ODELIA

Open Consortium for Decentralized Medical Artificial Intelligence

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REPORT ON SUMMER SCHOOLS

Lead beneficiary	EIBIR
Author(s)	Ulrike Mayerhofer-Schirmer, Oliver Saldanha (TUD), Adrià Marcos Morales (VHIO)
Reviewer(s)	Daniel Truhn (UKA)
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DISCLAIMER

EXECUTIVE SUMMARY

This report summarises three Summer Schools organised by ODELIA to advance training and knowledge exchange in privacy-preserving AI for healthcare. Two internal events in Dresden 2023 and 2024 focused on onboarding partners, building technical capacity, and harmonising workflows for Swarm Learning. The third one, held in Barcelona in 2025, targeted external participants with a CME accredited programme combining expert lectures, interactive workshops, and networking. Feedback across all events was highly positive, confirming their strong educational value and impact. These initiatives demonstrate ODELIA's commitment to collaboration, capacity building, and dissemination of cutting-edge AI methodologies.

1. INTRODUCTION

As part of ODELIA's stakeholder training activities to foster knowledge exchange and capacity building under Task 7.2, the project placed particular emphasis on training and education programmes, which were designed to strengthen expertise both within the consortium and across the wider European innovation community. To achieve this, ODELIA implemented a two-tier approach.

The first tier focused on internal training for staff involved in the implementation of the ODELIA project, ensuring efficient onboarding and a shared understanding of key principles such as co-training AI models, quality control procedures, and the integration of bottom-up feedback mechanisms. Central to this effort were two Summer Schools, held during the early phases of the project (i.e. in June 2023 and September 2024), which brought together participants from the partner sites for an intensive programme. These events focused on building a common understanding of Swarm Learning principles and establishing consistent workflows in order to strengthen technical alignment, and to create a solid basis for collaborative development across all partner sites.

The second tier extended ODELIA's educational impact beyond the consortium, targeting external participants, from early-career researchers, to data scientists, and clinicians to explore cutting-edge AI technologies that are shaping the future of healthcare, showcase emerging imaging techniques, highlight the value of European collaborative frameworks, and provide in-depth exposure to the clinical reality of breast cancer, including current screening strategies and challenges. A dedicated external Summer School was organised in September 2025 to introduce participants to the concept of Swarm Learning and empower them to apply ODELIA's deliverables and technology in their own domains. This event featured a scientific lectures, hands-on sessions, teambuilding activities and discussions, ensuring high-quality engagement and knowledge transfer.

Together, these Summer Schools exemplify ODELIA's commitment to professional development, collaborative learning, and the dissemination of cutting-edge AI methodologies across Europe.

This report presents in the following the ODELIA Summer Schools in detail.

2. SUMMER SCHOOL 1 (INTERNAL)

ODELIA Internal 1st Summer School 2023

Location: Dresden, Germany
Dates: 20–21 June 2023
Organised by: KatherLab, EKFZ Technical University Dresden
Lead Organiser: Prof. Dr. Jakob Nikolas Kather
Coordination & Facilitation: Oliver Lester Saldanha, Kevin Pfeiffer, Jie Fu Zhu
Participants: Representatives from all ODELIA partner institutions, with 15 participants in total

2.1 Introduction and Overview

The ODELIA Summer School 2023 was held at EKFZ Technical University Dresden, bringing together multidisciplinary experts and researchers from all ODELIA partner institutions. The event aimed to advance understanding of Swarm Learning, a decentralised, privacy-preserving approach to deep learning and its application in medical research.

The two-day intensive program combined lectures, technical workshops, hands-on sessions, and networking opportunities. The event fostered collaboration between clinicians, data scientists, and computer engineers, strengthening the ODELIA network's shared goal: enabling AI development across distributed medical data sources without compromising privacy.

This first Summer School emphasised hands-on experimentation, open-source implementation, and long-term integration of decentralised AI in healthcare.

2.2 Objectives

The ODELIA Summer School focused on several overarching goals:

- **Capacity Building:** To train researchers and technical staff on implementing Swarm Learning frameworks.
- **Collaborative Development:** To align partner institutions on common protocols, tools, and reproducible workflows.
- **Open-Source Integration:** To encourage contributions to shared GitHub repositories and codebases.
- **Interdisciplinary Dialogue:** To bridge the gap between clinical and technical perspectives on decentralied data analysis.
- **Future Road Mapping:** To discuss next steps for the ODELIA project, including validation datasets, publication strategies, and clinical impact pathways.

2.3 Day 1 – 20 June 2023

Opening and Ice-breaking Session (09:00–10:00)

The event commenced with an opening session led by Prof. Dr. Jakob Nikolas Kather and Oliver Lester Saldanha (PhD) who welcomed participants and introduced the objectives of the Summer School.

Each attendee introduced themselves, detailing their institutional affiliations, background, and research interests. This session established a collaborative atmosphere and allowed participants to identify overlapping interests particularly in AI model development, medical imaging, and federated data infrastructures.

The session concluded with an overview of KatherLab's ongoing work in medical AI and the motivation behind adopting decentralised learning frameworks.

Introduction to Swarm Learning (10:00–10:45)

Speakers: Oliver Saldanha and Jie Fu Zhu

This presentation offered a theoretical overview of Swarm Learning, highlighting its origins, architecture, and advantages over traditional centralised AI. Key discussion points included:

- The biological inspiration behind Swarm Learning, drawing parallels to collective intelligence in nature.
- Blockchain integration for ensuring secure communication and transparency between distributed nodes.
- The distinction between Swarm Learning Nodes (SL nodes), Swarm Network Nodes (SN nodes), and Sentinel Nodes.
- The role of the Swarm Learning Command Interface (SWCI) and Swarm Operator Node (SWOP) in managing training and model synchronization.
- Ethical considerations in medical AI, emphasizing patient privacy, data sovereignty, and GDPR compliance.

Participants also reviewed the architecture diagrams and documentation hosted on Hewlett Packard Enterprise's official repository.

System Setup Workshop (11:00–12:30)

Participants engaged in a hands-on setup of the Swarm Learning infrastructure across three systems. Guided by the facilitators, the group installed essential components including:

- Hardware Configuration: Installation of hard drives and GPU verification.
- Software Dependencies: Installation of CUDA drivers and environment setup.
- Networking Tools: Configuration of OpenVPN and SSH connections for secure distributed computing.

This session also served as a live troubleshooting exercise, ensuring each participant successfully established a local environment to run Swarm Learning nodes.

Lunch & Informal Networking (12:30–13:30)

Lunch was hosted at CARUSO, House 22, providing participants an opportunity to connect informally and discuss cross-institutional collaborations.

Discussion with Prof. Dr. Jakob Kather (13:30–14:00)

Prof. Kather provided a strategic overview of ODELIA's goals and outlined how decentralised learning aligns with broader European AI research objectives. The discussion focused on:

- Building a sustainable, open-source ecosystem for clinical AI research.
- Integrating Swarm Learning into ongoing ODELIA case studies, such as histopathology and endoscopy image analysis.
- Encouraging reproducibility and transparency in model reporting.

Swarm Learning Setup & Experimentation (14:00–16:00)

The afternoon session transitioned into practical experimentation using the KatherLab GitHub Swarm Learning repository. Participants implemented example models, synchronised nodes, and monitored data exchanges.

Key activities included:

- Running initial experiments using the DUKE dataset.
- Evaluating model performance and synchronization stability.
- Documenting feedback on setup clarity, code readability, and usability for future training sessions.

The session successfully demonstrated end-to-end deployment of Swarm Learning workflows in a real-world research environment.

Social Event and Dinner (18:00–23:00)

The day concluded with a social event in Dresden, where participants enjoyed local cuisine and sightseeing. This informal setting encouraged networking and laid the foundation for future collaborations between institutions and researchers across Europe.

2.4 Day 2 – 21 June 2023

Experimental Design Session (09:00–10:00)

Participants explored strategies for distributing and splitting the DUKE dataset across multiple nodes. Discussions focused on maintaining statistical balance between local datasets while preserving privacy.

Key outcomes included:

- Consensus on using synthetic data partitions for benchmarking.
- Agreement on maintaining consistent data preprocessing pipelines across nodes.
- Exploration of ensemble model validation techniques.

Hands-on Experiments (10:00–12:00)

In this extended session, participants executed a series of Swarm Learning experiments using the setup created the previous day. Each group performed the following activities:

- Trained localised models on separate data partitions.
- Shared model parameters via the blockchain-based Swarm Network.
- Evaluated overall accuracy improvements after synchronization rounds.

The session emphasised technical robustness and highlighted practical challenges, including latency management, synchronisation frequency tuning, and GPU utilization efficiency.

Lunch Break and Networking (12:00–13:00)

Participants reconvened over lunch to share preliminary experiment outcomes, compare hardware performance, and exchange notes on their Swarm configurations.

Presentation by Nvidia representative (13:00–14:00)

Representatives from Nvidia delivered a session on GPU optimisation for distributed AI workloads. The talk introduced tools like NCCL (NVIDIA Collective Communications Library) and Dockerised ML containers, relevant to the scalability of Swarm Learning setups.

Participants discussed integrating Nvidia hardware acceleration into ODELIA's ongoing projects to reduce model training times.

Open Source Implementation & Closing Discussion (13:00–16:00)

The final session consolidated learnings from both days, focusing on:

- Improving ODELIA's open-source documentation and usability.
- Identifying opportunities to contribute to shared repositories.
- Gathering participant feedback for future editions of the Summer School.

The event concluded with reflections from all participants and acknowledgements from Prof. Kather, highlighting the growing importance of collaborative, privacy-preserving AI in healthcare.

2.5 Outcomes and Impact

- **Enhanced Technical Competence:** Participants gained first-hand experience in setting up and running Swarm Learning nodes.
- **Cross-Institutional Collaboration:** Strengthened ties among ODELIA partners, enabling more aligned research initiatives.
- **Infrastructure Validation:** Successfully tested distributed learning workflows across multiple systems.
- **Knowledge Dissemination:** Documented training protocols for use in subsequent workshops and publications.
- **Future Planning:** Established a framework for ongoing joint experiments and shared code maintenance.

3. SUMMER SCHOOL 2 (INTERNAL)

ODELIA 2nd Internal Summer School 2024

Date: 11 September 2024
Time: 09:00 – 12:00
Venue: MTZ (Medizinisch-Theoretisches Zentrum), House 91, Fiedlerstraße 42, 01307 Dresden, Germany
Room: MTZ Hörsaal 2
Organised by: KatherLab, Technical University Dresden
Coordinator: Prof. Dr. Jakob Nikolas Kather
Facilitators: Oliver Lester Saldanha, PhD and the ODELIA Core Team
Participants: Primary technical and scientific contacts from all ODELIA partner institutions

3.1 Overview

The **ODELIA Internal Summer School 2024** served as a focused follow-up to the 2023 edition, bringing together representatives from all partner institutions for a half-day, hands-on session in Dresden.

This internal workshop aimed to evaluate project progress, address technical and procedural challenges, and align all partners on a unified workflow for ongoing Swarm Learning implementation. Unlike the previous training-oriented event, the 2024 meeting emphasised open discussion, shared troubleshooting, and practical coordination across sites.

3.2 Objectives

The ODELIA Summer School focused on several overarching goals:

- Review progress in **data collection** and **Swarm setup** at each site
- Identify technical and procedural **problems and solutions** collaboratively
- Harmonise workflows to improve **efficiency and consistency**
- Strengthen inter-partner **communication and support channels**
- Define **next steps** for project-wide technical coordination

3.3 Summary of Sessions

Opening Remarks

Prof. Dr. Jakob Kather welcomed all participants and highlighted the Summer School's role in improving coordination and workflow efficiency across the consortium.

Partner Updates

Each partner briefly reported on their local progress in data handling, node setup, and connectivity. Common themes included:

- Progress in hardware and VPN setup following 2023 guidelines
- Remaining delays in data curation and preprocessing
- Need for harmonised GPU configurations and software versions

Open Discussion & Problem Solving

Moderated by Oliver Lester Saldanha, this session encouraged direct sharing of issues and practical fixes. Key topics included:

- Technical troubleshooting for Swarm setup and synchronisation
- Data standardisation and compliance across institutions
- Streamlining documentation and communication workflows

The main outcomes were as follows:

- Agreement on shared setup templates and documentation standards
- Plan for a small technical support group to handle cross-site issues
- Decision to maintain a live consortium-wide progress tracker

Workflow Alignment and Next Steps

Partners drafted a common workflow for technical coordination, including:

- Regular synchronisation tests and version checks
- Designation of local “node captains” for each site
- Establishment of a standardised reporting mechanism

Prof. Kather concluded by outlining next steps, in particular continued technical syncs, documentation updates, and preparation for the upcoming consortium review meeting in 2025.

3.4 Closing Remarks

The Internal Summer School effectively strengthened collaboration among ODELIA partners, improved technical coherence, and established a shared understanding of operational priorities. The open and solution-oriented format allowed teams to address ongoing challenges directly and agree on practical, coordinated approaches moving forward.

4. SUMMER SCHOOL 3 (EXTERNAL)

ODELIA External Summer School

Date: 16-18 September 2025
Venue: Vall d'Hebron Institute of Oncology (VHIO), C/ Saturnino Calleja 11-13, 08035, Barcelona, Spain
Organised by: VHIO
Coordinator: Raquel Pérez López, Adrià Marcos Morales and VHIO team
Facilitators: ODELIA Core Team
Participants: 24 attendees (10 female, 14 male; from 7 European countries)

The ODELIA Summer School, Barcelona, Spain 16/09/2025 - 18/09/2025, has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with 11.5 European CME credits (ECMEC®s).

4.1 Overview

The 2025 ODELIA External Summer School was held in person at the Vall d'Hebron Institute of Oncology (VHIO) in Barcelona from 16–18 September 2025. A total of 24 participants attended, primarily early-career researchers and students, but also expert clinicians, technologists, and senior investigators, offering a valuable training opportunity, aligned with ODELIA's educational objectives. The in-person format strongly encouraged interaction between participants, speakers, and experts, resulting in rich discussions throughout the event.

The programme combined plenary lectures, student elevator pitches, a highly interactive hands-on workshop on AI in clinical trials, and thematic networking activities, including guided tours of the Vall d'Hebron campus and the Sant Pau Hospital.

4.2 Objectives

The integration of AI into clinical practice, particularly in oncology and clinical trials, is rapidly evolving. However, there remains a significant educational gap among early-career researchers and clinicians regarding the practical application, ethical considerations, and methodological design of AI-driven tools in healthcare. The third ODELIA Summer School addressed this gap by offering a focused, immersive programme that combines theoretical knowledge with hands-on experience. Identified educational needs:

- Understanding AI in the clinical context
- Designing AI-enhanced clinical trials
- Understanding privacy-preserving distributed learning

The Summer School focused on several overarching goals. By the end of the event, participants should be able to:

- Describe the role of AI in modern oncology and clinical trials.
- Design a basic clinical trial protocol incorporating AI methodologies.
- Understand the principles and benefits of distributed learning in healthcare.
- Evaluate the use of AI in imaging, particularly MRI for breast cancer.

4.3 Programme

Tuesday, 16th of September

13:30 – 14:00 – Arrival and Welcome (Raquel Pérez López – VHIO)

14:00 – 15:00 – Keynote Lecture: Healing With Words - Large language models in medicine (Daniel Truhn – Aachen University Hospital)

15:00 – 16:30 – SESSION I: Student Elevator Pitches (Moderators: Olivia Prior Palomares and Daniel Navarro Garcia - VHIO)

Students will give 5min presentations of their projects. A total of 10 projects will be selected based on submitted abstracts.

16:30 – 17:00 – Guided Tour of Vall d'Hebron campus

17:00 – 19:30 – Networking Tapas at CELLEX

Wednesday, 17th of September

9:00 – 10:00 – Keynote Lecture: Development of a Clinically Viable MYC Inhibitor for Cancer Treatment: From an "Undruggable" Target to Clinical Trials (Silvia Casacuberta Serra – VHIO)

10:00 – 11:00 – Workshop Part I: Theory

Three experts will give introductory talks to the Workshop session. The talks will focus on Clinical Trials for Oncology and AI in clinical settings.

10:00 – 10:15 – Workshop Introduction (Raquel Pérez López – VHIO)

10:15 – 10:40 – Intro Lecture I: Clinical Trials 101 (Irene Braña – VHIO)

10:40 – 11:10 – Intro Lecture II: AI In and Around Clinical Studies in Oncology: How AI is reshaping clinical studies and how one does a clinical study of an AI-enabled point-of-care intervention (Stephen Gilbert – Technische Universität Dresden)

11:10 – 11:30 – Coffee Break

11:30 – 13:00 – Workshop Kick-Off and Group Work (A) - Moderator: Raquel Pérez López (VHIO)

Interactive sessions where participants will design a clinical trial including AI. Clinical trial experts from VHIO will be available throughout for support and guidance. Available experts include members from: VHIO´s Radiomics Group, VHIO's Biostatistics Unit, VHIO's Clinical Trials Office, and VHIO's Academic CRO

13:00 – 13:45 – Lunch

13:45 – 14:45 – Workshop Part II: Group Work (B) - Moderator: Raquel Pérez López (VHIO)

14:45 – 16:00 – Workshop Final Presentations and Experts' Feedback - Moderator: Raquel Pérez López and Adrià Marcos Morales (VHIO)

17:00 – 19:00 – Teambuilding Activity: Guided Tour of Sant Pau Hospital

Thursday, 18th of September

9:00 – 11:00 – SESSION II: Distributed Learning (Moderators: Cristina Villaseca Sitjar and Adrià Marcos Morales – VHIO)

9:00 – 9:30 Kaapana: Open-source Federated Medical Imaging AI Platform (Mikulas Bankovic - DKFZ)

9:30 – 10:00 Federated Learning Across High- and Low-resource Settings (Karim Lekadir - Universitat de Barcelona)

10:00 – 10:30 Swarm Learning: Bridging the Gap Between Data Sharing and Privacy (Oliver Saldanha - Technische Universität Dresden)

10:30 – 11:00 Multi-Modal Federated Learning from Heterogeneous Cardiovascular Data (Malte Toelle - Universität Heidelberg)

11:00 – 11:30 – Coffee Break

11:30 – 13:00 – SESSION III: Breast Cancer Screening Techniques (Chairs: Marta Buetas Arcas and Maria Balaguer Montero - VHIO)

11:30 – 12:00 Introduction to Breast Cancer Imaging (Julia Camps Herrero – Fundación Ribera Salud)

12:00 – 12:30 An overview of Magnetic Resonance Imaging (MRI): from basic principles to cutting-edge applications (Francesco Grussu - VHIO)

12:30 – 13:00 Breast MRI: Technique, Indications, and Future Applications (Belén Ubeda Hernández – Hospital Clinic de Barcelona)

13:00 – 13:30 – Closing Remarks & Elevator Pitch Awards (Raquel Pérez López – VHIO)

4.4 Summary

The event opened with a keynote lecture by ODELIA coordinator Daniel Truhn (Aachen University Hospital) on the role and future potential of large language models in medicine, providing an accessible introduction to the capabilities, limitations, and future clinical impact of generative AI. A second keynote by Silvia Casacuberta Serra (VHIO) highlighted the path from basic scientific discovery to clinical translation using the example of academically-developed compound *"Omomyc"*. The final day featured technical talks on distributed and federated learning, with contributions from DKFZ, TU Dresden, the University of Barcelona, and Heidelberg University, and a set of clinical and technical talks on breast Cancer screening procedures and techniques, featuring professionals from Ribera Salud, CLINIC and VHIO. These sessions connected directly to ODELIA's scientific foundations and discussed ongoing developments in privacy-preserving AI, including swarm learning.

Ten students selected from submitted abstracts presented 5-minute elevator pitches on their research projects, covering imaging biobanks, radiomics, synthetic MRI generation, multi-omics integration, histopathology reconstruction, AI for prostate cancer, radiotherapy applications, and ethical considerations in AI. This format was particularly successful in encouraging students to present their projects, thereby enhancing their communication skills.

One of the most impactful components of the Summer School was the hands-on workshop on the design of AI-enabled clinical trials in oncology, the first of its kind organised within ODELIA. Structured across two sessions (theory + group work), the workshop allowed participants to collaborate in small teams to design trial concepts using real-world clinical considerations. Experts from VHIO's Radiomics Group, Biostatistics Unit, Clinical Trials Office, and Academic CRO provided continuous mentoring. The workshop concluded with group presentations and panel feedback. This format emerged as one of the most valuable elements of the programme due to its practical orientation, direct expert interaction, and the opportunity to apply theoretical concepts to realistic clinical scenarios.

Participants represented various external academic centres. The diversity of backgrounds, ranging from medical imaging, machine learning, and computational biology to clinical research, contributed to active discussions and high engagement across sessions. The in-person setup was instrumental in fostering spontaneous exchanges, mentoring opportunities, and collaborative thinking.

The Summer School also generated external visibility: two VHIO web notes were published to disseminate the event and its relevance for the future of medical AI, namely *"New research project ODELIA launches to revolutionise artificial intelligence in healthcare using swarm learning"* (https://vhio.net/2023/02/06/new-research-project-odelia-launches-to-revolutionise-artificial-intelligence-in-healthcare-using-swarm-learning/) and *"Shaping future medical AI"* (https://vhio.net/2025/09/25/shaping-future-medical-ai/). In addition, the ODELIA website promoted participation in the summer school. The website provided information on the programme and registration/participation policy (https://odelia.ai/odelia-summer-school/) and a summary article was published afterwards (https://odelia.ai/odelia-annual-meeting-summer-school-2025-advancing-ai-in-healthcare/). In parallel, regular posts were published on the project's and partners' social media accounts.

Overall, the Summer School successfully advanced ODELIA's training objectives by equipping early-career researchers with practical skills, strengthening the community around distributed AI for healthcare, and increasing the project's visibility and outreach impact.

4.5 Evaluation

Attendees were required to complete a comprehensive online survey following the Summer School to provide feedback on their experience and learning outcomes. Completion of this survey was mandatory for issuing the participation certificate, including the accredited CME credits, in accordance with the requirements of the accreditation body.

Overall, the feedback collected through the post-event survey was highly positive. Attendees expressed great satisfaction with the Summer School, highlighting the quality of the scientific content, the interactive format, and the valuable learning experience. Many participants emphasised that the programme met or exceeded their expectations and contributed significantly to their understanding of the topics covered. While some constructive feedback was provided, such as a desire for more time dedicated to group work, a larger venue, and a more structured approach to the workshops, these comments were framed within an overall context of enthusiasm and appreciation. In summary, participants were very happy with both the organisation and the educational value of the event.

Main results from the survey are briefly presented in the following:

Half of the attendees reported that the Summer School was extremely helpful for their professional activity; 29% reported that it was useful.

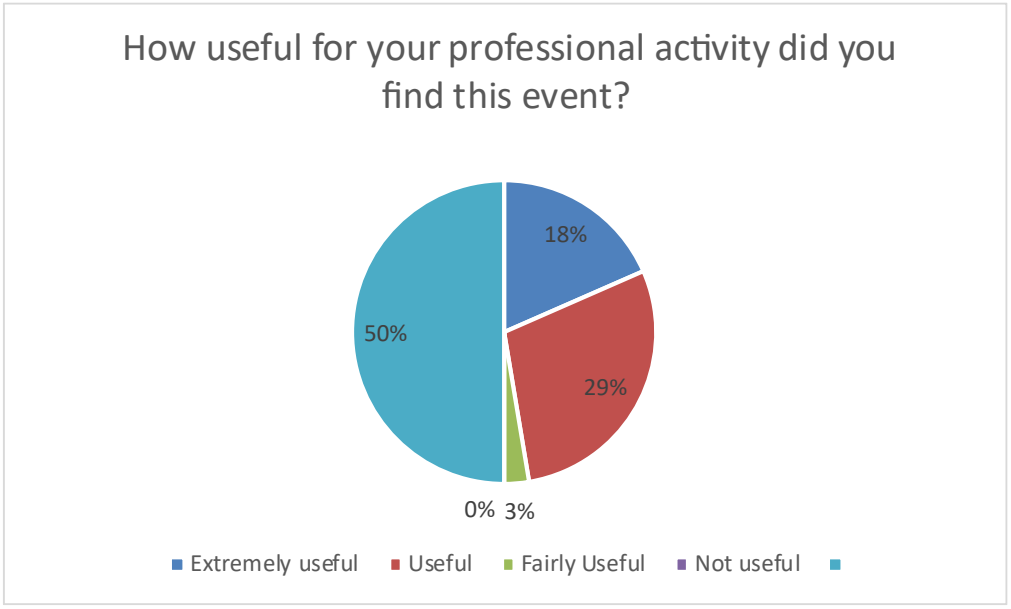


Figure 1: How useful for your professional activity did you find this event?

More than half of the attendees indicated that the Summer School fulfilled the educational goals and expected learning outcomes very much; in addition, 42% reported that these were fulfilled somewhat.

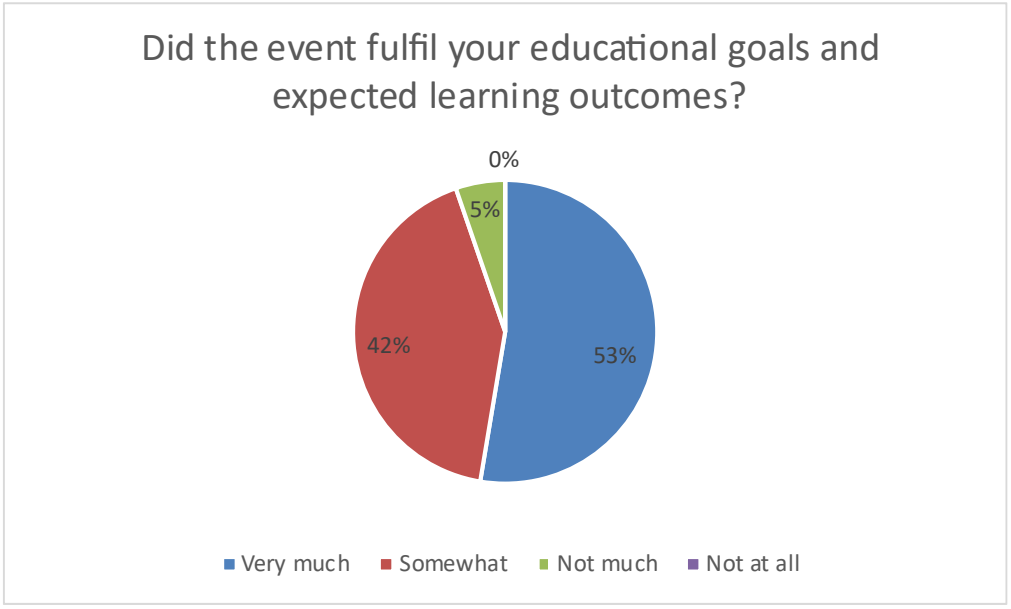


Figure 2: Did the event fulfil your educational goals and expected learning outcomes?

Over 80% of attendees confirmed that there was adequate time available for discussions, questions & answers and learner engagement.

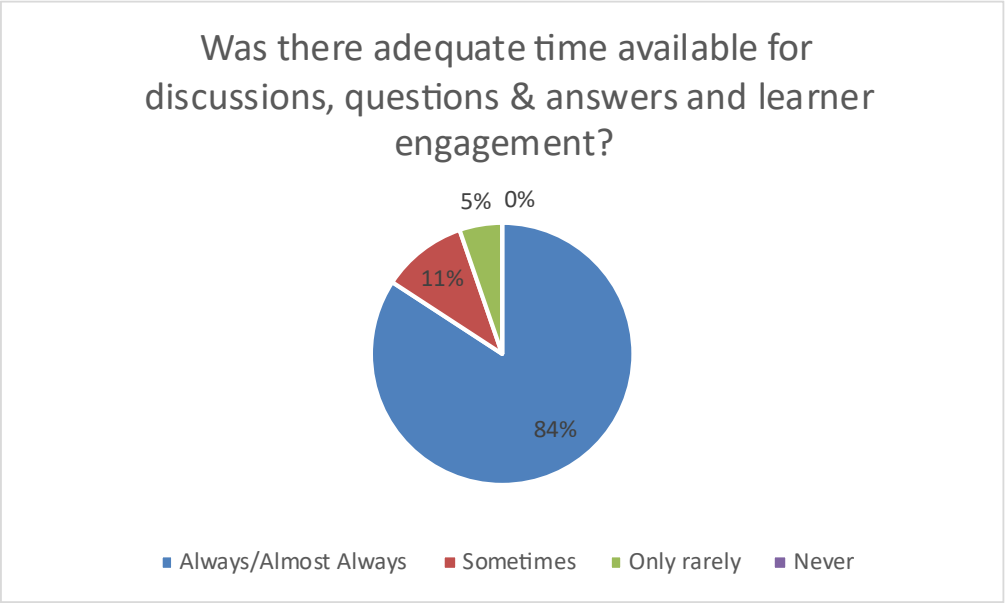


Figure 3: Was there adequate time available for discussions, questions & answers and learner engagement?

Almost two thirds of respondents indicated that the learnt information will be implemented in practice; one quarter of respondents still indicated that it will be somewhat implemented.

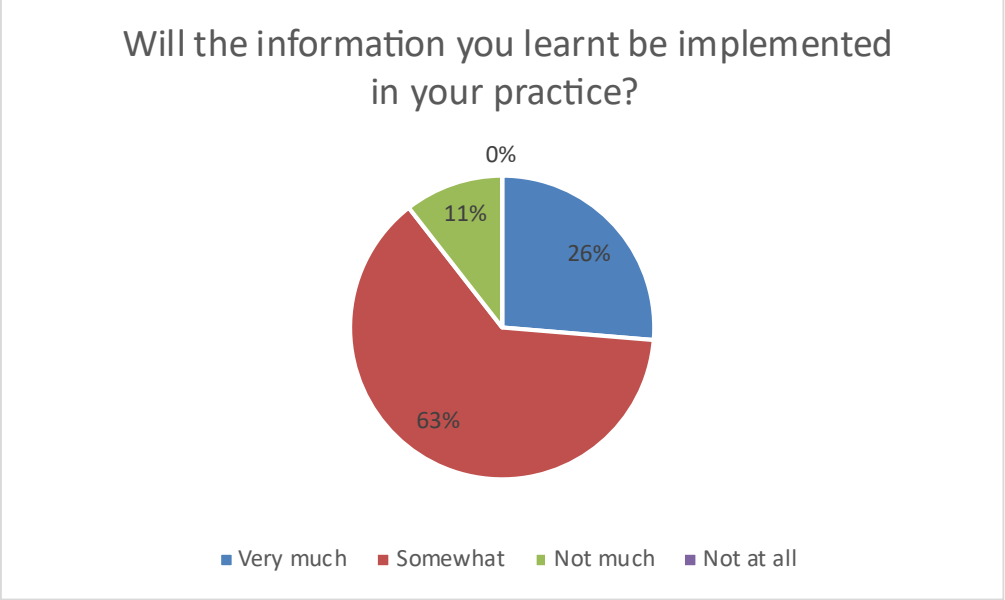


Figure 4: Will the information you learnt be implemented in your practice?

The survey also included some open text questions, and some answers are provided exemplarily in the following:

<u>What was the best aspect of this event?</u>

- Get to know experts from different domains.
- To combine the topics and talks with activities regarding different cases of AI for healthcare and reunite different professionals
- Learning on Clinical Trials, networking with people from other centers
- Talking to clinicians about designing a mock clinical trial

- The practical part on the second day
- This event was particularly meaningful to me as it provided the opportunity to engage with individuals from diverse backgrounds and with research interests in various fields. Moreover, the group activities focused on designing a clinical trial were invaluable in helping me understand how to conceptualise, plan, and implement the necessary steps for conducting a clinical trial.
- The motivation of the team and the speakers was really inspiring and sharing different ideas was a great part of it. I especially enjoyed the group activity to simulate a clinical trial proposal.
- The team-building activities encouraged collaboration and meaningful connections
- high level talks
- As a medical doctor, I have understood better how we will come to use AI in our daily work.

Can you provide one example how this event will influence your future practice?

- It will allow me to better understand how clinical trials are planned and executed.
- It has helped me to understand how should I create the AI models so they could be used in clinical research.
- Federated Learning as new option for collaborations to ensure privacy
- Considering the potential requirements of clinical trials on the projects I will work on.
- Know the difference between federated learning and swarm learning
- One example is that I will apply the structured approach to clinical trial design learned during the program when planning future research projects, ensuring a stronger methodological foundation
- I have computer science background, so I will consider clinical validation in my model creation.
- I will go deeper into breast cancer research to make AI-based classification clinically possible and impactful

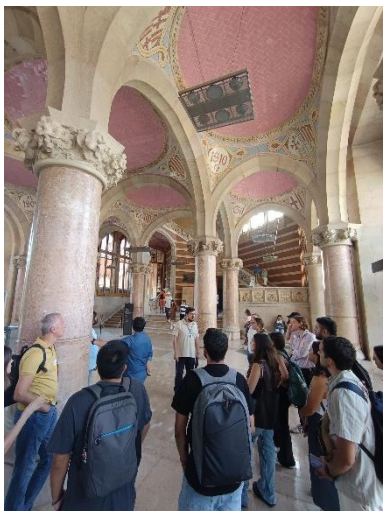
4.6 Photos









5. CONCLUSION

The ODELIA Summer Schools successfully fulfilled their dual purpose of strengthening internal collaboration and extending knowledge to the broader research community. The two internal events in 2023 and 2024 provided hands-on training and technical alignment for consortium partners, ensuring a shared understanding of Swarm Learning principles and harmonised workflows. These sessions fostered interdisciplinary dialogue, improved technical coherence, and laid the foundation for collaborative development across sites.

The external Summer School in 2025 marked a significant milestone in outreach and impact. Bringing together participants from diverse backgrounds, it combined high-level scientific lectures with practical workshops, notably the AI-enabled clinical trial design exercise. Accredited with CME credits, the event received overwhelmingly positive feedback, with participants praising its educational value, interactive format, and networking opportunities.

In conclusion, the Summer Schools exemplify ODELIA's commitment to capacity building, knowledge dissemination, and fostering a European community around privacy-preserving AI in healthcare. They not only advanced technical expertise within the consortium but also empowered external stakeholders to engage with cutting-edge methodologies, reinforcing ODELIA's role as a leader in decentralised medical AI.