



One Health drugs against parasitic vector borne diseases in Europe and beyond

**Strategies for breaking
the chain between the
parasite reservoir in
animals and infections
in humans.**

4-6 June 2025

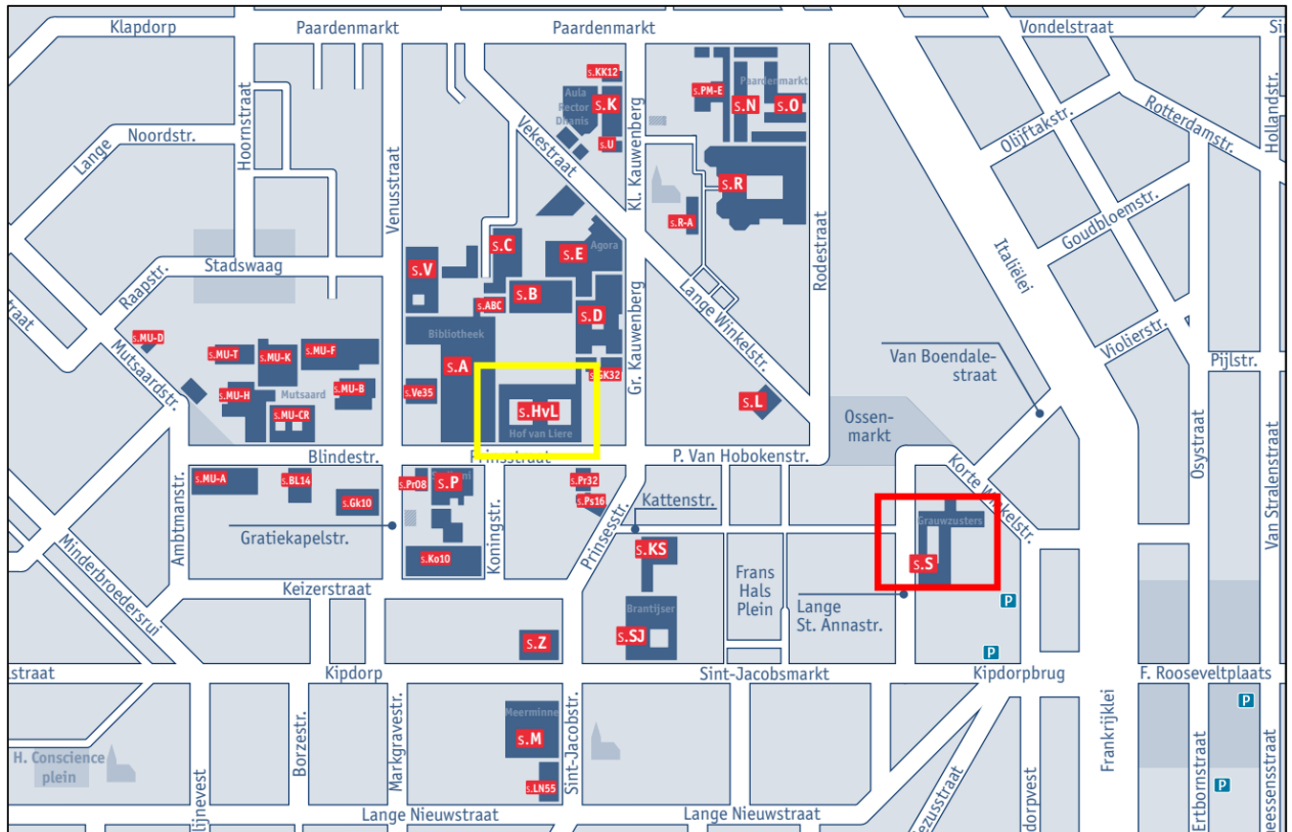
OneHealthdrugs

The OneHealthdrugs COST Action network brings together experts to advance the discovery of innovative drugs and therapeutic targets aimed at combating vector-borne infections in both human and veterinary medicine. By adhering to the principles of an optimal drug profile, our approach enhances treatment effectiveness while minimizing environmental impact.

Meeting Venue

University of Antwerpen – Grauwzusters, Lange Sint-Annastraat 7, Antwerp, Belgium

City campus



For Conference: s.S - Grauwzusters - Lange Sint-Annastraat 7

For Dinner: s.HvL - Hof van Liere - Prinsstraat 13

Organizing committee

Scientific committee

Prof. Jose Maria Alunda
Prof. Mirco Bundschuh
Prof. Guy Caljon
Prof. Anabela Cordeiro Silva
Prof. Elisabeth Davioud-Charvet
Prof. Louis Maes
Prof. Maria Paola Costi
Prof. Joana Tavares
Prof. Elisa Uliassi

Local supporting team

Yentl Jacobs
Cassandra Present
Lauren Van den Broeck
Sin-Ting Wong
Ting Yu

Meeting Program

Wednesday, June 4, 2025			
11:30	Registration		
12:30	Welcome address (Guy Caljon and Maria Paola Costi)		
<u>Session 1: Industry stakeholders – interface academia/industry (Translation)</u>			
Chair: Louis Maes			
12:45	Thomas Geurden	Keynote lecture 1: How is the Animal Health industry driving innovation?	Page: 1
13:20	Serge Van Calenbergh	Purine nucleoside analogues against protozoan pathogens in humans and livestock: from bench to barn	Page: 2
13:40	Paul M. Selzer	Antiparasitic Research: An Animal Health Perspective	Page: 3
14:00	Guy Caljon	Strategic roadmap towards high-quality leads and drug development candidates: in vitro and in vivo laboratory approaches for kinetoplastid diseases	Page: 4
14:20	Anabel Olías Molero	Regulatory Framework for Veterinary Medicines in the European Union	Page: 5
14:40 Coffee break			
<u>Session 2: Roadmap and assays for target and off-target effects (Pharmacology)</u>			
Chair: Sarah Hendrickx			
15:10	Sheraz Gul	In vitro and in silico methods to assess ADME-Tox and ecotoxicological profiles of compounds in drug discovery	Page: 6
15:30	José María Alunda	Academic research ecosystem: does it fit the antiparasitic drug discovery process?	Page: 7
15:50	Maria Alice Carvalho	New fused-pyrimidine derivatives as promising broad-spectrum antiparasitic agents	Page: 8
16:10	De Koning Harry	A new class of minor groove binders active against animal trypanosomiasis in vivo	Page: 9
16:30	Ioannis P. Papanastasiou	Synthesis and Evaluation of Nitroheterocyclic Aromatic Adamantanohydrazones with Trypanocidal Activity	Page: 10
16:40	Črtomir Podlipnik	OCART: A Simple Chemoinformatics Toolkit in Orange3 for Drug Discovery in Vector-Borne Diseases	Page: 11
16:50	Margarida Duarte	Metabolic Rewiring in Leishmania Lacking PRX1/2 Reveals Hidden Vulnerabilities for Drug Targeting	Page: 12
17:00 Poster session			
18:00 Social event 1 – local drink tasting			

Thursday, June 5, 2025		
<u>Session 3: Unintended side effects of pharmaceuticals on the ecosystem level (Environment)</u>		
<i>Chair: Kayhan Ilbeigi</i>		
9:00	Tomas Brodin	Keynote lecture 2: The potential trade-off between human health and ecosystem health – ecological effects of pharmaceutical contamination
9:30	Mirco Bundschuh	Pharmaceuticals and their potential for ecological surprises
9:50	Johannes Charlier	Piloting sustainable worm control approaches in grazing livestock to minimize the environmental impact of anthelmintics in livestock
10:10	Maarten Vanhove	Monogenean flatworms: petite parasites, mighty models, innovative indicators?
10:30 Coffee break + poster viewing		
<u>Session 4: Parasite and host targets: identification and structural characterization</u>		
<i>Chair: Elisa Uliassi</i>		
10:50	Cecilia Pozzi	CA21111 OHD1 - Target database project: the BioTarget DataBase (BioT-DB)
11:10	Joana Tavares	Contributions to drug discovery against Leishmania infantum: from target-based strategies to insights into the biology of the infection
11:30	Benoit Stijlemans	Q586B2 is a crucial virulence factor during the early stages of Trypanosoma brucei infection that is conserved amongst trypanosomatids
11:50	Alvaro Baeza Garcia	Targeting host and Plasmodium immunomodulators for new malaria therapeutics
12:10 lunch		
<u>13:30 COST general assembly meeting</u>		
<u>13:30 Breakout workshop: Young innovators and career</u>		
13:30	Elsa Abranches	My Career Tale: one step at a time
14:00-17:00	Corinne Herrijgers; Marjolijn De Clercq	Coaching session
15:30 Coffee break + poster viewing		
<i>Chair: Benoît Stijlemans</i>		
16:00	Daniel Sojka	Proteases driving the apical complex of Babesia during egress and invasion of host red blood cells
16:20	Malgorzata Domagalska	Multi-drug tolerance in Leishmania persister-like cells
16:40	Ana M Tomás	Metal Transporters in Leishmania: Exploring Their Potential as Drug Targets
16:50	Jovana Ajdukovic	Heterocyclic steroid derivatives with antitrypanosomal activity and in silico binding affinity to glucose-6-phosphate dehydrogenase
17:30: Social event 2 – Chocolate museum		
19:30: Congress dinner: Hof van Liere University Club		
Friday June 6, 2025		
<u>Session 5: Promising synthetic and natural compounds for sustainable control</u>		
<i>Chair: Ioannis P. Papanastasiou</i>		
9:00	Elisa Uliassi	Building Bridges Between Medicinal Chemistry and Sustainability: Parasitic Diseases in the One Health Context
9:20	Maria Paola Costi	High-Throughput Screening Selection and Deselection Process for the Identification of High-Affinity PTR1 Inhibitors

09:40	Elisabeth Davioud-Charvet	Preparation of a library of polysubstituted 3-benzylmenadiones and design of plasmodione prodrugs
10:00	Orazio Tagliatela-Scafati	The potential of natural products against vector-borne diseases
	Marco Persico	Computer-aided design of new nature-inspired antimalarials
<i>10:30 Coffee break</i>		
<i>Chair: Margarida Duarte</i>		
11:00	Roland Hellinger	Discovery, characterization and application of nature-derived cystine-knot peptides with antimicrobial activity
11:20	Theodora Calogeropoulou	Sustainable development of novel antiparasitic agents valorising by-products of the cashew industry
11:40	Godwin U. Ebiloma	Development of a novel Trypanosome Alternative Oxidase inhibitor with a broad-spectrum activity against the causative agents of animal Trypanosomiasis
<i>11:50 Concluding remarks (Guy Caljon and Maria Paola Costi)</i>		
<i>12:00 Adjourn – city walk</i>		

Poster Presentations

Hafidh Akkari	Bioassay guided isolation and identification of Amoebicidal and leishmanicidal compounds from Tunisian natural sources
Gülşah Bayraktar	Studies on Thiazolopyrimidine Derivatives within One Health Perspective
Dijana Blazhekovikj	Fish-borne parasitic zoonoses: One Health perspectives
Aleksandar Cvetkovski	Role of crystal engineering in repurposing drugs for therapy of antiparasitic vector-borne disease: structure-property relationship
Roncareggi Davide	On the road to unravel the interactome of Leishmania molecular heat shock protein 90
Dilek Ömer Gürkan	Bridging Veterinary and Human Health: Drug Targets for Zoonotic Parasite Reservoirs
Jasmina Đorđević	TIME-CHANGE LÉVY PROCESS IN MODELLING OF EPIDEMICS
Lori Doko	Pharmacological Advances in Vector-Borne Parasitic Diseases: Assays, Targets, and Environmental Impact
Abazaj Erjona	Risk factors, mode of transmission and potential for acute toxoplasmosis serological diagnosis: A case series of this infection occurring during pregnancy
David C. Magri	Cinchona Alkaloid Polymeric Fluorescent Logic Gates
Miguel Marín Folgado	Assessment of dyes and new strategies in the design of anthelmintic drugs
Sébastien Pomel	PEGylated liposomes encapsulating amphotericin B: an innovative formulation for the treatment of cutaneous leishmaniasis
Ricardo Monteiro	Evaluation of Novel 4-Thiazolidinone Bioisosteres of Alkylphosphocholines as anti-Trypanosomal agents
Essia Sebai	Chemical analysis and in vitro acaricidal activity of Mentha pulegium and Thymus capitatus essential oils against Hyalomma dromedarii
Asghar Talbalaghi	Leishmaniasis and Vector Control An Emerging Threat and New Prevention Strategies
Theo Zacharis	Stakeholder Engagement for Sustainable Drug Development under the OneHealthDrugs Action

Sponsors:

