

## Antimicrobial Resistance Course (AMR) – A One Health Challenge 1<sup>st</sup> edition

## Co-organized by the Mérieux Foundation & the University Paris-Diderot

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

Nov 4th to 8th, 2019



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 the University Paris-Diderot (UPD) have 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 UPD 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 the developing world 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

version 10.10.2019

	International Scientific Committee	
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Peter Collignon	Medical School, Australian National University	Australia
Delfy Gochez	World Organisation for Animal Health (OIE)	France
Benjamin Djoudalbaye	Africa Centres for Disease Control and Prevention	Ethiopia
Jorge Pinto Ferreira	World Organisation for Animal Health (OIE)	France
Cecilia Ferreryra	Foundation for Innovative New Diagnostics (FIND)	Switzerland
Olga Jonas	Harvard global health institute	USA
Helen Lambert	Bristol University	United Kingdom
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Jean-Christophe Lucet	Assistance Hopitaux Publique de Paris (APHP)	France
Alice Green	The Food and Agriculture Organization of the United Nations (FAO)	Italy
Jean Yves Madec	National Agency of food security and the enviroment (ANSES)	France
Laura Marin	Joint Programming Initiative on Antimicrobial Resistance (JPIAMR)	Sweden
ТВС	World Health Organization (WHO)	Switzerland
Patrick Munk	Technical University of Denmark	Denmark
Abdoul Salam Ouedraogo	Hôpital Universitaire de Bobo Dioulasso	Burkina Faso
Charles Penn	Department of Health	United Kingdom
Carmen Pessoa	World Health Organization (WHO)	Switzerland
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Johan Vekemans	World Health Organization (WHO)	Switzerland
Jaap Wagenaar	Utrecht University	The Netherlands
Timothy Walsh	Cardiff University	United Kingdom

## Course Programme

Day 1	Monday, November 4 <sup>th</sup> 2019		
8:30 - 9:00	Opening & welcome addresses		
	Fondation Mérieux	Hubert Endtz	
	Universite Paris Diderot	Antoine Andremont	
Session 1	The role of antibiotics & the current challenges - Improving awareness and understanding of antimicrobial resistance		
	Chairs: Carmen Pessoa & Jean-yves Madec		
	<ul> <li>Session Objective:</li> <li>To Provide an overview on the role and use of antibiotics in global health</li> </ul>		
	Master Lectures		
9:00 - 9:45	Keynote lecture: past and present situation of AMR & future challenges	Hanan Balkhy	
9:45 – 10:15	The onehealth perspective on AMR	Peter Collignon	
10:15 – 10:45	Impact of AMR in human health and the environment	Alessandro Cassini	
10:45 – 11:00	Discussion		
11:00 - 11:30	Coffee Break		
11:30 – 12:00	Underlaying the genetic resistance transmission	Timothy Walsh	
12:00 - 12:30	Role of the environmental resistome	Patrick Munk	
12:30 - 12:45	Discussion		
12:45 - 14:00	Lunch		
	Group work		
	Group Activity Coordinators: Damien Roux & Valentina Picot		
14:00 – 17:00	Group work: Panel discussion (group work activities will be further specified in upcoming versions of the course programme)	Facilitator: TBD Reporteur: TBD	
19:00	Welcome reception with Evening Lecture		
19:30 – 19:50	Evening Lecture: An overview of the GAP (Global Action Plan)-AMR and the Countries NAP (National Action Plan)	Marc Sprenger	

Day 2	Tuesday, November 5 <sup>th</sup> 2019		
Session 2	Strengthen the knowledge and evidence through Monitoring & Surveillance		
	Chairs: Constance Schultsz & Juan Carrique-Mas		
	Session Objective: • TBD		
	Master Lectures		
9:00 - 9:30	Surveillance in Humans for AMU, AMR (including GLASS)	Carmen Pessoa	
9:30 - 10:00	Surveillance in animals for AMU, AMR including surveillance of AMR in food-borne pathogens	Jaap Wagenaar	
10:00 – 10:30	Metrics of antimicrobial use in humans and animals, including the case of the EU monitoring system	Juan Carrique-Mas	
10:30 - 10:45	Discussion	·	
10:45 – 11:15	Coffee Break	-	
11:15 – 11:45	Limitations in data generated by surveillance systems & data sharing regional / global – Solutions	Constance Schultsz	
11:45 – 12:15	How to use monitoring and surveillance to improve care	Damien Roux	
12:15 – 12:30	Discussion		
12:30 - 14:00	Lunch		
	Group work		
	Group Activity Coordinators: Damien Roux & Valentina Picot	1	
14:00 – 17:00	Group work: Steps in developing/enhancing a national surveillance system	Facilitator: TBD Reporteur: TBD	
	(group work activities will be further specified in upcoming versions of the course programme)		
19:00	Dinner	•	
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Day 3	Wednesday, November 6 <sup>th</sup> 2019		
Session 3	Interventions to tackle AMR		
	Chairs: Timothy Walsh & Abdoul Salam Ouedraogo		
	Session Objective:		
	<ul> <li>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.</li> </ul>		
	Master Lectures		
9:00 – 9:30	Infection, prevention and control (IPC) and WASH Interventions at hospital Inpatient level. ( <i>Reducing the incidence of infection through IPC and effective sanitation, hygiene and other preventive measures</i> )	Jean-Christophe Lucet	
9:30 - 10:00	Electronic algorithms and point-of-care tests to manage febrile children and reduce antibiotic prescription	Rainer Tan	
10:00 - 10:30	AMR interventions at the environment level	Heike Schmitt	
10:30 - 10:45	Discussion		
<u>10:45 – 11:15</u> 11:15 – 11:45	Coffee Break	Delf - Oralian	
11:15 - 11:45	AMR interventions at the animal level – veterinary	Delfy Gochez	
11:45 – 12:15	AMR interventions at the food production level for human and animals - agriculture	Alice Green	
12:15 – 12:45	AMR community sensibilization and Public Engagement campaigns	Jocelyne Arquembourg	
12:45 – 13:00	Discussion		
13:00 – 14:30	Lunch & Group Picture		
	Group work		
	Group Activity Coordinators: Damien Roux & Valentina Picot		
14:30 – 17:30	Group work:Infection prevention and control core components for national and local IPC programs	Facilitator: TBD Reporteur: TBD	
	(group work activities will be further specified in upcoming versions of the course programme)		
19:00	Dinner	•	

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Day 4	Thursday, November 7 <sup>th</sup> 2019	
Session 4	Optimize the use of antimicrobial medicines in human and animal health	
	Chairs: Sophie Touze & Xavier Lescure	
	Session Objective:	
	• TBD	
	Master Lectures	
9:00 - 9:30	Role of the microbiotas and impact of antibiotics	Etienne Ruppe
9:30 - 10:00	Antibiotic stewardship in veterinary medicine	David Speksnijder
10:00 - 10:30	Infection prevention measures – The role of vaccines	Johan Vekemans
10:30 - 10:45	Discussion	
10:45 – 11:15	Coffee Break	
11:15 - 11:45	Role of diagnostics in AMR	Cecilia Ferreryra
11:45 - 12:15	Antibiotic stewardship in human medicine	Xavier Lescure
12:15 – 12:45	Behavioral / Social Sciences of AMR in LMICs	Helen Lambert
12:45 - 13:00	Discussion	
13:00 - 14:00	Lunch	
	Group work	
	Group Activity Coordinators: Damien Roux & Valentina Picot	
14:00 – 17:00	Group work: Case studies (group work activities will be further specified in upcoming versions of the course programme)	Facilitator: TBD Reporteur: TBD
17:00 – 17:20	Evening Roundtable: AMR Industry perspective in LMICs	Alex Van Belkum Emilie Alirol Natalie Vassilouthis
19:00	Dinner & Evening Lecture	
19:30 – 19:50	Evening Lecture: Fleming Fund – AMR activities	Charles Penn

Day 5	Friday, November 8 <sup>th</sup> 2019		
Session 5	Policy -Regulation- Governance & the Economic case for global sustainable investment to tackle AMR		
	Chairs: Jaap Wagenaar & Benjamin Djoudalbaye		
	Session Objective: 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		
8:30 - 9:00	Governance need it for an implementable NAP- National Action Plan on AMR	Benjamin Djoudalbaye	
9:00 - 9:30	How to translate WHO-CIA-list, OIE and EU prioritization and other information / data into advocacy and Policy	Jean-Yves Madec	
9:30- 10:45	Roundtable on the various lists of antibiotics currently available	Peter Collignon Jorge Pinto Ferreira TBC	
10:45 - 11:15	Coffee Break	•	
11:15 – 11:45	EU Policy and regulation on AMR	Laura Marin	
11:45 – 12:15	Economics of AMU in animal production	Jonathan Rushton	
12:15 – 12:45	AMR in LMICs a complex economic business model?	Olga Jonas	
12:45 - 13:00	Discussion		
13:00 - 14:00	Lunch		
	Course Evaluation & Diploma Ceremony		
14:00 - 15:00	Course Evaluation		
15:00 - 16:00	Diploma Ceremony & Diplomas Group Picture		
16:00	Closure of the course		