

LATAM BOP COURSE

ORGANIZERS: Maria E. Francia, Sheila Nardelli, Erico Dos Santos Martins, Lilach Sheiner and Andrea Avila.

LECTURES SCHEDULE

November 28th, 2022

8:00- 9:00: Dr. Maria E. Francia, Laboratory of Apicomplexan Biology, Institut Pasteur de Montevideo, Uruguay

Welcome address on behalf of the organizing committee

General Course Organization and Logistics

Talk Title: The phylum Apicomplexa, and the particular biology of their cell division

9:00 - 10:00: Dr. Rogerio Amino, Malaria Infection & Immunity Unit, Institut Pasteur Paris, France.

Talk Title: The phenomenal life of plasmodial parasites

10:30-11:30: Dr. Tiago Mineo, Immunology Department, Universidade Federal de Uberlândia, Brasil

Talk Title: The biology and epidemiology of *Neospora caninum*

11:30 - 12:30 ([virtual](#)): Dr. Sumiti Vinayak, University of Illinois at Urbana-Champaign, USA.

Talk Title: Molecular mechanisms controlling proliferation and development of *Cryptosporidium parvum*

November 29th, 2022

8:00- 9:00: Dr. Erika Martins Braga, Department of Parasitology, Federal University of Minas Gerais, Brasil.

Talk Title: Immune mechanisms driving anemia in *Plasmodium vivax* infections: understanding the destruction of non-infected erythrocytes

9:00 - 10:00: Dr. Rogerio Amino, Malaria Infection & Immunity Unit, Institut Pasteur Paris, France

Talk Title: The phenomenal death of plasmodial parasites

10:30-11:30: Dr. Tiago Mineo, Immunology Department, Universidade Federal de Uberlândia, Brasil

Talk Title: *Neospora caninum*: host-pathogen interactions

11:30 - 12:30: Dr. Lilach Sheiner, School of Infection & Immunity, University of Glasgow, UK.

Talk Title: The respiratory chain in apicomplexans, a complex story!

November 30th, 2022

8:00- 9:00: **Dr. Boris Striepen, Professor Department of Pathobiology School of Veterinary Medicine University of Pennsylvania, Philadelphia, PA, U.S.A.**

Talk Title: The biology of parasite sex and life cycle progression

9:00 - 10:00 (**virtual**): **Dr. Mattie Pawlowic, Sir Henry Dale Fellow, Wellcome Centre for Anti-Infectives Research, University of Dundee, Scotland, UK.**

Talk Title: Tools for cryptosporidiosis drug discovery

10:30-11:30: **Dr. Jose Tort, Department of Genetics, School of Medicine, Universidad de la República, Uruguay.**

Talk Title: Genomes, evolution and host parasite relationships in liver flukes

11:30 - 12:30: **Dr. Maryse Lebrun, Laboratory of Pathogen Host Interactions, University of Montpellier II, France**

Talk Title: How *Toxoplasma* builds a doorway to enter its host cell

December 1st, 2022

8:00- 9:00 **Dr. Erica Dos Santos Martins, Departamento de Parasitologia, Universidade Federal de Minas Gerais**

Talk Title: Ultrastructure of *Toxoplasma gondii*

9:00 - 10:00: **Dr. Lilach Sheiner, School of Infection & Immunity, University of Glasgow, UK.**

Talk Title: Staying in touch - organelle membrane contact sites in *Toxoplasma gondii*

10:30-11:30(**virtual**): **Dr. Chi-Min Ho (Mimi), Department of Microbiology & Immunology at Columbia University, USA.**

Talk Title: Structural Parasitology of Malaria Parasites

11:30 - 12:30 **Dr. Maryse Lebrun, Laboratory of Pathogen Host Interactions, University of Montpellier II, France**

Talk Title: Insights into the secretion mechanisms of virulence factors in apicomplexan parasites

December 2nd, 2022

9:00 - 10:00: **Dr. Boris Striepen, Professor Department of Pathobiology School of Veterinary Medicine University of Pennsylvania, Philadelphia, PA, U.S.A.**

Talk Title: "Writing better grant proposals can be learned!"

10:30-11:30 (**virtual**): **Dr. Manuel Llinás, Distinguished Professor of Biochemistry and Molecular Biology and of Chemistry, Penn State, USA**

Talk Title: Harnessing metabolomics to subvert malaria parasites

11:30 - 12:30: Dr. Marcelo Comini, Laboratory of Redox Biology, Institut Pasteur de Montevideo, Uruguay.

Talk Title: Trypanosomatids' redox biochemistry and compounds' mode of action revealed with genetically-encoded biosensors

December 3rd, 2022

9:00 - 10:00: Dr. Sergio Angel, Instituto Tecnológico de Chascomús (INTECH), Argentina

Talk Title: Epigenetic regulation in *Toxoplasma gondii*

10:30-11:30: Dr. Sheila Nardelli, Instituto Carlos Chagas, FIOCRUZ, Brasil

Talk Title: Chromatin and protein acetylation in *Toxoplasma gondii*

11:30 - 12:30 Dr. Andrea Avila, Instituto Carlos Chagas, FIOCRUZ, Brasil

Talk Title: Gene expression control during *Trypanosoma cruzi* life cycle.

December 5th, 2022

8:00- 9:00 (virtual**): Dr. Eva Gluenz, Institute of Cell Biology, University of Bern, Switzerland**

Talk Title: Functional genomics screens in *Leishmania*

9:00 - 10:00: Dr. Leonel Malacrida, Head of the Advanced Bioimaging Unit at Institut Pasteur de Montevideo and Universidad de la República, Uruguay.

Talk Title: Blending spectroscopy with microscopy to open up new dimensions for parasitology research with optical microscopy

10:30-11:30(virtual**): Dr. Sebastian Lourido, Department of Biology, Massachusetts Institute of Technology and Whitehead Institute for Biomedical Research, USA**

Talk Title: Functional genomic approaches to dissect the *Toxoplasma* genome

11:30 - 12:30: Dr. Hugo Bisio, Information Génomique & Structurale, Centre National de la Recherche Scientifique, Aix-Marseille University, France

Talk Title: A matryoshka doll of infections in Acanthamoeba: parasites that are hosts

1.30-2.30 (virtual**): Dr. Ellen Yeh, Associate professor of Pathology, Microbiology and Immunology, Stanford University, USA.**

Talk Title: The algal origins of apicomplexan parasites

December 6th, 2022

8:00- 9:00: Dr. Victor Midlej, Laboratório de Biologia Estrutural, Instituto Oswaldo Cruz/Fiocruz, Brasil.

Talk Title: Ultrastructure of *Giardia lamblia*

9:00 - 10:00: Dr. Erica Dos Santos Martins Duarte, Departamento de Parasitologia, Universidade Federal de Minas Gerais, Brasil

Talk Title: Strategies in the search for new treatments for acute and chronic toxoplasmosis

10:30-11:30 (virtual): Dr. Ross Waller, Professor of Evolutionary Cell Biology, Department of Biochemistry, University of Cambridge, UK

Talk Title: The multiple origins of parasitism in Myzozoa and the pre-adaptations that likely made this possible.

11:30 - 12:30: Dr. Andrea Avila, Instituto Carlos Chagas, FIOCRUZ, Brasil

Talk Title: Uncovering novel components of mRNA export in *Trypanosoma cruzi*

December 7th, 2022

8:00- 9:00: Dr. Natalia De Miguel, Instituto Tecnológico de Chascomús (INTECH), Argentina

Talk Title: *Trichomonas vaginalis* pathogenesis

9:00 - 10:00: Dr. Victor Midlej, Laboratório de Biologia Estrutural, Instituto Oswaldo Cruz/Fiocruz, Brasil.

Talk Title: A cell under a dome: cell Biology of *Giardia lamblia* differentiation.

10:30-11:30: Dr. Carolina Touz, Instituto de Investigación Médica Mercedes y Martín Ferreyra, INIMEC – CONICET, Universidad Nacional de Córdoba, Argentina

Talk Title: Formation of Extracellular Vesicles In *Giardia lamblia*: How to Make Music with Few Instruments

11:30 - 12:30: Dr. Camila Indiani de Oliveira, Fundação Oswaldo Cruz | FIOCRUZ · Centro de Pesquisas Gonçalo Moniz (CPqGM) - Fiocruz Bahia, Brasil

Talk Title: Immune response to Leishmania

December 8th, 2022

8:00- 9:00: Dr. Carolina Touz, Instituto de Investigación Médica Mercedes y Martín Ferreyra, INIMEC – CONICET, Universidad Nacional de Córdoba, Argentina

Talk Title: Protein Trafficking and Organelle Dynamics in *Giardia lamblia* Differentiation

9:00 - 10:00: Dr. Camila Indiani de Oliveira, Fundação Oswaldo Cruz | FIOCRUZ · Centro de Pesquisas Gonçalo Moniz (CPqGM) - Fiocruz Bahia, Brasil

Talk Title: Immunomodulatory properties of sand fly salivary proteins and their impact on the development of Cutaneous Leishmaniasis

10:30-11:30: Dr. Natalia De Miguel, Instituto Tecnológico de Chascomús (INTECH), Argentina

Talk Title: Gene transcription and epigenetics in *T. vaginalis*

11:30 - 12:30: Dr. Gustavo Arrizabalaga, Assistant Dean for Professional Development and Diversity. Professor, Pharmacology and Toxicology. Indiana University School of Medicine
Talk Title: The shape-shifting mitochondrion of *Toxoplasma gondii*

December 9th, 2022

8:00- 9:00: Dr. Pablo Smircich, Laboratorio de Bioinformática del Departamento de Genómica, IIBCE, MEC. Sección Genómica Funcional, Facultad de Ciencias, UdelaR.

Talk Title: Transcriptomic analysis of the adaptation to prolonged starvation of the insect-dwelling *Trypanosoma cruzi* epimastigotes

9:00 - 10:00: (virtual): Dr. Bruno Martorelli, Department of Microbiology and Molecular Genetics, University of Vermont, USA.

Talk Title: The role of metabolism in host-parasite interaction

10:30-11:30: Dr. Gustavo Arrizabalaga, Assistant Dean for Professional Development and Diversity. Professor, Pharmacology and Toxicology. Indiana University School of Medicine

Talk Title: Mentoring up: taking charge and making the most of your mentored experiences

11:30 - 12:30 (virtual): Dr. Antônio Pereira Neves, Departamento de Microbiologia (CPqAM), Fundação Oswaldo Cruz, FIOCRUZ, Brasil

Talk Title: TBD