Summer school

Becoming a Clinician Scientist: a practical guide to clinical research and skill development

The Summer School initiative is designed to provide medical students, residents, and PhD candidates in clinical disciplines with a robust foundation in clinical research methodologies, including the integration of artificial intelligence (AI). Aimed at bridging the gap between traditional medical education and academic career development, the program promotes the role of the clinician scientist—an individual capable of integrating research with patient care to enhance healthcare outcomes.

This multidisciplinary training initiative offers participants essential skills for designing, conducting, analyzing, and translating clinical studies into practice, with a strong emphasis on international standards and ethical frameworks. It also introduces tools for patient engagement, digital platforms like REDCap and MOOVE, and principles of AI-based tool development. A unique feature of the program is its adaptability—topics and instructional depth are customized according to pre-course survey results that assess participants' learning needs.

The Summer School aligns closely with the University of Padua's Third Mission, strengthening its leadership in advanced medical education and reinforcing the Department of Women's and Children's Health's dedication to integrating care, research, and teaching. Direct beneficiaries include participants who gain exposure to advanced topics and global faculty, while indirect beneficiaries extend to the broader academic and clinical community through the creation of a research-empowered ecosystem.

International in scope, the program is conducted entirely in English and features contributions from leading experts in Europe, North America, Australia, and New Zealand. These collaborations support the global mobility of learners, cross-cultural knowledge exchange, and the promotion of harmonized standards. Key subject areas include clinical trials, precision medicine, health policy, predictive modeling, and ethical implementation of AI in clinical practice. Content is aligned with international frameworks like Horizon Europe and the WHO.

The curriculum includes research design, literature review, regulation-compliant data handling, and science communication. Interactive sessions such as workshops, clinical simulations, and breakout discussions

promote hands-on learning and interdisciplinary collaboration. Tailored breakout groups ensure individualized attention and content delivery based on specific participant needs.

A co-design model underpins the program, engaging stakeholders from the Pediatric Emergency Research Network (PERN) and other global organizations. The curriculum is crafted through interdisciplinary input, ensuring relevance across clinical contexts and adaptability to real-world healthcare needs.

Innovation and interdisciplinarity are central. The curriculum blends insights from medicine, data science, AI, global health, and bioethics, preparing participants to tackle complex healthcare challenges with advanced, adaptive methodologies. Faculty are drawn from a global pool of highly regarded clinician scientists and researchers, supplemented by experienced local educators. This balance provides participants with both an international outlook and region-specific expertise.

Outcomes include increased competence in clinical research, critical evaluation skills, ethical reasoning, and AI in clinical research. Graduates of the program will be prepared to integrate care and research in their careers, contributing to healthcare innovation and equity. The initiative also supports long-term institutional strategy, leverages multi-source expertise, and fosters a continuous training pipeline for future clinician scientists. The program's structure allows for long-term growth, expansion into recurring sessions, and deeper partnerships with academic and research institutions worldwide.

KEY INFO

Dates: 6th July 2026 – 10th July 2026

Target: Master's, PhD and residency students in Medicine and related fields

Minimum number of participants: 20

Maximum number of participants: 40

Location: Padua

ECTS: 3

Fee: 500 euros per week / 20% fee waiver for students of partner universities / 50% fee waiver for Arqus students (including UNIPD students). A maximum number of waivers might apply.

Contact: summerschool@unipd.it

Application dates: 15th November 2025 – 15th March 2026