HCPA*

*Discussion (25 min)

Wednesday - May, 7th - Windsor Barra and posters Welcome 8h00 Welcome coffee & Credentials 9h00 Opening of the poster exhibition WED-1 - Strengthening and predicting the technological pathway for the development of innovative biological products Chair: Hugo Defendi, Fiocruz/Bio-Manguinhos* Poster Oral presentation WED1.2: VAC-02 - Direct RNA Sequencing by Nanopore: A Breakthrough in RNA Vaccine Quality Control with Cost Reduction and High Accuracy - Thiago Santos Chaves Poster Oral presentation WED1.2: BIO-01 - A New Approach for Structural Clustering of Antibodies and Antigens - Joao Herminio Martins da **WED-1 SESSION** Silva Sena 9h00 **Speakers:** Pandemic Preparedness and Disease X: how to strengthen global strategies for accelerating the 10h30 development of innovative vaccines - Petro Terblanche, Afrigen* New technologies and trends in biopharma development – Challenges for development of biological products in Brazil - Spartaco Astolf Filho, Federal University of Amazonas / Cristalia* Discussant: Beatriz Fialho, Fiocruz/Bio-Manguinhos* *Discussion Coffee break Science talks 1 Poster session (exhibition + pitchs): 10h30 Science talks round 1: Production proccess 1 Chair: Gisele Corrêa Miranda 11h00 ORT-08 - Identification and phylogenetic characterization of Alkalihalophilus strain isolated in a pharmaceutical industry using polyphasic techniques - Pamella Sousa MAN-01 - Al-Driven Process Optimization: The Role of LLMs in Organizational Efficiency - Larissa Christina Vale de Paiva WED-2 – Genetic therapies for the future of medicine and health Chair: Martín Bonamino, Inca / Fiocruz* **WED-2 SESSION** Poster Oral presentation WED2.1: ORT-04 - Anti-HER2 CAR-T Cells Evaluation in an Ovarian Tumor Preclinical Model - Emmanuel Arthur 11h00 Albuquerque Aragao Speaker: Waseem Qasim, UCL / NHS* 12h30 Discussants: Antonio Carlos Campos de Carvalho, Fiocruz*; Bruno Solano, Hospital São Rafael -





Salvador*; Camile Giaretta Sachetti, Fiocruz*; Hilda Petrs Silva, IBCCF / UFRJ*; Guilherme Baldo,

		Lunch box
Science talks 2 / 3		Poster session (exhibition + pitchs)
		Science talks round 2 – CAR-T 1 Chair: Mayla Abrahim Costa
		BIO-04 - Scalable Manufacturing of CD19 CAR-T Cells Using a Minicircle-Sleeping Beauty Transposon Platform - Leonardo Ribeiro Batista Silva
	12h30 -	ORT-10 - Evaluation of CAR-T Cell Inoculation Routes in Xenograft Models of Hematologic and Subcutaneous Tumors - Luana Neto de Lima
	14h00	Science talks round 3 – CAR-T 2 Chair: Patricia Neves
		ORT-15 - Enhancing CAR-T Cell Therapy: Efficient Transposon-Based Gene Editing and Ultrafast Production Protocols - Luiza de Macedo Abdo
		ORT-22 - Comparison between allogeneic 19BBz CAR-T cells generated with CRISPR and Sleeping Beauty transposons - Eduardo Mannarino Correia
		ORT-29 - Generation of anti-GD2 CAR-T Cells by sleeping beauty transposon system - Layla Maria Vieira
e E	14h00	Satelite Symposium – Sanofi
Satelite symposium	_	Agile assets and sustainable manufacturing for Vaccine
Ss	14h40	Speaker: Pierre Chouvenc, Sanofi*
		WED-3 - Challenges, opportunities, and trends in diagnostics
		Chair: Patricia Alvarez Baptista – Fiocruz/Bio-Manguinhos*
		Poster Oral presentation WED3.1: IVD-01 – Wastewater-Based Epidemiology: One-Year Monitoring of Respiratory Viruses in Rio de Janeiro Using dPCR Assays - Renan da Silva Faustino
Z		Speakers:
SSIC	14h40	 One Health- Concepts and practical applications in diagnostics – André Siqueira, DNDi*
WED-3 SESSION	- 16h10	■ Preparedness for new regional and global impact of sanitary emergencies — Alexander Rosewell, PAHO*
WE		■ Emerging Technologies in <i>In Vitro</i> Diagnostics: Future Directions for preparedness - Emmanuel Agogo, FIND
		■ Bacterial Resistance - Preparing for a silent pandemic — Ana Paula Assef, Fiocruz* Discussion Maria Krieger, Figure (in margarium) and Antonia Compas Binto Farming, Figure (Binto Form)
		Discussant: Marco Krieger, Fiocruz (in memoriam) and Antonio Gomes Pinto Ferreira, Fiocruz/Bio- Manguinhos*
		*Discussion
		GRAND OPENING
		■ Alexandre Padilha, MoH
		Mario Moreira, Fiocruz*
BNII		■ Tedros Adhanom, WHO*
GRAND OPENING	16h10 -	■ Mauricio Zuma, Bio-Manguinhos*
	17h30	■ Jarbas Barbosa, PAHO*
		■ Cristian Morales, PAHO*
		■ Marie-Ange Saraka Yao, GAVI*
		Odilon Costa, Abifina*
		■ Akira Homma, scientific chair of the 9th ISI*





		Social networking
		Poster session (exhibition + pitchs)
		Science talks round 4 – Neglected diseases: diagnosis and treatment Chair: Wagner José Tenório dos Santos
7		OTR-06 - Effect of Pirfenidone on fibrosis induced by Trypanosoma cruzi infection in cardiac spheroids/organoids - Clara Monteiro Seydel
Science talks 4 /	17h30	ORT-19 - Study of capsaicin derivatives for their antimycobacterial and immunomodulatory potential as an adjunctive treatment for severe pulmonary tuberculosis - Fábio Hugo Siqueira Ferreira
	19h00	ORT-18 - Development of a rapid diagnostic test for detection of pathogenic mycobacteria based on CRISPR - Lia Lima Gomes
		Science talks round 5 – Reagents for diagnosis Chair: Wagner José Tenório dos Santos
		ORT-14 - Comparative Evaluation of Digital PCR Platforms for Multiplex Detection of SARS-CoV-2, Influenza A/B, and Internal Control in Wastewater-Based Epidemiology - Lara Correa Umpierre Henriques
		IVD-02 - Development and Implementation of Multiplex RT-PCR for Respiratory Virus Detection and Quality Control: Insights from Brazil's National Laboratory Network - Fernando do Couto Motta
		IVD-03 - Lateral Flow Assay for Efficient Detection of IgM Antibodies in Human Leptospirosis - Percy Edison Torres Castillo

Names sinalized with * are confirmed participants





Thursday – May, 8th – Windsor Barra

Science talks 6		Welcome coffee & Credentials
		Poster session (exhibition + pitchs)
	8h00	Science talks round 6 – RNA Vaccine Chair: Martín Hernán Bonamino
		VAC-03 - Fine-Tuning Self-Amplifying RNA: Unlocking the Impact of Codon Optimization and Promoter Selection - Thiago Santos Chaves
	9h00	BIO-02 - Scaling up the encapsulation process of the mRNA vaccine developed by Bio-Manguinhos against COVID-19 - Ana Beatriz Teixeira Frederico
		VAC-05 - Effects of Modified Nucleotides in a mRNA Construct Encoding SARS-CoV-2 Spike Protein: Implications for Functionality and Therapeutic Potential - Tainá Cunha Udine Bernardino
		VAC-13 - Evaluation of the stability of the mRNA-based COVID-19 vaccine developed at Bio-Manguinhos - Ingrid Silva Correia
		THU-1 - Vaccines for all: production, logistics, and access to immunobiologicals
		Chair: Cristiana Toscano, Ceti-Saúde / UFG
THU-1 SESSION		Poster Oral presentation THU1.1: OTR-02— Serum osteopontin as a biomarker of covid-19 severity: kinetic profile and association with clinical outcomes - Carine Felipe dos Santos
	9h00	Speakers:
	10h30	 Challenges for introduction of new vaccines to the immunization Callendar – Eder Gatti, MoH / NIP* Challenges in developing, manufacturing and delivering vaccines for the public market - Thomas Denny, Duke Global Institute*
		■ Facilitating the development of the ugently required combination vaccines, Peter Dull, BMGF*
		Discussant: Lely Guzmán, PAHO*
		*Discussion
		Coffee break
Science talks 7	10h30 - 11h00	Poster session (exhibition + pitchs):
		Science talks round 7: Production proccess 2 Chair: Marco Alberto Medeiros
		VAC-11 - Scaling Up the Downstream Process for Inactivated Yellow Fever Vaccine: A Pilot-Scale Proposal (Eukaryotes Pilot Laboratory/Bio-Manguinhos) - Pedro Trica de Araújo
		VAC-16 - Automated decontamination of embryonated SPF eggs for use in viral vaccine production - Wania Renata dos Santos





THU-2 SESSION	11h00 - 12h30	THU-2 - Tuberculosis is a significant public health issue on a global scale. How should we tackle it? Chair: Margareth Dalcolmo – Fiocruz* Poster Oral presentation THU2.1: ORT-09 – Chalcone and zingerone derivatives and their antimycobacterial and anti-inflammatory activity in the search of new drugs for severe pulmonary tuberculosis - Júlia Costa de Souza Poster Oral presentation THU2.2: ORT-13 – Study of synthetic chalcones and aurones for their antimycobacterial and anti-inflammatory potential in the treatment of severe pulmonary tuberculosis - Yasmin Viana Martins Speakers: TB Epidemiological Situation in Brazil – Eduardo de Souza Alves – MoH – CGTM/DATHI* TB vaccine development at Gates Medical Research Institute – Alexander Schmidt, Gates MRI* New MTBVAC Vaccine to Combat Tuberculosis – Carlos Martín, Biofabri* Discussant: Luiz Roberto Castello Branco, FAP* *Discussion
Science talks 8 / 9	12h30 - 13h50	Lunch box Poster session (exhibition + pitchs) Science talks round 8 – Quality control 1 Chair: Talita Coelho ORT-12 - Expansion of MALDI-TOF MS database by inserting a fungi isolated from a Pharmaceutical Industry Facility - Maria Luiza Souza Galvão Dacio ORT-20 - The impact of excipient quality on the improvement of cell health in bioprocessing industry - Letícia Paifer Marques BIO-05- Validation of MALDI-TOF MS database expansion with spectra of in house bacterial strains isolated in the pharmaceutical industry - Joyce Modesto de Andrade Science talks round 9 – Quality control 2 Chair: Marcelo Brandão VAC-09 - Development of analytical methodology for quality control of messenger RNA vaccine - Renata Maria dos Santos VAC-18 - Evaluation of the THP-1 lineage in the monocyte activation test for quality control of Meningococcal C Conjugate and Yellow Fever Vaccines - Angela Santos BIO-10 - Using a comprehensive mass spectrometry-based protocol for released glycans characterization of biopharmaceutical erythropoietin (rhEPO) - José Roberto Aparecido dos Santos-Pinto
Special session	13h50 - 14h30	Special Session - Data science and artificial intelligence (AI): applications to vaccine R&D Chair – Fernando Ferreira, UFRJ/NetLab* Speakers: Abstraction and Transfer in Reinforcement Learning: Implications for Modeling and Optimization of Biological Systems – Andre Barreto, Deepmind Artificial Intelligence in Biopharmaceutical Development: From Molecular Modeling to Predictive Analytics - Laurent Dardenne, LNCC Discussant: Eduardo Krempser, Fiocruz/Bio-Manguinhos* *Discussion





		THU-3 - The "new era" in omics: omics-based technology for use in Biomedicine
		Chair – Zilton Vasconcelos, Fiocruz/IFF*
		Poster Oral presentation THU3.1: IVD-06 – IgG Epitope Mapping of Gn, Sm, and Gs Proteins Encoded by the M Segment Gene of Oropouche Virus - Paloma Napoleão Pêgo
NO NO		Speakers:
SESS	14h30 - 16h00	■ Artificial Intelligence and Omics Data Science – Gabriel Fernandes, CT Vacinas*
THU-3 SESSION		Identification of biomarkers and candidates for therapeutic targets through genomics, proteomics and bioinformatics - Tatiana Tilli, Fiocruz/CDTS*
		■ The MasPec Pen development - Analysing molecules and understanding biological processes - Livia Schiavinato Eberlin, Baylor College*
		Discussant: Luciana Madeira, Fiocruz/Bio-Manguinhos* *Discussion
		Coffee break
		Poster session (exhibition + pitchs) / Coffee break
ks 10	16h00 - 16h30	Science talks round 10 – Cancer Treatment Chair: Aline Oliveira
Science talks 10		ORT-11 - Biophysical and molecular characterization of antibody-mimetic proteins directed to malignant glioma tumor proteins - Maria Rita De Albuquerque Almeida Neta
Scie		VAC-07 - Cancer-Testis Antigens as potential targets for the development of therapeutic strategies for breast câncer - Pablo Viana Oliveira
		ORT-17 - Phonotypic Immune profile in Breast Cancer Patients Treated with Neoadjuvant Chemotherapy within the NeoSAMBA Trial - Igor de Oliveira Santos
		THU-4 - 100 Days Mission – The challenge for regulation
	16h30 - 18h00	Chair: Rosane Cuber – Bio-Manguinhos*
THU-4 SESSION		Poster Oral presentation THU1.1: VAC-01 – Preparedness against a potential H5N1 influenza pandemic: Production and immune response of vaccine candidates for current H5N1 influenza viruses in circulation - Milena Apetito Akamatsu
		Poster Oral presentation THU1.2: ORT-03 – Strengthening National Laboratorial and Genomic Surveillance of Respiratory Syncytial Virus (RSV) in Brazil - Paola Cristina Resende Silva
		Speaker: Syed Hassan Askary, CEPI*
		Discussants: Maria Fernanda Reis e Silva Thees, Anvisa*; Julie Joseph, Health Canada*; Marco Cavaleri, EMA*
		*Discussion

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Friday – May, 9th – Windsor Barra

		Walaama aaffaa 9 Cuadantiala
Science talks 11		Welcome coffee & Credentials
		Poster session (exhibition + pitchs) Science talks round 11 – Nanotech for delivery
	8h00 –	Chair: Renata Chagas Bastos
	9h00	ORT-05 - Cabazitaxel-loaded anti-egfr immunoliposomes: targeted therapeutic strategy for prostate câncer - Ana Carolina Cruz de Sousa
		VAC-08 - Optimization of ZK_ASTP DNA Vaccine Delivery Using PLGA Nanoparticles - Bruno Henrique de Sousa Leite
		BIO-09 - Anti-EGFR immunoliposomes and physical methods improve the topical delivery of Chloroaluminum Phthalocyanine - Alice Vitoria Frota Reis
		VAC-10 - Standardization of Pilot Scale Microfluidic Manufacturing of mRNA-Lipid Nanoparticles - Elaine Motta Costa
		FRI-1 - Agnostic vaccine platforms for bacterial and viral vaccines: challenges, innovations
		and future perspectives
		Chair – Luciana Cezar de Cerqueira Leite, Butantan*
-		Poster Oral presentation FRI1.1: VAC-04 - Homology analysis of MPXV and VACV peptides underscores the need to consider both MPXV clades for vaccine development - Lara Isis Teodoro de Oliveira
SION		Speakers:
FRI-1 SESSION	9h00 – 10h30	 Multiple Antigen Presenting System (MAPS): State of art and potential applications - Otavio Cintra, GSK*
품		■ Applications of Generalized Modules for Membrane Antigen (GMMA) platform – Francesca
		Micoli, GSk Vaccines Institute of Global Health*
		Reverse vaccinology – Rino Rappuoli, Biotechnopolo di Siena*
		Discussant: Marisol Simões, Fiocruz/Bio-Manguinhos*
		*Discussion
		Coffee break
7		Poster session (exhibition + pitchs) / Coffee break
ience talks 12	10h30	Science talks round 12 – Multidrug Resistant Bacteria Chair: Ivna Alana Silveira
ce ta	-	BIO-07 - Establishment of an MRSA Osteomyelitis Animal Model and Evaluation of an In Situ Diagnostic Using CY7-Labeled Anti-PBP2a
Scien	11h00	mAb - Juliana Pascarelli Compan Boechat
S		BIO-08 - Evaluation of Cecropin in circulating strains of Acinetobacter baumannii in the state of Rio de Janeiro - Mariana Silva de Freitas
		ORT-27 - PEGylation Reaction of Aptamers for the Treatment of Infections Caused by Multidrug-Resistant Bacteria (MDR) - Juliana Carmo de Souza
	11h00	FRI-2 - Autochthonous development for new biological products in Brazil
	– 12h30	Chair: Fernanda De Negri, MoH / SECTICS*
Z		Poster Oral presentation FRI2.1: OTR-01 - Antitumor activity of β-lapachone in regulating migration and epithelial-mesenchymal transition in murine mammary tumor - Matheus Menezes Vianna
FRI-2 SESSION		Speakers:
-2 SE		■ Development of biotechnology in Brazil – Leda Castilho, UFRJ*
FR!-		■ A CDMO experience in Brazil – Guilherme del Padre, Biotimize*
		The experience of a mRNA vaccine and KIT NAT in Bio-Manguinhos – Hugo Defendi / Bio-Manguinhos*
		*Discussion
		DISCUSSION





		Lunch box
13 and 14		Poster session (exhibition + pitchs)
		Science talks round 13 – Virology and Health Chair: Marisol Simões
	12h30 - 13h50	ORT-21 - Impact of post-COVID-19 symptoms on muscle strength and lactate levels in COVID-19 vaccinated individuals - Marielle Máximo Barbosa
Science talks 13 and		Science talks round 14 – Surveillance Chair: Zilton Vasconcelos
Science		VAC-12 – Pregnant Women Inadvertently Vaccinated Against Dengue: Analysis of Immunization Errors in Brazil (March 2023 to January 2025) - Paulo Henrique Santos Andrade Paulo Andrade
		VAC-14 - Socioeconomic inequalities and implications for national surveillance of events supposedly attributable to vaccination or immuzation: na ecological study, Brazil, 2023 - Cibelle Mendes Cabral
		VAC-24 - Monitoring Adverse Events of Special Interest Related to the Attenuated Dengue Vaccine in Brazil, 2023-2024 - Roberta Mendes Abreu Silva
		FRI-3 – Advancements in technology and the evolving landscape of therapeutic monoclonal antibodies
		Chair: Aline de Almeida Oliveira, Fiocruz / Bio-Manguinhos*
<u>N</u>	421.50	Speakers:
SESS	13h50 -	■ Innovation in monoclonal antibodies: what may change the game in the next years — Kelly
FRI-3 SESSION	14h50	Broster, Thermofisher*
		 Emerging Trends and Key Drivers Shaping the Biopharmaceutical Industry - Renaud Jacquemart, Bioplan*
		 Increasing access to monoclonal therapeutic antibodies - Els Torreele, Global Health and Medical Innovation Researcher, Advisor, Advocate*
		FRI-4 – Whats next? Challenges and perspectives for global health
		Chair: Paulo Buss, Fiocruz / CRIS*
	14h50 - 16h30	Discussants:
SESSION		 Facilitating synergies to build R&D ecosystems for PPR – Mario Moreira, Fiocruz* Technological, scientific, economic and political perspectives for global immunization: GVIRF
FRI-4 FINAL SES		overlook – Martin Friede, WHO* Public health and biotech product development agenda on international fóruns – G20, BRICS and
4 E		COP 30 – Daniel Nogueira Leitão, BRICS / MRE*
품		 Equitable access to life saving DTVs – Rachel Soeiro, Médicins Sans Frontières* Pandemic funds and S&T investments – Luana Bermudez, MoH / AISA*
		 Development and production of biopharmaceuticals focusing on public health – Rosane Cuber,
		Fiocruz / Bio-Manguinhos* *Discussion
₽	16h30	
Award cerimony	_	Award cerimony Independent Committee of Poster Evaluation
Ce	17h00	
ial ring	17h00	
Social gathering	18h00	Final social gathering
OD)		

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