

Newsletter

NEWSLETTER OCTOBER 2024

Dear All,

I am sending the newsletter of October 2024 including the appointments for this month and dissemination events. During September we had a general assembly at the workshop organized by WG2 and WG1 in Athens. This was an important event because we planned a final version of the work budget plan (WBP) for YEAR3 of the OHD Action. You can find all the material related to the Athens meeting in the Action webpage.

I wish you a good reading.

Paola

General assembly program 20 September 2024, 2-5pm Greek time

AGENDA

1. Overview of the PHD project achievements (OHD1 projects advance)
2. One Healthdrugs Academy for OneHealthdrugs ambassador
3. Surveys ongoing:
 - Collection of available technologies (WG1-WG2) (Ulrike Wittig, Theodora Calogeropoulou)
 - Collection of Medicinal chemistry projects within the network (WG2)
 - Stakeholders survey (Launched)
4. Forthcoming surveys
 - Ecotox survey
 - From WG6 - Survey about epidemiological data on human parasitic diseases and environmental impact in Action countries "[WG6]
5. OHd- Reporting the 1st and 2nd year
6. Presentations of the next year 3 WBP plan
Grant Awarding Team (Elisabeth Davidou)
WG5 – Gulsah Bayraktar
7. HGs events
8. Year 2 - Year 3
 - October events

- Gulsah Bayraktar: Researcher nights event
- October meeting for WG4 on "WG4 Workshop "Adverse outcome pathways at early stages of the design of antiparasitic drugs " 17th October 2024 9:00-11:00 am CET (VIRTUAL)" call for contribution.

4. DESCRIPTION OF THE ACTIVITIES

The General Assembly started at 14:37

Chair presented. The goal of the GA is to update the Action members of the progress of the Action and to plan the 3 Working Period.

1. Overview of the PHD project achievements (OHD1 projects advance)

The GA is at the end of the WS held in Athens. There are about 30 people in the room and 20 from remote, which is a good number.

The Chair briefly presented the challenge and objectives. A greener approach: not only green! Summary of the situation We are about 45 countries, all over the world, 300 Action participants and 1000 people overall registered to the Action events. YR are between 30-40%, which is a great achievement, and we encourage YR to work even more with us.

The new WG5 leader is Gulsah Bayraktar that will substitute the former leader, while he recovers.

We organised our activities in 4 OHD projects (for now). This was a way to attract people into realistic activities and publications. This is a change in mentality that we need to achieve: we have to find new mind settings about concepts.

OHD1- the biotarget database. We try to convince the network to contribute actively providing the name of the targets, because we have seen that the survey sent by WG1 had only 2 answers. We then simplified the approach and ask only the targets 'names and a few information. Up to now we have 10-12 targets 'names, we can do better!

The list of specific endpoints of the database targets has been shown and briefly commented.

OHD2- the compound database construction. From August 1st the OH database is ready and available online. Compounds can be uploaded. We are looking for volunteers to upload the compounds from literature. The software development is progressing in parallel to the database under Sheraz Gul coordination

The compound from the database will be tested against the proteins targets. The work has to be planned, and we are looking for volunteers to work on this.

OHD3 is Animal models and replacements to environmentally friendly approaches, with 2 different topics.

OHD4 Environmental impact of veterinary drugs against VBPD. We just publish a very good paper, open access, under review. Other reviews are in the pipeline

Concepts and numbers from year 2 and 1. Beyond the numbers there is a lot of collaborative work, for which the Chair thanks everybody. The concepts are starting to become common, and some speakers are presenting them outside the Action to important scientific meetings.

- We published over 30 papers in a special issue that is going to be published by the end of the year together with papers from outside the Action and we have been congratulated by the editor.
- One paper has been published in ORE
- We financed about 20 fellowships, we would like to see more, especially from YR
- We had about 80 meetings, 8 of them in presence. We supported about 200 people, sometimes the same, to attend the events eligible for reimbursement.
- We organised 4 training schools.

2. OneHealthdrugs Academy for OneHealthdrug ambassadors

We are looking for OH Ambassadors. YR are welcome, senior researchers can apply. The idea is to have some criteria to select the Ambassador and have them approved by the MC. The Ambassadors are people that proven to be very interested in the concept, and they will be supported to attend 60% of the events organised by the Action. They will be supported by the Action every time they want to attend to a networking activity. There will be a plan of activities, and we will follow (ex. Review, asked to represent the Action). They could have a different profile. The criteria will be proposed and voted in the next MC next month.

3. Surveys ongoing

These are ongoing and the Action participants have been contacted and reminded to participate and some responded.

- Collection of available technologies (WG1-WG2) (Ulrike Wittig, Theodora Calogeropoulou)
- Collection of Medicinal chemistry projects within the network (WG2)
- Stakeholders survey (Launched)

4. Forthcoming surveys

They will be presented by the WG leaders

- WG5-HG4(Stakeholders) survey re-launched
- WG 6 Survey on veterinary drugs
- HG7-survey on ecotox

5. OHd- Reporting the 1st and 2nd year

The Chair invited everybody to continue to report the activities, papers, collaborations, patents, projects and other outcomes into the common OHD report: <https://docs.google.com/spreadsheets/d/1GcC-wuYN0lqP8R7gEiRngDFiWzLoGqxNuwxMm6rnVLE/edit#gid=0>

These data will be integrated into the Progress Report due by the end of November, being prepared by the Chair.

6. Presentations of the next WBP plan

The networking activities planned for the 3rd WBP will be presented. We received 217.000 euro to be used for the 3rd year. It is a responsibility to use all of it for financing networking activities.

WG1 Ulrike Wittig presented an overview of the survey done, showing graphics of the 65 answers received, question by question. This report is available on the Action website. Importantly, we have now a table of the available technologies and the names of the people that have these technologies,

based on the answers received. The idea is to put this table on the website and also to include more technologies/people. Ulrike asks the Assembly opinion about putting researchers' names on the website, the idea is to contact each person and ask. The reason to publish this table is to further network with other scientists interested about one or more technology(ies)

The Chair presented the deliverables (see list below) achieved and those ongoing. For the deliverables (D), each WG leader should send a brief description of the D and the % achieved. For each deliverable we organised a Workshop on the D topic that is also useful to achieve them. For WP3 we have D7 and D10 to reach. D7 is ongoing, we need to collect targets; D10 is for WG3, part of the information is available, but it has to be completed.

The Chair presented the specific goals for each WG, summarising the work done and how to continue for each goal.

WG1 proposed a new activity. It is a monthly 2-hour training (front lecture + practical work online) on topics asked by the YR. This is a sort of permanent Training School, ex. on a particular technique. The scientists can also propose topics that they would like to discuss.

WG2 2 Deliverables have been completed, 4 are to be delivered during the 3rd year: D8, D9, D10, D11. The Chair summarised the work to be done in order to achieve each of them. The specific goals for the 3rd year have been read.

WG3. D2 has been reached. D6 should be postponed because we are at 0% activity. The next deliverable to be done during the 3rd WP is D10.

The specific goals for 3rd WP have been planned during last week meeting with Guy.

Elisabeth proposed to organise in presence the WG3 Workshop 1 - 26/09/2025 14.00 – 17.00 CET: Imaging and biosensor strategies in drug discovery for VBDs (VIRTUAL). The date and location has to be decided.

The OHD 2025 conference will be organised by WG3 in Antwerp (Belgium) 4-6 June 2025

WG4 Does not have Deliverables for the 3rd year. This WG is looking for a WG leader, actually the Chair is provisory leading it. Kate from Poland is proposing herself as vice-leader if she can find somebody with a background in ecotoxicity, maybe a colleague in Warsaw.

For the WG4 meeting will replicate last year dates, For the WS we will joint o others and organise 1.

WG5 Gulsah Bayraktar is presenting. For the website, WG5 is collaborating with HG1. There are ideas for Woman days, and others.

The WG5 meetings dates have been presented and a joint WS will be done for HG4 for YRI, focusing on STSM.

European Research Night, Sept 27th, if the lab is participating WG5 can provide some material about OH to attract attention and is collecting photos to be displayed online.

HG2 Grants awarding groups. Elisabeth Davioud-Charvet : with her Consortium they organise every 2 years in front of Marseille Tulon and could make a joint meeting with the COST about the imaging and biosensor, October 25th, 2025. Michael thinks this is not possible, but he is open to discuss it. A

few points were discussed about how to organise co-organised events with the COST and how much the LoS could be; the Oxford conference was taken as an example.

WG6 Has only 1 deliverable. The specific goals are set for veterinary medicine., with surveys and review papers.

HG4 (YRI) Elisa Uliassi presented the plan for 3rd WP. There are around 100 YRI in the Action. The internal meetings have been planned to organise the YR activities. They are preparing also dissemination materials. They are organising the second edition of the “OHd marathon” in which we have YR session, and we give them an award. Last year experience was very positive.

They are planning a brief survey and then a review paper “Brook’s Project” (in agreement with other WGs/HGs).

They are interacting with the communication for women in STEM, for this year they would make comparison between young and senior women researchers. The Chair asked to do something for the researcher nights, example a new poster to upload on the website. She suggested also a little survey about YR publications.

HG6 - Plan for networking for ecotoxicology (Michael Bertram and Eli Thorè)

Michael Bertram is a representative of the United Nations and he accepted to report on his experience.

The Brooks’s project is a project for a new paper about language sharing, on how to communicate among different expertise in OHd. The same concept is expressed with different words, and this was note in the Oxford meeting. The Chair asks for a possible event in presence in Sweden.

Will have 2 events for people collaborating with stakeholders. One in presence in November 2024 and one in September 2025 inviting the stakeholder in the COST’s premises

HG7- Compound degradability. The idea is to have a Training School in Athens in March 2025.

Deliverable

YEAR 1 and YEAR 2

D1_Website and social media platform launched and available. M4 (WG5)

D2_Report on imaging and target engagement studies. M18 (WG3).

D3_Report on biomarker and receptor-based assays in ecotoxicology. M18 (WG1, WG2, WG4)

D4_Web resource - Coordination of compound libraries resources. M24 (WG1).

D5_Report on compounds in silico pattern degradation prediction. M24 (WG1).

D6_Report on omics and validation technologies. M24 (WG1-WG4).

YEAR 3

D7_Report on target selected and structural biology. M36 (WG1).

D8_Report on compounds synthesized. M36 (WG2)

D9_Report on coordination of different medicinal chemistry technologies. M36 (WG2)

D10_Report on One Health nanotechnology system for animal models studies. M36 (WG1, WG2, WG3)

D11_Report on coordination of ecotoxicology assays and model systems. M36 (WG2, WG3)

YEAR 4

D12_Report on HTS assays and structural biology. M42 (WG1,WG2,WG3)

D13 Report on integration of ecotox studies from WG1-WG3 and perspective for benefits upon such integration. M42 (WG4)

D14_Report on SOP coordination on standardization of animal experiments. M42 (WG3)

D15 Report on compounds degradability in vitro. M42 (WG1, WG2)

D16_Roadmaps to assess the environmental effects of pharmaceuticals and their degradation products/metabolites. M44 (WG4)

D17 Report on progress on compounds in the discovery pipeline M48 (WG3, WG4)
D18_Report about compounds collections. M48 (WG1)
D19_Report on compounds identified from natural sources and organic waste. M48 (WG1, WG2).
D20_White paper composed and distributed. M48 (WG4-WG5)
D21_Report on internal coordination of the transfer of knowledge and exploitation plan. M48 (WG1-WG6)
D22. Report on external coordination of the transfer of knowledge and exploitation plan. M48 (WG1-WG6)

Events in presence

Conference in Antwerp (Belgium) 4-6 June 2025

One WS in Tirana topic to be decided,

A Training School in Rome maybe for this or next year organised between Marco Mazzorana (Oxford UK) and Andrea Ilari (Rome, Italy).

Training Schol in Athens

STSM

8 STSM were achieved, 2 Applications for dissemination grants. All paid, one still pending because Eli Thoré will attend in October.

The grant coordinating team was informed at the end of the STSM that the project was changes. The STSM was approved because people very well-known and well considered. Next time the STSM will be rejected if the project is modified without notice to the grant coordinating team.

For the next 3rd period, the budget will be more or less the same than in the past and they proposed about 10 STSM, 2 Dissemination grants, with 2 rounds of selection. The STSM application windows are:

15 October-30 November 2024

1 February – 15 March 2025

All STSM and grants must be completed by end of August 2025, so to have the time to report and be reimbursed by end of September 2025

In the evaluation process YR have priority, even if senior scientists are welcome to apply.

Linkedin group and website






The Action Linkedin group is administered by Theo Zacharis and the Chair, and it is updated with the events. If you want to contribute with figures, pictures and other icons and contents related to OH, please do. We only have 172 members, we need much more, because the Action has about 300 members!

In the web site different sessions were shown: the MC committee, the Core group, the working groups, the surveys, the calendar, the meetings, dissemination activities done by Action members, STSM reports, the international initiatives (NTD days, woman day, research night...). The private area, accessible by log-in, that can be reached by all Action members. It I organised by WG and each WG has its own room with activities, reports, summaries, so everybody can see them. These documents are modifiable only by the WG leader. The officer will check every detail of the web site. Last year the complaint because the "laboratory" page was empty.

Upcoming events until the end of the 2nd Working Period (31st October 2024)

The Chair showed the calendar of the events for end of September and October 2024.

She asked for contributions for the organisation of WG6 meeting-stakeholders involvement of the 21st October 2024.

	WG2 meeting 4th October 2024 15:00-16:00 pm CET (VIRTUAL) Friday, October 4, 2024 3:00 PM	...	<input type="button" value="Join"/>
	WG1 meeting 9 October 2024 15:00-16:00 pm CET (VIRTUAL) Wednesday, October 9, 2024 3:00 PM	...	<input type="button" value="Join"/>
	WG4 Workshop "Adverse outcome pathways at early stages of the design of antiparasitic..." Thursday, October 17, 2024 9:00 AM	...	<input type="button" value="Join"/>
	WG6 meeting 21st October 2024 2:30-3:30 pm CET (VIRTUAL) Monday, October 21, 2024 2:30 PM	...	<input type="button" value="Join"/>
Scheduled a meeting			
	7thMC meeting 10th October 2024 2:30-5:30 (VIRTUAL) Thursday, October 10, 2024 2:30 PM	...	<input type="button" value="Join"/>

Linkedin:

Youtube channel: <https://www.youtube.com/@OneHealthdrugs>

Website: <https://www.onehealthdrugs.com/loading...>

Concluded events

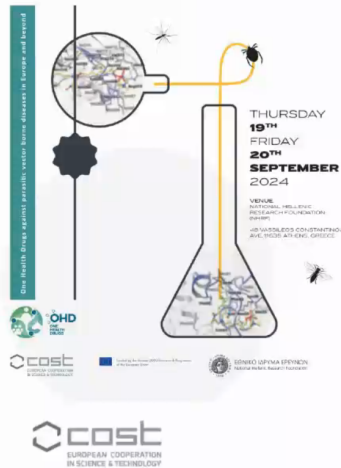
Athens workshop 19-20 September 2024: all documents in the Action webpage

Training school in Warsaw: all documents in the Action webpage

Both events were successful and of high interest. Thanks a lot to the organizers!

- Update on the WG1 WG2 HG7 Thematic Workshop: " Novel leads and drugs for vector borne diseases: Targets and off targets (toxicity and ecotoxicity) and mechanism of action" September 19-20 2024, National Hellenic Research Foundation, Athens, Greece

WORKSHOP
NOVEL LEADS AND DRUGS FOR VECTOR BORNE DISEASES:
 Targets and off targets (toxicity and ecotoxicity) and mechanism of action



It was attended by ~86 participants including a number of young researchers and encompassed high quality presentations (18 oral presentations, 11 flash poster presentations and three round table discussions) on target identification, drug design and synthesis for VBDs, in silico methods for the prediction of ecotoxicity, bioaccumulation and biodegradability and their incorporation in the design of new antiparasitic drugs and natural compounds.



Workshop in Athens! You can find details in the cost action website.

WORKSHOP ON AOP!!



WG4 Workshop "Adverse outcome pathways at early stages of the design of antiparasitic...
 Thursday, October 17, 2024 9:00 AM

...

Join

Adverse Outcome Pathways (AOPs) provide a framework for curating and organising toxicological & ecotoxicological knowledge with associated measurements of key events and the dose & temporal concordance of relationships between these events. AOPs have been the topic of many conferences and workshops since the concept was first proposed in 2012 when the [Organisation for Economic Co-operation and Development](#) (OECD) launched a new programme on the development of adverse outcome pathways. A guidance document that describes in detail how AOPs are to be developed, reviewed, agreed is published at the OECD level. To date these qualitative AOPs have made little impact in regulatory toxicology beyond chemical reactivity-driven endpoints. However, quantitative AOPs are likely to be significantly more impactful

in next generation risk assessments using new approach methods without the need to conduct animal studies. There is, though little guidance on best practices for quantitative AOP generation. AOPs are important for expanding the use of mechanistic toxicological data for risk assessment and regulatory applications with recent applications in further disciplines such as climate science. Our workshop has the objective to introduce to these concepts

<https://www.onehealthdrugs.com/events/scientific-meeting/>

DISSEMINATION EVENTS

1. Participation to congresses
(<https://www.onehealthdrugs.com/dissemination/participation-to-meetings-and-congress/accelnet-6th-annual-meeting-date-16-18-october-venue-hilton-old-town-alexandria-washington-usa/>)

Letter by the COST Action officers

Following our collaboration and joint event organization with the NSF AccelNet Programme [Challenges & solutions for data sharing in different research fields \(cost.eu\)](https://www.onehealthdrugs.com/dissemination/participation-to-meetings-and-congress/accelnet-6th-annual-meeting-date-16-18-october-venue-hilton-old-town-alexandria-washington-usa/), the American partner informed us that they would be able to host participants from COST at their annual meeting.

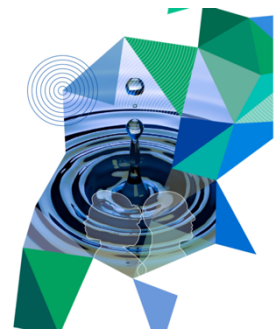
AccelNet 6th Annual Meeting is organized for the AccelNet Principal Investigators. The event is a great networking opportunity offering meeting and engaging with funded AccelNet project leaders and allowing to establish connections and start possible collaborations. The list of funded AccelNet projects can be browsed [NSF Award Search: Advanced Search Results](#). You can find the draft agenda enclosed for your information.

OHD Representative person **Dr. Sheraz Gul** ([Fraunhofer](#), Hamburg, Germany)

Event details:

Date 16-18 October 2024

Venue: Hilton Old Town Alexandria, Washington, USA



Motivation

OneHealthdrugs (OHD) COST Action, wants to contribute to building of global pharmaceutical research and development consortia, training of research scientists, capacity building and refining data sharing protocols to ensure projects at different sites align seamlessly in relation to discovering lifesaving antiparasitic drugs with safe human profiles, animals and the environment. We at OHD aim to achieve this by adopting a multidisciplinary platform to approach the problem. Attending the AccelNet 6th Annual Meeting will be an ideal opportunity to meet experts in their respective fields of research, to both learn and share our experiences in relation to international networking. The presentations listed in the agenda will provide insights into the different approaches being undertaken to build productive consortia in the field of pharmaceutical research. The event will provide a unique platform to gain fresh insights and stay updated on the latest trends and innovations in networking. Engaging with like-minded individuals, participating in thought-provoking

discussions, and hearing from experts will provide new ideas on how our Action can implement new projects in the future. Beyond the content, attending the event demonstrates our commitment to lifelong learning and professional development, as a valuable experience and empower us create a lasting impact on our future projects.

Abstract

As a OneHealthdrugs participants, We are motivated to bring the essence of our action around the different initiatives in the world, to collect interest and to contaminate with the action objective: To provide life-saving antiparasitic drugs with a safer profile for humans, animals and the environment. We adopt a multidisciplinary platform to approach the problem that has a huge under considered dimension. The concrete objective to participate to the events AccelNet 6th Annual Meeting are: i) to introduce the concepts/tools of early design of safer drugs to the stakeholders working in the pharmaceutical field; ii) to include in the drug discovery process a panel of assays allowing the evaluation of the effect on environmental models; iii) to focus on veterinary drugs and to interact with interested pharmaceutical companies for collaboration in this field. We are developing a suitable tool for early evaluation of the ecotoxicological profile of compounds/expected drug candidates; a platform with a database for training and evaluation of a few thousand known compounds and a forthcoming toolbox with unpublished/published compounds for experimental testing: applicable models for ecotoxicological evaluation of compounds in the discovery phase to promote the selection of the best compounds. Collaboration in this area would be highly relevant. We are also writing guidelines for the integration of advanced greener concepts in the antiparasitic drugs discovery pipeline.

You can find the initiative in onehealthdrugs website:

<https://www.onehealthdrugs.com/dissemination/participation-to-meetings-and-congress/accelnet-6th-annual-meeting-date-16-18-october-venue-hilton-old-town-alexandria-washington-usa/>

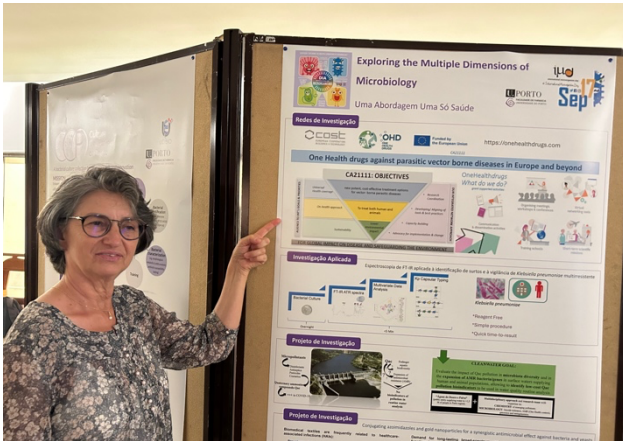
- 2. International Microorganism Day with Interactive Exhibition on Antimicrobial Resistance (AMR) and the "One Health" Approach.** University of Porto September 17th.

Faculty of Pharmacy Celebrates International Microorganism Day with Interactive Exhibition on Antimicrobial Resistance (AMR) and the "One Health" Approach

On September 17th, the Microbiology Laboratory of the Faculty of Pharmacy at the University of Porto joined the celebrations for International Microorganism Day with an interactive exhibition focused on the theme of Antimicrobial Resistance (AMR) and the "One Health" approach.

The initiative offered students and staff at U.Porto the opportunity to explore the MicroMundo@UPorto project and meet researchers, challenges, and emerging projects in the fields of Microbiology and AMR. Participants also had the chance to make microscopic observations and test their knowledge through fun quizzes.

International Microorganism Day, originally launched in Portugal in 2017 by the Portuguese Society of Microbiology (SPM), has now become a global event promoted by the Federation of European



Microbiological Societies (FEMS) and is celebrated by microbiologists worldwide. The date was chosen to honor the Dutch tradesman Anton van Leeuwenhoek, who, on September 17, 1683, sent a letter to the Royal Society of London describing the first observation of live bacteria in dental plaque. Despite not being a scientist, van Leeuwenhoek, driven by his curiosity, perfected an optical lens system that revealed microscopic life and laid the foundation for modern Microbiology.

EVENTS

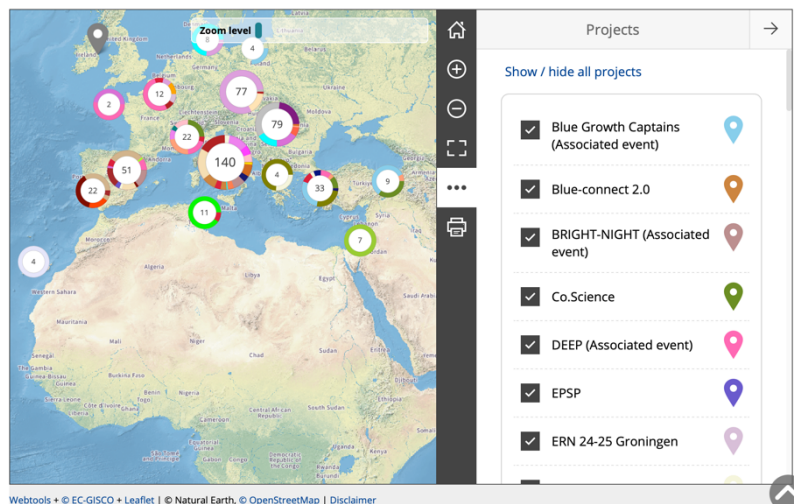
1. European Researchers Nights (ERN) 27 September 2024



We show below some one of the websites reporting the ERN activities.

<https://marie-sklodowska-curie-actions.ec.europa.eu/actions/msca-citizens/join-a-celebration-of-science>

Find the event and activities in your country



We have reported below a few concepts related to the initiatives.

What is the theme of the European Researchers Night 2024?

Under the motto “Mission Possible: Researchers on Board for an Inclusive and Sustainable Future,” the European Researchers' Night returns for its 18th year on Friday, September 27. This YEAR we want to dedicate the European Researchers Night.

The focus of OneHealthdrugs 2024 is on sustainability in professional education.

<https://www.focus.unimore.it/unimore-illumina-la-notte-della-ricerca/>

Prof. Professor Rohini R. Roopnarine, (St. George’s University of Grenada, WI)

Expert in Veterinary Epidemiology & Public Health and professional education in the field point out with a short summary some concepts.

Her participation to the COST Action OneHealthdrugs is of unique relevance due to her expertise in the field of professional education and her capacity to interconnect the One Health concept with medicinal chemistry approaches within parasitic diseases, but valid for other diseases. She presented an important lecture, very well appreciated at the COST Action event in Rome at the joint event Paul Ehrlich medicinal chemistry network- OneHealthdrugs, 17 June 2024. She is part of the One Health Initiative (OHI) our communication partner in US (Bruce Kaplan as representative scientist). We have some crucial connection interconnecting Europe and USA on One Health themes (<https://onehealthinitiative.com> and <https://www.onehealthdrugs.com>).

A Joint message for the European Researcher night from One Health Initiative (OHI) and COST Action OneHealthdrugs . 27 September 2024.

The Missing Professional in the Chemistry of Care: Medicinal Chemists and the One Health Philosophy

The concept of One Medicine focused on the interconnection between animal health and human health with the inclusion of the connection with ecosystem health, bringing the One Health term into being. However, another key player is key to elevating this transdisciplinary approach—the Medicinal chemist.

The environmental impact of medical waste derived from antivirals, antibiotics, anthelmintics and antifungals, amongst others, is a key threat to human and animal health. Importantly, developing antimicrobial-resistant pathogens is a key public health concern compounding the effects of human and animal contact with medical waste in effluent systems and other water sources. The skills required in designing compounds using the principles of green chemistry and implementing antimicrobial stewardship are tools of the chemist that can be used for educating and preparing future medical and veterinary graduates for a more eco-friendly approach to practice.

We wish that future efforts can mitigate the effects of climatic change on the occurrence of novel emerging diseases in diverse species. This effort will continue with the development of new and safer vaccines and therapeutics. *However, the outcome of this work can only be successful with the inclusion of the medicinal chemists into the conversation of interprofessional education. One Health approaches to antimicrobial stewardship could have significant benefits for elevating our approach to mitigating the effects of climate change and halting the progression of antimicrobial resistance and its threats to human health, animal health and ecosystem demise.*

Suggested website

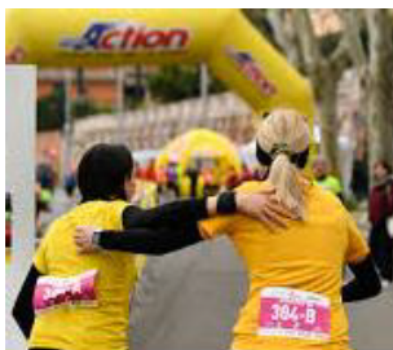
Medicinal chemists play a crucial role in the One Health approach, which emphasizes the interconnectedness of human, animal, and environmental health. Here are some key contributions they make:

1. **Drug Development:** Medicinal chemists design and synthesize new drugs to treat diseases that affect both humans and animals. [This includes developing antibiotics, antivirals, and antiparasitic agents that can be used across species¹.](#)
2. **Antimicrobial Resistance:** They work on creating new compounds to combat antimicrobial resistance, a significant One Health challenge. [By developing drugs that are effective against resistant strains, they help protect both human and animal health².](#)
3. **Environmental Impact:** Medicinal chemists also focus on the environmental impact of pharmaceuticals. [They develop eco-friendly drugs and work on methods to reduce pharmaceutical pollution, which can affect wildlife and ecosystems³.](#)
4. **Interdisciplinary Collaboration:** They collaborate with veterinarians, physicians, environmental scientists, and other professionals to [ensure that new drugs are safe and effective for all species and do not harm the environment⁴.](#)
5. **Public Health:** [By contributing to the development of vaccines and treatments for zoonotic diseases \(diseases that can be transmitted from animals to humans\), medicinal chemists help prevent outbreaks and protect public health¹.](#)

Their work is essential in creating a holistic approach to health that considers the well-being of humans, animals, and the environment.

YEAR 3 FORTHCOMING EVENT in NOVEMBER 2024

6. OHD Marathon 2024



- 4 half days-all topics – all teamwork
- Presentation of the work performed during 2nd Working Period
- 15 minutes per participant.

25/11/2024 14:30-18:00 WG1 – ½ WG2
 26/11/2024 9:30-13:00 reserved to YRI presentations
 27/11/2024 14:30-18:00 ½ WG2 - WG3
 28/11/2024 9:30-13:00 WG5-WG6 and awards

Closure

