

From AI Research to Clinical Implementation – BosomShield Summer School (September 8th - 12th, 2025)

Venue: Maribor, Slovenia (Faculty of Electrical Engineering and Computer Science of University of Maribor, lecture room Alfa)

Day 1: Opening Ceremony & Introduction to Clinical AI (September 8th)

Opening Ceremony (9:00 - 09:30)	Opening statements and welcome addresses
	Prof. dr. Gorazd Štumberger, dean Faculty of Electrical Engineering and Computer Science, UM, Slovenia
	Prof. dr. Zdravko Kačič, rector University of Maribor, Slovenia
	Mag. Ksenija Klampfer, Minister of Digital Transformation, Slovenia
	Iztok Kos, MD, State secretary at Ministry of Health, Slovenia
	Dr. Jure Gašparič, State secretary at Ministry of Higher Education, Science and Innovation, Slovenia
EU vision for healthcare AI (policy view) (9:30 – 10:00)	
EU Cancer Mission & Cancer Clusters	Marianne Ines DA SILVA, Health and Digital Executive Agency (HaDEA), TBC
AIA, MDR-IVDR	EVAS Tatjana, DG CNECT, European Commission (remote)
MSCA	Domna PASCHALIDOU, Research Executive Agency (MSCA), European Commission (remote)
Keynote Address (10:00 - 11:00)	
Digital Transformation of Hospitals	Prof. dr. Vojko Flis, MD, general director of University Medical Centre Maribor, Slovenia
Healthcare innovation strategy	National Institute of Public Health (NIJZ), Slovenia, TBC
Vision for academic-clinical collaboration	Dr. Izidor Mlakar, University of Maribor, Slovenia
Coffee Break (11:00 - 11:30)	
Medical Research in Action (11:30 - 13:30)	Research projects showcase session with Q&A
BosomShield, Horizon Europe MSCA project	Prof. dr. Domenec Puig, Universitat Rovira i Virgili, Spain
RAIDO, Horizon Europe project	Prof. dr. John Shawe Taylor, Jožef Stefan Institute, Slovenia
TARGET, Horizon Europe project	Dr. Hatem A. Rashwan, Universitat Rovira i Virgili, Spain
Immune checkpoint inhibitors	Assist. dr. Nežka Hribernik, MD, Institute of Oncology Ljubljana, Slovenia
SHIELD, Horizon Europe project	Prof. dr. Athanasios Anastasiou, Harokopio University of Athens, Greece (remote)
DIOPTRA, Horizon Europe project	Dr. Christos Fotis, Protavio, Greece (remote)
Implementation Network Europe for Cancer Survivorship Care, COST	Prof. dr. Josephine Hegarty, University College Cork, Ireland (remote)
Lunch & Networking (13:30 - 15:00)	
Clinical Trial Design for AI-driven Cancer Research (15:00 - 16:30)	
Topics: Trial types and methodologies, Statistical considerations, Protocol development.	
Lecturers: Assoc. prof. dr. Georgios Dimitrakopoulos and Prof. dr. Athanasios Anastasiou, Harokopio University of Athens, Greece (remote)	
Closing Remarks, Student Task assignments & Day 1 Wrap-up (16:30 - 17.00)	

Day 2: Regulatory Framework & Compliance (September 9th)

European Medical Device Regulation (9:00 - 10:00)

Topics: Overview of MDR framework, Classification of AI-based medical devices, Risk classification and management, Post-market surveillance requirements

Lecturer: Dr. Maria Panousopoulou, National Organisation for the Provision of Health Services, EOPYY, Greece (remote)

Coffee Break (10:00 - 10:30)

AI Act & Compliance (10:30 - 11:30)

Topics: Intersection of MDR and AI Act, Additional requirements for AI systems, Impact on medical device development

Lecturer: Dr. Piercosma Bisconti, DEXAI, Italy

HTA and Health Economics (11:30 - 13:00)

Topics: Economic evaluation methods, Cost-effectiveness analysis, Quality-adjusted life years (QALYs), Healthcare resource utilization

Lecturer: Dr. Magda Chatzikou, PharmEcons Easy Access, Greece/UK

Lunch & Networking (13:00 - 14:00)

Practical Compliance Workshop (14:00 - 17:00)

Lecturers: Dr. Magda Chatzikou and Dr. Piercosma Bisconti

Closing Remarks & Day 2 Wrap-up (17:00 - 17:30)

Day 3: Clinical Research & Ethics (September 10th)

Bridging the Gap Between AI Research & Clinical Adoption (9:00 - 10:30)

Success stories and lessons learned

Dr. Matej Horvat, MD, Department of Oncology, UMC Maribor, Slovenia

Key challenges and opportunities

Sara Močnik, MD, Pediatric and adolescent psychiatry, UMC Maribor, Slovenia

The potential of AI in health registries - the case of the Slovenian Cancer Registry

Dr. Tina Žagar, Institute of Oncology Ljubljana, Slovenia

Coffee Break (10:30 - 11:00)

Ethical Aspects of Medical AI (11:00 - 12:30)

Ethical Frameworks for Clinical Implementation of AI

Dr. Antonio Carnevale, University of Bari, Italy

Bias & End-User Perspective

Prof. dr. Bojan Musil, University of Maribor, Slovenia

XAI & Transparency

Dr. Izidor Mlakar, University of Maribor, Slovenia

Lunch & Networking (12:30 - 13:30)

Internet of Things - Case Studies & Workshop (13:30 - 16:00)

Cloud Computing and Sensing networks 1

Dr. Zouhair Haddi, NVISION Systems, Spain

Cloud Computing and Sensing networks 2

Dr. Nurlan Dauletbayev, University Marburg, Germany

Closing Remarks & Day 3 Wrap-up (16:00 - 17:00)

Day 4: Interoperability, Commercialization & Funding (September 11th)

Interoperability, Standardization and Data Spaces in Medical AI (09:00 - 10:00)

Healthcare data standards, Data spaces implementation, Cross-border sharing Dr. Antonis Billis, Aristotle University of Thessaloniki, Greece (remote)

Coffee Break (10:00 - 10:30)

Commercialization and Funding

From Cancer Research to Startup (10:30 - 11.30)

Dr. Christos Fotis, Protavio, Greece (remote)

Commercial Exploitation of Research and Innovation Projects (11:30 - 12:30)

Dr. Marios Logothetis, Netcompany – Intrasoftware, Greece (remote)

Medical Research Ecosystem (12:30 - 13:00)

Prof. dr. Denis Horgan, European Alliance for Personalised Medicine

Lunch & Networking (13:00 - 14:00)

Future of AI in Cancer Research and Practice (14:00-14:30)

Dr. Antonis Billis, Aristotle University of Thessaloniki, Greece (remote)

Closing Remarks & Day 4 Wrap-up (14:30 -15:00)

*Maribor - guided city tour (15:00 - 17.00)

Meeting point in front of the main entrance of the Faculty of electrical engineering and computer science, Koroška cesta 46, Maribor.

Day 5: Student, Early Research Contributions (September 12th)

(CLOSED meeting)

Group Project Presentations & Discussion (9:00 - 12:00)

BosomShield Students

Closing Remarks and Wrap-up (12:00-12:30)

Lunch & Networking with goodbye (12:30 - 15:00)

BosomShield project meeting (15:00 – 17.00) **(CLOSED meeting for BosomShield project partners)**