

SIMHA

Smart Innovative Materials
for Health Applications

International Training School
25–26 May 2026 • BARI



SMART
LIPOSOMES &
NANOVACCINES



BIO-BASED &
LIVING MATERIALS



CARBON DOTS
FOR BIOMEDICINE



SYNTHETIC CELLS
& PROTOTISSUES



LIGHT-RESPONSIVE
DRUG DELIVERY



BIOMEDICAL
APPLICATIONS



PROTON
ACCELERATOR

Villa La Rocca,
Via Celso Ulpiani 27, Bari



PROGRAMME

DAY 1

Monday, 25 May 2026

09:00 – 09:30	Welcome coffee and registration
09:30 – 10:30	Materials from living organisms and living organisms as materials: possibilities and challenges in biomedicine <i>Gianluca Maria Farinola, University of Bari, Italy</i>
10:30 – 11:00	Coffee break
11:00 – 12:00	Engineering Bioactive Multifunctional Hydrogels for Cell Therapy Applications. <i>Ângela Maria Moraes, University of Campina, Brazil</i>
12:00 – 13:00	Flexible Sensing: Leveraging Natural Polymer Eutectogels for Motion Monitoring <i>Guillermo J. Copello, University of Buenos Aires, Argentina</i>
13:00 – 14:30	Light lunch
14:30 – 15:30	Tailoring Immunity: "SMART" Liposomes as NanoVaccines for Precision Disease Prevention <i>Michele Fiore, University of Lyon 1, France</i>
15:30 – 16:30	Novel peptide-based nanomaterials applied for vaccines, antivenom and diagnostic kits development <i>Silvia Andrea Camperi, University of Buenos Aires, Argentina</i>
16:30 – 17:00	Coffee break
17:00 – 18:00	Light-responsive synthetic cells as smart drug delivery platform <i>Paola Albanese, University of Siena, Italy</i>
18:00 – 18:30	General discussion

DAY 2

Tuesday, 26 May 2026

09:00 – 09:30	Welcome and introduction to Day 2
09:30 – 10:30	Engineering Smart Carbon Dots for Advanced Biomedical Applications <i>Nicolò Mauro, University of Palermo, Italy</i>
10:30 – 11:00	Coffee break
11:00 – 12:00	Functional Colloidal Nanoparticles for Emerging Health and Biomedical Applications <i>Elisabetta Fanizza, University of Bari, Italy</i>
12:00 – 13:00	Plasma Technology for Surface Modification Processes on Biomedical Materials <i>Pietro Favia, University of Bari, Italy</i>
13:00 – 14:15	Light lunch
14:15 – 15:00	Transfer to Ruvo di Puglia
15:00 – 15:30	Welcome and institutional greetings by the ITEL Group
15:30 – 16:15	Visit to LinearBeam – Proton Therapy Department. Introduction to the ERHA project – Enhanced Radiotherapy with Hadrons and to the proton linear accelerator
16:15 – 16:30	Coffee Break
16:30 – 17:00	Radiopharmaceuticals for Diagnosis and Therapy: Current Applications and Future Perspectives <i>Anna Tolomeo, Itepharma S.r.l., Ruvo di Puglia, Italy</i>
17:00 – 18:00	Visit to Radiopharmaceuticals and Microbiology Department
18:00 – 18:30	Final discussion and closing remarks

