challenges of AI for a Changing World

08 May 2025

Juan Pavón from the Complutense University of Madrid gave a lecture entitled "Inclusive Innovation: Al at the Service of Sustainable Communities" at the event "Vision 2025: Challenges of Al for a Changing World," which took place at Universidad de la Costa (Barranquilla, Colombia) on May 8, 2025.



Workshops to promote inclusion of people with intellectual disabilities in science education sponsored by the European STEP Project

Activities promoted by Santiago Herrero (University Complutense of Madrid)

<u>March 18 – 21, 2025:</u> Twelve inclusive scientific workshops were also held at Las Musas Secondary Education Institute (Madrid, Spain) with students of that institute and students coming from four special education centers: Fundación Goyeneche (Madrid, Spain), A la Par (Madrid, Spain), Rosa Parks (Coslada, Spain), Areteia (Alcobendas, Spain).

<u>April 5, 2025:</u> Masterclass and subsequent debate entitled I.amAble Educational Innovation Project. Scientific Workshops and Educational Inclusion. Law Auditorium of the University of Santiago de Cali (Colombia).

<u>April 8, 2025:</u> Practical class on *How to prepare inclusive scientific workshops in the Chemistry Laboratory* of the Faculty of Health Sciences and Basic Sciences of the Free University of Cali (Colombia).

A<u>pril 10, 2025:</u> Inclusive workshop on the synthesis of pyrophoric iron in the Chemistry Laboratory of the Santa Librada Educational Institution in Cali (Colombia) with students from the center and students with intellectual disabilities from the Ideal Foundation.

<u>May 9, 2025:</u> I.amAble workshops at Neil Armstrong Secondary Education Institute (Valdemoro, Spain) with students of that institution and students from Duque de Ahumada Special Education Center.



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COMMUNICATION AND DISSEMINATION

CeDRI EDI+ Impact Reseach Award 02 July 2025

The CeDRI EDI+ working group and the CeDRI Board celebrated the 1st edition of the EDI+ Impact Research Award, a prize created to recognise and value research that integrates the principles of Equality, Diversity and Inclusion (EDI). This initiative reflects our commitment to promoting fairer, more inclusive science and technology with a positive social impact. This was the first edition of this award organised by CeDRI, which received 10 applications from its researchers.

CeDRI EDI+ Impact Research Award

"High-Resolution Portable Bluetooth Module for ECG and EMG Acquisition"

LUIZ E. LUIZ, SALVIANO SOARES, ANTONIO VALENTE, JOÃO BARROSO PAULO LEITÃO, JOÃO P. TEIXEIRA

The jury considered this project "An example good engineering work that address technological accessibility in the health sect presenting a socially useful technologic solution, capable of reducing inequalitie promoting health and quality of life afailitating accessibility to health technologies."



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CeDRI



CeDRI is proud to announce that its researcher Luiz E. Luiz, together with Salviano Soares, Antonio Valente, João Barroso, Paulo Leitão and João Paulo Teixeira, were the winners of the first CeDRI EDI+Impact Research Award, announced at the Symposium of Applied Science for Young Researchers (SASYR), with his paper "High-resolution portable bluetooth module for ECG and EMG acquisition".

CeDRI EDI+ Action Plan

17 July 2025

The Digitization and Intelligent Robotics Research Centre (CeDRI) has shared its EDI+ (Equality, Diversity and Inclusion) Action Plan with the Mountain Research Centre (CIMO) community. The presentation was made by Professor Maria de Fátima Pachecho (coordinator), João Mendes (Pós-Doc Contact) and Rebeca B. Kalbermatter (PhD Contact). This initiative came about as part of the STEP Project - STEM Research and Equality, Diversity and Inclusion (step.ipb.pt), which prompted the creation of an internal working group dedicated to promoting equity, diversity and inclusion at CeDRI. Based on this collaborative work, the first CeDRI EDI+ Action Plan was presented, which defines concrete measures to make the work carried out at the Center more ethical, representative and inclusive.



STEM RESEARCH CONNECTING IMAGINATION AND REALITY

COMMUNICATION AND DISSEMINATION

25° International Conference on Diversity in Organizations, Communities & Nations 11-13 June 2025

On June 12, Juan Pavón (UCM) gave the plenary lecture "Diversity in Responsible Research and Innovation: The Case of AI" at the Twenty-fifth International Conference on Diversity in Organizations, Communities & Nations, University of Nicosia, Cyprus, June 11-13, 2025. During this talk, Juan presented the STEP project results concerning the issues of gender and cultural diversity in the development of artificial intelligent systems.



V Symposium of Applied Science for Young Researchers 02 July 2025

The STEP Project is one of the sponsors of the Symposium of Applied Science for Young Researchers. The event of this year took place at the Polytechnic Institute of Viana do Castelo, on 02 July. The main objective of SASYR is to provide a friendly and relaxed environment for young researchers who are beginning in the science career to present their work, discuss recent results, and develop new ideas.



V International Conference on Optimization, Learning Algorithms and Applications 28 - 30 July 2025

The STEP project was one of the sponsors for the 6th OL2A conference, which took place in Sestri Levante, Genoa, Italy, from 28 - 30 July 2025. The event was attended by more than 80 participants, including academics, researchers, teachers and guests. STEP promoted one participation from developing countries.

STEM RESEARCH CONNECTING IMAGINATION AND REALITY

DISSEMINATION

Dissemination at Södertörn University (Sweden)

The representatives of the STEP project at Södertörn University (SH) presented the project through multiple dissemination activities aimed at promoting equality in academia. They introduced STEP during a workshop on counteracting dominance techniques to staff in the student administrative department at SH. Additionally, Ann Mutvei, from SH, highlighted the STEP project during her docent lecture "From mitochondria to didactics and societal challenges" at a school meeting with faculty, researchers, and administrators from the School of Natural Sciences, Technology, and Environmental Studies.



European Conference of Social Work

Education

June 24-26, 2025

Representatives of UCM's STEP Project

IX National and II International Conference on Social Work with Groups

May 12-13, 2025 University of Zaragoza, Spain Andrés Astray and David Alonso









Check the paper

Gender Equality and Its Significance for Scientific Research and Innovation Organisations: A Case Study

CInzia Leone, Lina Donnarumma and Vanessa De Luca

Social Inclusion 2025, Volume 13, Article 10105 https://doi.org/10.17645/si.10105

STEM RESEARCH CONNECTING IMAGINATION AND REALITY

FUTURE EVENTS

STEP Summer School in Bragança

How to write innovative and fundable proposals with the EDI principles

During the week of 08-12 September, the Polytechnic Institute of Bragança will host the 2nd STEP Summer School. This year, we will have the theme How to Write Innovative and Fundable Proposals with EDI Principles, increasingly valued in research funding. The Summer School will have the participation of the National Agency of Innovation from Portugal, ANI, and representatives of the five institutions of STEP members.

More information: step.ipb.pt/events/step-summer-school-in-braganca/



Are you preparing a research proposal and want to improve your chances of success?

Join the STEP Summer School and learn how to design, structure and write robust and competitive research projects, integrating Equity, Diversity and Inclusion (EDI) principles, increasingly valued in research funding.

What will you learn?

- How to plan your project
- How to write fundable proposals
- Evaluation criteria & common mistakes
- Tips from experienced researchers & evaluators

Special Session











International Workshop on Multicultural Approaches to Diversity

18 - 22 November 2025

STEP Project is one of the sponsors of the International Workshop on Multicultural Approaches to Diversity (IWMAD 2025), which will be held at *Centro de Formacion de la Cooperacion Española, Cartagena de Indias (Colombia)*, between 18-22 November 2025.

This workshop intends to join researchers from Europe and Latin America (especially from the Caribbean Region) in order to find synergies in different areas of knowledge, with special emphasis on Diversity, enriched with the multicultural views from both sides of the Atlantic ocean.

More information: eventos.ucm.es/go/iwmad2025

VI International Conference on Optimization, Learning Algorithms and Applications 10 - 12 June 2026

The sixth edition of the International Conference on Optimization, Learning Algorithms and Applications (OL2A 2026) will take place at Ada Byron, University of Málaga, and participants can attended on-site or online (all OL2A sessions will be streamed live).

All submitted papers will pass through a multiple peer-review process and will be carefully evaluated based on originality, significance, technical soundness, and clarity of exposition. Conference proceedings will be published in SCOPUS indexed Springer-Verlag Book Series, Communications in Computer and Information Science (CCIS).

Paper submission by 22 February 2026. More information: ol2a.ipb.pt

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