



**UNIMORE**  
UNIVERSITÀ DEGLI STUDI DI  
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# Nanotechnology in Global Health: Navigating the Frontiers of Infectious Disease and Antiparasitic Therapy

*Nanotechnologies applications and regulatory aspects in different therapeutic area with focus on infectious diseases and antiparasitic drugs. Leveraging low environmental impact and one health consideration*

4-5 June 2026

University of Modena, Modena, Italy

***Workshop of the COST Action CA21111 & HIP-TECH PhD School  
One Health drugs against parasitic vector borne diseases in Europe and  
beyond  
OneHealthdrugs***

The event is open to PhD, young innovators and senior scientists from both academia and pharma

## **Nanotechnology in Global Health: The 2026 Paradigm Shift**

*The One Health drugs COST Action and the HIP-Tech PhD School (University of Modena and Reggio Emilia) convene in June 2026 for two international days focused on Nanotechnology in global health.*

## **Introducing the Workshop**

The One Health drugs COST Action and the HIP-Tech PhD School (University of Modena and Reggio Emilia) convene in June 2026 for an international day focused on Nanotechnology in global health. The integration of nanotechnology into therapeutic areas represents a critical intersection of innovation, regulatory evolution, and environmental stewardship.

In 2026, nanotechnology has transformed the fight against Neglected Tropical Diseases (NTDs) like malaria. By using intracellular targeting via polymeric nanocapsules, drugs are delivered directly into host cells to strike

parasites where they hide. Simultaneously, nano-suspensions have boosted the bioavailability of drugs like Ivermectin, allowing for lower, safer doses.

This progress is governed by a rigorous regulatory landscape. Agencies now mandate Quality by Design (QbD), requiring real-time monitoring of particle size and drug loading. To ensure long-term safety, the industry has pivoted toward biodegradable materials that leave no toxic footprint in the patient.

Sustainability is the new manufacturing standard. Through "Green" Synthesis,

researchers use plant extracts and fungi instead of hazardous solvents, slashing the carbon footprint of pharmaceutical production. This "One Health" approach extends to eco-pharmaco-vigilance, ensuring that nano-waste does not disrupt aquatic ecosystems or livestock environments, which helps combat antimicrobial resistance.

Powering these breakthroughs is AI-driven optimization. Machine learning now predicts membrane interactions and perfects nanocarrier "recipes," drastically reducing animal testing. From personalized human therapeutics to more efficient veterinary care, these microscopic innovations are solving macroscopic global health challenges.

The attendance is free.

Registration is two steps, both mandatory:

- 1- **Create an e-COST account** (only, if you do not have one) here: [www.cost.eu](http://www.cost.eu)
- 2- **Register here**, with the same e-mail address used to create the e-COST account: [https://docs.google.com/forms/d/e/1FAIpQLSfhwVra-UFDAm24hDb13xuNSPZR-6GUDHBgMpLdW\\_J3fqyetQ/viewform?usp=publish-editor](https://docs.google.com/forms/d/e/1FAIpQLSfhwVra-UFDAm24hDb13xuNSPZR-6GUDHBgMpLdW_J3fqyetQ/viewform?usp=publish-editor)

We invite contributions for:

- Poster presentation, from 1<sup>st</sup> year PhD students
- Flash oral presentation, from 2<sup>nd</sup> and 3<sup>rd</sup> year PhD students

Abstracts will be selected based on the coherence to the topic and scientific requirements.

Please submit your abstract to Giovanni Tosi ([giovanni.tosi@unimore.it](mailto:giovanni.tosi@unimore.it)) and maria Paola Costi.

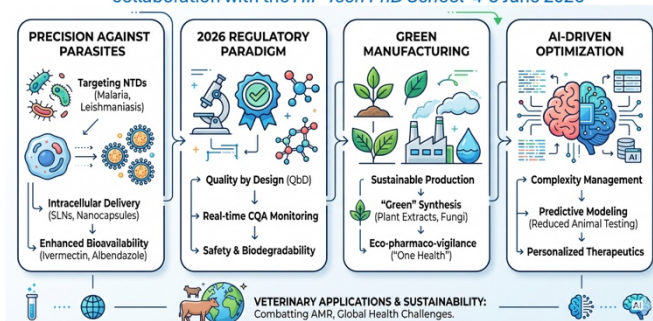
The deadline for the abstract submission is May 20th, 2026. The template can be downloaded in the announcements section of the OHD website <https://onehealthdrugs.com/events/scientific-meeting/meeting-2026>

### Preliminary Program

Day 1 (Thursday 4 June 2026)	
13:30 – 14:30	Registration
14:30 – 15:00	Welcome remarks ( <i>Prof. P. Costi</i> ) and introduction ( <i>Prof. G. Tosi</i> )
15:00 – 15:30	Lecture 1: _____ ( <i>Prof. _</i> )
15:30 – 16:00	Lecture 2: _____ ( <i>Prof. _</i> )
16:00 – 16:15	Break
16:15 – 16:45	Poster presentations ( )
16:45 – 17:45	Flash research presentations ( )

### Nanotechnology in Global Health: Navigating the Frontiers of Infectious Disease and Antiparasitic Therapy

A workshop organized by the OneHealthdrugs COST Action in collaboration with the HIP-Tech PhD School 4-5 June 2026



17:45 – 18:05	Closing of day 1
Evening	Optional group pizza

Day 2 (Friday 5 June 2026)	
9:00 – 9:30	Lecture 3: _____ (Prof. _)
9:30 – 10:00	Lecture 4: _____ (Prof. _)
10:00 – 10:15	Group photo
10:15 – 10:35	Break
11:15 – 12:15	Flash research presentations (_____)
12:15 – 12:45	Lecture 5: _____ (Prof. _)
12:45 – 13:15	Lecture 6: _____ (Prof. _)
13:15 – 14:00	Rich coffee break
14:00 – 14:45	Round table _____ (_____)
14:45 – 15:00	Closing remarks