

2ND AMR COURSE

a **One Health**
challenge

Antimicrobial Resistance Course (AMR) – A One Health Challenge

2nd edition

Co-organized by the Mériem Foundation & Université de Paris

*Les Pensieres Center For Global Health
Veyrier-du-Lac - France*

November 1st to 5th, 2021



Université
de Paris

des racines pour la vie • roots for life



After the success of its inaugural edition in 2019, the second edition of the AMR Course will take place from November 1st to 5th, 2021 at Les Pensières Center for Global Health, Veyrier du Lac, France.

Antimicrobial resistance (AMR) is a growing global public health menace that threatens the prevention and treatment of bacterial diseases. The AMR-Global Action Plan (GAP) by WHO (World Health Organization) and One Health global strategy consider fostering awareness and understanding on antimicrobial resistance to be a priority and essential for the adoption, deployment and implementation of country AMR-National Action Plans (AMR-NAPs).

To support this critical effort, the Mérieux Foundation and Université de Paris joined their expertise and capacities to support the AMR-GAP by designing a course to address concretely -from plan to action- the five objectives of the AMR-WHO-GAP. Together, the Mérieux Foundation and Université de Paris propose a residential intensive training course on AMR in a One Health perspective, principally targeting audiences from low- and middle-income countries.

The course advocates for the value of the One Health approach to fight against AMR and builds capacity for critical decision-making in low-and middle-income countries through education, partnerships and networks.

The program is based on the five WHO-AMR-GAP objectives (one objective per day):

- **Day 1:** The role of antibiotics and the current challenges – improving awareness and understanding of antimicrobial resistance
- **Day 2:** Strengthening knowledge and evidence through monitoring & surveillance
- **Day 3:** Interventions to tackle AMR
- **Day 4:** Optimizing the use of antimicrobial medicines in human and animal health
- **Day 5:** Policy-regulation-governance and the economic case for global sustainable investment to tackle AMR



International Scientific Committee

(ALPHABETIC ORDER)

Yewande Alimi	Africa CDC	Ethiopia
Antoine Andremont	Course Director, Emeritus Professor, Université de Paris	France
Juan Carrique-Mas	Centre for Tropical Medicine Oxford University Clinical Research Unit	Vietnam
Hubert Endtz	Course Co-Director, Fondation Mérieux	France
Xavier Lescure	Université de Paris	France
Valentina Picot	Course Manager, Fondation Mérieux	France
Damien Roux	Université de Paris	France
Abdoul-Salam Ouedraogo	Hôpital Universitaire de Bobo Dioulasso	Burkina Faso
Constance Schultz	University of Amsterdam's Faculty of Medicine	The Netherlands
Olivier Vandenberg	Université Libre de Bruxelles	Belgium
Jaap Wagenaar	Utrecht University	The Netherlands
Timothy Walsh	Cardiff University	United Kingdom

Steering Committee

Antoine Andremont	Course Director, Emeritus Professor, Université de Paris	France
Hubert Endtz	Course Co-Director, Erasmus University	The Netherlands
Valentina Picot	Course Manager, Fondation Mérieux	France
Marianne Gojon-Gerbelot	Course Coordinator, Fondation Mérieux	France

Faculty

(ALPHABETIC ORDER)

Yewande Alimi	Africa CDC	Ethiopia
Antoine Andremont	Course Director, Emeritus Professor, Université de Paris	France
Laurence Armand-Lefevre	APHP – Université de Paris	France
Mateusz H-Agopsowicz	World Health Organization (WHO)	Switzerland
Anand Balachandran	World Health Organization (WHO)	Switzerland
John Billington	International Federation of Pharmaceutical Manufacturers (IFPMA)	United States
Juan Carrique-Mas	Ausvet - Recent former: Oxford University Clinical Research Unit	Vietnam
Alessandro Cassini	World Health Organization (WHO)	Switzerland
Peter Collignon	Medical School, Australian National University	Australia
Valerie D'Acremont	Unisante	Switzerland
Benjamin Djoudalbaye	Africa Centres for Disease Control and Prevention	Ethiopia
Hubert Endtz	Course Co-Director, Erasmus University	The Netherlands
Sergey Eremin	World Health Organization (WHO)	Switzerland
Leonard Floryan	University of Copenhagen	Denmark
Cecilia Ferreyra	Foundation for Innovative New Diagnostics (FIND)	Switzerland
Delfy Gochez	World Organisation for Animal Health (OIE)	France
Solen Kerneis	Assistance Publique - Hôpitaux de Paris	France
Helen Lambert	Bristol University	United Kingdom
Ramanan Laxminarayan	The Center for Disease Dynamics, Economics & Policy	India
Jean Yves Madec	National Agency of food security and the environment (ANSES)	France
Patrick Munk	Technical University of Denmark	Denmark
Abdoul Salam Ouedraogo	Hôpital Universitaire de Bobo Dioulasso	Burkina Faso
Sarah Paulin	World Health Organization (WHO)	Switzerland
Jorge Pinto Ferreira	Food and Agriculture Organization of the United Nations	Italy
Damien Roux	Université de Paris	France
Jonathan Rushton	University of Liverpool	United Kingdom
Heike Schmitt	National Institute for Public Health and the Environment	The Netherlands
Constance Schultz	University of Amsterdam's Faculty of Medicine	The Netherlands
David Speksnijder	Utrecht University	The Netherlands
Hugo Turner	Imperial College London	United Kingdom
Olivier Vandenberg	Université Libre de Bruxelles	Belgium
Jaap Wagenaar	Utrecht University	The Netherlands
Jessica Wallis	Fleming Fund	United Kingdom
Timothy Walsh	Cardiff University	United Kingdom
Jean-Ralph Zahar	French Muslim Hospital	France



COURSE PROGRAMME

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Day 1	Monday, November 1 st 2021 Charles Mérieux Conference Room	
	Opening & Course introduction Introduction: Valentina Picot	
08:00-08:15	Fondation Mérieux & Université of Paris	Antoine Andremont Hubert Endtz
08:15-09:00	Keynote Lecture : AMR in the context of the COVID19 pandemic	Ramanan Laxminarayan
Session 1	The role of antibiotics & the current challenges - Improving awareness and understanding of antimicrobial resistance	
	Day Chairs: Heike Schmitt & Hubert Endtz	
	Session Objective: <ul style="list-style-type: none"> • To provide an overview on the role and use of antibiotics in global health 	
	Master Lectures	
09:00-09:30	AMR past and present & future challenges	Antoine Andremont
09:30-10:00	Onehealth perspective on AMR	Peter Collignon
10:00-10:30	Overview of AMR and means to control it	Timothy Walsh
10:30-11:00	Underlying the genetic resistance transmission	Jean-Yves Madec
11:00-11:15	<i>Discussion</i>	
11:15-11:45	Coffee Break	
11:45-12:15	Impact of AMR in human health	Alessandro Cassini
12:15-12:45	Impact of AMR in animal health	Jaap Wagenaar
12:45-13:15	Role of the environmental resistome	Patrick Munk
13:15-13:30	<i>Discussion</i>	
13:30-14:45	Lunch	
	Group Work	
	Group Activity Coordinators: Valentina Picot & Anand Balachandran	
14:45-15:00	GAP- AMR tools and Groupwork introduction	Sarah Paulin
15:00-17:15	Breakout Group Work – Exercise with Tripartite AMR Country Self-assessment Survey (TrACSS) tools to develop an operational plan for NAP Implementation and activity prioritization. (specifics on group work activity details and timings is provided in separate communication)	<u>Facilitator:</u> Faculty member <u>Reporteur:</u> Candidate
	Afternoon Coffee Break - open from 15h30 to 16h30 for groups to take as it suits work in progress-	
17:15-17:30	Day 1 -Evaluation	
19:00	Welcome Dinner	



Day 2	Tuesday, November 2 nd 2021 Charles Mérieux Conference Room	
Session 2	Strengthen the knowledge and evidence through Monitoring & Surveillance	
	Day Chairs: Constance Schultsz & Damien Roux	
	Session Objective: <ul style="list-style-type: none"> To become familiar with the methodologies for measuring and reporting AMU and AMR in commensal organisms and pathogens from humans and animals for research and surveillance purposes. To become familiar with existing international AMU/AMR surveillance initiatives. To critically evaluate AMU/AMR surveillance systems. 	
Master Lectures		
09:00- 9:30	Surveillance in Humans for AMU, AMR - Including the Global Antimicrobial Resistance Surveillance System - GLASS)	Sergey Eremin
09:30-10:00	Surveillance in Animals for AMU, AMR - Including surveillance of AMR in food-borne pathogens	Jaap Wagenaar
10:00-10:30	Surveillance in the Environment	Heike Schmitt
10:30-10:45	<i>Discussion</i>	
10:45-11:15	Coffee Break	
11:15-11:45	How to use monitoring and surveillance to improve care	Damien Roux
11:45-12:15	Limitations & solutions in data generated by surveillance systems & data sharing regional / global level	Constance Schultsz
12:15-12:45	<i>Discussion</i>	
12:45-14:00	Lunch	
Group Work		
Group Activity Coordinators: Valentina Picot & Juan Carrique-Mas		
14:00-14:20	Activity Objectives & Introductory lecture: AMU surveillance- Metrics of antimicrobial use in humans and animals, including the case of the EU monitoring system	Juan Carrique-Mas
14:20-14:30	Introductory lecture to Groupwork	Juan Carrique-Mas
14:30-17:00	Breakout Group Work – Excercise on AMR / AMU Surveillance (specifics on group work activity details and timings is provided in separate communication)	Facilitators: Faculty members Reporteur: Candidate
	Afternoon Coffee Break - open from 15h30 to 16h30 for groups to take as it suits work in progress-	
17:00-17:15	Day 2 -Evaluation	
19:00	Dinner & Evening Lecture	
	Evening Lecture: Current methods and new perspectives of Antibiotic resistance diagnostics (Methodological lecture)	Olivier Vandenberg



Day 3	Wednesday, November 3 rd 2021 Charles Mérieux Conference Room	
Session 3	Interventions to tackle AMR	
	Day Chairs: Abdoul-Salam Ouedraogo & Antoine Andremont	
	Session Objective: <ul style="list-style-type: none"> To understand the role of better hygiene and infection prevention measures and other critical interventions as essential to limit the development and spread of antimicrobial-resistant infections and multidrug-resistant bacteria. 	
Master Lectures		
09:00- 9:30	Infection, prevention and control (IPC) and WASH Interventions at hospital Inpatient level.	Jean-Ralph Zahar
09:30-10:00	AMU at the animal level	Delfy Gochez
10:00-10:30	Farm-based interventions to reduce AMU in small-scale systems in low- and middle-income countries	Juan Carrique-Mas
10:30-10:45	<i>Discussion</i>	
10:45-11:15	Coffee Break	
11:15-11:45	AMR interventions at the food production level for human and animals - agriculture	Jorge Pinto Ferreira
11:45-12:15	AMR community sensibilization and Public Engagement campaigns Behavioral / Social Sciences of AMR in LMICs	Helen Lambert
12:15-12:30	<i>Discussion</i>	
12:30-14:00	Lunch & Group Picture	
Group Work		
Group Activity Coordinators: Valentina Picot & Damien Roux		
14:00-14:10	Introductory lecture to Groupwork	Damien Roux
14:10-17:00	Breakout Group Work – Case Study on AMR interventions at hospital level including the role of WASH (specifics on group work activity details and timings is provided in separate communication)	<u>Facilitator:</u> Faculty member <u>Reporteur:</u> Candidate
Afternoon Coffee Break - open from 15h30 to 16h30 for groups to take as it suits work in progress		
17:00-17:10	Day 3 -Evaluation	
19:00	Aperitive & Gala Dinner	



Day 4	Thursday, November 4 th 2021 Charles Mérieux Conference Room	
Session 4	Optimize the use of antimicrobial medicines in human and animal health	
	Day Chairs: Cecilia Ferreyra & Benjamin Djoudalbaye	
	Session Objective: <ul style="list-style-type: none"> To understand how to optimize the use of antimicrobial medicines in human and animal health To improve understanding of the role of diagnostics and vaccines to tackle AMR 	
Master Lectures		
08:30- 9:00	Antibiotic stewardship in humans	Solen Keirnis
09:00-09:30	Antibiotic stewardship in animals	David Speksnijder
09:30-10:00	Role of the microbiotas and impact of antibiotics	Laurence Armand-Lefevre
10:00-10:15	<i>Discussion</i>	
10:15-10:45	Coffee Break	
10:45-11:15	AMR, Infection prevention measures & the role of vaccines	John Billington
11:15-11:45	WHO perspective to articulate the role of vaccine to prevent AMR	Mateusz Hasso-Agopsowicz
11:45-12:15	Role of diagnostics in AMR	Cecilia Ferreyra
12:15-12:45	Electronic algorithms and point-of-care tests to manage febrile children and reduce antibiotic prescription	Valérie d'Acremont
12:45-13:00	<i>Discussion</i>	
13:00-14:15	Lunch	
Group Work		
Group Activity Coordinators: Valentina Picot & Jaap Waagenar		
14:15-14:30	Introductory lecture to Groupwork	Jaap Waagenar
14:30-17:00	Breakout Group Work – Case Study on the use of antimicrobial medicines in human and animal health. (specifics on group work activity details and timings is provided in separate communication)	<u>Facilitator:</u> Faculty member <u>Reporteur:</u> Candidate
	Afternoon Coffee Break - open from 15h30 to 16h30 for groups to take as it suits work in progress	
17:00-17:15	Day 4 -Evaluation	
19:00	Dinner & Evening Lecture	
	Evening Lecture: Fleming Fund – AMR activities	Jessica Wallis



Day 5	Friday, November 5 th 2021 Charles Mérieux Conference Room	
Session 5	Policy -Regulation- Governance & the Economic case for global sustainable investment to tackle AMR	
	Day Chairs: Benjamin Djoudalbaye & Jaap Wagenaar	
	Session Objective: <ul style="list-style-type: none"> To recognize that a through economic impact assessments is needed in health and broader socioeconomic burden of antimicrobial resistance, including the investment in the development of new antimicrobial medicines, as well as in diagnostic tools and vaccines, to build our case. 	
	Master Lectures	
09:00- 9:30	Governance need it for an implementable NAP- National Action Plan on AMR	Benjamin Djoudalbaye
09:30-10:00	OIE List – Insights and how is it developed	Delfy Gochez
10:00-10:30	How to translate WHO-CIA-list , EU prioritization and other information / data into advocacy and Policy	Peter Collignon
10:30-11:00	Coffee Break	
11:00-11:30	EU Policy and regulation on AMR	Leonard Floryan
11:30-12:00	Economics of AMU in animal production	Jonathan Rushton
12:00-12:30	Economic impact assessments and the challenges on developing them for AMR	Hugo Turner
12:30-12:45	<i>Discussion</i>	
12:45-14:00	Lunch	
	Course Evaluation	
14:00-14:20	Day 5 & Global Course Evaluation	
14:20-15:30	Diploma Ceremony (Diploma Group Picture)	
15:30	Closure - End of the Course -	

For questions related to the content or other aspects related to the Course Program, please contact:
Valentina PICOT at valentina.picot@fondation-merieux.org

