

PVAC - POLIO ADVANCED COURSE IN VACCINOLOGY

**26 – 30 OCTOBER 2025
DOHA, QATAR**

Course Program

1. General objectives

The Polio Advanced Course in Vaccinology (PVAC) is designed to support critical decision-making in the global effort to eradicate polio. It equips low to mid-career health professionals with a comprehensive understanding of vaccinology and its application to polio eradication—covering immunology, epidemiology, regulatory frameworks, vaccine development, immunization strategies, program implementation, and the broader socio-political, ethical, financial and communication dimensions of eradication efforts.

Through a blend of evidence-based adult learning methodologies, scientific updates, real-world case studies, discussion of existing challenges and success, and access to an alumni network, PVAC intends to maximize both learning outcomes and long-term impact.

By the end of the course, participants should be able to:

- 1) Apply global best practices and technical strategies** in Polio surveillance, case detection, outbreak response, and eradication efforts, with a focus on tailoring approaches to local epidemiological and health system contexts.
- 2) Demonstrate competence in emergency preparedness and response** by designing and managing Polio-specific interventions, including program planning, resource mobilization, financial oversight, and supply chain logistics.
- 3) Critically evaluate approaches to Polio eradication** and integrate innovative, forward-looking strategies that address emerging threats, including geopolitical instability, misinformation, and climate-related disruptions.
- 4) Analyze and apply lessons learned** from historical and contemporary Polio eradication efforts to strengthen national and regional program sustainability, policy development, and health workforce training.
- 5) Use scenario-based planning tools** to address complex emergencies involving Polio re-emergence in conflict zones, humanitarian settings, and post-disaster scenarios.
- 6) Engage with global Polio eradication stakeholders** (including GPEI partners) to incorporate the latest scientific evidence, policy recommendations, and strategic frameworks into national plans and practices.

- 7) **Integrate risk communication and community engagement principles** into Polio eradication activities to enhance public trust, improve vaccine uptake, and respond effectively to vaccine hesitancy or misinformation.
- 8) **Join a pool of polio experts - PVAC Alumni Network** - to provide ongoing technical support to countries in need of support for surveillance, preparedness, and response.

With its 360° approach to vaccinology, PVAC bridges scientific knowledge and public health implementation, guiding participants through the complex process of translating epidemiological evidence into effective surveillance, immunization, and response strategies.

PVAC fosters cross-disciplinary understanding, expanding participants' expertise beyond their immediate field, encouraging global thinking, and introducing new technologies and approaches. This well-rounded education equips them with the leadership and technical skills necessary for impactful contributions to polio eradication.

Finally, PVAC offers a unique platform for professional exchange and networking, enabling participants to build lasting connections and collaboratively address challenges in the field. By learning from and with professionals across diverse backgrounds and institutions, PVAC alumni are well-positioned to support and advance the global polio eradication initiative at both the scientific and operational levels.

2. Course format

PVAC is structured as an intensive 5-day, in-person program, tailored for English-speaking low to mid-career health professionals from Africa and Asia.

Designed to be practical, dynamic, and highly interactive, the course combines scientific rigor with applied learning. Participants will engage in a variety of formats to ensure adequate understanding, real-world application, and valuable networking opportunities. Course components include:

- **Lectures:** Each lecture consists of a 25-minute expert presentation followed by a 20-minute discussion. Supplementary materials, including extended readings and recorded content, may be provided for those wishing to deepen their understanding of specific topics.
- **Interactive Working Groups:** Participants will be divided into small groups (4 to 6, depending on total attendance), each group will be guided by an expert facilitator. These sessions are designed to apply theoretical knowledge through case studies, scenario-based simulations, and practical exercises. Working group durations will range from 45 minutes to 90 minutes, depending on the topic and complexity of the activity.
- **Expert Panels:** Panels will feature 3 to 4 leading experts who will explore key issues through focused moderated talk (15–30 minutes), followed by an open discussion with participants.
- **Special Talk:** The course will include a special inspirational or thematic talk from a guest speaker.
- **Daily Wrap-Up and Q&A:** To reinforce learning and facilitate dialogue, each day will conclude with a collective 15–20-minute Q&A session involving all lecturers and facilitators, allowing participants to revisit and clarify key concepts as necessary.
- **Networking and Social Events:** Social events will be scheduled throughout the course to foster peer learning, build cross-regional connections, and support the formation of a strong PVAC alumni network.

3. 2025 Faculty

Speakers and facilitators:

- Ahmet Afşar - UNICEF, Kenya
- Ana Maria Guzman - Gates Foundation, USA
- Andrea Thompson - Gates Foundation, Canada
- Chris Wolf - Gates Foundation, USA
- Clancy Rudeforth - Centre for Humanitarian Dialogue, Switzerland
- David Heymann - London School of Hygiene and Tropical medicine, UK
- Deo Nshimirimana - Independent Health Consultant, Burundi
- Diana Maddah - Qatar university, Qatar
- Edwin Asturias - Children's Hospital Colorado, USA
- Farhan Cyprian - Qatar University, Qatar
- Fiona Braka - World Health Organization, Ghana
- Giridhara Rathnaiah Babu - Qatar University, Qatar (PVAC - Course Director)
- Hadi Mohamad Yassine - Qatar University, Qatar
- Hamad Eid H A Al-Romaihi - Qatar MOH, Qatar
- Hanan Abdul Rahim - Qatar University, Qatar
- Hebah Atef Mohammad Al-Khatib - Qatar University, Qatar
- Hemant Shukla - World Health Organization, Jordan
- Habib Hasan Farooqui - Qatar University, Qatar
- Isobel Blake - Imperial College, UK
- Jamal Ahmed - World Health Organization, Switzerland
- Jawahir Habib - Unicef, Switzerland
- Jeevan Kumar Makam - UNICEF HQ New York, USA
- Kamel Senouci - University of Geneva, Switzerland (PVAC - Course Director)
- Magda Robert - Gates Foundation, USA
- Modjirom Ndoutabe - World Health Organization, Republic of Congo
- Naureen Naqvi -UNICEF, Afghanistan
- Ondrej Mach - World Health Organization, Switzerland
- Ouseph Tharakan - Centre for Humanitarian Dialogue, Switzerland
- Rose Gana Fomban Leke - University of Yaounde, Cameroon
- Simmi Sharma - World Health Organization, Switzerland
- Suchita Guntakatta - Gates Foundation, USA
- Tandakha Ndiaye Dieye – UCAD, Senegal
- Valère De Riedmatten - Centre for Humanitarian Dialogue, Switzerland
- Ziad Memish - King Salman Humanitarian Aid & Relief Center, Saudi Arabia

Special guest speakers:

- Samina Fatima Hasnain Hasan Syed - Immunization specialist, PHCC, Qatar
- Mohammad Janahi - Division Chief Pediatric infectious diseases, Sidra / Chair of National Certification Committee, Qatar
- Abdullatif Al-Khal- Hamad Medical Corporation, Qatar
- Younis Awadallah - UNICEF Retiree, Palestine

4. Overall program

October 26 - DAY 1 – POLIO: HISTORY, CLINIC, VIROLOGY, IMMUNOLOGY & VACCINES			
Time	Topic	Objectives	Lecturer/facilitators
7:40 – 8:00	Bus from hotel to Qatar University Law campus		
08:00 - 8:30	Registration		
08:30 - 09:15	Opening: course's objectives, program, evaluation & logistic		- Giridhara Rathnaiah Babu - Qatar University, Qatar - Kamel Senouci - University of Geneva, Switzerland
09:15 - 09:40	Lecture 1: History of Polio and it's eradication	- Describe the origin and historical spread of poliovirus. - Describe the rational and global commitment towards polio eradication (past and current strategies). - Identify key milestones, progress, and setbacks in the eradication of wild poliovirus (WPV) and circulating vaccine-derived polioviruses (cVDPVs). - Rapid overview of socio-political and epidemiological challenges in remaining endemic areas (a more in-depth analysis will be covered in Lecture 16).	Giridhara Rathnaiah Babu - Qatar University, Qatar
09:40 - 10:00	Discussion	-	
10:00- 10:25	Lecture 2: Epidemiology of WPV and cVDPVs	- Provide an overview of the Global burden, incidence rates, and geographical distribution of Polio (WPV & cVDPVs). - Explain how vaccines have supported the eradication strategy for both WPV and cVDPVs. - Describe the epi impact of using various vaccines on the epidemiology (e.g. tOPV/bOPV switch).	Ondrej Mach - World Health Organization, Switzerland
10:25 - 10:45	Discussion	-	
10:45 - 11:10	coffee break		
11:10 - 11:35	Lecture 3: Virology of Polio and enteroviruses	- Describe the structure and classification of poliovirus and related enteroviruses. - Explain the genetic characteristics, pathogenesis, and diagnostic features of these viruses. - Provide some information on sequencing. - Illustrate key differences between poliovirus and other enteroviruses from a virological standpoint.	Hadi Mohamad Yassine - Qatar University, Qatar
11:35 -11:55	Discussion	-	
11:55 - 12:20	Lecture 4: Clinical manifestations of polio and enterovirus infections	- Describe the transmission modes, symptomatology and disease progression of poliovirus infections. - Explain the spectrum of clinical presentations (ratios) and outcomes, including paralytic and non-paralytic forms. - Describe the treatment and post-infection care. - Describe the impact on quality of life.	Edwin Asturias - Children's Hospital Colorado, USA
12:20 -12:40	Discussion	-	
12:40 -14:00	Lunch		
14:00 -14:25	Lecture 5: Immunology	- Explain the natural immune response to poliovirus and enteroviruses. - Compare innate and adaptive immune responses in the context of polio infection and vaccination. - Describe how acquired immunity informs vaccine strategy and protection. - Briefly describe the challenges for vulnerable persons (including immunocompromised and Immunodeficiencies).	Ondrej Mach - World Health Organization, Switzerland

14:25 -14:50	Lecture 6: Polio vaccines	- Describe different types of existing polio vaccines (IPV and OPVs) regarding composition, mechanism, and use. - Present and explain immunization schedules. - Explain their roles in routine immunization, outbreak response, and eradication campaigns. - Explain types, efficacy, safety, production challenges for future vaccines (nOPV, particle non-infectious vaccines etc.). - Describe Polio Vaccination for vulnerable persons (including immunocompromised and Immunodeficiencies)	Ondrej Mach - World Health Organization, Switzerland
14:50 -15:10	Discussion for both topics above	-	Ondrej Mach - World Health Organization, Switzerland
15:10 -15:55	Working group session 1: Interpretating lab results (Part 1)	- Explain how laboratories analyze samples and how to interpret laboratory data to identify viruses and poliovirus presence and type. - Explain the development and interpretation of dendrograms to assess genetic relationships between poliovirus isolates. - Discuss real-life scenarios to integrate epidemiological and lab findings in outbreak contexts.	Group 1 and 2: Reading polio virus dendrograms: - Hebah Atef Mohammad AlKhatib - Qatar University, Qatar - Farhan Cyprian - Qatar University, Qatar Group 3 and 4: Polio samples, diagnostic and lab - Isobel Blake - Imperial College, UK - Hadi Mohamad Yassine - Qatar University, Qatar
15:55 -16:20	coffee break		
16:20 - 17:05	Working group session 1: Interpretating lab results (Part 2)	- Explain how laboratories analyze samples and how to interpret laboratory data to identify viruses and poliovirus presence and type. - Explain the development and interpretation of dendrograms to assess genetic relationships between poliovirus isolates. - Discuss real-life scenarios to integrate epidemiological and lab findings in outbreak contexts.	Group 1 and 2: Reading polio virus dendrograms: - Hebah Atef Mohammad AlKhatib - Qatar University, Qatar - Farhan Cyprian - Qatar University, Qatar Group 3 and 4: Polio samples, diagnostic and lab - Isobel Blake - Imperial College, UK - Hadi Mohamad Yassine - Qatar University, Qatar
17:05 - 17:20	Interactive session 1: Q & A with lecturers Day 1	-	All speakers/ facilitators/ panelist present during the day
17:20 - 18:25	Self-presentation of participants (background, interests in life...)	-	Participants
18:40 – 19:00	<i>Bus from Qatar University Law campus to hotel</i>		
19:00 - 21:00	Welcome reception	Le Meridien city center	

October 27 - DAY 2 – POLIO OUTBREAK: FROM DETECTION TO RESPONSE

Timings	Topic	Objectives	Lecturer/facilitators
7:40 – 8:00	<i>Bus from hotel to Qatar University Law campus</i>		
08:00 – 8:30	<i>Registration</i>		
08:30 – 08:45	Daily introduction		Course Directors
08:45 – 09:10	Lecture 7: GPEI SOPs: surveillance, detection, notification and investigation	- Explain the key components of polio surveillance, including Acute Flaccid Paralysis (AFP) surveillance and environmental surveillance (ES). - Discuss the differential diagnosis of AFP (e.g. Guillain-Barré Syndrome, Malnutrition). - Discuss other Paralysis viruses (e.g. EV71, EV68). - Describe the role of immunodeficiency-associated vaccine-derived poliovirus (iVDPV) in surveillance and investigation.	Giridhara Rathnaiah Babu - Qatar University, Qatar
09:10 – 09:30	Discussion	-	
09:30 – 09:55	Lecture 8: GPEI SOPs: risk assessment and response	- Describe how to conduct a risk assessment for a potential or confirmed poliovirus outbreak. - Explain the development and components of an effective Outbreak Response Plan (ORP). - Illustrate the use of microplanning in tailoring response activities at the local level.	Hemant Shukla - World Health Organization, Jordan
09:55 – 10:15	Discussion	-	
10:15 – 10:40	coffee break		
10:40 – 11:05	Lecture 9: GPEI SOPs: Polio vaccines logistics	- Describe key aspects of vaccine distribution and storage, including temperature-sensitive logistics (OPV vs IPV). - Explain the process and importance of reverse logistics, including the handling of nOPV2 vials, stool samples, and other materials. - Evaluate protocols for managing biohazards and medical waste during polio response campaigns	Ahmet Aşar - Unicef, Kenya
11:05 – 11:25	Discussion	-	
11:25 – 12:55	Working group session 2: Preparing a risk assessment and a response plan	- Apply GPEI frameworks to develop a practical risk assessment based on a simulated outbreak scenario (POSE - Polio Outbreak Simulation Exercise) - Apply GPEI frameworks to design a tailored response plan incorporating microplanning, surveillance findings, and risk prioritization. - Apply GPEI frameworks to critically evaluate real-world case studies to identify strengths and gaps in response plans.	- Hemant Shukla - World Health Organization, Jordan - Jeevan Kumar Makam - UNICEF HQ New York, USA - Deo Nshimirimana - Independent Health Consultant, Burundi - Modjirom Ndoutabe - World Health Organization, Republic of Congo
12:55 – 14:00	Lunch		
14:00 – 14:25	Lecture 10: GPEI SOPs: budget, financing, HR for the response	- Outline the recommended structure and key components of an outbreak response budget. - Explain the process of financial planning, including digital payment systems (e-payments). - Describe strategies for human resource surge planning, including recruitment, training, and deployment.	Simmi Sharma - World Health Organization, Switzerland
14:25 – 14:45	Discussion	-	- Simmi Sharma - World Health Organization, Switzerland - Jawahir Habib - UNICEF, Switzerland
14:45 – 15:45	Working group session 3: Preparing the budget and the HR surge for the response	- Develop a detailed outbreak response budget using sample data and SOP recommendations. - Plan a human resource surge strategy, assigning roles and timelines for effective deployment. - Evaluate potential financial and HR bottlenecks in outbreak response scenarios.	- Simmi Sharma - World Health Organization, Switzerland - Jawahir Habib - UNICEF, Switzerland - Modjirom Ndoutabe - World Health Organization, Republic of Congo - Hemant Shukla - World Health Organization, Jordan

15:45 -16:10	coffee break		
16:10 -16:35	Lecture 11: Monitoring and evaluation of the quality of the response	• Describe the types of data used to monitor preparedness. • Describe response quality indicators (definition, collection, limitations etc.) and their role in continuous improvement. • Introduce the concept and implementation of Outbreak Response Assessments (OBRA) for feedback and accountability.	Modjirom Ndoutabe - World Health Organization, Republic of Congo
16:35 -16:55	Discussion	-	
17:00 -18:30	Working group session 4: Outbreak response campaigns: management, monitoring & evaluation	• Simulate the coordination of a response campaign, including implementation monitoring tools. • Use data to assess campaign effectiveness and identify areas for rapid improvement. • Use response quality indicators to improve immunization rounds. • Interpret OBRA results and propose corrective actions to strengthen surveillance and possible future responses.	- Hemant Shukla - World Health Organization, Jordan - Jeevan Kumar Makam - UNICEF HQ New York, USA - Deo Nshimirimana - Independent Health Consultant, Burundi - Modjirom Ndoutabe - World Health Organization, Republic of Congo
18:30 -18:45	Interactive session 2: Q & A with lecturers Day 2	-	All speakers/ facilitators/ panelist present during the day
18:45 -19:00	Student time		
19:00 – 19:20	<i>Bus from Qatar University Law campus to Qasr Al Yasmeen</i>		
19:30 -21:00	Social - Diner	<i>Location: Qasr Al Yasmeen</i>	

October 28 - DAY 3 – STRATEGIC AND SOCIAL DIMENSIONS OF POLIO OUTBREAK RESPONSE

Timings	Topic	Objectives	Lecturer/facilitators
7:40 – 8:00	<i>Bus from hotel to Qatar University Law campus</i>		
08:00 - 8:30	<i>Registration</i>		
08:30 -08:45	Daily introduction		Course Director
08:45 -09:10	Lecture 12: Lessons learned: determinants and challenges of a Polio outbreak response	• Present a real country case to identify the key determinants of successful outbreak response. • Present challenges encountered during outbreak response and the solutions used to address them.	- Giridhara Rathnaiah Babu - Qatar University, Qatar (moderator) - One Participant will be identified on a volunteer basis on day one after the self-presentations
09:10 -9:30	Discussion	-	
9:30 -09:55	Lecture 13: Engagement of communities and individuals in Polio surveillance and response (including addressing vaccine hesitancy)	• Explain the role of Social and Behavior Change Communication (SBCC) in building vaccine confidence and uptake. • Describe the impact of gender dynamics in polio surveillance and polio response (including the roles of women, caregivers & frontline health workers) • Identify culturally sensitive approaches to improve acceptance in different socio-cultural settings / different countries.	Naureen Naqvi - UNICEF, Afghanistan
9:55 -10:15	Discussion	-	
10:15 -10:45	coffee break		
10:45- 11:45	Working group session 5: Engaging communities and individuals	• Apply GPEI guidelines to develop strategies to address vaccine hesitancy through culturally tailored SBCC activities. • Apply GPEI guidelines to design a community engagement plan based on a contextual case scenario, integrating gender-sensitive approaches. • Simulate outreach messaging and feedback mechanisms for building community trust.	- Naureen Naqvi -UNICEF, Afghanistan - Ndoutabe Modjirom - World Health Organization, Republic of Congo - Ana Maria Guzman - Gates Foundation, USA - Diana Maddah - Qatar university, Qatar
11:45 -12:10	Lecture 14: Polio surveillance and response in insecure areas and conflict settings	• Identify the operational and logistical challenges of polio surveillance and response in conflict-affected or inaccessible areas. • Discuss adaptive strategies to ensure vaccine delivery, surveillance, and communication in fragile environments. • Explore coordination mechanisms with humanitarian and local security partners to maintain access.	Fiona Braka-World Health Organization, Ghana
12:10 -12:30	Discussion	-	
12:30 -12:45	Working group session 6: Polio surveillance and response in insecure areas and conflict settings - introduction	Presentation of Centre for Humanitarian Dialogue and their mission and introduction to Working group session 6 - participants <i>will then brake into groups after the break</i>	- Clancy Rudeforth - Centre for Humanitarian Dialogue, Switzerland
12:45 - 14:00	Lunch		
14:00 -15:30	Working group session 6: Polio surveillance and response in insecure areas and conflict settings	• Apply risk-based planning to develop a response strategy for a conflict or insecurity-affected region. • Simulate decision-making and coordination under field constraints (access, safety, mobility, trust). • Learn how to identify key partners and tools that can support response continuity in insecure zones.	- Clancy Rudeforth - Centre for Humanitarian Dialogue, Switzerland - Ouseph Tharakan - Centre for Humanitarian Dialogue, Switzerland - Valère De Riedmatten - Centre for Humanitarian Dialogue, Switzerland - Ana Maria Guzman - Gates Foundation, USA - Fiona Braka-World Health Organization, Ghana

			- Andrea Thompson - Gates Foundation, Canada
15:30 -15:55	PANEL 1 - Qatar polio stakeholders		- Hanan Abdul Rahim - Qatar University, Qatar (moderator) - Mohammad Janahi - Division Chief Pediatric infectious diseases, Sidra / Chair of National Certification Committee, Qatar
15:55 -16:20	Panel 1 -Discussion	•Discuss Qatar's support to outbreak preparedness, surveillance, cross-border collaboration, and emergency response.	- Samina Fatima Hasnain Hasan Syed, Immunization specialist, PHCC, Qatar - Hamad Eid H A Al-Romaihi - Qatar MOH, Qatar - Abdullatif Al-Khal, Hamad Medical Corporation, Qatar
16:20 -16:40	coffee break		
16:40 -17:00	Interactive session 3: Q & A with lecturers Day 3	-	All speakers/ facilitators/ panelist present during the day
17:00- 17:50	<i>Bus from Qatar University Law campus to hotel for bag drop (15 minutes) of and to Souq Waqif</i>		
17:50 -19:30	Special social and cultural event		
19:30	Bus transfer to hotel - Free evening (no dinner)		

October 29 - DAY 4 – POLIO ERADICATION, SUSTAINABILITY & INNOVATION PRESENT AND FUTURE STRATEGY

Timings	Topic	Objectives	Lecturer/facilitators
7:40 – 8:00	Bus from hotel to Qatar University Law campus		
08:00 - 8:30	Registration		
08:30 -08:45	Daily introduction	-	Course Director
08:45 -09:10	Lecture 15: The Global Polio Eradication Initiative (GPEI)	• Describe the structure, roles, and partnerships within the GPEI, including the functions of the World Health Organization Strategic Advisory Group of Experts on Immunization (SAGE). • Present the role of accountability and governance in driving progress toward eradication including the functions of the GPEI Independent Monitoring Board (IMB), and the Polio Eradication Certification Committees (Global, Regional and National). • Summarize how responsibilities, funding mechanisms, and global coordination are managed under GPEI.	Suchita Guntakatta - Gates Foundation, USA
09:10 -09:30	Discussion	-	
09:30 -09:55	Lecture 16: The 2022-2026 GPEI strategy	• Explain the strategic goals and operational pillars of the current GPEI strategy. • Present the status of implementation to date, including achievements and setbacks. • Present the strategy’s alignment with broader global health priorities and contextual challenges. • Present GPEI possible future strategy options	Suchita Guntakatta - Gates Foundation, USA
09:55 -10:15	Discussion	-	
10:15 -10:40	Lecture 17: Routine immunization, integration, and polio transition	• Describe how routine immunization contributes to polio eradication. • Discuss the integration of other public health interventions within polio programs to improve overall health impact (and vice versa). • Explain the concept of polio transition and how assets and infrastructure can be sustained or repurposed.	Chris Wolf - Gates Foundation, USA
10:40 -11:00	Discussion	-	
11:00 - 11:25	coffee break		
11:25 -11:50	Lecture 18: Polio containment	• Explain the rationale and principles of poliovirus containment. • Describe the global containment framework and national responsibilities. • Present risks associated with containment breaches and required mitigation strategies. • Briefly describe the challenges for vulnerable persons (including immunocompromised and Immunodeficiencies).	David Heymann - London School of Hygiene and Tropical medicine, UK
11:50 -12:10	Discussion	-	
12:15 -13:30	Lunch		
13:30 -13:55	Lecture 19: Political engagement and resource mobilization at global, regional and country levels	• Present key drivers and barriers to securing political commitment for polio eradication. • Explain challenges in mobilizing financial, human, and technical resources across levels. • Discuss and present strategies to strengthen advocacy and sustain support in low-priority or transitioning countries.	- Magda Robert - Gates Foundation, USA
13:55-14:15	Discussion	-	
14:15 -15:15	Working group session 7: Political engagement and resource mobilization for polio at the country levels	• Learn how to develop a stakeholder mapping and advocacy strategy to engage political leaders and donors. • Design a country-level resource mobilization plan incorporating public and private sector contributions.	- Hanan Abdul Rahim - Qatar University, Qatar - Magda Robert - Gates Foundation, USA

		• Simulate a high-level policy dialogue to secure commitment and funding for national polio efforts.	- Deo Nshimirimana - Independent Health Consultant, Burundi - Jamal Ahmed - World Health Organization, Switzerland - Habib Hasan Farooqui - Qatar University, Qatar
15:15 -15:40	Lecture 20: Innovations in Polio	• Present cutting-edge tools and approaches enhancing polio prevention, surveillance, and response (e.g. GIS, artificial intelligence, rapid diagnostics). • Explain the impact and feasibility of integrating innovations into existing public health infrastructure. • Present gaps in innovation uptake and proposed strategies to overcome barriers.	Edwin Asturias - Children's Hospital Colorado, USA
15:40-16:00	discussion	-	
16:00 -16:30	coffee break		
16:30 -17:30	PANEL 2 - Polio eradication: is it time to rethink our eradication objective?	• Engage in a critical discussion on the feasibility and sustainability of achieving global polio eradication. • Compare eradication with long-term control strategies and implications for public health priorities.	- Kamel Senouci - University of Geneva, Switzerland (Moderator) - Rose Gana Fomban Leke - University of Yaounde, Cameroon - David Heymann - London School of Hygiene and Tropical Medicine, UK - Jamal Ahmed - World Health Organization, Switzerland - Ziad Memish - King Salman Humanitarian Aid & Relief Center, Saudi Arabia
17:30 -17:45	Interactive session 4: Q & A with lecturers Day 4	-	All speakers/ facilitators/ panelist present during the day
17:45 - 18h15	Bus from Qatar University to hotel		
18:15 -19:00	Time for students		
19:00-19h20	Bus from hotel to Gala Diner		
19:30 -21:30	Gala dinner	Location: <i>The Restaurant, Chedi Katara</i>	
21:30-21:50	Bus from Gala Diner to hotel		

October 30 - DAY 5 – ETHICS, COMMUNICATION & HUMAN STORIES IN POLIO ERADICATION			
Timings	Topic	Objectives	Lecturer/facilitators
7:40 – 8:00	Bus from hotel to Qatar University Law campus		
08:00 - 8:30	Registration		
08:30 - 08:45	Daily introduction	-	Course Director
08:45 - 09:20	Lecture 21: Ethics and Polio	• Outline ethical challenges related to vaccine access, affordability, and funding mechanisms. • Present the ethical arguments for and against mandatory immunization laws and policies. • Outline professional ethics in cases where patients refuse immunization, including dismissal policies. • Explain the ethical obligation to report Adverse Events Following Immunization (AEFIs) and provide transparent communication to patients and families. • Present broader ethical issues including use of OPV, Polio programmatic impact on health systems, and prevention of sexual exploitation, abuse and harassment (SEAH) in immunization campaigns.	- Giridhara Rathnaiah Babu - Qatar University, Qatar - Magda Robert - Gates Foundation, USA
09:20 - 09:40	Discussion		
09:50 - 10:55	Working group session 8: crisis communication	• Learn how to develop key messages for use during vaccine-related crises (e.g. AEFIs, outbreaks, hesitancy incidents). • Simulate a press conference or media interview responding to a real-time polio-related event. • Learn how to apply principles of transparency, empathy, and trust-building in communicating with affected communities, healthcare workers, and media. • Evaluate real-world examples of successful and unsuccessful crisis communication in immunization contexts.	- Giridhara Rathnaiah Babu - Qatar University, Qatar - Kamel Senouci - University of Geneva, Switzerland
10:55 - 11:20	coffee break		
11:20 - 12:40	Working group session 8: crisis communication - continued	• Learn how to develop key messages for use during vaccine-related crises (e.g. AEFIs, outbreaks, hesitancy incidents). • Simulate a press conference or media interview responding to a real-time polio-related event. • Learn how to apply principles of transparency, empathy, and trust-building in communicating with affected communities, healthcare workers, and media. • Evaluate real-world examples of successful and unsuccessful crisis communication in immunization contexts.	- Giridhara Rathnaiah Babu - Qatar University, Qatar - Kamel Senouci - University of Geneva, Switzerland
12:40 - 14:00	Lunch		
14:00 - 14:25	Inspirational talk	Inspirational talk	Younis Awadallah - UNICEF Retiree, Palestine
14:25 - 14:35	Questions/discussion		
14:35 - 14:50	Interactive session 5: Q & A with lecturers Day 5		All speakers/ facilitators/ panelist present during the day
14:50 - 15:30	Evaluation of the course		-
15:30 - 16:45	Diploma ceremony		-
16:45 - 17:15	coffee break		
17:15	Closing		

PVAC - POLIO ADVANCED COURSE IN VACCINOLOGY - QATAR						
	Sunday October 26	Monday October 27	Tuesday October 28	Wednesday October 29	Thursday October 30	
06:30	Breakfast at hotel	Breakfast at hotel	Breakfast at hotel	Breakfast at hotel	Breakfast at hotel	06:30
07:40	Transport from hotel to QU campus	Transport from hotel to QU campus	Transport from hotel to QU campus	Transport from hotel to QU campus	Transport from hotel to QU campus	07:40
08:00	Registration	Registration	Registration	Registration	Registration	08:00
08:15						08:15
08:30	Opening: course's objectives, program, evaluation & logistic	Daily introduction	Daily introduction	Daily introduction	Daily introduction	08:30
08:45		GPEI SOPs: surveillance, detection, notification and investigation	Lessons learned: determinants and challenges of a Polio outbreak response	The Global Polio Eradication Initiative (GPEI)	Ethics and Polio	08:45
09:00						09:00
09:15		09:15				
09:30	History of Polio and it's eradication	GPEI SOPs: risk assessment and response	Engagement of communities and individuals in Polio surveillance and response (including addressing vaccine hesitancy)	The 2022-2026 GPEI strategy		09:30
09:45					09:45	
10:00	Epidemiology of WPV and cVDPVs	Coffee break	Coffee break	Routine immunization, integration, and polio transition	Working group session 8: crisis communication	10:00
10:15						10:15
10:30	10:30					
10:45	Coffee break	GPEI SOPs: Polio vaccines logistics	Working group 5: Engaging communities and individuals	Coffee break	Coffee break	10:45
11:00	11:00					
11:15	Virology of Polio and enteroviruses	Working group session 2: Preparing a risk assessment and a response plan	Polio surveillance and response in insecure areas and conflict settings	Polio containment	Working group session 8: crisis communication	11:15
11:30						11:30
11:45	11:45					
12:00	Clinical manifestations of Polio and enterovirus infections		Working group session 6 - introduction	Lunch	Lunch	12:00
12:15						12:15
12:30	12:30					
12:45	Lunch	Lunch	Political engagement and resource mobilization at global, regional and country levels		Lunch	12:45
13:00						13:00
13:15				13:15		
13:30				13:30		
13:45	13:45					
14:00	Immunology	GPEI SOPs: budget, financing, HR for the response	Working group session 6: Polio surveillance and response in insecure areas and conflict settings	Working group session 7: Political engagement and resource mobilization for polio at the country levels	Inspirational talk	14:00
14:15	Polio vaccines				14:15	
14:30	Immunology and Polio vaccines - Discussion	Working group session 3: Preparing the budget and the HR surge for the response	PANEL 1 - Qatar Polio stakeholders	Innovations in Polio	Daily Q & A	14:30
14:45						14:45
15:00	Working group session 1: Interpretating lab results (Part 1)	Coffee break	Coffee break	Coffee break	Course evaluation	15:00
15:15						15:15
15:30	Coffee break	Monitoring and evaluation of the quality of the response	Coffee break	PANEL 2 - Polio eradication: is it time to rethink our eradication objective?	Diploma ceremony	15:30
15:45						15:45
16:00	Working group session 1 : Interpretating lab results (Part 2)	Working group session 4: Outbreak response campaigns: management, monitoring & evaluation	17h00 - transfer to hotel for bag drop (15 minutes) of and to Souq Waqif	Daily Q & A	Coffee break	16:00
16:15						16:15
16:30	Daily Q & A	Daily Q & A	Special Social and Cultural Event	Student time	Coffee break	16:30
16:45						16:45
17:00	Self-presentation of participants	Daily Q & A	19h00 - transfer to Gala Dinner	Closing		17:00
17:15						17:15
17:30		17:30				
17:45		17:45				
18:00		18:00				
18:15		18:15				
18:30		18:30				
18:45	18h40 - transfer to hotel and welcome reception	Student time	19h00 - transfer to Gala Dinner	18:45		
19:00	18h45 - transfer to restaurant	19:00				
19:15	Welcome Reception at Le Méridien City Center	Dinner at Qasr Al Yasmeen	19h30 - transfer to hotel	Gala Dinner at Cheddi Katara	19:15	
19:30					19:30	
19:45					19:45	
20:00					20:00	
20:15					20:15	
20:30					20:30	
20:45					20:15	
21:00	20:30					
21:15	21h - transfer to hotel	21h - transfer to hotel	21h30 - transfer to hotel	20:15		
21:30				20:30		

Lecture + discussion
Working group
Panel
Special presentation
Social events and meals
Student time
Bus transfers