

DISIT Seminar Series

2025



Tuesday 02nd
DECEMBER



14.30 - 15.30



Room 204



Translation Laboratories in Action: Building Bridges between Hospital and University

[Dr. Annalisa Roveta](#)

Dipartimento Attività Integrate Ricerca Innovazione
(DAIRI) - AOU AL



UNIVERSITÀ DEL PIEMONTE ORIENTALE



SCAN HERE
TO GET MORE INFO

Translation Laboratories in Action: Building Bridges between Hospital and University



[Dr. Annalisa Roveta](#)

Research and Innovation Department, SS. Antonio e Biagio e Cesare Arrigo University Hospital,
Via Venezia 16, Alessandria

aoveta@ospedale.al.it

The creation of the Integrated Research Laboratories (Joined Labs) between the Research and Innovation Department (DAIRI) of Alessandria University Hospital and the Department of Science and Technological Innovation (DISIT) of the University of Eastern Piedmont represents a consolidated model of cooperation between healthcare and academic institutions [1]. Launched in 2020, the initiative was designed to strengthen translational research — understood as the continuous process that transforms discoveries from basic science into clinical applications and, in turn, uses clinical evidence to inform and refine laboratory investigations. From this perspective, the Joined Labs serve as a catalyst for the bidirectional exchange of knowledge, integrating biomedical research with clinical needs and technological innovation. Thanks to a structured plan, DAIRI and DISIT have developed a shared research infrastructure aimed at advancing studies on environmentally related diseases, antibiotic resistance, and digital health innovation. Five Joined Labs were formally established, each combining complementary expertise, advanced instrumentation, and research personnel from both institutions: Sequencing Laboratory – dedicated to genomic surveillance and microbiota analysis, with projects on antibiotic resistance and SARS-CoV-2 monitoring [2–4] Preclinical Research Laboratory – focused on experimental models and new therapeutic strategies for mesothelioma and other tumors [5–7] Asbestos Research Laboratory (LIRiCA) – specialized in identifying and quantifying asbestos fibers and inorganic materials in biological tissues using SEM/EDX and micro-RAMAN technologies [8–10] Artificial Intelligence and Medical Informatics Laboratory – promoting AI-based decision support, data analytics, and personalized education in healthcare [11–13] Metabolomics Laboratory – extending the NMR platform (PRISMA) toward biomedical and preclinical metabolomics [14] This integrated network has enhanced scientific productivity, interdisciplinary collaboration, and training opportunities for young researchers, fostering innovation and translational impact at both institutional and regional levels. The DAIRI–DISIT partnership now stands as a reference model for the joint development of health-oriented research infrastructures.

References

- [1] Maconi et al. Organizzazione della ricerca: in modello DAIRI di Alessandria. *Sanità* 4, 0, 2 (2022), p. 9-24
- [2] Leli C et al. Application of Real-Time PCR Syndromic Panel on Lower Respiratory Tract Samples: Potential Use for Antimicrobial De-Escalation. *Microorganisms*. 2025 doi: 10.3390/microorganisms13071678
- [3] Bottino P et al. Evaluation of Bacterial Viability for Fecal Microbiota Transplantation: Impact of Thawing Temperature and Storage Time. *Microorganisms*. 2024 doi: 10.3390/microorganisms12071294
- [4] Bottino et al. Clinical Evaluation and Comparison of Two Microfluidic Antigenic Assays for Detection of SARS-CoV-2 Virus. *Microorganisms*. 2023 doi: 10.3390/microorganisms11112709
- [5] Bonsignore et al. Unraveling BOLD-100 synergistic potential in pleural mesothelioma treatment: an in vitro study. *Invest New Drugs*. 2025 doi: 10.1007/s10637-025-01540-9
- [6] Ghezzi et al. NAMPT and NNMT released via extracellular vesicles and as soluble mediators are distinguished traits of BRAF inhibitor resistance of melanoma cells impacting on the tumor microenvironment. *Cell Commun Signal*. 2025 doi: 10.1186/s12964-025-02361-2
- [7] Pellavio et al. Aquaporin-6 May Increase the Resistance to Oxidative Stress of Malignant Pleural Mesothelioma Cells. *Cells*. 2022 doi: 10.3390/cells11121892
- [8] Croce et al. Assessment of Optical and Scanning Electron Microscopies for the Identification and Quantification of Asbestos Fibers and Typical Asbestos Bodies in Human Colorectal Cancer Tissues. *Chemosensors*. 2024 doi: 10.3390/chemosensors12100200
- [9] Croce et al. Application of a Multi-Technique Approach to the Identification of Mineral Polymorphs in Histological Samples: A Case of Combined Use of SEM/EDS and Micro-Raman Spectroscopy. *Minerals*. 2024 doi: 10.3390/min1407063
- [10] Croce et al. Asbestos Bodies in Human Lung: Localization of Iron and Carbon in the Coating. *Geosciences*. 2024 doi: 10.3390/geosciences14030058
- [11] Roveta A et al. Developing Mobile Apps to Support Clinical Management of HIV Patients: An Observational Study. *Appl Clin Inform*. 2025 doi: 10.1055/a-2543-7444
- [12] Bottrighi A et al. A Symbolic AI Approach to Medical Training. *J Med Syst*. 2025 doi: 10.1007/s10916-024-02139-y
- [13] Bottrighi A et al. A machine learning approach for predicting high risk hospitalized patients with COVID-19 SARS-Cov-2. *BMC Med Inform Decis Mak*. 2022 doi: 10.1186/s12911-022-02076-1
- [14] Lalli et al. Derivatives of GdAAZTA Conjugated to Amino Acids: A Multinuclear and Multifrequency NMR Study. *Inor Chem*. 2022 doi: 10.1021/acs.inorgchem.2c02110

