

MEETING PROGRAMME

SUNDAY NOVEMBER 9

Room B

14:00h:

Precourse 1, at Hotel Glória

14:00-18:00: Directed to teachers of elementary schools. Public health aspects of protozoa will be discussed with the aim of spread the vigilance in the communities.

Speakers:

Alejandro M. Katzin (ICB-USP)

Tania Bijovski (ICB-USP)

Lucile M. Floeter-Winter (ICB-USP)

Room C

14:00h:

Precourse 2, at Hotel Glória

14:00: General Biology of Protozoons (Jeffrey Shaw, ICB-USP, São Paulo)

15:30: Immunology (Clara Lúcia Barbiéri Mestriner, EPM-UNIFESP, São Paulo)

17:00: Molecular Biology (Gerhard Wunderlich, ICB-USP, São Paulo)

18:30-20:00:

Dinner

NOVEMBER 10 MONDAY

Room C

9:00 h:

Continuation Precourse 2

9:00: Population Genetics (Rubiani de Cassia Pagotto, ICB-USP, São Paulo)

10:30: Cell Biology (Carmen Becerra Fernandez, ICB-USP, São Paulo)

12:00-14:00h:

Lunch

14:00-16:30h:

Registration for the meeting

Room A

16:30-16:45h

Welcome and Announcements

17:00-18:00h

Opening Conference: Erney F. Plessmann de Camargo (ICB-USP): Parasitology and our congress: A love story
Chairman: Isaac Roitmann (UnB)

18:00-20:00:

Dinner Poster session 20.30-23:00 (even numbers)

Gymnasium

20:30-23:00:

Poster session even numbers

NOVEMBER 11 TUESDAY

9:00-10:00 – Mini-conferences

Room A

Epidemiology

Chairwoman: **Marta M. G. Teixeira (ICB-USP)**

- 9:00 MC-E-1: Andrew Townsend Peterson (University of Kansas)
Ecological niche modeling: A new tool for understanding geographic dimensions of disease systems
- 9:30 MC-E-2: Joanne Webster (University of Oxford)
Rats, cats, people and parasites: the influence of *Toxoplasma gondii* on host behaviour

Room B

Molecular Biology

Chairwoman: **Bianca Zingales (IQ-USP)**

- 9:00 MC-MB-1: Thomas Blumenthal (University of Colorado HSC, Denver)
Widespread operons in the *C. elegans* genome: why and how
- 9:30 MC-MB-2: Hernando A. del Portillo (ICB-USP)
Molecular basis of virulence and chloroquine resistance in *Plasmodium vivax* malaria

Room C

Chemotherapy

Chairwoman: **Anita H. Straus Takahashi (EPM-UNIFESP)**

- 9:00 MC-CT-1: Hector Freilij (Hospital de Niños Ricardo Gutierrez, Buenos Aires)
Diagnosis and treatment of Chagas' disease and toxoplasmosis in pediatric patients
- 9:30 MC-CT-2: Helio K. Takahashi (EPM-UNIFESP)
Glycolipid antigens of *Leishmania* and *Trypanosoma cruzi* as potential targets to chemotherapy

10:00-10:30 coffee break

10:30-12:00 – Oral presentations

Room A

Vaccines and pathological mechanisms

- 1 VPM-T-1: **Preliminary observations on the morphology of murine (BALB/c) purified epidermal Langerhans cells following interaction with *L. (V.) braziliensis* or *L. (L.) amazonensis*.**
A.C.Q. Leão et al. - (UEPA/UFPA/MC).
- 2 VPM-T-2: **African trypanosome interactions with the human blood-brain barrier.**
D.J. Grab et al. - (Johns Hopkins School of Medicine, Baltimore, MD, USA).
- 3 VPM-T-3: **Effects of bone marrow cell transplantation in experimental chronic chagasic myocarditis.**
R.S. Lima et al. - (Centro de Pesquisas Gonçalo Muniz, FIOCRUZ).
- 4 VPM-T-4: **Biological behavior of *Leishmania (L.) amazonensis* isolated from different clinical forms of American tegumentar leishmaniasis In BALB/c mice.**
C.M.C. Gomes et al. - (FMUSP).
- 5 VPM-T-5: **Role of endogenous interferon-gamma in CpG ODN- or other adjuvants-assisted immunizations using a recombinant malaria vaccine candidate.**
D.S. Rosa et al. (UNIFESP/EPM).
- 6 VPM-T-6: **The long-lasting protection conferred by mucosal immunization against murine leishmaniasis.**
E.F. Pinto et al. - (Instituto de Biofísica Carlos Chagas Filho/UFRJ).
- 7 VPM-T-7: **Participation of T-CD4⁺ and T-CD8⁺ lymphocytes in the immune response of IL-12p40 deficient mice infected with *Leishmania (V.) braziliensis*.**
R.A. Andrade et al. - (Instituto de Ciências Biológicas/NUPEB, Universidade Federal de Ouro Preto).
- 8 VPM-T-8: **Evidence for in situ cellular hyperactivation in human mucosal leishmaniasis**
D.R. Faria et al. - (ICB/UFMG).

Room B

Molecular Biology

- 1 BM-T-1: **Identification of PDZ5, a candidate universal minicircle sequence binding protein of *Trypanosoma cruzi*.**
E.R. Coelho et al. – (Instituto de Biofísica Carlos Chagas Filho – CCS-UFRJ).
- 2 BM-T-2: **The cohesin complex of trypanosomatids.**
D.K.C. Lucena & B.D. Lima – (Universidade de Brasília).
- 3 BM-T-3: **TcRBP1 and TcRBP2: Two putative RNA binding proteins from *Trypanosoma cruzi*.**
G.G. Gomes et al. – (Instituto de Biofísica Carlos Chagas Filho/UFRJ).
- 4 BM-T-4: **Tests of RNA interference (RNAi) and construction of a tetracycline-inducible T7 promoter system in *Trypanosoma cruzi*.**
W.D. Da Rocha et al. – (UFMG).
- 5 BM-T-5: **Real time PCR strategy for *Trypanosoma cruzi* major lineage identification directly on human infected tissues.**
Jorge M. Freitas et al. – (ICB-UFGM).
- 6 BM-T-6: **Quantification and identification of *Leishmania (V.)* parasites by glucose-6-phosphate dehydrogenase gene based real time PCR assays.**
T.M. Castilho et al. – (ICB/USP).
- 7 BM-T-7: **Functional genomics analysis of differentiating epimastigotes during *Trypanosoma cruzi* in vitro metacyclogenesis.**
J. Cardoso et al. – (IBM-Paraná).
- 8 BM-T-8: **DNA microarrays for comparative genomics and analysis of gene expression in *Trypanosoma cruzi*.**
C.S. Baptista et al. – (IQ/USP).

Room C

Chemotherapy and drug targets

- 1 CT-T-1: **Studies on *Leishmania* virulence and antimony resistance.**
V. Vilhena et al. – (UFBA).
- 2 CT-T-2: **Antiproliferative effect in vitro of 22-hydrazone-imidazol-2-yl-5a-colen-3β-ol on *Leishmania (L.) mexicana* promastigotes.**
D. Arrieche et al. – (Instituto de Investigaciones en Biomedicina y Ciencias Aplicadas, Universidad de Oriente).
- 3 CT-T-3: **The dual action of Sb on thiol redox metabolism.**
S. Wyllie & A.H. Fairlamb – (University of Dundee, UK).
- 4 CT-T-4: **Trypanocidal activity of the essential oil of *Croton cajucara*.**
I.A. Rodrigues et al. – (UFRJ).
- 5 CT-T-5: **The effect of topoisomerase II inhibitors on the kinetoplast ultrastructure.**
D.P. Cavalcanti et al. – (Instituto de Biofísica Carlos Chagas Filho/UFRJ).
- 6 CT-T-6: **Pfprt polymorphism and the spread of chloroquine resistance in *Plasmodium falciparum* populations across the Amazon Basin.**
P.P. Vieira et al. – (Instituto de Biofísica Carlos Chagas Filho/UFRJ).
- 7 CT-T-7: **Confirmation of differential gene expression levels of *Trypanosoma cruzi* populations susceptible and resistant to benznidazole.**
S.M.F. Murta et al. – (Centro de Pesquisas René Rachou/FIOCRUZ).
- 8 CT-T-8: **Novel trypanothione analogues in *Trypanosoma cruzi*.**
M.R. Ariyanayagam – (University of Dundee/UK).

12:00-14:30: Lunch

14:30-16:00 – Round tables

Room A

Epidemiology

Chairwoman: Marta M. G. Teixeira (ICB-USP)

- 14:30 RT-E-1: Fernando Monteiro (CDC-Atlanta)
Molecular phylogeography and triatomine systematic: a public health perspective.
- 14:53 RT-E-2: Arthur Gruber (FMVZ-USP)
Strain discrimination of *Eimeria* spp. of domestic fowl: application of RAPD, mitochondrial genomes and microsatellite markers for epizootiological studies.
- 15:16 RT-E-3: Flávia Maia da Silva (ICB-USP)
Phylogenetic relationships among *Trypanosoma rangeli* isolates from man, wild mammals and triatomines from distinct geographic regions.
- 15:39 RT-E-4: Marcelo Urbano Ferreira (ICB-USP)
Use of microsatellites in the epidemiology of malaria.

Room B

Molecular Biology

Chairwoman: **Bianca Zingales (IQ-USP)**

- 14:30 RT-MB-1: David Campbell (UCLA)
Spliced leader RNA processing in kinetoplastid protozoa
- 14:53 RT-MB-2: Isabel Cano (UNICAMP)
Telomers and telomeric proteins of *Leishmania* spp.
- 15:16 RT-MB-3: Lucio Freitas-Junior (Pasteur Institute, Paris)
***Plasmodium* telomeres: a pathogens' perspective**
- 15:39 RT-MB-4: Maria Carolina Elias (EPM-UNIFESP)
Satellite DNA organization in *Trypanosoma cruzi* strains

Room C

Chemotherapy

Chairwoman: **Anita H. Straus Takahashi (EPM-UNIFESP)**

- 14:30 RT-CT-1: Norton Heise (UFRJ)
The toxic effects and possible mechanisms of action of hexadecylphosphocholine (Miltefosine) against *Trypanosoma cruzi*: *in vitro* and *in vivo* studies.
- 14:53 RT-CT-2: Leonor L. P. Leon (Fundação Oswaldo Cruz - R.J.)
Biological and biochemical aspects of the anti-leishmanial chemotherapy.
- 15:16 RT-CT-3: Maria de Lourdes Higuchi (INCOR, FMUSP)
The interpretation of *T. cruzi* antigens present in myocardial inflammation in cases of chronic Chagas' disease.
- 15:39: RT-CT-4: François Dubremetz (CNRS, Montpellier, France)
Phospholipids of *Plasmodium*-infected erythrocytes: Peculiarities and pharmacological implications.

16:30-17:30 Plenary session of the Brazilian Society for Protozoology

18:00-20:30: Dinner

Gymnasium

20:30-23:00 Poster session odd numbers

9:00-10:00 – Mini Conferences

Room A

Cell Biology

Chairman: Renato A. Mortara (EPM-UNIFESP)

- 9:00 MC-CB-1: Michael Miles (London School of Hygiene and Tropical Medicine)
Genetic hybridization in *Trypanosoma cruzi*.
- 9:30 MC-CB-2: Debbie Smith (Imperial College, London)
N-myristoylation as a target for intervention in kinetoplastid parasitic infection.

Room B

Immunology

Chairman: Luiz Vicente Rizzo (ICB-USP)

- 9:00 MC-IM-1: Paola Minóprio (Pasteur Institute, Paris)
The *Trypanosoma cruzi* proline racemase: an enzyme with multiple roles - from development to parasite escape
- 9:30: MC-IM-2: Marcello Barcinski (ICB-USP)
The role of apoptotic mimicry in host-parasite interplay

Room C

Insect Vectors

Chairman: Nelder de Figueiredo Gontijo (UFMG)

- 9:00 MC-VE-1: Antonio Carlos Silveira (UNESP)
Old and new challenges facing the control of Chagas' disease
- 9:30 MC-VE-2: Mark Taylor (Liverpool School of Tropical Medicine)
***Wolbachia* bacterial endosymbionts as the tools and targets of disease controls**

10:00-10:30: Coffee break

10:30-12:00 – Oral presentations

Room A

Cell Biology and Biochemistry

- 1 CBQ-T-1: **Post-transcriptional regulation of cruzipain by the endogenous inhibitor chagasin.**
C.C. Santos et al. – (Instituto de Biofísica Carlos Chagas Filho/UFRJ).
- 2 CBQ-T-2: **Apical regulated exocytosis of *Plasmodium* sporozoites is mediated by cAMP and Ca⁺⁺**
L. Cabrita-Santos et al. – (New York University School of Medicine).
- 3 CBQ-T-3: **Cloning and kinetic characterization of *Plasmodium falciparum* polyprenyl diphosphate synthase - a possible new drug target.**
R. Tonhosolo et al. – (ICB/USP).
- 4 CBQ-T-4: **A novel phospholipase C cleaves acylated GPI in procyclic forms of *Trypanosoma brucei*.**
C. Borsoi et al. – (ICB/USP).
- 5 CBQ-T-5: **Putative amino acid transporter genes of *Trypanosoma cruzi*: a post-genomic analysis.**
A.M. Silber et al. – (IQ/USP).
- 6 CBQ-T-6: **Proteomic analysis of trypomastigote and amastigote forms of *Trypanosoma cruzi* using isotope-coded affinity tagging.**
J. Paba et al. – (Universidade de Brasília).
- 7 CBQ-T-7: **Histone H1 phosphorylation during the cell cycle of *Trypanosoma cruzi*.**
J.P.C. Cunha – (UNIFESP/EPM)
- 8 CBQ-T-2: **Functional classification of *Trypanosoma cruzi* proteins: The application of the BioNotes system.**
M. Alves-Ferreira et al. – (IOC/FIOCRUZ – PUC/RJ).

Room B

Immunology

- 1 IM-T-1: **Determination of spleen T lymphocyte subpopulations and their cytokine production in C57BL/6j mice immunized with irradiated *Toxoplasma gondii* RH strain tachyzoites.**
R.M. Hiramoto et al. – (IMT/USP).
- 2 IM-T-2: **A factor produced by *Plasmodium yoelii* infected erythrocytes modulates dendritic cell function.**
J.M. Hahn et al. – (New York University School of Medicine).
- 3 IM-T-3: **Humoral and cellular immune response against cDNA constructions from *Lutzomyia longipalpis* saliva in the golden hamster.**
R.B.B. Gomes et al. – (UFBA).
- 4 IM-T-4: **Role of interleukin-4 and prostaglandin E2 in *Leishmania (L.) amazonensis* infection of BALB/c mice.**
E.T. Guimarães et al. – (Centro de Pesquisas Gonçalo Muniz/FIOCRUZ).
- 5 IM-T-5: **Role of NK cells in resistance to *Trypanosoma cruzi* infection in mice.**
C. Beuter et al. – (Max-Planck-Institut für Immunbiologie, Freiburg).
- 6 IM-T-6: **Genetic control of the humoral immune response against *Plasmodium falciparum* glutamate-rich protein.**
L.R. Pratt-Riccio et al. – (IOC/ RJ).
- 7 IM-T-7: **Impaired resistance to acute infection with *Trypanosoma cruzi* in mice lacking functional MyD88.**
M.A. Campos et al. – (Centro de Pesquisas René Rachou).
- 8 IM-T-8: **Identification of B13 and cardiac myosin epitopes recognized in molecular mimicry by a crossreactive T cell clone: structural analysis.**
L.K. Iwai – (INCOR-HC/FMUSP-UNIFESP/IPM).

Room C

Vectors

- 1 VE-T-1: **Saliva from *Lutzomyia longipalpis* induces MCP-1 expression and monocytes recruitment *in vitro* and *in vivo*.**
C.R. Teixeira et al. – (Centro de Pesquisas Gonçalo Muniz/FIOCRUZ - UFBA).
- 2 VE-T-2: **Could the anaesthetic activity of the triatomines saliva be originated from the paralyzing activity of the Hemiptera predators?**
C. L. Alves et al. – (ICB/UFMG).
- 3 VE-T-3: **Characterization of ubiquitin-associated-vitellin populations from *Rhodnius prolixus*.**
L.H. Mendonça et al. – (UFRJ).
- 4 VE-T-4: **Feeding-induced changes in protein phosphorylation status in *Aedes aegypti*.**
R. Senna and M.A.C. Silva-Neto – (UFRJ).
- 5 VE-T-5: **The *Boophilus microplus* protein tyrosine phosphatase (BmPTP) controls vitellin degradation.**
A.B. Silveira et al. – (UFRJ).
- 6 VE-T-6: **Sequencing of a midgut-specific genomic chitinase clone from *Lutzomyia longipalpis*.**
J.R. Ortigão-Farias & Y.M. Traub-Cseko – (IOC/FIOCRUZ).
- 7 VE-T-7: **Immune response against *Lutzomyia intermedia* saliva in BALB/c mice.**
C.I. de Oliveira et al. – (Centro de Pesquisas Gonçalo Muniz/FIOCRUZ).
- 8 VE-T-8: **Some approaches to study the blood digestive process and its consequences on *Culex quinquefasciatus* midgut.**
K. Okuda et al. – (ICB/USP).

12:00-14:30: Lunch

14:30-16:00 – Round tables

Room A

Cell Biology

Chairman: Renato A. Mortara (EPM-UNIFESP)

- 14:30: RT-CB-1: Sergio Angel (IIB-INTECH, Chascomús, Argentina)
Organellar targeting and expression analysis of *Toxoplasma gondii* HSP90 during bradyzoite development.
- 14:53: RT-CB-2: Silvia Alfieri (ICB-USP)
Enzyme secretion in *Acanthamoeba* trophozoites.
- 15:16: RT_CB-3: Renato A. Mortara (EPM-UNIFESP)
Traffic of *Trypanosoma cruzi* trypomastigotes within Vero cells colonized with *Coxiella burnetti*: invasion, transference and ... escape?
- 15:39: RT-CB-4: Narcisa Cunha-e-Silva (UFRJ)
Influence of the cytoskeleton on the endocytic pathway of *Trypanosoma cruzi* epimastigotes.

Room B

Immunology

Chairman: **Luiz Vicente Rizzo (ICB-USP)**

- 14:30 RT-IM-1: Daniel Hoft (Saint Louis University HSC, Missouri)
Immune protection against experimental Chagas' disease.
- 14:53 RT-IM-2: Edécio Cunha Neto (INCOR, FMUSP)
Differential production of inflammatory cytokines in CCC: Modulation of gene and protein expression in CCC heart lesions.
- 15:16 RT-IM-3: Adriana Lima Vallochi (ICB-USP)
Is the auto-immune response involved in the development of ocular lesions caused by *Toxoplasma gondii*?
- 15:39 RT-IM-4: Milton Adriano Pelli de Oliveira (UFG)
Induction of a high amount of IL-12p40 by metacyclic *Leishmania* is related to an immature stage of macrophages.

Room C

Insect Vectors

Chairman: **Nelder F. Gontijo (UFMG)**

- 14:30 RT-VE-1: Jesus G. Valenzuela (NIH)
Immune response to vector salivary proteins: From spitomes to functional genomics.
- 14:53 RT-VE-2: Hatisaburo Masuda (UFRJ)
Oogenesis in triatomines.
- 15:16 RT-VE-3: Marcos Horácio Pereira (UFMG)
Triatomines feeding behaviour: electromyogram of cibarial pump and intra-vital microscopy.
- 15:39 RT-VE-4: Nelder F. Gontijo (UFMG)
Inhibition of the complement system by saliva of hematophagous insects: its physiological role and probable importance for parasite transmission.
- 16:00-16:30: Coffee break**
- 16:30-18:00 Brain storm meetings (free rooms)**
- 18:00-20:00: Dinner**

Closure conference Room A

Chairman: **Walter Colli (IQ-USP)**

- 20:30 CC-1: Maria Julia Manso Alves (IQ-USP)
***Trypanosoma cruzi*: peculiar strategies for host cell infection.**
- 21:30-22:30: Awards**

Index

Opening Conference	13
Closing Conference	14
Mini-conferences	15
Round Tables	33
Oral Presentations	49
Poster	
Biochemistry	69
Cell Biology	85
Chemotherapy	108
Immunology	121
Molecular Biology	155
Vectors	198
Author Index	217