







## **CONFERENCE AGENDA**

## Advancements in Science and Technology: Benefits and Risks for the Biological Weapons Convention

## 11-12 October 2022

Manohar Parrikar Institute for Defence Studies and Analyses, New Delhi, India

## 11 October 2022 (Day 1)

Registration and distribution of conference material  Overview of Day 1 and Logistics Information  H.E. Izumi Nakamitsu (Video Message) UN Under-Secretary-General and High Representative for Disarmament Affairs  Opening Remarks  H.E. Amb. Leonardo Bencini (Video Message) President-Designate of the Ninth Review Conference of the BWC Permanent Representative of Italy to the Conference on Disarmament	Time (IST)*	Topic	Speakers
(Video Message) UN Under-Secretary-General and High Representative for Disarmament Affairs  9:00 – 9:30  Opening Remarks  H.E. Amb. Leonardo Bencini (Video Message) President-Designate of the Ninth Review Conference of the BWC Permanent Representative of Italy	8:30 – 9:00		
	9:00 – 9:30	Opening Remarks	(Video Message)  UN Under-Secretary-General and High Representative for Disarmament Affairs  H.E. Amb. Leonardo Bencini (Video Message)  President-Designate of the Ninth Review Conference of the BWC Permanent Representative of Italy

	Delegation of the European Union
	to India.
	MEA representative
	Ministry of External Affairs,
	Government of India
	H.E. Amb. Sujan Chinoy
	Director General, Manohar Parrikar
	Institute of Defence Studies and
	Analyses, New Delhi
	Mr. Daniel Feakes
	Chief
	BWC Implementation Support Unit
	United Nations Office for
	Disarmament Affairs
9:30 – 9:45	Group Picture
y:30 – y:45	Break
Session 1: Biorisk Surveillance, Verification and Mitigation	

	<b>Chair:</b> James Diggans	
9:45 – 10:15	Disinformation: Impact on Science and Technology Development	Lela Bakanidze  Key Expert, OSA to EU CBRN  Centers of Excellence Initiative  Regional Secretariat for Central Asia
10:15 - 10:35	Lessons learned from Oversight of DNA Synthesis	Sarah Carter Principal, Science Policy Consulting LLC

10:35 – 10:45	The Risks and Benefits of Emerging Scientific and Technological Developments in Biorisk Management	<b>Mrinmayee Bhushan</b> Founder- Director, Mindfarm Novatech Private Limited
10:45 – 10:55	Break	
	<b>Chair:</b> Javier Antonio Rodrigi	uez
10:55 – 11:15	TBC	Lane Warmbroad  Biological and Chemical Weapons Policy Analyst, Pacific Northwest National Laboratory, US
11:15 – 11:35	Understanding Biosecurity for Effective Disease Surveillance	Bobadoye Ayodotun  Chief Operating Officer, Global Emerging Pathogens Treatment Consortium (GET)
11:35 - 11:55	Securing Gene Synthesis Technologies: Mitigating Risks and Enabling Innovation	Amanda Kobokovich Senior Analyst, Johns Hopkins Center for Health Security
11:55 – 12:15	Emerging Biosecurity landscapes: comprehension to containment	Atanu Basu Scientist G, ICMR National Institute of Virology, Pune

12:15 – 13:45	Lunch		
	Session 2: Agriculture and Biosecurity		
	<b>Chair:</b> Jaime M. Yassif		
13:45 – 14:15	Biosafety Challenges to Food and Agriculture Security in the Caribbean	Neela Badrie  Professor, University of the West Indies, St. Augustine, Trinidad and Tobago	
14:15 – 14:45	Emerging Agricultural Biotechnologies Challenge the BWC: the Case of Viral- induced Plant Genome Editing	Felix Moronta-Barrios  Senior Programme Assistant, Regulatory Science Group. International Centre for Genetic Engineering and Biotechnology	
14:45 – 15:05	Curbing Health-Related Issues in the Agricultural Sector through Biosecurity	Judith Okolo  Assistant Chief Scientific Officer, National Biotechnology Development Agency, Nigeria	
15:05 – 15:25	Animal Diseases, Agriculture, and Biosecurity	Lauren C. Richardson  Director, Science and Technology at  Merrick & Company	
15:25 – 15:45	Break		

Session 3: Neuroscience, Neurotechnology and Biosecurity			
	Chair: Beyza Unal		
15:45 – 16:15	Opportunities and Risks of Neurotechnologies and Brain-Machine Interfacing	Ricardo Chavarriaga Senior Researcher, Zürich University of Applied Sciences	
16:15 – 16:45	Towards Full Human Augmentation: Dangers and Perspectives	Renaud Jolivet  Professor, Maastricht Centre for Systems Biology, Maastricht University	
16:45 – 17:15	Neurosecurity and the Dual-Use Implications of Neurotechnology	Marcello lenca Professor, Bioethics, ZTH Zurich	
17:15 – 17:35	Neuroscience and the Solution of Dual-Use	Aakansha Bhawsar Former Scientist, ICMR Headquarters, New Delhi	
17:35 – 17:50	General Discussion and Feedback  Day 1 Closing Remarks		
17.55 17.50			
18:30 onwards	Reception		

Time (IST)*	Topic	Speakers
8:45 – 9:00	Overview and Logistics for Day 2	
	Session 4: Synthetic Biology and E	Biosecurity
	<b>Chair:</b> Sarah R. Carter	
9:00 – 9:30	Developing Legal and Policy Frameworks in Biosecurity-a Moving Target	Nancy Connell  Senior Scientist, Board on Life Sciences, US National Academies of Sciences, Engineering and Medicine
9:30 – 9:50	Synthetic Viruses: Opportunities and Risks	Yoke Fun Chan Professor of Virology, University of Malaya, Malaysia
9:50 – 10:10	DNA-Synthesis, Genome Engineering and their Risks and Opportunities	<b>Maximilian Brackmann</b> CBRN Arms Control Expert, Spiez Laboratory
10:10 – 10:30	Addressing Emerging Risks through Regional Networks	<b>Geoffrey Otim</b> Founder and CEO, Synbio Africa
10:30 – 10:50	Dual Uses of Bioinformational Engineering	Thom A Dixon

		PhD scholar, Macquarie University, Australia
10:50 – 11:10	Break	
	Session 5: Artificial Intelligence and Cy	ber-biosecurity
	<b>Chair:</b> Felix Moronta-Barrio	os
11:10 – 11:40	Predicting Risk from DNA Constructs: Capabilities and Needs	James Diggans  Director, Data Science and Biosecurity, Twist Bioscience
11:40 – 12:00	Existing and Emerging Cyber Risks to Biosecurity	Beyza Unal  Head, Science and Technology Unit,  United Nations Office for  Disarmament Affairs, New York
12:00 – 12:20	Design against Crime: A Biological Security Strategy to Safeguard Science and Society	<b>Mariam Elgabry</b> Founder and CEO, Bronic Ltd.
12:20 – 12:40	Technbellem: Al and the Trajectory of Bio (and Cyber) Warfare	Janine Medina (Nina Alli) Executive Director, Biohacking Village

12:40 – 14:00	Lunch	
Session 6:	Youth Engagement and Gender Consid	lerations in BWC (Posters)
	Involving Young Scientists in the Implementation of the Biological Weapons Convention (BWC): Some Key Points	Brice Boris Legba University of Abomey-Calavi, Benin
	Managing Biothreats; Mitigating Spill overs of Zoonotic Viruses: Experience from Uganda	<b>Doreen BIRUNGI</b> Africa University One Health Network, Uganda
14:00 – 15:30	The Youth Declaration for Biosecurity: Mobilizing Youth to Strengthen the BWC	<b>Fatima Aziz</b> Aga Khan University, Pakistan
	My work as a part of Youth Empowerment under the BWC	<b>Hitesh Kumar Bhattarai</b> Kathmandu University, Nepal
	Contribution of Woman Scientists and Biosafety professionals from Biotechnology Industry in Strengthening the BWC	Imane BELKOURATI MCI Santé Animale, Morocco
	Youth Involvement and Gender Consideration in the Implementation of the Philippine Health Laboratory System (PHLS)	<b>Leodymar Jorduela</b> Department of Health, Philippines

		and
		Teddy Rowell Mondres
		National Yang Ming Chiao Tung University, Taiwan
	RNA seq data reveals response signatures for early detection and surveillance of malaria and COVID-19 in febrile patients	<b>NZUNGIZE Lambert</b> Founder, SynBio Rwanda
	Need for Accelerating Diversity, Equity and Inclusion in Non-Proliferation Treaty decision making process	Rahuldeep Singh  HIV Sentinel Surveillance Program, PGIMER, Chandigarh, India
	Starting Them Early: A Preliminary Summer Internship Program on Biosafety and Biosecurity in the Philippines for Senior High School Students	Rodel Jonathan S. Vitor II University of Tokyo, Japan
	TBC	Shrestha Rath  Centre for Effective Altruism, UK
	Session 7: Science-Policy Inte	erface
	<b>Chair:</b> James Revill	
15:30 – 16:00	Global Guidance Framework for the Responsible Use of the Life Sciences: Mitigating Biorisk and Governing Dual-use Research	Soatiana C. Rajatonirina Technical Officer, Science Division, World Health Organization

16:00 – 16:50	Panel discussion  Science and Technology in Biosecurity: Funding, Communication and Capacity Development	Lijun Shang Professor, London Metropolitan University  Jaime M. Yassif Vice President, Global Biological Policy and Program NTI: Bio  Andrew Nerlinger Executive Director, Global Health Security Fund, and Co-Founder Pandemic Tech  Jonathan Forman Science and Technology Advisor, Pacific Northwest National Laboratory,
16:50 – 17:00	Break	
	Chair: M M Ramchandra	
17:00 – 17:50	Panel discussion Biosecurity: Developing Legal and Policy Frameworks	Amber Murch Principal Biological Advisor for Non- Proliferation, Defence S&T Laboratory  Hubert K. FOY Director & Senior Research Scientist, African Center for Science and International Security  Leifan Wang Center for Biosafety Research and

		Director, Initiative for Global Security, Argentina
17:50 – 18:15	General Discussion and Feedback	
	Closing Remarks and Vote of Thanks	
19:00 onwards	Dinner	

<sup>\*</sup> Time is in Indian Standard time (IST).