Tuesday - May, 2nd



For the Recovery of the High Vaccination Rates Project in Brazil

(Auditorium – Centro Administrativo Vinicius Fonseca)

Open access to all participants

8:30

9:30

Round table 1A – The challenge of Low Vaccination Coverage Situation in Brazil and Worldwide

- Brazil Ethel Maciel, SVS / Brazilian MoH*
- Americas Jarbas Barbosa, PAHO*
- WHO Samir Sodha, IVB/WHO

Chair: Akira Homma, Fiocruz*

9:30 10:00

Coffee break

10:00 -11:00

Round table 1B – How to overcome the low vaccination Coverage Challenges? Brazilian field experiences

- Creating connections with vulnerable groups Oiapoque / Teatro Maiuhi, Elissandra Barros da Silva, Pet Indígena Unifap*
- Strategies to reconquest the high vaccination coverages in Paraíba State, Renata Nóbrega, Health Surveillance Unit from Paraíba*
- For the Recovery of the High Vaccination Rates Project in Brazil through solidarity networks, Maria de Lourdes de Sousa Maia, PRCV Bio-Manguinhos*

11:00 -11:30

8:30

Round table 1C - Challenges and perspectives for SUS to strengthen vaccination in Brazil

- Primary health care agenda, Nesio Fernandes, Secretary of Primary Health Care, Ministry of Health*
- Health surveillance agenda, Eder Gatti, Director, Department of Immunization and Preventable Diseases, Ministry of Health*



Easy ISI - Mini courses wth high level information for beginners

Subscription needed at the event's website

Easy ISI 02
Capacity Building
Center - Centro

Easy ISI 01

Lima Pavillion

Vinicius Fonseca

Auditorium Rocha

Nanotechnology in Biopharmaceuticals and Vaccine development

(Coordinators: Perla Villani, Aline Oliveira, Ana Paula Ano Bom and Renata Chagas)

- Kaique Alves Brayner Pereira, Fiocruz/Bio-Manguinhos*
- Vinícius de Lima Gonçalves, Fiocruz/Bio-Manguinhos*

Antimicrobial resistance

(Coordinators: José Procópio Senna / Ivna Alana)

- One Health and multi-resistant bacteria, Ana Paula D'Alincourt Assef, Fiocruz/IOC*
- Bacterial vaccines and antimicrobial resistance and antibacterial agents in clinical and pre-clinical development, José Procópio Moreno Senna, Fiocruz/Bio-Manguinhos*

Guided Tour Museu da Vida and Fiocruz Castle

Subscription needed at the event's website (Meeting at the Foyer – Centro Administrativo Vinícius Fonseca)

9:30

Guided visit to Bio-Manguinhos' vaccine and biopharmaceuticals production site / Museu da Vida and Fiocruz Castle

Main Scientific and Technological Agenda Tuesday – May, 2nd

(Auditorium / Foyer – Centro Administrativo Vinícius Fonseca)

Open access to all participants

11:30 13:00 Science talks 1 – Poster session (exhibition + pitch) / Lunch box

11:40 - 12:10 - Poster pitch - VACCINATION COVERAGE IN BRAZIL

- 1.1 VAC-06 Pertussis antibodies and vaccination coverage among healthcare professionals in Brazil is inadequate, Rita Soares Barbosa Cardona. USP
- 1.2 ORT-18- Human papillomavirus vaccination coverage in Brazilian North Region, 2013-2022, Mateus de Paula Von Glehn, EpiSUS
- 1.3 VAC-18 Analysis of the possible factors associated with a low vaccination coverage among health Science undergraduates, Camila Costa dos Santos, UFF

12:20 - 12:50 - Poster pitch - IMMUNE RESPONSE AND COVID-19

- 1.4 VAC-05 Comparative Evaluation of Antibodies Response against Spike RBD Epitopes of SARS-CoV-2 in Immunized, Maria Eduarda Santos Monteiro, Fiocruz/CDTS
- 1.5 VAC-09- Observational study of immunogenicity, effectiveness and reactogenicity in 6 months to 17 years age group of vaccines against COVID-19, Camila Amormino Corsini, Fiocruz/Minas IRR
- 1.6 IVD-06- New approaches in the detection of neutralizing antibodies using SARS-CoV-2 as a model, Caio Bidueira Denani, Fiocruz/Bio-Manguinhos

13:00 14:00

Opening session

Coral da Fiocruz

- Carlos Augusto Grabois Gadelha, Brazilian MoH*
- Mario Santos Moreira, Fiocruz*
- Maurício Zuma, Fiocruz/Bio-Manguinhos*

Chair: Akira Homma, Bio-Manguinhos*

14:00 14:30

Poster Poster Oral Presentation 1 (VAC)

• VAC-01 - Humoral and cellular responses to SARS-CoV-2 variants after AstraZeneca/COVISHIELD vaccination in the primary protocol and follow-up, Artur Silva Vidal Capão, Fiocruz/IOC

Poster Oral Presentation 2 (VAC)

• VAC-02 - Immunogenicity and protection evaluation of a live attenuated chimeric vaccine for zika virus in mice model, José Henrique Rezende Linhares, Fiocruz/Bio-Manguinhos

14:30

Science talks 2 - Poster session (exhibition + pitch) / Coffee break

15:20

14:40 - 15:10 - Poster pitch - VACCINOLOGY

- 2.1 VAC-03 An alphavirus-derived replicon polyvalent RNA vaccine induces neutralizing antibodies in mice against omicron SARS-CoV-2 variant of concern, Vinicius Pinto Costa Rocha, SENAI CIMATEC
- 2.2 VAC-08 Integrating Next-Generation Phage Display and bioinformatics approaches for the screening of B-cell epitopes of different antigens using polyclonal sera, Alexsander de Moraes, USP Faculdade de Medicina de Ribeirão Preto
- 2.3 VAC-07 Intranasal Vaccinal strategy targeting mucosal surface for methicillin-resistant Staphylococcus aureus (MRSA) decolonization, Juliana Georg da Silva, Fiocruz/Bio-Manguinhos

15:20 16:20

Panel I - Vaccines

New technologies for accelerating vaccine development and new delivery methods

- Adjuvants Charles Lutsch, Sanofi*
- Vaccine development in 100 days Ann-Muriel Steff, CEPI*

Chair: Sotiris Missailidis, Bio-Manguinhos*

16h20

Satellite Symposium 1 - Sanofi

17h00

Vaccine hesitancy and the risk of polio re-emergence

- Causes of vaccine hesitancy, data from the study on low vaccine coverage and adverse effects, José
 Cassio*
- Risk of Polio re-emergence in Brazil, Luiza Helena*

Wednesday – May, 3rd

8:00 - 8h20

Morning warm up (Foyer - NAPA)



Innovation Hub (Auditorium - Centro Administrativo Vinicius Fonseca) Open access to all participants 8:30 -Round table IH1- Innovation strategy to meet public health needs in Brazil 9:20 Carlos Augusto Grabois Gadelha, SCTIE/MoH Igor Manhães Nazareth, Embrapii Chair: Artur Couto, Fiocruz/Bio-Manguinhos 9:20 Round table IH2– Innovation strategy at Fiocruz to meet public health needs in Brazil 10:10 Presenting: Marco Krieger* Debators: Antonio Ferreira*, Carlos Morel*, Pedro Barbosa*, Camille Giaretta Sachetti* Chair: Sotiris Missailidis, Fiocruz/Bio-Manguinhos* 10:10 -Coffee break 10:40 10:40 -Round table IH3– Biopharmaceutical technological development models to accelerate product 11:30 supply in the market adopted by Bio-Manguinhos • Articulation for the development of partnerships in biosimilars, Anna Erika* Tech transfer, Antonio Barbosa* • Service-linked product development, Carla Lemos Gottgtroy* WHO vaccine development hub, Patricia Neves* Chair: Hugo Defendi, Fiocruz/Bio-Manguinhos *



Easy ISI - Mini courses wth high level information for beginners Subscription needed at the event's website 8:30 Easy ISI 03 Bioinformatics applied to immunobiologicals Virtual only (Coordinators: Mayla Abrahim Costa / Alexandro Guterres da Silva / Monique Menegaci / Renato Astray) 11:00 Mayla Abrahim Costa, Fiocruz/Bio-Manguinhos* Alexandro Guterres da Silva, Fiocruz/ Bio-Manguinhos * Easy ISI 04 Industry 4.0 and its tools Capacity Building (Coordinators: Felipe Rodrigues / Fernando Serva / Luiz Lima) Center - Centro - Introduction of the concepts, elements and tools proposed by Industry 4.0 Administrativo Vinicius for application in the biopharmaceutical industry, Fabricio Costa, Deloitte* **Fonseca** - Successful cases in the biopharmaceutical industry (related to the era 4.0), Douglas Mariotoni, Nordika*

Guided Tour Fiocruz/Bio-Manguinhos

Subscription needed at the event's website
(Meeting at the Foyer – Centro Administrativo Vinícius Fonseca)

-- Guided visit to Bio-Manguinhos' vaccine and biopharmaceuticals production site / Museu da Vida and Fiocruz Castle

Main Scientific and Technological Agenda Wednesday – May, 3rd

(Auditorium / Foyer – Centro Administrativo Vinícius Fonseca)

Open access to all participants

11:30 13:00 Science talks 3 – Poster session (exhibition + pitch) / Lunch box

11:40 - 12:10 - Poster pitch - FROM INFECTIOUS DISEASES TO CANCER - NEW THERAPEUTIC APPROACHES

- 3.1 ORT-02 Improvement CAR-T cell therapy with ultra-fast protocol and IL-15 membrane bound addition, Luiza de Macedo Abdo, INCa
- 3.2 ORT-03 Evaluation of a betullinic acid nanosystem for cancer therapy, Natália Pereira da Rocha, Fiocruz
- 3.3 ORT-08 Synthesis of polymeric nanoparticles of a high potency second generation isoniazid derivative aiming tuberculosis treatment via direct delivery to the lung, Frederico Silva Castelo Branco, Fiocruz/Farmanguinhos

12:20 - 12:50 - Poster pitch - BIOPHARMACEUTICALS AND CANCER

- 3.4 ORT-07 Anti-her2 CAR-T cells evaluation in an ovarian tumor preclinical model, Emmanuel Arthur Albuquerque Aragao, INCa
- 3.5 BIO-04 Structural modeling and design of scFv fragments from the antineoplastic antibody Brontictuzumab for enhanced binding to Notch1 NRR region, Aline de Oliveira Albuquerque, Fiocruz Ceará
- 3.6 BIO-08 Regulation of the epigenetic machinery in pancreatic cancer, Ricardo Alberto Chiong Zevallos, USP

13:00 14:00

Panel II- Biopharmaceuticals & Biotechnology Biopharmaceuticals encoded by RNA

- CART Cells to threat cardiac injuries using mRNA, Joel Rurik, University of Pensylvannia*
- Next generation lipid nanoparticles technology for extrahepatic delivery of RNA molecules, Jayesh Kulkarn, NanoVation*
- Revolutionizing Antibody Discovery with Single-Cell Analysis, James Crowe, Vanderbilt Vaccine Center Chair: Patricia Neves, Bio-Manguinhos*

14:00 14:30

Poster Oral Presentation 3 (BIO)

• BIO-01 - Immune Checkpoint Blockade via PD-L1 Potentiates More CD28-Based than 4-1BB-Based Anti-Carbonic Anhydrase IX Chimeric Antigen Receptor T Cells, Najla Santos Pacheco de Campos, Universidade Federal do ABC

Poster Oral Presentation 4 (MAN)

• MAN-01 - Project For the Recovery of High Vaccination Coverage: innovation in structuring actions to promote vaccination at the local level, Isabel Cristina Alencar De Azevedo, Fiocruz/Bio-Manguinhos

14:30 15:20

Science talks 4 - Poster session (exhibition + pitch) / coffee break

14:40 – 15:10 – Poster pitch - NEW THERAPY APPROACHES

- 4.1 BIO-03 Development and Characterization of Anti-VLA4 Monoclonal Antibody as a Potential Biopharmaceutical for the Treatment of Multiple Sclerosis, Vitória Fernandes de Castro, Fiocruz/Bio-Manguinhos
- 4.2 VAC-10 Safety and immunogenicity of the anti-cocaine vaccine UFMG-VAC-V4N2 in a non-human primate model, Raissa Lima Gonçalves Pereira, UFMG
- 4.3 BIO-05 CLEC5A expression can be triggered by spike glycoprotein and may be a potential target for COVID-19 therapy, Thiago Lazari Machado, Fiocruz/Bio-Manguinhos

15:20 17:00

Panel III - Management of Biotech Development and Production in the 4th Industrial Revolution

- First steps on the journey to the future of the productive sector, Igor Calvet, ABDI*
- 4th Industrial Revolution in Biotech industry, Marcio Freitas, Aché
- Applications of 4.0 solutions in the pharmaceutical industry, Fabricio Costa, Deloitte*
- 4.0 platform for the new Bio-Manguinhos plant, Fernando Serva Cavalcanti Leite, Bio-Manguinhos* Chair: Luiz Alberto Lima, Bio-Manguinhos*

8:00 - 8h20

Morning warm up (Foyer – NAPA)



Innovation Hub

(Auditorium / Foyer – Centro Administrativo Vinicius Fonseca)

Open access to all participants

8:30

-11:30

Hands on digital transformation

MIDA



Easy ISI – Mini courses wth high level information for beginners

Subscription needed at the event's website		
8:30 - 11:00	Easy ISI 05 Auditorium Rocha Lima Pavillion	Quality by Design Applied to the Development of Products (Coordinators: Renato Astray / Iaralice / Anna Erika / Caio Veloso) - Lecture: Present the concepts of QbD and expose the scope of QbD in the pharmaceutical industry - Diogo Dibo, Fiocruz/Farmanguinhos* - Case Study: Application of QbD for analytical development of vaccines – Caroline Perez, Butantan*
	Easy ISI 06 Bio-Manguinhos' training room – NAPA 1st floor	New methodologies and platforms for Diagnosis (Coordinators: Antonio Gomes Pinto Ferreira / Elba Lemos / Patricia Alvarez) - Remote diagnostics — PoC and Self-test - Wagner Tenório, Fiocruz/Bio-Manguinhos* - Molecular diagnostics as a tool for diagnosis and epidemiological surveillance - Patricia Alvarez, Fiocruz/Bio-Manguinhos* - Cancer diagnostics - technological challenges — Sheila Coelho, INCa*

	Workshop on Biosimilars Updates
Evolu	ition of the development, regulation and use of biosimilars: strengthening consensus for the Brazilian scenario
	(only for invited guests)
	Salão de Conferência Luiz Fernando Ferreira — COC/Fiocruz
8:30 8:40	WS open and presentation of dynamic of the day
8:40 9:10	Lecture WS 1
	Are Clinical Trials Phase III necessary?
	Valderílio Feijo, Rheumatological Physician*
	Chair / rapporteur: Adriana Danowski, Fiocruz/Bio-Manguinhos*
9:10 9:40	Lecture WS 2
	SB3 Trastuzumab – a biobetter?
	Mark Pregram, Stanford University
	Chair / rapporteur: Rosane Cuber, Fiocruz/Bio-Manguinhos*
9:40 10:00	Coffee break
10:00 11:30	Discussion and consensus
	Chair: Hugo Defendi and Rosane Cuber, Bio-Manguinhos*
	General rapporteurs: Anna Erika Vieira de Araujo* and Carla Lemos Gottgtroy*, Fiocruz/Bio-Manguinhos

Main Scientific and Technological Agenda

Thursday - May, 4th

(Auditorium / Foyer – Centro Administrativo Vinícius Fonseca)

Open access to all participants

11:30 13:00 Science talks 5 - Poster session (exhibition + pitch) / Lunch box

$11:40-12:10-Poster\ pitch-Technological\ development\ and\ innovation\ to\ control\ to\ endemic\ infectious\ diseases$

- 5.1 IVD-02 Kit NAT PLUS HIV/HBV/HCV/Malária Bio-Manguinhos: Innovation and technological upgrade for NAT, Daniele Ramos Rocha, Fiocruz/Bio-Manguinhos
- 5.2 ORT-04 Evaluation of three antigens for the use in immunochromatographic rapid test for serological diagnosis of Human Visceral Leishmaniasis in Brazil, Allana Kelly Oliveira Dutra, Fiocruz/Bio-Manguinhos
- 5.3 IVD-08- Evaluation of Influenza A and SARS-CoV2 detection using RT-PCR by paired saliva and nasopharyngeal secretions samples, Pedro Henrique Cardoso, Fiocruz/Bio-Manguinhos

12:20 - 12:50 - Poster pitch - VIRUSES - FROM RAPID TEST TO MULTIPLEX ASSAY

- 5.4 IVD-03 A flow cytometry-based assay to measure neutralizing antibodies against SARS-CoV-2 virus, Veridiane Maria Pscheidt UFCSPA
- 5.5 ORT-09 Usefulness of rapid molecular assay to detect hepatitis C virus, Vanessa Duarte da Costa, Fiocruz/IOC
- 5.6 IVD-07 Development of a multiplex RT-PCR molecular assay for Measles and Rubella viruses detection, Monica Barcellos Arruda, Fiocruz/Bio-Manguinhos

13:00 14:00

Panel IV - IVD

Cancer diagnosis and core demands

- Diagnostics by sequencing and digital PCR. What can we expect? Ilana Zalcberg, INCa*
- Real-time PCR and digital PCR applied to cancer diagnosis, John Young Lee, OPTOLANE Technologies Inc.* Chair: Patricia Alvarez da Silva Baptista, Bio-Manguinhos*

14:00 14:30

Poster Oral Presentation 5 (IVD)

• IVD-01 - Detection of Plasmodium spp. in asymptomatic blood donors at Brazilian blood centers by the NAT PLUS HIV/HBV/HCV/MALARIA Bio-Manguinhos kit, Beatriz Vasconcello de Souza Barreto, Fiocruz/Bio-Manguinhos

Poster Oral Presentation 6 (ORT)

• ORT-01 - A high content image-based assay for detection and measurement of SARS-CoV-2 neutralizing antibodies, Vinicius Pinto Costa Rocha, SENAI CIMATEC

14:30

Science talks 6 – Poster session (exhibition + pitch) / coffee break

15:20

14:40 - 15:10 - Poster pitch - INFECTIOUS DISEASES

- 6.1 ORT-05 Evaluation of mutations in ABCB1 and ABCB11 genes by qPCR and their impact on the clinical evolution of hepatitis C, Leticia Bomfim Campos, Fiocruz/Instituto Oswaldo Cruz
- 6.2 ORT-06 Thiourea Derivatives with Antimycobacterial and Anti-Inflammatory Activity as an Adjuvant Treatment Strategy for Severe Pulmonary Tuberculosis, Sanderson Dias Calixto, UENF
- 6.3 BIO-02 Effect of lactoferrin as an immunomodulator and gene regulation of ferritin in different tissues of K18-hACE2 mice infected with SARS-CoV-2, Andrea Marques Vieira Da Silva Fiocruz/Bio-Manguinhos

15:20 16:30

Grand Finale Round Table

One Health and preparedness for the next pandemic

- A. Alonso Aguirre, Colorado State University*
- Mariangela Simão, Instituto Todos Pela Saúde*
- Ann-Muriel Steff, CEPI*
- Meiruze Freitas, Anvisa*

Chair: Akira Homma, Bio-Manguinhos*

16:30

Poster Award Ceremony

17:00

■ Poster Award Independent Committee

Event close-up remarks

Akira Homma, Bio-Manguinhos*