

AMR High-Level Meeting

Event Program

Location: Chateau Laurier Hotel, Canadian Room

Date: September 22, 2025

08:00 - 08:45

Registration & Morning Refreshments

08:45 - 09:30

Welcome and Opening Keynotes

- Senator Mohamed-Iqbal Ravalia
- Dr. Natasha Crowcroft Vice President, Infectious Diseases and Vaccination Programs and A/Chief Public Health Officer Public Health Agency of Canada
- Robert (Rob) Purdie, Member of the Taskforce of AMR Survivors, World Health Organization
- G7 and Regional Updates:
 - Moderator: Kristine Peers, General Counsel, European Federation of Pharmaceutical Industries and Associations (EFPIA)
 - Veronika Von Messling, Director-General, Ministry of Research and Innovation (Germany)
 - Guido Rasi, Professor of Microbiology, Rome University Tor Vergata, Gemelli Polyclinic& Former Executive Director, European Medicines Agency (Italy)
 - Wolfgang Philipp, Chief Science Officer, Health Emergency Preparedness and Response (HERA), European Commission
 - Dr Charles Martins-Ferreira, Councillor, Embassy of France, Washington DC (France)

Opening Remarks: AMR through a Canadian Lens

 Dr. Allison McGeer, Infectious Disease Consultant & Senior Clinician Scientist, Department of Laboratory Medicine & Pathobiology, Sinai Health (Toronto)

09:50 - 10:20

Keynote Address - International Guests

- Welcome Remarks: Michelle Horn, Country Medical Director, GSK Canada
- Moderator: Dr. Eric Brown, McMaster University
- Dame Sally Davies, UK Special Envoy on Antimicrobial Resistance
- James Anderson, Executive Director, Global Innovation, IFPMA
- Kevin Outterson, Professor of Law, Boston University and Founding Executive Director, CARB-X
- Topics:
 - o The economic burden of antimicrobial resistance
 - o The economic case for AMR incentives and innovation
 - Lessons from national and global efforts to create sustainable AMR solutions

10:20 - 10:35 Break

10:35 - 11:00

Economic Impact of AMR and the Case for Pull Incentives

• Anthony McDonnell, Policy Fellow, Center for Global Development

R&D Progress and Opportunities

• Suzanne Edwards, Programme Officer & Economist, Global R&D AMR Hub

11:00-11:45

Breakout Sessions

Topic: Financial and Budgetary Strategies for AMR Incentives

- Breakout groups will include:
 - Government officials and policy advisors
 - o Health and pharmaceutical economists
 - o Frontline infectious disease physicians

- Industry stakeholders
- AMR researchers and technical experts
- Topics:
 - Structuring pull and hybrid incentives
 - o De-risking AMR innovation
 - Equity and sustainability in funding models

12:05 - 12:55

Working Lunch

Screening of BBC Storywork's Race Against Resistance: The Life And Death Struggle To Save Antibiotics

Panel: Innovation and Global Access

Overview

The discussion will explore how global initiatives can be leveraged to align innovation in antibiotic development with equitable global access. Panellists will highlight collaborative models that strengthen the antimicrobial pipeline while ensuring availability in low- and middle-income countries (LMICs) and under-resourced health systems.

- Moderator: Greg Frank, Merck & Co.
- Dr. Jean Pierre Nyemazi, Lead, Quadripartite Joint Secretariat on AMR, WHO
- Jeffrey Rowland, Director of External Relations, GARDP

13:00 - 13:50

Briefing Session with Canadian Parliamentarians

Antimicrobial Resistance (AMR) on the Front Lines: Innovation, Impact, and the Path Forward

Overview

This special briefing for Canadian parliamentarians will offer a front-line view of the growing threat of antimicrobial resistance (AMR). Clinicians from Canada and other G7 countries, along with patient advocates, will share real-world experiences from hospitals and communities. The session will highlight the connection between AMR and conditions like sepsis and cancer, and explore where innovation and access are falling short. Parliamentarians will gain insight into how policy can support frontline needs and strengthen Canada's leadership on AMR.

- Introduction: Joe Farago, Vice-President Government & Stakeholders Relations (Interim), Innovative Medicines Canada
- Moderator: Senator Mohamed-Iqbal Ravalia
- Christine Caron, Sepsis survivor (Ottawa ON)
- Dr. Victor Leung, Medical Director of Infection Prevention and Control and Physician Lead for Antimicrobial Stewardship Program, Providence Health Care (Vancouver, BC)
- Sameeh Salama, Chair, Canadian Antimicrobial Innovation Coalition and Chief Scientific Officer, Fedora Pharmaceuticals (Edmonton, AB)
- Gerry Wright, Professor, Scientific Director, Michael G. DeGroote Institute for Infectious
 Disease Research, Executive Director of the Global Nexus School for Pandemic Prevention
 & Response, McMaster University (Hamilton ON)
- Topics:
 - AMR on the front lines: Perspectives from Canadian clinicians, patients, researchers and innovators
 - o Patient voice: The link between AMR, sepsis, and cancer treatment
 - o Gaps in support for innovation, antimicrobial stewardship and access
 - o Policy tools to advance Canadian leadership on AMR

13:50 - 14:10

Break

14:10 - 15:10

Resistant Pathogens in Battlefield Injuries: Securing Hospital Systems and Advancing NATO's Defense Goals

Overview:

This panel examines how war injuries in conflicts like Ukraine and elsewhere foster the spread of existing resistant bacteria and the emergence of novel strains, posing serious risks to civilians, hospital systems, and military personnel. The increase in resistant pathogens in healthcare facilities, exacerbated by war and conflict, further threatens treatment and recovery efforts, highlighting the need for strategic investments in antimicrobial research and development. Such efforts align with NATO's goal of increasing defence expenditure to 5% of GDP, emphasizing health security as a core component of modern defence.

Overview:

- Moderator: Jomana Musmar, Antimicrobial Strategic Coalition
- Major General Dr. Paul Friedrichs, MD (Ret.), Center for Strategic and International Studies
- Eli Cahan, MD, Pediatrician, Boston Children's Hospital & Harvard Medical School and Investigative Journalist, Rolling Stone Magazine
- Colonel Paul Charlebois, MD, Internal Medicine Specialist, Canadian Armed Forces
- Topics:
 - Emergence of Resistance in Battlefield Injuries
 - Risks to Hospital Systems
 - NATO and G7 Role and Investment
 - o Strategic Importance of Antimicrobial Innovation
 - Securing future commitments

15:00 - 15:30

Reflection and Synthesis Discussion

15:30 - 15:45

Closing Remarks

15:30 - 17:00

Break / Transition Time

Opportunity for informal networking, side meetings, or rest before the evening program.

17:30 -

Reception

Hosted gathering to foster continued dialogue and partnerships in AMR innovation and policy.

The reception will be hosted by the Embassy of France – invitation is required.



Discussion Guide

At a Crossroads: Advancing Sustainable Incentives for Antimicrobial Resistance (AMR) Innovation

Context and Purpose

We are at a pivotal moment in global health: antimicrobial resistance (AMR) is accelerating faster than innovation can keep pace, while economic disincentives continue to undermine the development of new antimicrobials.

A recently published article in eClinicalMedicine (September 2025): <u>Bridging the fair share gap for antibacterial innovation: an observational analysis of antibacterial revenues in the G7 and EU27</u> highlights just how modest potential revenues are in this space compared with the wider pharmaceutical market.

As the authors note, an antibiotic receiving global revenues equal to the mid-range targeted value of \$363 million per year would rank only as the 230th best-selling on-patent pharmaceutical globally in 2024. This stark comparison underscores the structural weakness of the antibiotic market: even "success" barely registers within the global pharmaceutical landscape, leaving little incentive for private investment.

In addition, this newly-released <u>brief</u> from International Federation of Pharmaceutical Manufacturers and Associations (IFPMA) identifies key barriers to antibiotic R&D and the policy measures needed to address them. In particular, it points out that sustainable, effective pull incentives are urgently required to ensure a reliable pipeline of new antibiotics for patients and health systems and sets out how these should be designed and implemented, guided by a set of core principles to maximize their impact.

Against this backdrop, the high-level meeting in Ottawa is being convened to complement Canada's 2025 G7 Presidency (though it is not an official Government of Canada event), bringing together senior representatives from health, finance, and economic development sectors, along with global institutions, frontline physicians, economists, and innovators. The purpose is to align strategies, identify actionable solutions, and design long-term, sustainable economic incentives capable of reversing current trends and securing the future of AMR innovation.

The Innovation Pipeline Is Drying Up: The global antimicrobial pipeline remains sparse. Without push, as well as new pull incentive tools that reward success rather than just effort, few companies can afford to invest.

Pull Financing Shows Promise—but Remains Underutilized: As noted in numerous policy reports, AMR R&D incentive structures that pay for successful outcomes can drive innovation and can provide meaningful societal returns.

Stewardship Must Match Innovation: Even where new antimicrobials become available, without strong stewardship practices—including surveillance, prescribing safeguards, and equitable access—their effectiveness will be rapidly eroded. Stewardship and innovation must advance together.

Government Budgets Are Constrained: Even countries committed to AMR solutions are challenged by how to sustain incentives across multi-year budget cycles.

New Threats Are Emerging: Antifungal resistance and AMR in conflict zones represent growing, under-addressed risks requiring urgent attention.

Global Leadership Is Needed: G7 countries are uniquely positioned to lead the way on coordinated, sustainable AMR R&D and stewardship strategies.

Discussion Topics

1. Revitalizing the antibiotic R&D ecosystem

- What is the state of antibiotic R&D and investment landscape and what are the current gaps?
- How can pull incentive mechanisms be made more attractive to governments?
- What lessons can we learn from the UK subscription model or models proposed in other G7 and elsewhere?

2. Budgeting for the Long Haul

- How do we design incentives that align with national budget cycles?
- What is the role of finance ministries in embedding AMR within health, innovation and defence spending plans?
- Which mechanisms can support predictable funding, including in terms of the broader AMR response?

3. G7 Leadership and Shared Incentive Principles

- What concrete steps can the G7 take to drive coordination, including with G20 partners?
- How can G7 nations collectively work together to support a favourable R&D and access ecosystem for new antimicrobials?
- How do we ensure that AMR policy is truly "One Health" and inclusive of environmental and veterinary perspectives?

4. Stewardship and Access

- What policy, program and funding approaches can best coordinate stewardship efforts that are managed locally with the global nature of AMR?
- What are the barriers frontline infectious disease physicians face in accessing appropriate treatments? Are they consistent between G7 countries, providing opportunities to devise common strategies?

 How do we build stewardship into innovation incentive models in consistent ways to support both local and global stewardship, such as use of diagnostics and surveillance technologies?

5. Urgent Issues

- How can addressing AMR in conflict zones strengthen our common commitments to global security and public health?
- What role can NATO and G7 countries play in AMR response? How could investments in AMR preparedness count toward NATO country spend?
- Cancer and AMR: Can we work together to update national cancer action plans to draw attention to the connection between AMR and cancer?

Facilitating Questions for Breakout Sessions

1. Strategic Framing and Financial Sustainability

- How can we account for AMR programs that reward success within broader government economic, industrial and health agendas?
- What are viable pathways for making AMR incentives sustainable over the longerterm, including across government budget cycles?

2. Policy Innovation and Collaboration

- How do we ensure that incentive frameworks are accessible to developers of biomedical solutions?
- o What governance frameworks are needed to track and coordinate implementation?

3. Impact and Accountability

- o What metrics will demonstrate that incentives are working?
- How can we align public investment with stewardship and sustainable equitable access?

This meeting aims to surface actionable insights and forge lasting partnerships to secure the future of antimicrobial innovation. With the right strategies, this crossroads can become a springboard. Without them, the cost of inaction will be profound.

Background Documents - Links

World Health Organization (WHO). National Action Plans on AMR. Link

Public Health Agency of Canada. Pan-Canadian Action Plan on Antimicrobial Resistance. Link

Center for Global Development. The Case for More Pull Financing. Link

Council of Canadian Academies. When Antibiotics Fail: The Potential Socio-Economic Impacts of Antimicrobial Resistance in Canada. Link

Council of Canadian Academies. Overcoming Resistance: Pull Incentives for High-Value Antimicrobials. Link

Global AMR R&D Hub. Investment Dashboard. Link

eClinicalMedicine. Bridging the Fair Share Gap for Antibacterial Innovation: An Observational Analysis of Antibacterial Revenues in the G7 and EU27. <u>Link</u>

International Federation of Pharmaceutical Manufacturers and Associations (IFPMA). Revitalizing the Antibiotic Pipeline by Implementing New R&D Incentives. Link

Cahan, E. Could a Conflict-Borne Superbug Bring on Our Next Pandemic? Rolling Stone. Link

Speaker Biographies



James Anderson

As Executive Director, James leads the IFPMA's Global Health programme of work, developing policy, engaging with stakeholders and building partnerships across the public and private sectors. James focuses on priority disease areas including AMR, pandemic preparedness, and non-communicable diseases, to address key challenges for our companies, health stakeholders and patients.

Prior to joining the IFPMA in January 2021, James worked in a variety of roles at GSK since joining in 2005. James has been involved in establishing multiple initiatives to address AMR, including the AMR Action Fund, the Davos Declaration, the IMI 'New Drugs for Bad Bugs', GARDP, and the AMR Industry Alliance, and advised the O'Neill AMR Review, the UK Government-Industry Joint TF, the WHO and the EU Commission.

James serves as Chair both of the AMR Industry Alliance and the INTREPID Alliance on antivirals and has also served on the Board of the UK Life Science Strategy and as the Vice-Chair of Business at OECD Healthcare Committee.



Dr. Eric Brown

Dr. Eric Brown is a Distinguished University Professor at McMaster University in the Department of Biochemistry and Biomedical Sciences and member of the M.G. DeGroote Institute for Infectious Disease Research. He is an elected Fellow of the Royal Society of Canada and has received a number of other awards including the Canadian Society of Microbiologists Murray Award for career achievement. Dr. Brown is a former department Chair and was also the founding Director of the

Biomedical Discovery and Commercialization program at McMaster. He has served a variety of national and international associations, including a term as President of the Canadian Society of Biochemistry, Molecular and Cellular Biology. Dr. Brown is known for a large body of top-flight research in antibiotics and is an innovator in diverse areas of drug discovery, using tools of chemical and systems biology to probe the complexity that underlies disease. A founder of two biotechnology companies, he has been active in commercializing his laboratory's research and is especially curious about technology and discoveries with promise in creating breakthrough therapies.



Eli Cahan MD, MSc

Eli Cahan MD, MSc is an award-winning investigative journalist covering the intersection of child welfare and social justice. His written work has been featured in The Washington Post, LA Times, Rolling Stone, and USA Today, among other publications. His multimedia work has appeared on TV via ABC and radio via NPR. Eli's reporting has won awards from the National Press Club, the News Leaders Association, and elsewhere; he was shortlisted for the Livingston Award in 2025. He has received

reporting fellowships from The McGraw Center, The National Press Foundation, and The Dart Center, among others; he has also been a grantee of the Fund for Investigative Journalism, The Pulitzer Center, and elsewhere.

Eli is also a neonatal intensive care doctor at Stanford University, and received his general pediatrics training at Boston Children's Hospital and Harvard Medical School. He has published nearly two dozen studies which have garnered over 500 citations and been featured in NEJM, JAMA, BMJ, and Health Affairs, among other publications. He is Journalist-in-Residence at Harvard's T.H. Chan School of Public Health, director of the Health Equity Media Fellowship at Stanford School of Medicine, a health communication advisor for the National Academy of Medicine, and a member of the American Academy of Pediatrics' Executive Committee for the Council on Communications and Media.

Eli graduated Phi Beta Kappa from the University of Michigan with a Bachelor's of business administration where he was an Angell Scholar; Stanford University with a Masters' in health policy where he was a Knight Hennessy Scholar; and NYU School of Medicine where he was a Rudin Scholar.



Joanna Carey

Joanna Carey specializes in government relations strategies for organizations in highly regulated and disruptive industries. Currently, Joanna works as a Senior Advisor at Magnet Strategy Group. For the past several years, Joanna has developed and deployed comprehensive public policy and government and stakeholder relations programs, both nationally and globally, for a multinational company. She has also serviced clients in health, telecommunications, natural resources, and information technology sectors. Building upon her experience working in Washington,

D.C., Joanna helps translate successful public policies to Canada and create solutions for clients and governments alike. Joanna holds an Honours B.A. with a Specialization in History and a Master of Public and International Affairs from the Graduate School of Public Policy at the University of Ottawa.



Christine Caron

Christine Caron is an infection survivor with lived experience as a critically ill patient requiring an extensive intensive care admission, many surgical interventions, including amputations and intensive rehabilitation. Caron sits as a Director with the Canadian Sepsis Foundation, co-chair of the patient family advisory council of the Sepsis Canada research network and is involved with various organizations. An advocate for infection survivors and families she is passionate about the inclusion of patient voices in research.



Colonel Paul Charlebois CD2, MD, CCFP, FRCPC, CTropMed

Col Charlebois association with the Canadian Armed Forces began at an early age as part of a military family. He has been a member of the regular component of the Canadian Armed Forces since 1992, when he entered the Medical Officer Training Program while attending medical studies at Dalhousie University. After his training, he was posted to 4 Wing, Cold Lake Alberta as a General Duty Medical Officer and Flight Surgeon; where he was deployed to Aviano, Italy on OPERATION ECHO in support of fighter operations in the Former Yugoslavia. In 1999, he was posted to 5

Service Battalion in Valcartier, Quebec, and was deployed for 7 months to Bosnia-Herzegovina as part of OP PALLADIUM, the peacekeeping mission in support of the Dayton accord of 1995. Upon receiving his fellowship from the Royal College of Physicians and Surgeons of Canada, he was posted to Halifax. Since then, Dr. Charlebois has frequently deployed, with four trips to Afghanistan between 2006 and 2012. He also participated in two humanitarian missions: OP UNISON (2005) to aid victims of Hurricane Katrina and a two-month deployment to Indonesia in 2010 aboard the USNS Mercy. In 2015, he went to Sierra Leone in support of OP SIRONA, where he worked at an Ebola treatment facility during the epidemic. Most recently, he was deployed as part of OP IMPACT, to a Canadian-led medical facility in northern Iraq.

Col Charlebois' regular duties involve care of civilian and military patients from the Atlantic Region, and he is part of the physician support to Canada's critical care air evacuation capability. From 2015-2022, he was the Canadian Armed Forces Chief of Internal Medicine, and he now holds the position of Canadian Armed Forces Chief of Medical and Surgical Specialties and coordinates the management of operational training and employment of physicians who practice within civilian facilities. He also advises leadership on policies that involve acute medicine and hospital-based care in both the domestic and deployed setting.



Dr. Natasha S. Crowcroft

Dr. Natasha S. Crowcroft is Vice President of the Infectious Diseases and Vaccination Programs Branch of the Public Health Agency of Canada (PHAC). With more than 30 years experience practising public health and preventive medicine and over 300 scientific publications, she is an Adjunct Professor in the Dalla Lana School of Public Health, Inaugural Director of the Centre for Vaccine Preventable Diseases, and Senior Fellow, Massey College at the University of Toronto. From 2020 to

2025 she served as the Senior Technical Adviser for Measles and Rubella at the World Health Organization, Geneva, and before that as Chief Scientist and Chief of Infectious Diseases at Public Health Ontario, Professor in Laboratory Medicine and Pathobiology at the University of Toronto, Adjunct Scientist at ICES, and a member of Canada's National Advisory Committee on Immunization.



Dame Sally Davies

Dame Sally Davies is the 40th Master of Trinity College, Cambridge University and the first woman to hold the post. She was appointed as the UK Government's Special Envoy on AMR in 2019. Dame Sally was the Chief Medical Officer for England and Senior Medical Advisor to the UK Government from 2011-2019.

She is a leading figure in global health, having served as a member of the World Health Organisation (WHO) Executive Board 2014-2016, and as co-convener of the United Nations Inter-Agency Co-ordination Group (IACG) on Antimicrobial Resistance (AMR), reporting in 2019. In November 2020, Dame Sally was announced as a member of the new UN Global Leaders Group on AMR, serving alongside Heads of State, Ministers, and prominent figures from around the world to advocate for action on AMR.

In the 2020 New Year Honours, Dame Sally became the second woman to be appointed Dame Grand Cross of the Order of the Bath (GCB) for services to public health and research, having received her DBE in 2009. She was elected Fellow of the Royal Society in 2014 and a member of the National Academy of Medicine, USA in 2015.



Suzanne Edwards

Suzanne Edwards is a Pharmacologist turned Economist with over 15 years of experience across the global healthcare ecosystem. Since joining the Global AMR R&D Hub in late 2019, she has led its work on shaping product market incentives for anti-infective technologies in the context of rising AMR. Her academic foundation at the London School of Economics, followed by her work in comparative health systems analysis (European Observatory of Health Systems and Policies), supported her

subsequent specialisation and consultancy work in R&D, market intelligence, and access across markets in both the Global North (WHO EURO, pharmaceutical sector, EU agencies) and Global South (GIZ-BMZ, ATMf, CEPI, CGD).

Suzanne's diverse experience equips her with critical insights into the product life cycle, the varied perspectives of stakeholder constituencies, and the differences between legal and regulatory jurisdictions- particularly in supporting private markets to function more effectively for global public health. Suzanne began her career in the pharmaceutical industry before spending time managing humanitarian response projects in conflict settings.



Joe Farago

Drawing from over 20 years of experience in the Canadian pharmaceutical and specialty biopharmaceutical markets, Joe Farago has honed his skills through diverse roles, including market access, sales, marketing, government affairs, supply chain and operations. Joe joined Innovative Medicines Canada (IMC) in 2016. In addition to being the Executive Director of Market Access, he is acting Vice President of Government and Stakeholder Relations. He is responsible for leading the pharmaceutical industry's

market access policy across private and public markets and for government and stakeholder relations strategies.

Joe is committed to advancing a proactive, collaborative, research-based approach to policy challenges and advocates for dual private and public healthcare coverage. His work encourages timely access to innovative medicines, contributing to the total health of Canadians, the broader healthcare system, and the economy. Before joining IMC, Joe played a key role in establishing CSL Limited as a market leader in Canada's Plasma Protein Specialty market. Joe holds a BSc from Carleton University and resides in Ottawa, with his wife, three children, and grandson.



Greg Frank, PhD

Greg Frank is Director, Global Public Policy with Merck & Co., where he leads global AMR and therapeutic pandemic preparedness policy. Previously, he was Senior Director of Infectious Disease Policy at the Biotechnology Innovation Organization (BIO), overseeing AMR, vaccine regulatory and reimbursement policy, and other infectious disease issues. Prior to which, he led science and diagnostics policy at the Infectious Diseases Society of America. He serves on advisory bodies focused on AMR and pandemic

preparedness, including the National Academies Forum on Microbial Threats, the Leadership Council of the National Institute of Antimicrobial Resistant Research and Education, and the expert advisory committee for the Partnership to Fight Infectious Diseases. He is a board member of the AMR Industry Alliance and a member of the World Economic Forum Global Future Council on Tackling AMR. His prior advisory roles include membership on the U.S. Presidential Advisory Committee on Combating Antibiotic-Resistant Bacteria and participation on expert committees for the Access to Medicine Foundation AMR Benchmark and the Global AMR R&D Hub. Dr. Frank holds a Ph.D. in immunology from the University of Pittsburgh and completed postdoctoral training at the National Institute of Allergy and Infectious Diseases.



Major General Dr. Paul Friedrichs

Dr. Paul Friedrichs is an adjunct professor of surgery at the Uniformed Services University. He previously served as the deputy assistant to the president and inaugural director of the White House Office of Pandemic Preparedness and Response Policy, where he advised the president and coordinated U.S. government efforts to enhance the U.S. and its partners' ability to detect, prevent, prepare for, and respond to pandemics and other biological events. Paul served as senior director for global health security and biodefense at the National Security Council. Prior to that, he

served as the joint staff surgeon at the Pentagon, where he provided medical advice to the chairman of the Joint Chiefs of Staff and was the U.S. representative to the North Atlantic Treaty Organization's Committee of the Chiefs of Military Medical Services. In addition to caring for patients in combat, Antarctica, and other austere locations, he has led the Department of Defense's global medical evacuation system and assisted in major domestic and international responses to natural disasters and biological outbreaks, and global health diplomacy efforts. He received his undergraduate degree from Tulane University, his MD from the Uniformed Services University, and was a distinguished graduate of the National War College, where he received a master's in strategic security studies. He was awarded the Bronze Star and an honorary Doctor of Science from the University of Nebraska and was named a chevalier in the French Ordre National du Mérite.



Michelle Horn

Michelle is a dedicated and accomplished medical professional with a rich history of impactful contributions to the healthcare industry. Her journey began at the University of the Witwatersrand in South Africa, where she laid the foundation for her career in the public health sector. In 2017, Michelle joined GSK Singapore as a Medical Advisor for HIV, where she swiftly made her mark by rolling out new governance frameworks, effectively managing stakeholders, and enhancing patient engagement.

Driven by a desire for new challenges, Michelle transitioned to Canada, where she assumed the role of Medical Director of the Specialty Team. Her leadership and expertise led to her appointment as the Medical Affairs Head for Vaccines and Infectious Diseases, and subsequently, as the Country Medical Director. In these roles, Michelle has successfully led diverse teams, aligning their efforts with business priorities for key assets.

Throughout her career, Michelle has remained unwavering in her commitment to delivering impactful external engagement, being ambitious for patients, and shaping the healthcare landscape to improve patient outcomes. Her dedication and vision continue to drive meaningful advancements in the field of medicine.



Dr. Victor Leung

Dr. Victor Leung is an infectious disease specialist and medical microbiologist. He is the Medical Director for Infection Prevention and Control and the Physician Lead for Antimicrobial Stewardship at Providence Health Care in Vancouver. At UBC, Dr. Leung is a Clinical Professor in the Department of Pathology and Laboratory Medicine.



Dr. Charles Martins Ferreira

A graduate of the National Veterinary School in Nantes, Charles Martins Ferreira spent his early years in veterinary practice before joining the Ministry of Agriculture as the Head of the Food Safety Department at the Bas-Rhin Veterinary Services Directorate (Strasbourg). In 2004, he became Regional Veterinary Attaché at the French embassy in Beirut for the Near and Middle East, covering market access conditions for animals and animal products. He later served as Head of the Veterinary Pharmacy Unit at the Directorate-General for Food until being appointed

Deputy Head of the Animal Health and Welfare Division in 2011 (Ministry of Agriculture – Paris). From 2015 to 2018, he was Deputy Counselor for Agricultural Affairs at the Embassy of France in Beijing. Following this, he became Head of the European and International Sanitary Affairs Division at the Directorate-General for Food (Ministry of Agriculture - Paris). In 2023, he was appointed as Deputy Counselor for Agricultural Affairs, in charge of SPS issues & food matters, at the regional economic service of the Embassy of France to the U.S. in Washington, DC.



Allison McGeer MSc, MD, FRCPC, FAMMI

Dr. Allison McGeer is a Professor in Laboratory Medicine and Pathobiology at the Dalla Lana School of Public Health at the University of Toronto, and an Infectious Disease Specialist and Senior Clinician Scientist at the Lunenfeld-Tanenbaum Research Institute of the Sinai Health System. Her research interests are in infection prevention in healthcare, adult immunization, emerging infections, and AMR. She is a founding member of the Canadian Nosocomial Infection Surveillance program, chairs its working group on Candida auris, and is a member of Can-AMR-Net, Canada's

national consortium for training the next generation of AMR leaders. She also serves on the Public Health Agency of Canada's Expert Advisory Group on Antimicrobial Resistance. In 2024, Dr. McGeer was inducted into Canada's Medical Hall of Fame for her contributions to pandemic preparedness and response, and for advancing understanding of the epidemiology of bacterial and viral infections, including AMR.



Anthony McDonnell

Anthony McDonnell is a policy fellow in the Centre for Global Development's (CGD) global health policy team. He leads CGD's work on antimicrobial resistance (AMR), including modelling the macroeconomic burden of AMR. Anthony was previously the technical lead of CGD's working group, A New Grand Bargain to Improve the Antimicrobial Market for Human Health. He has also led projects analysing the COVID-19 vaccine portfolio, examining policy interventions to protect the supply

chains for pharmaceuticals from COVID-19-induced shocks, and contributed to the international Decision Support Initiative's work in Ethiopia. Before joining CGD, Anthony was the Head of Economic Research for the UK's Independent Review into AMR which was set up by the UK government and the Wellcome Trust; led a Wellcome Trust project examining how it could fund more economic research; a research associate at ODI working on the political economy of why governments role out health services in LMICs, (particularly those aimed at reaching the left behind); and a senior health economist at the University of Oxford, modelling the cost of malaria interventions.



Dr. Veronika von Messling

Professor Dr. Veronika von Messling is the Director-General for Life Sciences at the German Federal Ministry of Education and Research. She obtained her veterinary degree and her doctorate in veterinary virology from the Veterinary School Hannover, Germany. After completing a postdoctoral fellowship at the Mayo Clinic's Molecular Medicine Program in Rochester, MN, she became an Assistant Professor at INRS-Institut Armand-Frappier in Laval, QC, and then later an Associate Professor at Duke-NUS Graduate Medical School in Singapore. Following which, Dr,

von Messling was appointed as the Director General of the Division of Veterinary Medicine at Paul-Ehrlich-Institute, the German Federal Institute of Vaccines and Biomedicines, in Langen, Germany.



Dr. Jomana Musmar

Dr. Jomana Musmar is a distinguished global policy expert and resultsoriented leader with over fifteen years of government experience in cross-functional coordination, strategic planning, operational design, and policy execution. She is the Founder and Senior Consultant at Advisors of Global Health, LLC, a global consulting firm specializing in government and external affairs, product promotion, and coalition building.

Dr. Musmar also serves as Leadership Council Member at The National Institute of Antimicrobial Resistance Research and Education and is an Honorary Senior Lecturer at the University of Bristol. Renowned for simplifying complex topics with expertise and diplomacy, Dr. Musmar has spearheaded innovative solutions to global and One Health challenges, shaped impactful policies, and advanced national and international missions. As the Executive Director of the Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria for over a decade, she established and led the council's operations, liaising with over 600 experts in human, animal, and environmental domains across government, industry, and academia. Her efforts culminated in the development of critical recommendations addressing antimicrobial resistance and interrelated One Health issues, influencing both domestic and global health strategies. In her tenure as Deputy Director of Strategic Initiatives for the Office of Infectious Diseases and HIV/AIDS Policy, at the US Department of Health and Human Services, Dr. Musmar oversaw the formulation and implementation of national health strategies for vaccines and a range of infectious diseases including HIV/AIDS and viral hepatitis, and the regulatory policies that govern them. Her leadership and technical expertise facilitated the streamlined implementation of operations during national emergencies, including responses to the COVID-19 pandemic, and initiatives to combat congenital syphilis and childhood vaccination disruptions.

Dr. Musmar holds a Ph.D. in Biodefense and International Security from George Mason University, a Master's degree in Biomedical Science policy and Advocacy from Georgetown University, and is a Lean Six Sigma Black Belt. Fluent in English and Arabic, she is a sought-after speaker and advisor, having represented the United States at premier global health conferences. Her published works on antimicrobial resistance, pandemic preparedness, and national health security policy underscore her reputation as a thought leader and innovator in public health and biodefense.



Dr. Jean Pierre Nyemazi

Dr. Jean-Pierre Nyemazi serves as the Director of the Quadripartite (FAO, UNEP, WHO, WOAH) Joint Secretariat on Antimicrobial Resistance (AMR) and as the Head of the Governance & Strategic Initiatives Unit in the AMR Department at the WHO. Leading a dedicated team, Dr. Nyemazi advances multisectoral action against AMR, focusing on the implementation of the UNGA Political Declaration on AMR and other Global commitments. His work also supports the functioning of the

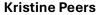
Global Governance Structures for AMR, including the Global Leaders Group on AMR and the AMR Multistakeholder Partnership Platform. Prior to joining the WHO, Dr. Nyemazi held the position of Permanent Secretary of the Ministry of Health of Rwanda.



Kevin Outterson, ESQ.

Prof. Kevin Outterson is the founding Executive Director of CARB-X, the world's leading public-private partnership that accelerates the early-stage development of innovative products to prevent, diagnose, and treat bacterial infections globally. CARB-X has supported more than 100 R&D projects around the world. 18 of these projects have already reached or surpassed first-in-human clinical trials, including two products already on the market. In 2020, CARB-X was awarded the

Innovating for Impact Partnership Award by the Global Health Technologies Coalition (GHTC). CARB-X funders include the governments of the United States (BARDA & NIAID), Germany (BMBF), United Kingdom (GAMRIF), Canada (PHAC), and Japan (MHLW), plus Wellcome, the Novo Nordisk Foundation, and the Bill & Melinda Gates Foundation. Prof. Outterson is also the Austin B. Fletcher Professor of Law at Boston University, where he co-directs the Health Law Program. Prof. Outterson has published ~100 articles and book chapters on health care law, with a focus on incentive problems related to pharmaceutical products, including push and pull incentives for antimicrobials.



Kristine Peers is General Counsel at the European Federation of Pharmaceutical Industries and Associations (EFPIA) since September 2017. Her role includes responsibility for EFPIA's policy solutions to address antimicrobial resistance (AMR). Kristine is Board member of the AMR Industry Alliance and represents EFPIA at the Commission expert group 'Antimicrobial resistance (AMR) One Health Network'.

Through its direct membership of 37 national associations, 38 leading pharmaceutical companies, and a growing number of small and medium-sized enterprises (SMEs), EFPIA's mission is to create a collaborative environment that enables our members to innovate, discover, develop and deliver new therapies and vaccines for people across Europe, as well as contribute to the European economy. Our vision is for a healthier future for Europe. A future based on prevention, innovation, access to new treatments and better outcomes for patients.

Kristine builds on a career combining legal expertise with public policy and government relations. She has worked in various legal and corporate affairs functions at Belgian, European and global level with GlaxoSmithKline and Pfizer. Prior to joining the pharmaceutical industry, Kristine practiced at the Belgian Bar. She graduated in law from Leuven University, Belgium, and obtained a post graduate qualification in European Law at the European University Centre in Nancy, France, where she was also visiting lecturer teaching European regulations of medicinal products to health professionals. Throughout her career she had several legal, business and leadership trainings including at INSEAD and NYU Stern.



Danielle Peters

Dani Peters is the President of Magnet Strategy Group, a consulting firm that manages public affairs strategies in Canada and the United States. She also serves as Senior Advisor to the Canadian Antimicrobial Innovation Coalition, a non-profit organization committed to preventing the rise in antimicrobial resistance (AMR), by positioning Canada to be a leader in AMR research and product development, economic growth, and investment. Over the course of her career, Dani has supported the private

sector in a variety of initiatives related to antimicrobial resistance and innovation in both the U.S. and Canada. In addition to operating Magnet Strategy Group, Dani serves on the Industry Advisory Board for Bloom Burton & Co., a healthcare investment advisory firm in Toronto. Dani is also a Health Leader-in-Residence for the World Health Innovation Network (WIN), within the University of Windsor's Odette School of Business.



Wolfgang Philipp, PhD

Wolfgang Philipp is the Principal Adviser - Chief Science Officer of the European Commission's Health Emergency Preparedness and Response Authority (HERA). He has large experience in EU health crisis preparedness and management, and health policy making across different fields. Over the past 5 years, he was involved in the EU crisis management and response to Covid-19 as well as in developing and setting up HERA. HERA's mission is to prevent, detect, and rapidly

respond to health emergencies. HERA works to ensure the development, production and distribution of medicines, vaccines, and other critical medical countermeasures in case of health emergencies.

He holds a PhD in microbiology of the University of Paris, France, and has been working in tuberculosis research at the Institut Pasteur in Paris, at the Universities of Bern and Basel and was a Member of the Basel Institute of Immunology, Switzerland, before joining the European Commission in 2001.



Robert (Rob) Purdie

Rob Purdie is a husband and father who was diagnosed with Cocci Meningitis in 2012, the most severe type of Valley Fever. Rob relies on daily antifungals to control his disease and has used his experience to help other patients and become a leading fungal disease patient advocate.

In 2023 Rob founded MyCARE, the first patient led, pan fungal nonprofit; with a goal to bring fungal patients together to share knowledge and experiences and advocate for better care and increased research for

their diseases. Rob is becoming a sought-after speaker and key opinion leader in the fungal and AMR communities. Rob's legislative efforts have included work on state and federal legislation and appropriations to support fungal research and awareness. Rob is also a member of the WHO Task Force of AMR Survivors and is part of the workgroup developing a Fungal Priority Pathogen List blueprint to provide guidelines to address the pathogens on the list that was created by the WHO in 2022.

Rob Purdie is a nationally recognized patient advocate and co-founder of the MyCARE Foundation, the only patient-driven organization in the United States dedicated to fungal diseases. He brings over a decade of lived experience with Valley Fever and has led numerous initiatives to advance research, education, and policy focused on improving outcomes for patients affected by mycologic diseases.



Guido Rasi

Guido Rasi is an Honorary Professor at Tor Vergata University of Rome and currently serves as Advisor to the Minister of Health, Orazio Schillaci, as an expert in the field of pharmaceuticals. He was the Executive Director of the European Medicines Agency (EMA) from 2011 to 2020 and served as Chair of the International Coalition of Medicines Regulatory Authorities (ICMRA) between 2019 and 2021. Prior to these roles, he was Director-General of the Italian Medicines Agency (AIFA) from 2008 to 2011 and a member of its Management Board. Earlier in his

career, he was Director of Research at the Institute of Neurobiology and Molecular Medicine of the National Research Council (CNR) in Rome from 2005 to 2008. He is also the author of hundreds of scientific publications.



Senator Mohamed-Iqbal Ravalia

Senator Mohamed-Iqbal Ravalia was appointed to the Senate of Canada on June 1, 2018, on the recommendation of Prime Minister Justin Trudeau, representing Newfoundland and Labrador. Born and raised in Rhodesia (now Zimbabwe), he immigrated to Canada in 1984 and practiced family medicine in Twillingate until his appointment. A respected physician and educator, he earned his medical degree in 1980, later achieving certification and fellowship with the College of Family Physicians of Canada. At Memorial University, he served as

Associate Professor of Family Medicine and Assistant Dean of the Rural Medical Education Network, where he helped expand medical training across Newfoundland and Labrador. Throughout his career, Senator Ravalia has contributed to provincial, national, and international medical organizations and received numerous honours, including the Order of Canada, the Queen Elizabeth II Diamond Jubilee Medal, and Canadian Family Physician of the Year. In the Senate, he serves on committees covering foreign affairs, fisheries, and parliamentary research, and is active in Canada's bilateral and multilateral parliamentary associations. He is a founding member of the African Canadian Senate Group and a member of the Parliamentary Black Caucus, with a focus on rurality, resource management, eldercare, health, and inclusion. Senator Ravalia and his wife Dianne live in Twillingate, where they raised their two sons, Adam and Mikhail.



Jeff Rowland

Jeff Rowland joined GARDP in 2023 as Director of External Relations, where he leads engagement with public and private funders to build collaborations and drive innovative solutions addressing the global crisis of antimicrobial resistance. With more than 20 years of experience in global health and development, Jeff has helped donors and partners create catalytic change that improves lives around the world. Prior to GARDP, Jeff served on the management team at Gavi, the Vaccine Alliance, as Director of Global Operational Partnerships, where he

created groundbreaking collaborations that expanded access to vaccines and secured more predictable and flexible funding. Earlier in his career, he launched the first private sector fundraising operation at the UN World Food Programme, winner of the 2020 Nobel Peace Prize.

He began his professional journey as a reporter for *The Washington Post*, working in the United States and abroad, and holds a master's degree in international affairs and economics from Johns Hopkins University.



Sameeh M. Salama, Ph.D.

Dr. Sameeh M. Salama is an accomplished scientist, inventor, and business development leader with over 30 years of experience in anti-infective drug discovery and development. He is Chief Scientific Officer at Fedora Pharmaceuticals Inc. where he drives scientific strategy and pipeline development for novel antibiotics. He also holds leadership roles across academia, government, and non-profits, including:

- Chair, Canadian Antimicrobial Innovation Coalition (CAIC)
- Advisor, PHAC External Advisory Group on AMR
- Co-Chair, BioAlberta Board of Directors

Dr. Salama played a key advisory role in shaping Canada's Pan-Canadian Action Plan on Antimicrobial Resistance. He earned his Ph.D. in Medical Microbiology from the University of Salford, UK, and is the author of over 70 publications and patents. As a business development leader, Dr. Salama has over two decades of experience in licensing and partnerships, including Fedora's one billion Canadian dollars licensing deal with F. Hoffmann-La Roche. Through his interdisciplinary expertise, he continues to advance antimicrobial innovation, education, global health policy, and life sciences entrepreneurship.



Dr. Gerry Wright

Dr. Gerry Wright, professor of biochemistry and biomedical studies, is the Executive Director of the Global Nexus School for Pandemic Prevention & Response. He is also the founder, former director, and an active member of the Michael G. DeGroote Institute for Infectious Disease Research. He also holds the Michael G. DeGroote Chair in Infection and Anti-Infective Research, and a Canada Research Chair in Antibiotic Biochemistry. He is the recipient of many awards, including the Canadian Institutes of Health Research Scientist, a Medical

Research Council of Canada Scholar, and a Killam Research Fellowship. He has chaired and served on grant panels for funding agencies in Canada, the US, and Europe and consults widely for the pharmaceutical and biotech sectors. He is the author of over 240 manuscripts and is a member of the editorial boards of several peer-reviewed journals. Dr. Wright received his BSc in Biochemistry and his PhD in Chemistry from the University of Waterloo, followed by postdoctoral research at Harvard Medical School.