

---

November 27th to 29th



# XIII IMMUNO 2024

ANNUAL MEETING OF THE  
iMMUNOLOGY PROGRAM

---

SCHEDULE

**DBR**  
BIOTECH

**MERCK**

**eppendorf**

  
**BROMIS**

 veritas®

**pensabio**  
Ciência e inovação a serviço da vida

 **CAPES**

 **ICB USP**

---

---

# Organizing Committee

*Anderson de Sá Nunes*  
*João Gustavo Amarante Pessini Mendes*

Coordinators of the Graduate Program in Immunology

*Sandra Marcia Muxel*

Researcher and accredited supervisor in the Graduate Program of Immunology

*Carlos Neandro Cordeiro Lima*  
*Clara Andrade Teixeira*  
*Jonathan Miguel Zanatta*  
*Julia de Moura Bernardi*  
*Kamilla Batista da Silva Souza*  
*Laura de Quadros Pereira*  
*Leonardo Mandu Gonçalves*  
*Letícia Andrade Savério*  
*Matheus Fernandes de Oliveira*  
*Rodrigo Jose Rocha Xavier Freitas*

Students of the Graduate Program of Immunology

---

# November 27th afternoon

Pink Room

14:00 h *Opening*

14:30 h *General meeting*

16:00 h *Lecture: Jaqueline Polizeli – DBR Biotech*  
*Boas Práticas para o Unmixing Espectral*

16:45 h *Oral communication: Marcelo Valdemir de Araujo*  
*Ketogenic diet modifies lung microbiota composition and*  
*impacts tissue-specific immunity*

17:00 h *Lecture: Eppendorf*  
*“Clínica de Pipetagem”*

18:00 h *Opening party*  
*Boteco Rei das Batidas*  
*Avenida Valdemar Ferreira, 231 – Butantã, São Paulo – SP*

# November 28th morning

Pink Room

- 08:45 h *Lecture: Profa Dra. Maria Regina D'Imperio Lima  
CD39 prevents lung necrosis by regulating macrophage  
P2RX7-mediated cell death in response to severe tuberculosis*
- 09:30 h *Lecture: Prof Dr. Marcelo Mori  
Adiposopathies Accelerate Immune System Senescence and  
Dysfunction*
- 10:15 h *Coffee break*
- 10:30 h *Workshops 1-4*
- 12:15 h *Lunch*



---

# November 28th afternoon

Pink Room

14:00 h *Lecture: Merck*

14:45 h *Lecture: Prof Dr.Ricardo Gazzinelli  
The Valley of Death and Vaccine Innovation in Brazil*

15:30 h *Coffee break*

16:00 h *Workshops 5-8*

---

# November 29th morning

Pink Room

08:30 h *Lecture: Pensabio*  
*Revolucionando a Biologia Através da Multiômica Espacial,  
Single Cell e Reagentes da Pensabio*

09:00 h *Lecture: Dr. Rodrigo Nálío*  
*Uncovering a novel FOLR2+ macrophage subset in cancer using  
single-cell RNA sequencing*

10:15 h *Coffee break*

10:30 h *Lecture: Profa Dra. Maria Notomi Sato*  
*Maternal fetal interaction*

12:00 h *Lunch*



# November 29th afternoon

Pink Room

14:00 h *Workshops 9–11*

15:15 h *Round table: Career challenges and prospects  
beyond academia*

17:00 h *Closing and awards*

---

# Workshop 1

Pink Room

10:30 h *Rodrigo Jose Rocha Xavier Freitas*

The Effect of purinergic signaling on T cell-mediated neuropathology in an experimental model of cerebral malaria

10:45 h *Kathia Terumi Kato*

The splanchnic nerves subdue neutrophil activity in a rat model of septic peritonitis

11:00 h *Julia Domene Galano*

Vaccinal strategy for Herpes simplex virus type 1 and 2: trivalent VLP vaccine using HSV-1-derived amplicon vectors

11:15 h *Guilherme William da Silva*

Effect of different experimental oral vaccine platforms and contribution of visceral adipose tissues for oral vaccine-induced responses

11:30 h *Gustavo Rocha Dias*

Evaluation of the adjuvant potential of OVA/PDDA and OVA/DODAB nanoparticles in the generation of adaptive cellular immunity

11:45 h *Lucas Henrique Rodrigues da Silva*

Cellular chimerism: production of NK-DC hybrid cells as a new antineoplastic therapeutic strategy

12:00 h *Gretta Huamanrayme Bustamante*

Evaluation of immunomodulatory activities of amblyomma *Sculptum saliva* in immune cells



# Workshop 2

Blue Room

10:30 h *Gabriele Manamy Baba Rodrigues*

Effect of probiotics in the protection of intestinal barrier following *Yersinia pseudotuberculosis* infection

10:45 h *Amanda Valéria Cardoso Prestes*

Mechanisms Involved In Pulmonary Neutrophilia Induced By Ketogenic Diet

11:00 h *Julia de Moura Bernardi*

Effect of *Aedes aegypti* salivary components on experimental sepsis: neutrophil modulation

11:15 h *Bárbara Pastori Gustineli*

Understanding the effects of sevoflurane and propofol and their implications on monocyte-derived dendritic cells phenotype and function

11:30 h *Clara Andrade Teixeira*

The Role of MicroRNA-294 and NLRP12 in Modulating Macrophage Response to *Leishmania amazonensis*

11:45 h *Bárbara Heloisa de Lima*

ROLE OF RIPK3 IN CD8+ T CELL DIFFERENTIATION

# Workshop 3

Room 101

10:30 h *Maria Paula Oliveira Lima*

Generation of CAR-NK Memory-Like NKG2A KO Cells Using CRISPR-Cas9 for the Treatment of Multiple Myeloma

10:45 h *Rafael Queiroz de Souza*

The role of Gasdermin D in the control of *Toxoplasma gondii* infection in Macrophages

11:00 h *Larissa Fonseca Marques*

The effects of combined inhibition of glutaminolysis and the STAT3 pathway on the tumor microenvironment and the PD-1/PD-L1 axis

11:15 h *Nathalia Caroline Teixeira Zana*

Evaluation of the inflammasome in allergic asthma in mice genetically selected for maximum and minimum acute inflammatory response

11:30 h *Daniel Pereira Sousa*

TLR10 in the maternal-fetal interface: expression profile and functional analysis in Zika virus infection

11:45 h *Alan Frazão da Silva*

Profile of Cutaneous Innate Lymphoid Cells After Exposure to the Bite of the Mosquito *Aedes aegypti* in Naïve and Sensitized Host

# Workshop 4

Room 5

10:30 h *Wilson Santos Molari*

Expression And Biochemical Targets Of Amblyostatin-1, The First Salivary Cystatin From *Amblyomma sculptum*

10:45 h *Paulo Estevão Ferreira Macedo*

HIF-1alpha represses the gluconeogenesis rate-limiting enzyme in inflammatory macrophages

11:00 h *Matheus Fernandes de Oliveira*

Exploring the role of the mechanosensitive ion channel Piezo1 in macrophages in an experimental model of psoriasis

11:15 h *Luana Correia Croda Catharino*

Evaluation of the effect of the co-culture with dendritic cells in the phenotype and function of iPSC-derived CAR-T cells

11:30 h *Michel Mouawad de Queiroz*

Effect of metabolic inhibitors on CD8+ T cell differentiation in vitro

11:45 h *Bernardo de Castro Oliveira*

Mechanisms involved in protection against Metabolic Syndrome after infection by *Yersinia pseudotuberculosis*

# Workshop 5

Pink Room

16:00 h *Abolaji Samson Olagunju*

Recombinant *Listeria-Monocytogenes* Vaccine Induces Anti-tumor Immune Response in Inflammatory Cell Death Machinery-Deficient Mice

16:15 h *Raquel de Souza Vieira*

The role of the STING pathway in the antitumor response during methionine restriction

16:30 h *João Vinícius Honório da Silva*

Consequences of the absence of the TRPM5 ion channel on clinical and immunological parameters, in a murine model of DSS-induced Inflammatory Bowel Disease

16:45 h *Luísa Menezes Silva*

Effects of dietary changes on cellular and metabolic dynamics of B lymphocytes

17:00 h *Felippe Egon Catrignano Camargo*

Role Of Cd18 In The Structure Of Virus-Containing Compartments Loaded

17:15 h *Vinícius Martins Borges*

Bacillus Calmette-Guérin immunotherapy induces an efficient antitumor response to control murine melanoma depending on MyD88 signaling

17:30 h *Ian Antunes Ferreira Bahia*

Systemic Integrative Analysis of the Neuroendocrine-Immune Network in Major Depressive Disorder

# Workshop 6

Blue Room

16:00 h *Laura de Quadros Pereira*

Impact of the interaction between macrophages and intestinal epithelial cells on the development of intestinal inflammation

16:15 h *Joseana de Oliveira*

BLOCKING HIF2A IMPROVES THE HOST'S RESISTANCE TO MYCOBACTERIUM TUBERCULOSIS INFECTION

16:30 h *Lincon Felipe Lima Silva*

Downregulation of mitoKATP induces LPS tolerance in macrophages

16:45 h *Jaqueline Vaz de Oliveira*

Nanovesicles Derived From Dendritic Cells As Instruments For Modulating The Immune Response Against Glioblastoma

17:00 h *Jonathan Miguel Zanatta*

Screening HIF-1 $\alpha$  and HIF-1A antisense long non-coding RNA in macrophages during *Leishmania infantum* infection and TLR stimulation

17:15 h *Luis Felipe Serra Moreira*

Evaluation of the adjuvant effect of nicotinamide in a chemotherapy treatment for human intestinal cancer

17:30 h *Paula do Amaral Costa Ribeiro*

Generation of dendritic cells expressing CAR from induced pluripotent cells: an alternative treatment for cancer

# Workshop 7

Room 101

16:00 h *Emanuella Sarmiento Alho de Sousa*

Impact Of Hiv Infection On Placental Gene Expression:  
Implications For Fetal Immune Response And Development

16:15 h *Kamilla Batista da Silva Souza*

The role of Myosin IXB (Myo9b) in NLRP3 inflammasome activity  
in THP-1 cells

16:30 h *Carlos Neandro Cordeiro Lima*

Analysis of the function of long noncoding RNAs regulating the  
NFkB transcription factor in macrophages infected with  
*L. infantum*

16:45 h *Barbara Nunes Padovani*

Effect of caloric restriction on cGAS-STING signaling in acute  
kidney injury in zebrafish

17:00 h *Victor Yuji Yariwake*

Diet-induced obesity alters the phenotype of small intestine  
Foxp3+ regulatory T cells

17:15 h *Giovanna Manga Guimarães*

Total Tumor mRNA Transfection into mo-DC for Breast Cancer  
Therapy

17:30 h *Henrique Cesar Calderon Ferraiuolo*

DRP1 Controls Microglial Metabolism And Palmitate-Induced  
Inflammation

# Workshop 8

Room 5

16:00 h *Webster Leonardo Guimarães da Costa*

T-bet limits TNF- $\alpha$  and IL-12 expression in inflammatory macrophages to mitigate sepsis in mice

16:15 h *Carla Sanzochi Fogolin*

Reprogramming Macrophages through CRISPR-Cas9: an alternative for tumor treatment

16:30 h *Igor Salerno Filgueiras*

Macrophage-lymphocyte interaction switch according to spatial distribution in colorectal cancer

16:45 h *Samson Oluwapelumi Kosemani*

The Impact of Ultraviolet Radiation on the Expression of Ras Association Domain Family Members

17:00 h *Jordy Alexander Larco Lasso*

Modified extracellular vesicles for STAT3 inhibition and activation of innate immune responses for cancer treatment

17:15 h *Marcelo Rodrigues Berçot*

DRP1 is necessary for macrophage activation and brown adipose tissue remodeling upon cold exposure.

17:30 h *Lais Cavalieri Paredes*

Histone deacetylases' role in kidney regeneration and macrophage polarization post-AKI induction in zebrafish

# Workshop 9

Pink Room

14:00 h *Letícia Andrade Savério*

Assessment of Transfecting Monocyte-Derived Human Dendritic Cells (moDCs) with Total Tumor-Derived mRNA: A Study Utilizing Glioblastoma Cell Lines and moDCs from Healthy Donors

14:15 h *Fabiane Cristina Colunna*

Chronic inflammation as a progression factor for cancer associated with Human Papillomavirus

14:30 h *Leonardo Mandu Gonçalves*

Local regulatory T cell dysfunction following infection contributes to colorectal cancer development

14:45 h *Marcos Vinícios Pinheiro Cione*

Study Of T Cell-Mediated Immunity In Experimental Covid-19: Involvement Of Purinergic Signaling

15:00 h *Danilo Chaves da Silva Ramos de Souza*

Role of ATPase Inhibitory Factor1 (IF1) in CD4+ T cells in experimental malaria



# Workshop 10

Blue Room

14:00 h *Maribel Limachi Loza*

Modifications in the tumor microenvironment in mice deficient for genes involved in necroptosis (RIPK3 and MLKL) and pyroptosis (Caspase-1/11 and GSDMD), after vaccination with recombinant bacterial vectors

14:15 h *Mariela Estefany Gislene Vera Roa*

Genetic Variants in NLRP1 and NLRP3 Influence Inflammasome Activation in CD8<sup>+</sup> T Cells of Individuals with Chronic HIV Infection

14:30 h *Suemy Melim Yamada*

Effects of hyperthermia detection by T lymphocytes through the TRPV1 channel on acute kidney injury: a tropical study

14:45 h *Milena Carvalho Carneiro*

Activation Of The Complement System In Patients With Pulmonary Hemorrhagic Syndrome Associated With Human Leptospirosis

15:00 h *Ana Carolina Mikejevs Lorga*

Screening of C3 Binding Proteins in *L. interrogans*

# Workshop 11

Room 101

14:00 h *Lara Rodrigues da Silva*

Participation of Complement System in the Etiopathogenesis of Experimental Leptopirosis-Associated Pulmonary Hemorrhagic Syndrome in C3H/HeJ mice

14:15 h *José Arimatéa de Oliveira Nery Neto*

Intestinal Inflammation Increases Susceptibility To Kidney Ischemia Reperfusion Injury

14:30 h *Luciana dos Santos Barros Manhães*

Role of CD39 in immune response during pulmonary malaria induced by *Plasmodium berghei* NK65 infection

14:45 h *Caroline Martins de Matos*

Splenic macrophages communicate with the liver in acute systemic inflammation

15:00 h *Karla Karoline Santos Ramos*

Evaluation of BCG-mediated trained immunity mechanisms in controlling *Brucella abortus* infection