



## NOVEMBER 07<sup>th</sup>, 2016

**08h30 - 11h30 Pre-Meeting Course**

**Room B Caxambu**

**14h00 - 20h00 - Registration**

**16h30 - 17h00 - Meeting Opening**

**Room A Glória**

Welcome & Announcements

**17h00 - 18h00 - Samuel Pessoa Conference**

**Room A Glória**

Chair: Renata Rosito Tonelli

Binding to the extracellular matrix induces biochemical changes in *Trypanosoma cruzi* trypomastigotes

**Maria Julia Manso Alves** (IQ-USP, SP, BRA)

**20h00 - 20h30 - Reunião do Conselho/ Board Meeting**

**Room Baependi**

**20h30 - 22h30 – Poster Session**

**Gymnasium**

EVEN Numbers/Números PARES

**09h00 – 10h20 - OP.01 - Oral Presentations**  
BIOLOGY OF HOST-PARASITE INTERACTION**Room A** Glória**Chair:** Ricardo Gonçalves and Amanda Braga de Figueiredo

HP001 - Caspase-11 is essential to mediate host resistance against *leishmania spp* infection  
**Renan Villanova Homem de Carvalho** (USP, SP, BRA)

HP002 - *Leishmania* infection inhibits macrophage motility by altering adhesion complexes and F-actin dynamics  
**Juliana Perrone Bezerra de Menezes** (IGM - FIOCRUZ, BA, BRA)

HP003 - Role of tryptophan metabolism regulation by the host and the intestinal microbiota during oral infection with *Toxoplasma gondii*  
**Liliane Martins Dos Santos** (UFMG, MG, BRA)

HP004 - The role of Il-18 in the activation of CD4+ T cell : the maintenance of cutaneous lesions in model of infection with *L. amazonensis*  
**Caio Cotta Natale** (UFMG, MG, BRA)

HP005 - Inflammasome activation and Il-1beta; production are a consequence of cytotoxic CD8 T cells in *Leishmania braziliensis* infection  
**Fernanda Oliveira Novais** (UPENN, USA)

HP006 - Proteases, trypsin and chymase modify the immunomodulation via vasoactive intestinal peptide in human Chagas disease  
**Cristiane Alves da Silva Menezes** (UFMG, MG, BRA)

HP007 - Bone marrow mesenchymal stem cell as new host cell for *Leishmania infantum*  
**Carolina Salomão Lopes** (UFTM, MG, BRA)

HP008 - The journey of *Leishmania donovani*: from periphery towards the central nervous system  
**Guilherme Dias de Melo** (Institut Pasteur, FRA)

**09h00 - 10h20 - OP.02 - Oral Presentations**  
BIOLOGY OF PROTOZOA AND THEIR VECTORS**Room B** Caxambu**Chair:** Pedro Lagerblad De Oliveira and Nilmar Silvio Moretti

PV001 The mitochondrial calcium uniporter b (MCUb) of *Trypanosoma cruzi* is required for Ca<sup>2+</sup> uptake and is essential for parasite growth and infection  
**Miguel A Chiurillo** (UNICAMP, SP, BRA)

PV002 - Comparative transcriptome profiling of virulent and non-virulent *Trypanosoma cruzi* underlines the role of surface proteins during infection  
**Gabriela Flavia Rodrigues Luiz** (UFMG, MG, BRA)



PV003 - Conditional deletion of HUS1 reveals a dual role for the 9-1-1 clamp in the stability of the *Leishmania* genome.

**Jeziel Dener Damasceno** (USP, SP, BRA)

PV004 - The high molecular weight protein faz10 is required for flagellum/faz stabilization and cleavage furrow positioning in *Trypanosoma brucei*

**Bernardo Pereira Moreira** (USP, SP, BRA)

PV005 - UAP56 is a conserved crucial component of a divergent mRNA export pathway in *Toxoplasma gondii*

**Andrea Rodrigues Avila** (IOC - FIOCRUZ, BRA)

PV006 - Involvement of the cap-binding protein EIF4E1 in translation repression of trypanosomatids

**Danielle Maria Nascimento Moura** (CPQAM/FIOCRUZ, BRA)

PV007 - Actin binding proteins (ABPs) from *Neospora caninum*: role of actin-depolymerizing factor (NcADF) in actin dynamic

**Luciana Baroni** (FCFRP/USP, SP, BRA)

PV008 - Using *Trypanosoma cruzi* to re-write the histidine degradation pathway

**Raíssa De Fátima Pimentel Melo** (USP-ICB, SP, BRA)

**09h00 - 10h20 - OP.03 - Oral Presentations**  
TRANSLATIONAL BIOLOGY

**Room C** Aiuruoca

**Chair:** Maria Carolina Elias and Marcelo Santos da Silva

TB001 - Efficacy of a binuclear cyclopalladated compound therapy for cutaneous leishmaniasis in the BALB/c murine model of infection with *Leishmania amazonensis* and its inhibitory effect on topoisomerase 1B

**Marcia A. S. Graminha** (FCF-UNESP, SP, BRA)

TB002 - Development of innovative oral drug for leishmaniasis treatment: the case of 18-methoxycoronaridine (18-mc)

**Jan Carlo Delorenzi** (Universidade Presbiteriana Mackenzie, SP, BRA)

TB003 - Towards a better therapy against Chagas disease: innovative prodrugs targeting the *Trypanosoma cruzi* proline racemase

**Guilherme Dias De Melo** (Institut Pasteur, FRA)

TB004 - *In vitro* evaluation of promising epitopes selected using Bioinformatics tools in PBMC from *Leishmania* naturally infected dogs

**Rory Cristiane Fortes De Brito** (UFOP, MG, BRA)

TB005- Nanostructured formulations with Lychnopholide cure *Trypanosoma cruzi* strain resistant to benznidazole in mice treated by oral route.

**Marta De Lana** (UFOP, MG, BRA)

TB006- Efficacy of benznidazole nanoparticles against *T. cruzi* Nicaragua in experimental murine infection.

**Marcela Silvina Rial** (INP- Fátala Chaben, ARG)



**NOVEMBER 8<sup>th</sup>, 2016**

TB007- Identifying and exploiting deubiquitinating cysteine peptidases (DUBs) of trypanosomes and *Leishmania*

**Jeremy C Mottram** (*University of York, UK*)

TB008 - Expression of *Trypanosoma* antigens in *Leishmania tarentolae*. Potential for use in rapid serodiagnostic tests (RDTs).

**Bernadette Concepta Rooney** (*University Of Kent, UK*)

**10h30 - 11h10 – Flash Presentantion**

**Room A Glória**

**11h10 - 11h30 - COFFEE BREAK**

**Salão de Jogos**

**11h30 - 12h30 - CO.01 - Conference**

**Room A Glória**

**Chair:** Julio Scharfstein

Adipose Tissue and the Pathogenesis of Chagas Disease

**Herbert B. Tanowitz** (*Albert Einstein College of Medicine, USA*)

**12h30 - 14h00 - LUNCH**

**14h00 - 16h00 - RT.01 - RoundTable**

DISSECTING THE INTERFACE BETWEEN HOST AND THE APICOMPLEXAN PARASITE *TOXOPLASMA GONDII*

**Room A Glória**

**Chair:** Rossiane Claudia Vommaro

RT.01.001 - Early cellular and humoral biomarker networks in infants with distinct retinochoroidal lesion status of congenital toxoplasmosis

**Olindo Assis Martins Filho** (*FIOCRUZ- MG, BRA*)

RT.01.002 - Refining the *Toxoplasma* host cell invasion model : When high-speed myosin motor activity competes with host cell compressive forces and membrane stretching to optimise productive infection

**Isabelle Tardieux** (*Institut of advanced Biosciences- INSERM, FRA*)

RT.01.003 - Imaging of actin dynamics in *Toxoplasma* reveals new functions and mechanisms during the asexual lifecycle

**Markus Meissner** (*University of Glasgow, UK*)

RT.01.004 - Identifying essential apicomplexan proteins through genome-wide CRISPR screens in *Toxoplasma*

**Sebastian Lourido** (*Whitehead Institute, USA*)

**NOVEMBER 8<sup>th</sup>, 2016****14h00 - 16h00 - RT.02 - RoundTable**  
CELL SURVIVAL AND DEATH IN PROTOZOAN PARASITES **Room B** Caxambu**Chair:** Juliany Cola Fernandes RodriguesRT.02.001 Cell death mechanisms in protozoan parasites  
**Michael Duszenko** (*Universität Tübingen, GER*)RT.02.002 Apoptotic mimicry as an evasion strategy for intracellular parasites.  
**Joao Luiz M. Wanderley** (*Fac Medicina UFRJ, BRA*)RT.02.003 Strict control of metacaspase activity in trypanosomes: a matter of life or death  
**Vanina Eder Alvarez** (*UNSAM, ARG*)RT.02.004 – How studies on chemotherapy of leishmaniasis can help us to understand the cell death process in protozoan parasites  
**Juliany Cola Fernandes Rodrigues** (*UFRJ, RJ, BRA*)**14h00 - 16h00 - RT.03 - RoundTable**  
HOST-PARASITE INTERACTION IN THE GASTROINTESTINAL TRACT **Room C** Aiuruoca**Chair:** Renata Rosito TonelliRT.03.001 – *Entamoeba histolytica*-induced inflammasome activation initiates intestinal amebiasis  
**Kris Chadee** (*University of Calgary, CAN*)RT.03.002 - Mechanism of action of a marine compound with broad activity against apicomplexan parasites.  
**Roberta O'Connor** (*Tufts Medical Center, Boston, MA, EUA*)RT.03.003 - Giardia-an intestinal parasite of two faces  
**Staffan Svärd** (*Uppsala University, SWE*)RT.03.004 - Lessons for mucosal immunity from murine models of Giardiasis  
**Stephen Singer** (*Georgetown University, USA*)**16h00 - 16h30 - COFFEE BREAK** **Salão de Jogos****16h30 - 17h00 - MC.01 - Mini Conference** **Room A** Glória**Chair:** Marcia AttiasBiogenesis of basal body connections in *Trypanosoma brucei*  
**Sue Vaughan** (*Oxford Brookes University, UK*)**16h30 - 17h00 - MC.02 - Mini Conference** **Room B** Caxambu**Chair:** Santuza Maria Ribeiro TeixeiraGlobal transcriptome profiling of primary human macrophages (and THP-1) cells infected with *Leishmania*  
**Najib M. El-Sayed** (*University of Maryland, USA*)



**16h30 - 17h00 - MC.03 - Mini Conference**

**Room C** *Aiuruoca*

**Chair:** Walter Colli

ESCRT-III complex members in *Entamoeba histolytica* trophozoites: Genes and Proteins  
**Esther Orozco** (*Centro de Investigación y Estudios Avanzados del PN, MEX*)

**17h00 - 17h30 - MC.04 - Mini Conference**

**Room A** *Glória*

**Chair:** Edmundo Carlos Grisard

Genome-wide identification and characterization of functional promoter sequences for RNA polymerase II in trypanosomes  
**Miguel Navarro** (*IPBLN-CSIC, ESP*)

**17h00 - 17h30 - MC.05 - Mini Conference**

**Room B** *Caxambu*

**Chair:** Claudia M D'avila-Levy

Kinetoplastids as a playground of molecular evolution: lessons we learnt from trypanosomatids' genomes  
**Vyacheslav Yurchenko** (*University Of Ostrava, CZE*)

**17h30 - 18h30 - CO.02 - Conference**

**Room A** *Glória*

**Chair:** Renato Augusto Damatta

Genetic Analysis of Virulence in *Toxoplasma gondii*  
**David Sibley** (*WUSTL, USA*)

**18h30 - 19h30 - Plenary Session of SBPz**

**Room B** *Caxambu*

**20h30 - 22h30 - Poster Session**

**Gymnasium**

ODD Numbers/Números IMPARES



# NOVEMBER 9<sup>th</sup>, 2016

**09h00 - 10h20 - OP.04 - Oral Presentations**  
**BIOLOGY OF HOST-PARASITE INTERACTION**

**Room A** *Glória*

**Chair:** Marcia Attias and Lucio Ayres Caldas

HP009 - Involvement of SOCS2 in regulation of dendritic cells function during *Trypanosoma cruzi* infection

**Fabiana Simão Machado** (UFMG, MG, BRA)

HP010 - Circulating biomarkers of immune activation, oxidative stress and inflammation characterize severe canine visceral *Leishmaniasis*

**Deborah Bittencourt Mothé Fraga** (IGM-FIOCRUZ, BA, BRA)

HP011 - Participation of adapter molecule TRIF in resistance of C57BL/6 mice against *Neospora caninum* infection

**Vanessa dos Santos Miranda** (UFU, MG, BRA)

HP012 - Evaluation of BALB/Xid mice in infection by *Leishmania amazonensis*

**Luan Firmino Cruz** (UFRJ, RJ, BRA)

HP013 - *Toxoplasma gondii* impairs cerebral microcirculation damage and increases leukocyte-endothelial adhesion in mice

**Tally Chalolachvilli Mergener** (FIOCRUZ, RJ, BRA)

HP014 - Infestation by *Rhipicephalus sanguineus* interfere with the course of the disease and immunological parameters in resistant mice infected with *Leishmania major*.

**Gregório Guilherme Almeida** (UFMG, MG, BRA)

HP015 - Characterization of the host cell nuclear compartment during the infection with *Trypanosoma cruzi*

**Camila Gachet de Castro** (FMRP-USP, SP, BRA)

HP016 - Expression of CTLA-4 and TIM-3 in spleen of naturally infected dogs with visceral leishmaniasis

**Tainã Luís de Souza** (FIOCRUZ, RJ, BRA)

**09h00 - 10h20 - OP.05 - Oral Presentations**  
**BIOLOGY OF PROTOZOA AND THEIR VECTORS**

**Room B** *Caxambu*

**Chair:** Álvaro Acosta-Serrano and Tatiana Ferreira Rocha Costa

PV009 - CRISPR/Cas9-mediated endogenous C-terminal tagging of *Trypanosoma cruzi* genes reveals the cellular localization of proteins involved in calcium signaling

**Noelia Lander** (UNICAMP, SP, BRA)

PV010 - Chromosomal copy number variation reveals extensive levels of genomic plasticity among and within *Trypanosoma cruzi* DTUs

**João Luis Reis Cunha** (UFMG, MG, BRA)

PV011 - Editing the *Trypanosoma cruzi* genome using Zinc Finger Nucleases

**Gabriela de Assis Burle Caldas** (UFMG, MG, BRA)

PV012 - *Trypanosoma brucei* acetylome reveals the effect of protein acetylation in the regulation of glycolytic enzymes activity

**Nilmar Silvio Moretti** (UNIFESP, SP, BRA)

PV013- Origin is the new black: Activation of few replication origins could contribute to genetic plasticity in *Trypanosoma cruzi*.

**Christiane Bezerra de Araujo** (Instituto Butantan, SP, BRA)

**NOVEMBER 9<sup>th</sup>, 2016**

PV014 - Deletion of histone deacetylase 2 affects invasion and replication of *Toxoplasma gondii*  
**Caroline de Moraes de Siqueira** (ICC, PR, BRA)

PV015 - Expression and activity of the *Trypanosoma rangeli* arginine kinase (AK) during the parasite life cycle  
**Carime Lessa Mansur Pontes** (UFSC, SC, BRA)

PV016 - Does RNA incorporation into the DNA genome of *Trypanosoma brucei* drive DNA replication and antigenic variation?  
**Emma Marie Briggs** (University Of Glasgow, UK)

**09h00 - 10h20 - OP.06 - Oral Presentations**  
TRANSLATIONAL BIOLOGY

**Room C** Aiuruoca

**Chair:** Angela Kaysel Cruz and Erica dos Santos Martins Duarte

TB009 - GoldLEISH: Antileishmanial activity of gold(I) phosphine complexes against Sb-sensitive and resistant *Leishmania* is due to early ROS production and TR inhibition  
**Luiza Guimarães Tunes** (CPQRR/FIOCRUZ, MG, BRA)

TB010 - Giant synthetic vesicles (GUVS): a model to evaluate the trypanocidal effects of benzofuroxan active derivatives  
**Regina Maria Barretto Cicarelli** (UNESP, SP, BRA)

TB011 - *In vitro* phenotypic screening and electron microscopy approaches of novel aromatic amidines on *Trypanosoma cruzi*  
**Camila Cardoso Santos** (IOC, RJ, BRA)

TB012 - Efficacy of 14e therapy, a furoxan derivative, in visceral leishmaniasis using hamster model of infection with *Leishmania infantum* and the potential of multiple targets involvement  
**Letícia De Almeida** (UNESP, SP, BRA)

TB013 - *In silico* investigation of HIV peptidase inhibitors on *Trypanosoma cruzi*  
**Keyla Cristiny Da Silva Gonçalves** (FIOCRUZ, RJ, BRA)

TB014 - TcPRAC: A target for development of molecular, serological and imaging tools for diagnosis of Chagas Disease  
**Nicolas Coatnoan** (Institut Pasteur, FRA)

TB015 - Sex differences on the benznidazole pharmacokinetics in healthy volunteers  
**Leonardo Santos Ribeiro Pinto** (UFOP, MG, BRA)

TB016 - Molecular markers for miltefosine resistance identified in *Leishmania chagasi* isolates from visceral leishmaniasis patients with different Miltefosine treatment outcome  
**Juliana Brambilla Trindade Carnielli** (UFES, ES, BRA)

**11h00 - 11h30 - COFFEE BREAK**

**Salão de Jogos**



**NOVEMBER 9<sup>th</sup>, 2016****11h30 - 12h30 - CO.03 - Conference****Room A Glória****Chair:** Lucile Maria Floeter-Winter

Endogenous RNA viruses as virulence factors in parasitic protozoa  
**Stephen Beverly** (WUSTL, USA)

**12h30 - 14h00 - LUNCH****14h00 - 16h00 - RT.04 – Round Table****NEUTROPHIL DYNAMICS IN *LEISHMANIA* INFECTION:  
WHAT'S NEW?****Room A Glória****Chair:** Camila Indiani de OliveiraRT.04.001 – New insights on *Leishmania*-induced NETosis.**Elvira Maria Saraiva** (UFRJ, RJ, BRA)RT.04.002 - ROS and neutrophils during experimental infection with *Leishmania***Leda Quercia Vieira** (UFMG, MG, BRA)RT.04.003 - Role of the first responders to *Leishmania braziliensis* infection  
**Camila Indiani de Oliveira** (CPqGM-FIOCRUZ-BA, BRA)RT.04.004 - Sand fly gut microbiota drives persistent recruitment of neutrophils after infected bites through inflammasome-derived IL1- $\beta$  production**Shaden Kamhawi** (NIH, USA)**14h00 - 16h00 - RT.05 – Round Table****PARASITE PROTEOMICS AND DRUG DEVELOPMENT****Room B Caxambu****Chair:** Fabrício Klerlynton Marchini

RT.05.001 - Phenotypic screenings of novel candidates for Chagas Disease therapy

**Maria de Nazaré Correia Soeiro** (FIOCRUZ, BRA)RT.05.002 - Is the phospholipid matrix of the membrane a despised drug target in *Leishmania*? A peptide appraisal.**Luis Ignacio Rivas López** (CIB – CSIC, ESP)RT.05.003 – *Trypanosoma cruzi* global and subcellular proteomics**Carlos Andre Ornelas Ricart** (UNB, BRA)RT.05.004 – Phosphoproteomics shed light on the signaling networks of *Trypanosoma cruzi* metacyclogenesis**Fabrício Klerlynton Marchini** (FIOCRUZ, BRA)

**NOVEMBER 9<sup>th</sup>, 2016****14h00 - 16h00 - RT.06 - RoundTable  
VECTOR-PARASITE INTERACTIONS****Room C Aiuruoca****Chair:** Marcus Fernandes de Oliveira

RT.06.001 - The costs of triatomine-trypanosome interaction: a two sided clash?  
**Alessandra Aparecida Guarneri** (CPQRR/FIOCURZ, MG, BRA)

RT.06.002 - Beyond metacyclogenesis: the secret behind the remarkable success of *Leishmania* transmission by a vector bite.  
**Tiago Donatelli Serafim** (NIAID-NIH, USA)

RT.06.003 - When a vampire gets sick and old: how immunity and aging regulate mitochondrial function in the major arbovirus vector *Aedes aegypti*.  
**Marcus Fernandes de Oliveira** (IBQM, UFRJ, RJ, BRA)

RT.06.004 - The triatomine-microbiota-*Trypanosoma cruzi* tripartite interaction  
**Ana Cristina Bahia Nascimento** (UFRJ, BRA)

**16h00 - 16h30 - COFFEE BREAK****Salão de Jogos****16h30 - 17h00 - MC.06 - Mini Conference****Room A Glória****Chair:** Luis Carlos Crocco Afonso

Lessons learned on the outcome of *Leishmania infantum* infection with urbanization  
**Selma Maria Bezerra Jeronimo** (UFRN, RN, BRA)

**16h30 - 17h00 - MC.07 - Mini Conference****Canceled****Chair:** Angela Kaysel Cruz

Development of attenuated vaccine strains of *Leishmania* by genome editing using CRISPR-CAS9  
**Greg Matlashewski** (MCGILL University, CAN)

**16h30 - 17h00 - MC.08 - Mini Conference****Room B Caxambu****Chair:** Ariel Mariano Silber

Biochemical and biophysical characterization of specific proteins involved in *Trypanosoma brucei* SL trans-splicing  
**Marco Túlio Alves da Silva** (IFSC-USP, SP, BRA)

**17h00 - 17h30 - MC.9 - Mini Conference****Room A Glória****Chair:** Luis Carlos Crocco Afonso

Skin-Resident CD4+ T cells promote rapid control of *Leishmania major* by recruiting activated inflammatory monocytes  
**Phillip Scott** (University of Pennsylvania, USA)



**NOVEMBER 9<sup>th</sup>, 2016**

**17h00 - 17h30 - MC.10 - Mini Conference**

**Room B**

*Caxambu*

**Chair:** Ariel Mariano Silber

The Ups and Downs of Calcium Signaling in *Toxoplasma gondii*

**Silvia Noemi Josefina Moreno** (*University of Georgia, USA*).

**17h00 - 17h30 - MC.11 - Mini Conference**

**Room C**

*Aiuruoca*

**Chair:** Sergio Schenkman

Breaching borders without a visa: Understanding trypanosomes migration within the tsetse

**Alvaro Fernando Acosta-Serrano** (*LSTMED- UK*)

**17h30 - 18h30 - CC – Conference**

**Room A**

*Glória*

**Chair:** Samuel Goldenberg

Complex parasite problems or simple minds?

**Manoel Barral-Netto** (*FIOCRUZ BA, BRA*)

**18h30 - 19h30 Brainstorm**

THE QUESTION OF GENDER IN SCIENCE

**Room B**

*Caxambu*

**19h00 - 20h00 Signature of receipts to SBPz Members**

**21h30 - 22h30**

**CLOSING SESSION**

**Zigman Brener Awards and Closing Remarks**

**Room A**

*Glória*