

AUGUST 28TH, 2021

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10h00 - 11h30 - Satellite Symposium

ON-LINE: AUDITÓRIO PRINCIPAL - ZOOM

EARLY CARRER RESEARCHERS

10:00 – Opening section – ECR survey results presentation and discussion (30 min) Maria Fernanda Laranjeira-Silva (USP) Carolina Catta Preta (Unicamp) Daniela Ferreira (UFMG)

10:30 – "BSP – What did we learn?" (1h)
Joaquin Prada (University of Surrey)
Juan Quintana (University of Glasgow)
Tom Pennance (Western University of Health Sciences)

11:30 – Mentorship section (1h30min) Angela Cruz (USP) Dario Zamboni (USP)



Meeting Program (Programa Científico)

AUGUST 29TH, 2021

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10h00 - 11h30 - Satellite Symposium

ON-LINE: AUDITÓRIO PRINCIPAL - ZOOM

10:00 - "Understanding the world outside academia"

10:00 - Manuel Alejandro Saldivia Concepcion (Novartis)

10:45 - Ricardo di Lazzaro Filho (Genera)

11:30 - Round Table: "How to apply for grants in Brazil and abroad"

Maria Fernanda Laranjeira-Silva (USP) Djalma de Souza Lima Junior (NIAID/NIH)

Jeziel Damasceno (University of Glasgow)



AUGUST 30TH, 2021

09h15 - 09h30 - Meeting Opening

ON-LINE: AUDITORIUM PRINCIPAL - ZOOM

Welcome & Announcements

09h30 - 10h30 - Samuel Pessoa Conference

ON-LINE: AUDITORIUM PRINCIPAL - ZOOM

Chair: EDMUNDO CARLOS GRISARD

Understanding the genome, gene expression and virulence factors in *Trypanosoma cruzi* and *Leishmania* before a vaccine can be found

SANTUZA M. RIBEIRO TEIXEIRA (UFMG – Belo Horizonte – MG – Brazil)

10h35 - 11h35 - POSTER SESSION (DISCUSSION) TOPIC 1

ON-LINE: ROOM 01 -GOOGLE MEET

Chair: EDMUNDO GRISARD

HP002 - MACROPHAGE SURFACE PROTEIN DISULFIDE ISOMERASE (PDI) ENHANCES INFECTION BY Leishmania (L.) amazonensis

GUILHERME CARRARA MOREIRA PAIVA

HP004 - Identification and characterization of glycosomal iron transporters in *Leishmania* ROMÁRIO LOPES BOY

HP005 - Characterization of *Leishmania (L.) amazonensis* Oligopeptidase B and its role in macrophage infection

GUSTAVO ROLIM BARBOSA

HP007 - P21 gene ablation of *Trypanosoma cruzi* induces changes in the virulence phenotypes THAISE LARA TEIXEIRA

HP008 - The importance of Sialic acids in *Leishmania amazonensis* and *Leishmania infantum* chagasi infection

TAINÁ CAVALCANTE DE OLIVEIRA

HP010 - *Trypanosoma rangeli* mucins overexpression induces reduction of parasitemia and alters parasite immune response modulation in mice

ADRIANA CORREA DA SILVA

HP011 - Neurodegenerative development during Plasmodium berghei ANKA infection is reduced by Amido-coumarin co-treatment

PAULO GAIO LEITE

HP012 - Study of the cross-regulation between transport of iron and heme mediated by LIT1 and LHR1 in *Leishmania*

AHYUN AVERY HONG

HP013 - Characterization of manganese transport mediated by the iron transporter LIR1 in *Leishmania*

GIOVANA PARREIRA DE AQUINO



HP019 - Alterations and regulation of the mucosal barrier during mucin-Giardia interactions in vitro

KATHERINE TSANTARLIS

HP025 - Participation of enolase enzyme on the infection of promastigotes of *Leishmania* amazonensis

FRANCIANE DOS SANTOS ALVES

PV037 - Evaluation of *Trypanosoma cruzi* infection in the central nervous system by qPCR and bioluminescent imaging

CRISTINA HENRIQUES

HP035 - The asparagine synthetases from *Trypanosoma cruzi*: from coding genes to function.

ANDREA KATHERINE PINTO MARTINEZ

HP037 - Protein ANXA1 during an experimental infection by T. gondii: in vitro and vivo

RAYANE APARECIDA NONATO RABELO

PV039 - Disruption of active trans-sialidase genes impairs the egress from mammalian host cells and generates highly attenuated *Trypanosoma cruzi* parasites

GABRIELA DE ASSIS BURLE CALDAS

10h35 - 11h35 – POSTER SESSION (DISCUSSION)
TOPIC 2

ON-LINE: ROOM 02 -GOOGLE MEET

Chair: LUCILE FLOETER-WINTER

HP001 - MicroRNAs containing AAGUGCU seed sequence are important for *Leishmania* amazonensis infection in human THP-1 macrophages

JULIANE CRISTINA RIBEIRO FERNANDES

HP030 - Modulation of miR-145-5p and miR-146b-5p levels is linked to reduced parasite load in the H9C2 cardiomyoblast cells infected with *Trypanosoma cruzi*

PRISCILA SILVA GRIJÓ FARANI

HP016 - Blood transcriptomics of human visceral leishmaniasis reveals insights into the long non-coding RNA and mRNA co-expression profile induced by *Leishmania infantum* infection.

SANDRA REGINA COSTA MARUYAMA

HP018 - Genetic edition and drug free selection in *Trypanosoma cruzi:* new methodology for modifications by CRISPR/Cas9

BRUNO ALVES SANTAROSSA

TB008 - Biology of RNA genes in trypanosomatids

FLORENCIA DÍAZ-VIRAQUÉ

HP014 - Alternatively activation of murine macrophage does not support infection by Leishmania (V.) braziliensis

MIRIAN VIEIRA TEIXEIRA

HP017 - Gasdermin-D activation in response to *Leishmania amazonensis* induce a transient pore formation without cell death that promote NLRP3 activation and host resistance to infection



KEYLA SANTOS GUEDES DE SÁ

HP020 - TNFR1, a conductor of inflammatory process against L. amazonensis

LEONARDO GOMES VAZ

HP021 - Role of STAT-1, STAT-3 and STAT-6 activation in modulating two *Trypanosoma cruzi* strains coinfection within human polarized macrophages M1 and M2

MELISSA MARTINS DE OLIVEIRA

HP022 - Evaluation of different resins for ion exchange chromatography in the purification of *T.evansi*.

GABRIELLA BASSI DAS NEVES

HP023 - Residence in a LAMP deficient intracellular environment interferes with biological and molecular characteristics of *Trypanosoma cruzi* trypomastigote forms

LUCIANA DE OLIVEIRA ANDRADE

HP024 - Assessing the infectivity of Crithidia-like parasites obtained from human visceral leishmaniasis cases through in vitro infection of macrophages

LUANA APARECIDA ROGERIO

HP026 - Visceral infection model with Leishmania amazonensis

ARIELI BERNARDO PORTUGAL

HP028 - NTL25 inhibit the cellular proliferation on promastigotes of *Leishmania spp* and interact with trypanothione reductase.

NATALIA DEBIZE DA MOTTA

HP031 - Development of a qPCR method for parasite load quantification of *Leishmania spp* ADRIENE YUMI ISHIMOTO

HP032 - *Leishmania* infection inhibits macrophages migration in a three-dimensional environment

YASMIN DA SILVA LUZ

HP036 - *Leishmania*-Induced Dendritic Cell Migration and its Potential Contribution to Parasite Dissemination

AMANDA REBOUÇAS PAIXÃO

HP040 - Expression and functionality of co-inhibitory receptors TIGIT, TIM-3 and LAG-3 in CD4+ T cells from patients with chronic Chagas disease.

FATIMA ENEIDA DEL VALLE FERRAGUT

HP041 - HOST IMMUNE RESPONSE PARTICIPATES IN MALARIA ACUTE KIDNEY INJURY: ROLE OF CD8+ T CELLS

DOUGLAS ESTEVES TEIXEIRA

HP038 - ANXIETY AND DEPRESSIVE-LIKE BEHAVIOR IN LONG-TERM *Toxoplasma gondii* INFECTION OF C57BL/6 MICE ARE ASSOCIATED WITH DISRUPTION OF THE BLOOD BRAIN BARRIER AND INCREASE IN SITU AND SYSTEMIC CYTOKINE EXPRESSION

LEDA MARGARITA CASTAÑO BARRIOS



ON-LINE: ROOM 03 -GOOGLE MEET

10h35 - 11h35 - POSTER SESSION (DISCUSSION) TOPIC 3

Chair: **DANIEL LAHR**

PV001 - A comparative study demonstrates vertical inheritance and maintenance of arsenic resistance metabolism in eukaryotes.

GIULIA MAGRI RIBEIRO

PV003 - Phylogenetic reconstruction and evolution of the Rab GTPase gene family in Amoebozoa

ALFREDO LEONARDO PORFÍRIO DE SOUSA

PV012 - Investigation of kDNA minicircles copy number in *Trypanosoma cruzi* genetic groups by duplex qPCR

LUCILA LANGONI NAVES

PV015 - Characterization of Blastocystis subtypes isolated Minas Gerais State, Brazil MARLENE CABRINE DOS SANTOS

PV018 - Genomic comparison of *Trypanosoma cruzi* to trypanosomes of the clade *T. cruzi* isolated from bats

WERICA BERNARDO PEREIRA

PV030 - MOLECULAR SCREENING OF LEISHMANIINAE CLINICAL ISOLATES OBTAINED FROM HUMAN CASES OF VISCERAL LEISHMANIASIS TO PERFORM COMPARATIVE GENOMICS

ALEX YAMAGUCHI

PV038 - Cytochrome b phylogeny suggests the occurrence of a new species of *Triatoma brasiliensis* complex (Hemiptera, Reduviidae, Triatominae) in State of Rio Grande do Norte, Brazil.

ANDRESSA NORONHA BARBOSA DA SILVA

PV041 - Chasing for chromatin-associated proteins and histone PTMs patterns associated to cell cycle stages in *Trypanosoma cruzi*

ANA PAULA DE JESUS MENEZES

PV032 - Effect of ionizing radiation exposure in the cell cycle, morphology and growth of *Trypanosoma cruzi*

FERNANDA SYCKO ULIANA MARCHIANO

PV033 - Standardization of cutting-edge techniques for the study of *T. cruzi* replication dynamics

MARCELA DE OLIVEIRA VITARELLI

PV024 - DNA replication in the binucleated protozoan parasite Giardia lamblia

RENATA ROSITO TONELLI

PV036 - Investigating the transcription and regulatory machineries associated to tRNA genes (tDNAs) in *Trypanosoma cruzi*

HERBERT GUIMARÃES DE SOUSA SILVA

PV035 - Using CRISPR-dCas9 system as tool for epigenetic studies in *Trypanosoma cruzi* HÉLLIDA MARINA COSTA-SILVA



PV019 - The knockout of a noncoding RNA differentially expressed in *Leishmania braziliensis* emerges from the 3'UTR of the FtsX-like gene, regulates its expression and promotes phenotypical changes

JOSÉ CARLOS QUILLES JUNIOR

PV002 - Identification of components of a divergent mRNA export pathway in trypanosomes ANDREA RODRIGUES AVILA

PV008 - An unconventional RNA-binding protein defining the mRNA fate of the major variant surface antigen.

LARISSA MELO DO NASCIMENTO

PV023 - Identification of aneuploidy events in *Trypanosoma cruzi* by FISH assay ISABELLA RIOS LUCAS

PV034- Histone H2B.V demarcates strategic regions in the *Trypanosoma cruzi* **genome** JULIANA N. ROSÓN

PV042 - Protein partners and post-translational modifications directly associated with two *Leishmania* homologues of eIF2y, the core subunit of the translation initiation factor eIF2.

RAFAELA MIKAELLA ARRUDA MARTINS DA SILVA

PV043 - Analysis of nascent transcripts in Trypanosoma cruzi

PEDRO LEONARDO CARVALHO DE LIMA

PV046 - Analysis of duplicated Ribosomal Proteins RPS16 and RPL13 in *Leishmania* FRANCISCA DOS SANTOS BORGES

PV044 - Freeze tag: generation of PF16 tagged and knocked out mutants in *Leishmania* (*Viannia*) *braziliensis* stably expressing Cas9 nuclease.

CAROLINE RICCE ESPADA

PV045 - A conserved Zinc Finger RNA binding protein is implicated in the control of differentiation of both *Trypanosoma cruzi* and *T. brucei*

FERNANDA LINS BRANDÃO MÜGGE

PV027 - Generation of *Trypanosoma brucei* cell lines expressing *Trypanosoma cruzi's* histidine degradation pathway

GABRIELA TORRES MONTANARO

PV031 - Distribution of active chromatin profile in *Trypanosoma cruzi* epimastigotes and metacyclics forms using FAIRE-seq

ALEX RANIERI JERÔNIMO LIMA

ON-LINE: AUDITORIUM PRINCIPAL - ZOOM

17h00 - 18h00 - Reunião do Conselho/ Board Meeting



08h30 - 09h00 - CO.01 - CONFERENCE

ON-LINE: AUDITORIUM PRINCIPAL - ZOOM

Chair: Samuel Goldenberg

The role of RNA-binding proteins in gene expression regulation in *Trypanosoma cruzi*

LYSANGELA RONALT ALVES (FIOCRUZ-ICC – Curitiba - PR – Brazil)

09h05 - 09h35 - BOOK RELEASE

ON-LINE: AUDITORIUM PRINCIPAL - ZOOM

Triatominae - The Biology of Chagas Disease Vectors

Editors: Guarneri, Alessandra, Lorenzo, Marcelo (Eds.)

09h40 - 10h10 - CO.03 - CONFERENCE

ON-LINE: AUDITORIUM PRINCIPAL - ZOOM

Chair: ANGELA K. CRUZ

Inflammasomes, Leishmania and Autophagy: manipulation of host signalling pathways by Leishmania RNA Virus 1

DARIO SIMÕES ZAMBONI (FMRP-USP – Ribeirão Preto – SP - Brazil)

10h15 - 10h45 - CO.04 - CONFERENCE

ON-LINE: AUDITORIUM PRINCIPAL - ZOOM

Chair: JEFFREY SHAW

Combining transgenesis with paratransgenesis to fight malaria

MARCELO JACOBS-LORENA (JOHNS HOPKINS UNIVERSITY – Baltimore-MD - USA)

10h50 - 11h50 - POSTER SESSION (DISCUSSION)
TOPIC 4

ON-LINE: ROOM 04 -GOOGLE MEET

Chair: ARIEL SILBER

TB003 - Could the inositol pyrophosphates (PP-IPs) be involved in DNA repair pathways in the human pathogen *Trypanosoma cruzi*? Preliminary analyses

BRYAN ETINDI ABUCHERY

HP006 - A map of PFR proteins and dissection of their functions in motility and assembly of the *Trypanosoma brucei* flagellum

HELOISA BERTI GABRIEL

HP009 - The Cysteine Synthase enzyme plays an important role in the biological cycle of *Trypanosoma cruzi*.

ANA MILENA MURILLO GIRALDO

HP015 - Glutamine is an important energy source for Trypanosoma cruzi

FLÁVIA SILVA DAMASCENO

PV009 - How much does it cost to build a trypanosome? Estimating the amount of ATP necessary for maintaining and duplicating a bloodstream-form *Trypanosoma brucei* cell JANAÍNA DE FREITAS NASCIMENTO



PV016 - Chemical genetic approaches to study the role of protein kinases in Leishmania cell cycle regulation.

JULIANA BRAMBILLA TRINDADE CARNIELLI

PV017 - Could the kinase IP6K influence telomere dynamics in *Leishmania braziliensis*? Preliminary analyses

VITOR LUIZ DA SILVA

PV021 - Attempts of generation of *Leishmania infantum* deficient in ascorbate peroxidase using CRISPR/Cas9

ISABELLA FERNANDES MARTINS SANTOS

PV006 - Effect of the calcium binding protein TcCAL1 on the host-cell invasion by *Trypanosoma cruzi*

JESSICA RODRÍGUEZ-DURÁN

PV011 - The Fantastic Four: identification of four cruzipains subtypes in T. cruzi

VIVIANE CORREA SANTOS

PV026 - Identification of a mitochondrion-cell membrane tethering complex in *Toxoplasma gondii*

RODOLPHO ORNITZ OLIVEIRA SOUZA

PV028 - Is the transmembrane glycoprotein p67 a functional lysosomal hydrolase in *Trypanosoma brucei*?

CAROLINA MACEDO KOELLER

PV013 - Role of histone-fold domain containing Oocyst Rupture Proteins during oocyst and sporozoite stages

CHIARA CURRÀ

PV020 - What would be the target proteins of inositol pyrophosphates (PP-IPs) in the human pathogen *Leishmania braziliensis*? A preliminary approach

YETE GAMBARINI FERRI

PV022 - Investigation of the role of the ABC proteins (subfamily F) in paromomycin resistance in *Leishmania amazonensis*

TÁBATA RODRIGUES COSTA

PV025 - In vitro activity of crystal violet structural analogues for drug repositioning against trypanosomatid parasites

CLAUDIO ALEJANDRO PEREIRA

PV004 - Characterization of a Fatty-Acid Binding Protein-like in *Leishmania amazonensis* MARCO ANTONIO MENDES GOMES

PV005 - Could inositol pyrophosphates have been influencing parasitism within kinetoplastids?

ARTHUR DE OLIVEIRA PASSOS

PV007 - Investigating the Kennedy Pathway: phosphatidylcholine and phosphatidylethanolamine synthesis in *Trypanosoma cruzi*.

LEIGH-ANN BOOTH



PV014 - Could the roles played by inositol pyrophosphates (PP-IPs) in trypanosomatids be related to DNA metabolism and virulence?

MARCELO S. DA SILVA

PV040 - Comparison of lipid droplet formation and eicosanoid metabolism in *Brazilian Leishmania spp*.

YASMIN MONARA FERREIRA DE SOUSA ANDRADE

PV047 - Distribution of Trypanosoma cruzi and its vectors in a semi-arid area of northeastern Brazil

NATHAN RAVI MEDEIROS HONORATO

10h50 - 11h50 - POSTER SESSION (DISCUSSION) TOPIC 5 ON-LINE: ROOM 05 -GOOGLE MEET

Chair: CAMILA INDIANI DE OLIVEIRA

TB001 - Miltefosine and Amphotericin B susceptibility in reference strains and clinical isolates of *Leishmania spp.* responsible for tegumentary leishmaniasis

BIANCA ALVES FERREIRA

TB002 - Studies on paromomycin susceptibility and resistance in *Leishmania amazonensis* ELIZABETH MAGIOLO COSER

HP003 - The *Trypanosoma cruzi* Enoyl-CoA hydratase, an enzyme involved in the catabolism of the branched chain amino acids, might be an interesting drug target

SABRINA DEL CARMEN MARSICCOBETRE CASTAÑEDA

TB004 - Detecting compound target engagement in living Leishmania cells

CAROLINA MOURA COSTA CATTA PRETA

PV010 - Biological evaluation of (E)-N'-(thiophen-2-yl methylene)benzohydrazide as an antileishmanial agent

RAÍSSA BENAN ZARA

TB005 - A STRUCTURE-BASED DRUG DISCOVERY PROGRAM TARGETING LEISHMANIA GLYCOGEN SYNTHASE KINASE 3

PRISCILA ZONZINI RAMOS

TB006 - Building tamoxifen/clemastine chimera as a strategy to explore new treatments for leishmaniasis

VICTOR DE SOUSA AGOSTINO

TB007 - A SYBR GREEN-BASED REAL-TIME PCR ASSAY FOR DISCRIMINATION OF LEISHMANIA INFANTUM AND CRITHIDIA-LIKE PARASITES IN SAMPLES OF HUMAN VISCERAL LEISHMANIASIS

NAYORE T. TAKAMIYA

PV029 - Delineation and titulation of synthetic peptide as a target for diagnosis of *Trypanosoma evansi*.

GABRIELLA BASSI DAS NEVES



TB009 - High Content Screening to Evaluate the Antileishmanial Activity of Drugs against Intracellular Amastigotes

LETÍCIA DE ALMEIDA

HP027 - *Trypanosoma cruzi* inositol phosphorylceramide synthase as a potential drug target for Chagas disease

NAILMA SILVA APRIGIO DOS SANTOS

TB010 - COMPARATIVE TRANSCRIPTOMIC ANALYSIS OF BENZNIDAZOLE RESISTANT AND SUSCEPTIBLE *Trypanosoma cruzi* POPULATIONS

DAVI ALVARENGA LIMA

TB011 - Assembly, annotation and gene editing of the genome of the PH8 strain of Leishmania amazonensis with focus on multigene families encoding virulence factors

WANESSA MOREIRA GOES

TB012 - Novel Benznidazole Derivatives and Functionalized Graphene Oxide Matrix and its interaction with *Trypanosoma cruzi* parasites

MARCOS FELIPE PINATTO BOTELHO

HP029 - Treatment with Suboptimal dose of Benznidazole Mitigates Immune Response Molecular Pathways in Mice with Chronic Chagasic Cardiomyopathy

PRISCILA SILVA GRIJÓ FARANI

HP033 - Single Nucleotide Polymorphisms of two *Trypanosoma cruzi* genes encoding truncated type-I nitroreductases (TcNTR-1 and TcOYE): in vitro resistance to Nitroheterocyclic drugs and treatment failure

ARTURO MUÑOZ CALDERÓN

HP034 - Natural Populations of *Trypanosoma cruzi* in Oral Chagas Disease Patients Refractory to Benznidazole Chemotherapy: Molecular characterization through 9 years of Follow-Up

ARTURO MUÑOZ CALDERÓN

TB013 - Use of computational approaches in a rational strategy for discovery of a new chemistry entity and repurposing FDA-approved drugs for leishmaniasis treatment by structure-based virtual screening

JOB DOMINGOS INACIO FILHO

TB014 - Medular response of dogs naturally infected with *Leishmania infantum* presenting different clinical outcomes

BRUNA MARTINS MACEDO LEITE

HP039 - HYPERACTIVITY IN A MURINE MODEL OF LONG-LASTING CHRONIC *Toxoplasma aondii* IS REFRACTARY TO SULFADIAZINE AND PYRIMETHAMINE THERAPY

LEDA MARGARITA CASTAÑO BARRIOS

TB015 - Drug Discovery and Development against leishmaniasis and Chagas' diseaseJAIR LAGE SIQUEIRA NETO



SEPTEMBER 01ST, 2021

08h30 - 09h00 - CO.05 - Conference

ON-LINE: AUDITORIUM PRINCIPAL - ZOOM

Chair: LUCILE FLOETER-WINTER

The arginine sensing pathway in *Leishmania* **DAN ZILBERSTEIN** (TECHNION – ISRAEL)

09h05 - 09h35 - CO.06 - Conference

ON-LINE: AUDITORIUM PRINCIPAL - ZOOM

Chair: SANTUZA M. RIBEIRO TEIXEIRA

Disruption of Kharon and Trypanin genes and upgrade of the conditional knockout based on CRE-lox system in *Trypanosoma cruzi*

WANDERSON DUARTE DAROCHA (UFPR - Curitiba - PR - Brazil)

09h40 - 10h10 - CO.07 - Conference

ON-LINE: AUDITORIUM PRINCIPAL - ZOOM

Chair: LUIS CROCCO AFONSO

Advances on the impact of multiple blood meals on *Leishmania* inside the sand fly **TIAGO DONATELLI SERAFIM** (*NIH-NIAID - USA*)

10h15 - 11h15 - CC - Closure Conference

ON-LINE: AUDITORIUM PRINCIPAL - ZOOM

Chair: LUIS CROCCO AFONSO

From São Paulo to Bahia: a journey into the world of leishmaniasis, a neglected tropical disease

CAMILA INDIANI DE OLIVEIRA (CPQGM-FIOCRUZ – Salvador – BA - Brazil)

11h20 - 11h50
CLOSING SESSION
Zigman Brener and Walter Colli Awards and Closing Remarks

ON-LINE: AUDITORIUM PRINCIPAL - ZOOM

17h00 - 18h00 GENERAL ASSEMBLY ON-LINE: AUDITORIUM PRINCIPAL - ZOOM