

# Molecular **Parasitology** Meeting XXXI

September 21–24, 2020 | Anywhere and Everywhere

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## Meeting Organizers

Manoj Duraisingh, Harvard T. H. Chan School of Public Health  
Nina Papavasiliou, German Cancer Research Center  
Boris Striepen, University of Pennsylvania

## Meeting Sponsors

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**GENETICS**

*GENETICS* has been innovating since 1916, publishing high quality original research across the breadth of the field.



*G3: Genes|Genomes|Genetics* is an open access journal that publishes high quality, useful results regardless of perceived impact.

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**Meeting App**

To attend the conference presentations, you will need to sign in to the Conference App using your registration badge ID and last name. The App will be available in different formats: Desktop App (for desktop and laptop computers), or Mobile App (for Apple iOS and Android mobile devices).

You can find your registration badge number in your conference registration confirmation email, which was sent from the address NoReply@Convention-Mail.com.

Access the app at:

<https://genetics-gsa.org/parasitology-2020/conference-app/>

**Oral Presenters**

Please log into your session ten minutes before the start of your session (not your talk) using the special link you received in an email from MPM Zoom. A final video/audio/screen share check will be conducted.

View the oral presenter instructions here: <https://genetics-gsa.org/parasitology-2020/for-presenters/oral-presenter-guidelines/>

**Poster Presenters**

When you enter the Remo session, you will be randomly assigned to a table. The tables are labeled with a poster number and the presenting author's last name on each floor. Double click on your table and you will be moved to that table. Once you are at your table, on the bottom of the screen, click "More" and then Whiteboard to upload a pdf of your poster. There are two poster sessions each day, be sure you are in the correct session to find your table.

View the poster presenter instructions here:

<https://genetics-gsa.org/parasitology-2020/for-presenters/virtual-poster-presentations/>

**Viewing Oral Sessions**

Registrants will access all live sessions through the App. Five minutes before an oral session starts log in using your registration badge number and last name. Tap the "Join Webinar" button on your chosen session. The Join Webinar button will be visible ten minutes before the start of the session.

A recording will be available, in the session listings, within 24 hours after the session ends. The recordings will be available until October 20.

View full instructions for joining oral sessions here: <https://genetics-gsa.org/parasitology-2020/viewing-talks/>

**Attending Live Poster Sessions**

In the App click the "Live Poster Hall" link on the homepage to access the Poster Sessions, which will take place via the Remo platform. Once in Remo you will need to log in with the email you used for your meeting registration and create a password. Once you enter the site, you will be randomly assigned to a table. You can move between posters by double clicking on a table. Be sure to share your video and microphone to fully participate in the posters. In addition to presenting live in Remo, posters will be available via the App for the duration of the conference. Remember to visit the posters in both sessions occurring each day.

View full instructions for live poster sessions here:

<https://genetics-gsa.org/parasitology-2020/viewing-posters/#live>

**Viewing Virtual Posters on the App**

Poster files (with 3-minute audio overviews) will be available to view via the App between September 17 and September 25. Look for the "Virtual Poster" link near the bottom of each poster's entry in the App.

<https://genetics-gsa.org/parasitology-2020/viewing-posters/#virtual>

**Live Poster Session Schedule**

All live poster sessions will be held in the Remo platform. To enter Remo—click on the Live Poster Hall link in the App. There are two buildings for each session so be sure to visit both buildings and all 5 floors. Within Remo, the grid on the left will allow you to move between floors and on the upper left hand corner of the floorplan is a "Go to Poster Session" banner that you click on to move between sessions. Posters in the Remo platform will be removed at the end of each session.

If you are unable to attend the Live Poster Sessions, you can also leave questions for presenters on the app in the "Discussion" field at the bottom of the poster entry.

**Live Poster Presentation Schedule**

<b>Monday, September 21</b>		
<b>12:15 p.m. – 2:00 p.m.</b>	Poster Session A	Poster Session B
Floor 1	106 – 114 & Help Desk	151 – 159
Floor 2	115 – 123	160 – 168
Floor 3	124 – 132	169 – 177
Floor 4	133 – 141	178 – 186
Floor 5	142 – 150	187 – 195

<b>Tuesday, September 22</b>		
<b>12:15 p.m. – 2:00 p.m.</b>	Poster Session C	Poster Session D
Floor 1	196 - 204 & Help Desk	241 – 249
Floor 2	205 - 213	250 – 258
Floor 3	214 - 222	259 – 267
Floor 4	223 - 231	268 – 276
Floor 5	232 – 240	277 – 285

<b>Wednesday, September 23</b>		
<b>12:15 p.m. – 2:00 p.m.</b>	Poster Session E	Poster Session F
Floor 1	286 - 294 & Help Desk	331 – 339
Floor 2	295 - 303	340 – 348
Floor 3	304 - 312	349 – 357
Floor 4	313 - 321	358 – 366
Floor 5	322 – 330	367 – 374

<b>Thursday, September 24</b>		
	Posters will be displayed on the floors as noted above during the following times.	
<b>11:30 a.m. – 1:00 p.m.</b>	Poster Session A 11:30 a.m. – 12:15 p.m.	Poster Session B 12:15 p.m. – 1:00 p.m.
<b>1:15 p.m. – 2:45 p.m.</b>	Poster Session C 1:15 p.m. – 2:00 p.m.	Poster Session D 2:00 p.m. – 2:45 p.m.
<b>3:00 p.m. – 4:30 p.m.</b>	Poster Session E 3:00 p.m. – 3:45 p.m.	Poster Session F 3:45 p.m. – 4:30 p.m.

**Slack Chat Channels**

The MPM Slack workspace is the place to meet and chat with other attendees during the conference. You can join and create chat channels based on your interests. There are channels for getting technical help, discussing new papers and preprints, sharing job ads, and connecting with other attendees around shared interests.

Learn more about MPM Slack at: <https://genetics-gsa.org/parasitology-2020/mpm-slack/>

**VEuPathDB**

VEuPathDB staff will have tables available in the Poster Sessions to answer your questions and to hear your comments and suggestions. We will explain how to use our tools as well as how to submit your data.

**Job Postings**

Employers are welcome to add PDFs of job opportunities on the “Job Posting” table’s whiteboard in the Poster Sessions and in the #jobs channel in the MPM Slack workspace.

**Conference Policies****Code of Conduct**

The Genetics Society of America Conferences foster an international community of geneticists and provide an opportunity to discuss scientific advances and form new collaborations.

GSA values your attendance and wants to make your experience productive and inspiring by fostering an open exchange of ideas in a professional setting. Our Code of Conduct was established to communicate a transparent set of standards and guidelines for acceptable behavior at GSA Conferences and to provide a positive, safe, and welcoming environment for all attendees, vendors, volunteers, and staff.

All conference participants (regardless of their role) are expected to follow the Code of Conduct while attending any portion of the meeting, including but not limited to meeting rooms, the exhibit/poster hall, meeting areas in the official conference venue, and social events provided by the meeting or vendors.

### Unacceptable Behaviors

Unacceptable behaviors include, but are not limited to:

- Intimidating, harassing, abusive, discriminatory, derogatory, or demeaning speech or actions by any participant and at all related events
- Harmful or prejudicial verbal or written comments or visual images related to gender, gender expression, gender identity, marital status, sexual orientation, race, religion, political orientation, socioeconomic, disability or ability status, or other personal characteristics, including those protected by law
- Inappropriate use of nudity and/or sexual images in public spaces (including presentation slides and posters)
- Deliberate intimidation, stalking, or following
- Violating the rules and regulations of the conference hotel
- Sustained disruption of scientific sessions or other events
- Unwelcome and uninvited attention or contact
- Physical assault (including unwelcome touching or groping)
- Real or implied threat of physical harm
- Real or implied threat of professional or financial damage or harm
- Harassing or unwanted photography
- Photographing slides of oral presentations and posters without permission
- Recording of scientific and other sessions without permission

### Taking action or making a report

- Need to file a complaint? For instructions on how to confidentially report a Code of Conduct violation, please visit [genetics-gsa.ethicspoint.com](https://genetics-gsa.ethicspoint.com). In addition, GSA staff is available to assist participants in contacting our Ethics Committee to make a report. Please email Tracey DePellegrin, GSA Executive Director, at [tracey.depellegrin@genetics-gsa.org](mailto:tracey.depellegrin@genetics-gsa.org).

### Consequences of non-compliance

Anyone asked by GSA staff, a Session Chair, Workshop Leader, Moderator, Presenter, or Zoom representative to stop unacceptable behavior is expected to comply immediately. Retaliation toward GSA or toward someone reporting an incident or after experiencing any of the following consequences will not be tolerated and may result in additional sanctions.

The consequences of non-compliance with GSA's Code of Conduct may include:

- Immediate removal from accessing the online meeting and Slack channels without warning
- Restrictions from future GSA meeting attendance
- Termination of GSA membership or positions on GSA Boards or Committees
- Incidents may be reported to the proper authorities

### Accessibility

GSA is committed to assisting attendees with special needs. If you have accessibility questions or requests please email [gsaconferences@genetics-gsa.org](mailto:gsaconferences@genetics-gsa.org).

### Diversity and Inclusion

GSA is committed to promoting equality, diversity, and inclusion to create greater opportunity for any individual to fulfill their scientific potential, irrespective of their background, gender, or circumstances. This diversity leads to innovation by attracting the widest possible talent to the community and fostering a greater diversity of ideas, approaches, and perspectives. The Organizing Committee aims to select speakers and session chairs that represent the breadth and diversity of the discipline and conference participants. GSA especially encourages the Committee to select excellent speakers from [groups traditionally underrepresented in science](#).

### Social Media/Photo/Video Policy

Live tweeting of presentations is allowed unless the speaker explicitly opts out by stating so at the start of their talk. Taking or sharing photos or videos of posters is permitted only with the presenter's consent during the assigned poster session. Taking photos of posters while the presenter is not present is strictly prohibited. By attending a GSA conference, you grant GSA the right to use your photograph, name, and likeness for use in GSA educational, news, or promotional materials.

**Molecular Parasitology Meeting Keynote Lectures**

- 2019: When you come to a fork in the road, take it! New paradigms emerging from Leishmania glycobiology and virology **Stephen Beverley**, Washington University, St Louis
- 2018: The Hidden Life of African Trypanosomes **Stephen L Hajduk**, Department of Biochemistry & Molecular Biology University of Georgia
- 2017: African trypanosomes and the art of being social **Isabel Roditi**, Institute of Cell Biology, University of Bern
- 2016: Malaria sexual development: A challenging journey from the shadows into the spotlight **Robert Sinden** Emeritus Professor, Imperial College, London UK
- 2015: A Physician-scientist's investigation of amebiasis **Bill Petri** University of Virginia, Charlottesville, VA.
- 2014: Molecular Malaria and Global Health: Discoveries, Predictions, Tests of Time **Thomas Wellems** NIAID, NIH
- 2013: Navigating the trypanosome RNA jungle. **Elisabetta Ullu** Yale School of Medicine
- 2012: Pit bull or poodle? How are different breeds and developmental forms of Toxoplasma perfectly suited (or not.) to the challenge de jour. **John Boothroyd**, Stanford School of Medicine
- 2011: Antigenic variation: it's all about persistence. **George Cross** The Rockefeller University,
- 2010: The Major Challenges to Global Health in the Tropics & Beyond— from Insect Vectors of Malaria & of Other Parasitic or Viral Diseases **Fotis Kafatos** Imperial College London, London.
- 2009: Understanding Parasites: A Foundation for their Elimination. **Ken Stuart** Seattle Biomedical Research Institute
- 2008: J, etcetera **Piet Borst** The Netherlands Cancer Institute, Netherlands
- 2007: Rationale for the development of a malaria vaccine **Victor Nussensweig** New York University
- 2006: From genes to genomes: Insights into parasite biology **Dyann Wirth** Harvard University
- 2005: How trypanosomes make fatty acids. **Paul Englund** The Johns Hopkins University, Baltimore, MD
- 2004: Should Today's Molecular Parasitologists Focus More on New Drug Discovery or Basic Research? **C. C. Wang** University of California San Francisco, CA



<b>MONDAY, September 21</b>	
9:45 am - 11:00 am	<b>Welcome/Session 1</b>
11:05 am - 12:05 pm	<b>Concurrent Platform Sessions</b>
	<b>Session 2A, Epitranscriptomics</b>
	<b>Session 2B, Nuclear and Telomere Biology</b>
12:15 pm - 2:00 pm	<b>Concurrent Poster Sessions A &amp; B</b>
2:00 pm - 4:05 pm	<b>Concurrent Platform Sessions</b>
	<b>Session 3A, Sensing and Salvage/Session 4A, Lab and Field Genomics</b>
	<b>Session 3B, Single-cell Analysis/Session 4B, Nutrition and Metabolism</b>
4:10 pm - 6:00 pm	<b>Special Session: Black Lives Matter in Parasitology</b>
<b>TUESDAY, September 22</b>	
9:45 am - 10:00 am	<b>Memorials</b>
10:00 am - 12:05 pm	<b>Concurrent Platform Sessions</b>
	<b>Session 5A, Host-Parasite manipulation/Session 6A, Developmental cell biology</b>
	<b>Session 5B, Functional Cell Division/Session 6B Host determinants</b>
12:15 pm - 2:00 pm	<b>Concurrent Poster Sessions C &amp; D</b>
2:00 pm - 4:05 pm	<b>Concurrent Platform Sessions</b>
	<b>Session 7A, Egress to Invasion/Session 8A, Mitochondrial Biology</b>
	<b>Session 7B, Organellar Biology/Session 8B, Invasion</b>
4:15 pm - 6:00 pm	<b>Keynote Address by Akhil Vaidya</b>
<b>WEDNESDAY, September 23</b>	
9:45 am - 10:00 am	<b>MPM Quiz</b>
10:00 am - 12:05 pm	<b>Concurrent Platform Sessions</b>
	<b>Session 9A, Biology for Vaccines/Session 10A, Biology for Drugs</b>
	<b>Session 9B, Drug Development/Session 10B, Metabolites and Lipids</b>
12:15 pm - 2:00 pm	<b>Concurrent Poster Sessions E &amp; F</b>
2:00 pm - 4:05 pm	<b>Concurrent Platform Sessions</b>
	<b>Session 11A, Metabolism/Session 12A, Tissue Tropism</b>
	<b>Session 11B, Evolution and Genomics/Session 12B, Antigenic Variation</b>
4:05 pm - 4:35 pm	<b>Parasite Trivia</b>
4:03 pm - 5:15 pm	<b>Meet the Professors (in Remo)</b>
5:15 pm - 6:00 pm	<b>Free Social Time (in Remo)</b>
<b>THURSDAY, September 24</b>	
8:45 am - 4:00 pm	<b>Young Investigators in Parasitology</b>
10:00 am - 11:30 am	<b>Concurrent Platform Sessions</b>
	<b>Section 13A, New tools, new vistas</b>
	<b>Section 13B, Functional screens, new horizons</b>
11:30 am - 12:30 pm	<b>VEuPathDB community discussion on database feedback, needs, and priorities</b>
11:30 am - 1:00 pm	<b>Poster Sessions A and B</b> <i>A Poster Authors will present 11:30 a.m. - 12:15 p.m.</i> <i>B Poster Authors will present 12:15 p.m. - 1:00 p.m.</i>
1:15 pm - 2:45 pm	<b>Poster Sessions C and D</b> <i>C Poster Authors will present 1:15 p.m. - 2:00 p.m.</i> <i>D Poster Authors will present 2:00 p.m. - 2:45 p.m.</i>
3:00 pm - 4:30 pm	<b>Poster Sessions E and F</b> <i>E Poster Authors will present 3:00 p.m. - 3:45 p.m.</i> <i>F Poster Authors will present 3:45 p.m. - 4:30 p.m.</i>

Monday, September 21

9:45 am - 12:05 pm

**Welcome/Session 1/Session 2A:**

**Epitranscriptomics**

*Session Chairs:*

**Veronica Jimenez**, California State University Fullerton

**Jeff Dvorin**, Harvard University

9:45 am Welcome

Manoj Duraisingh, Nina Papavasiliou, Boris Striepen, MPM Organizers

Tracey DePellegrin, GSA Executive Director

Polling of Attendees, Omar Harb

**1 10:00 am** Exploring the male-induced female reproduction of *Schistosoma mansoni* in a novel medium. **Jipeng Wang**, UT Southwestern Medical Center

**2 10:15 am** Shifting perspectives: a modification to the life cycle of *Trypanosoma brucei*. **Jaime Lisack**, Universität Würzburg

**3 10:30 am** Critical Role for Isoprenoids in Apicoplast Biogenesis by Malaria Parasites. **Megan Okada**, University of Utah

**4 10:45 am** The *Cryptosporidium* single-cell atlas reveals key life cycle stages and a commitment to male and female development. **Katelyn Walzer**, University of Pennsylvania

11:00 am Session 2A, Epitranscriptomics

**5 11:05 am** N6-methyladenosine in poly(A) tails stabilize VSG transcripts. **Idálio Viegas**, Instituto de Medicina Molecular João Lobo Antunes, Faculdade de Medicina, Universidade de Lisboa

**6 11:20 am** Identification of an m6A-binding YTH protein regulating protein synthesis in the human malaria parasite. **Ameya Sinha**, Singapore-MIT Alliance for Research and Technology

**7 11:35 am** Adenine DNA methylation, 3D genome organization and gene expression in the parasite *Trichomonas vaginalis*. **Natalia de Miguel**, INTECH

**8 11:50 am** The *Toxoplasma* m6A epitranscriptome. **Michael Holmes**, Indiana University School of Medicine

Monday, September 21

11:05 am - 12:05 pm

**Session 2B: Nuclear and Telomere Biology**

*Session Chairs:*

**Jorge Cruz Reyes**, Texas A&M University

**Bibo Li**, Cleveland State University

**9 11:05 am** The trypanosome Variant Surface Glycoprotein mRNA is stabilized by an essential unconventional RNA-binding protein. **Esteban Erben**, DKFZ

**10 11:20 am** TbMYND1, a novel mRNA stabiliser that controls trypanosome migration through the tsetse. **Aitor Casas-Sanchez**, Liverpool School of Tropical Medicine

**11 11:35 am** Telomere maintenance in response to DNA damage in malaria parasites. **Jake Reed**, Weill Cornell Medical College

**12 11:50 am** Programmed DNA elimination in parasitic nematodes. **Richard Davis**, University of Colorado School of Medicine

Monday, September 21

2:00 pm - 4:05 pm

**Session 3A: Sensing and Salvage/Session  
4A: Lab and Field Genomics**

*Session Chairs:*

**Luisa Figueiredo**, Instituto de Medicina Molecular

**Theresa Gwira**, University of Ghana

**13** 2:00 pm *Tc*HTe expression is regulated by intracellular heme levels in *Trypanosoma cruzi*. **Evelyn Tevere**, Instituto de Biología Molecular y Celular de Rosario

**14** 2:15 pm Rho5 regulates lysophosphatidic acid induced macropinocytosis in *Entamoeba histolytica*. **Achala Apte**, Indian Institute of Science Education and Research

**15** 2:30 pm A unique Na<sup>+</sup>-Pi cotransporter in *Toxoplasma* plays key roles in phosphate import and control of parasite osmoregulation. **Beejan Asady**, Johns Hopkins

**16** 2:45 pm *Toxoplasma gondii* Resistance to Interferon-gamma Dependent Killing Requires a Parasite Oxygen Sensing Protein. **Charlotte Cordonnier**, University at Buffalo

3:00 pm Session 4A, Lab and field genomics

**17** 3:05 pm *Plasmodium falciparum* gametocyte diversity prior to and after malaria treatment with an artemisinin-based combination therapy. **Mary Oboh**, Medical Research Council Unit The Gambia at the London School of Hygiene and Tropical Medicine

**18** 3:20 pm Whole-genome sequencing of *Crithidia*-like parasites isolated from relapsing human visceral leishmaniasis in Brazil. **Sandra Maruyama**, Federal University of Sao Carlos

**19** 3:35 pm Utilizing interspecies comparisons between *Toxoplasma gondii* and *Hammondia hammondi* to identify mechanisms regulating stage conversion. **Sarah Sokol Borrelli**, University of Pittsburgh

**20** 3:50 pm Whole genome capture enrichment sequencing of enteroparasite *Cryptosporidium* directly from patient stool samples. **Asis Khan**, NIAID, NIH

Monday, September 21

2:00 pm - 4:05 pm

**Session 3B: Single-cell Analysis/Session  
4B: Nutrition and Metabolism**

*Session Chairs:*

**Shruthi Vembar**, Institute of Bioinformatics and Applied Biotechnology

**Natalia de Miguel**, INTECH

**21** 2:00 pm Exploring the evolution and adaptive role of mosaic aneuploidy in clonal *Leishmania donovani* populations, with high throughput single cell genome sequencing. **Malgorzata A Domagalska**, Institute of Tropical Medicine

**22** 2:15 pm Single-molecule dynamics of the trypanosomes' VSG coat. **Marie Schwebs**, University of Wuerzburg

**23** 2:30 pm Single-cell RNA sequencing reveals cellular heterogeneity, stage transition and antigenic variation during stress adaptation in synchronized *Plasmodium falciparum*. **Krishanpal Karmodiya**, Indian Institute of Science Education & Research, Pune.

**24** 2:45 pm Relatedness and mutation shape the genomic diversity of recurrent *Plasmodium vivax* infection. **Ian Cheeseman**, Texas Biomedical Research Institute

3:00 pm Session 4B, Nutrition and metabolism

**25** 3:05 pm TcAMPK: a cellular energy homeostasis hub regulator with unique characteristics in *Trypanosoma cruzi*. **Tamara Sternlieb**, INGEBI - CONICET

**26** 3:20 pm The malarial Stearoyl-CoA desaturase is essential only for parasite late liver stage development. **Sunil Narwal**, CSIR-Central Drug Research Institute

**27** 3:35 pm Loss of TgLaforin, a glucan phosphatase, renders *T. gondii* tachyzoites unable to survive without glutamine. **Robert Murphy**, University of Kentucky

**28** 3:50 pm Molecular and biochemical characterization of a phosphoglycerate kinase containing a Per-Arnt-Sim domain, from *Trypanosoma cruzi*. **Wilfredo Quiñones**, Universidad de Los Andes

Monday, September 21

4:10 pm - 6:00 pm

**Special Session: Black Lives Matter in Parasitology**

*Session Chair:*

**Regina Joice Cordy**, Wake Forest University

Discussion with panelists and an opportunity for attendees to ask questions.

Kojo Mensa-Wilmot, Kennesaw State University

Faith Osier, Kemri-Wellcome

De'Broski Herbert, University of Pennsylvania

Derrick Robinson, University of Bordeaux

Tuesday, September 22

9:45 am - 10:00 am

**Memorials**

*Session Chairs:*

**Dominique Soldati-favre**, University of Geneva

**Andy Waters**, Wellcome Centre for Integrative Parasitology

Tuesday, September 22

10:00 am - 12:05 pm

**Session 5A: Host-Parasite**

**Manipulation/Session 6A: Developmental Cell Biology**

*Session Chairs:*

**Chi-Min Ho**, Columbia University

**Clare Harding**, University of Glasgow

**29** 10:00 am Plasmodium protein export complex functions at both the parasite-host cell interface and within the parasite.

**Mikha Gabriela**, Burnet Institute

**30** 10:15 am ROP16 facilitates type III *Toxoplasma gondii* cyst development through activation of STAT6. **Joshua Kochanowsky**, University of Arizona

**31** 10:30 am *Toxoplasma gondii* GRABs host cytosolic proteins by interacting with the host ESCRT machinery. **Yolanda Rivera-Cuevas**, University of Michigan

**32** 10:45 am The expression of a novel multigene family is correlated with channel activity in *Babesia bovis*-infected erythrocytes. **Hassan Hakimi**, National Research Center for Protozoan diseases (NRCPD), Obihiro University

11:00 am Session 6A, Developmental Cell Biology

**33** 11:05 am The esophageal gland mediates host immune evasion by the human parasite *Schistosoma mansoni*. **Jayhun Lee**, Morgridge Institute for Research

**34** 11:20 am Knockout of the UNC-51 like kinases ULK-4 and Fused disrupts motile flagella assembly in *Leishmania mexicana*. **Ciaran McCoy**, University of Oxford

**35** 11:35 am A novel protein complex is essential for the maturation of transmission-stage malaria parasites. **Rebecca Clements**, Harvard Medical School

**36** 11:50 am Genome-wide screens identify *Toxoplasma gondii* determinants of parasite fitness in IFN $\gamma$ -activated murine macrophages. **Yifan Wang**, University of California, Davis

Tuesday, September 22

10:00 am - 12:05 pm

**Session 5B: Functional Cell**

**Division/Session 6B: Host Determinants**

*Session Chairs:*

**Markus Ganter**, Heidelberg University

**Josh Beck**, Iowa State University

**37** 10:00 am Mitotic microtubules emanate from a novel intranuclear compartment of *Plasmodium falciparum* blood stage centrosomes. **Caroline Simon**, Centre for Infectious Diseases - Heidelberg University Hospital

**38** 10:15 am Characterization of *Trypanosoma cruzi* Alpha tubulin acetyltransferase (ATAT). **Victoria Alonso**, IBR-CONICET

**39** 10:30 am *Trypanosoma cruzi* High Mobility Group B (TcHMGB): a pleiotropic player in trypanosome biology. **Pamela Cribb**, Instituto de Biología Molecular y Celular de Rosario, IBR-CONICET-UNR

**40** 10:45 am A hurdle race to translate the coding sequence: translation in the presence of multiple upstream open reading frames happens *via* a mix of reinitiation and leaky scanning in *Plasmodium falciparum*. **Chhaminder Kaur**, Indian Institute of Technology Bombay

11:00 am Session 6B, Host Determinants

**41** 11:05 am The interaction of Trypanosome Lytic Factor (TLF) with metacyclic promastigotes of *L. major* reduces C3b deposition and complement mediated lysis of the parasites. **Jyoti Pant**, Hunter College, City University of New York

**42** 11:20 am The CLIP-domain serine protease CLIPC9 regulates melanization downstream of SPCLIP1, CLIPA8, and CLIPA28 in the malaria vector *Anopheles gambiae*. **Gregory Sousa**, University of Pennsylvania School of Veterinary Medicine

**43** 11:35 am Characterization of Trypanosomes from Vectors, Skin and Blood of Cattle in Southern Ghana. **William Ekloh**, WACCBIP, University of Ghana

**44** 11:50 am Common genetic variation in human red blood cells drives growth rate variation in *P. falciparum* parasites. **Emily Ebel**, Stanford University

Tuesday, September 22

2:00 pm - 4:05 pm

**Session 7A: Egress to Invasion/Session 8A:**

**Mitochondrial Biology**

*Session Chairs:*

**Vasant Muralidharan**, University of Georgia

**Melissa Léger-Abraham**, Harvard Medical School

**45** 2:00 pm The key to egress? *Babesia bovis* perforin-like protein 1 (PLP1) with hemolytic capacity is required for blood stage replication and is involved in the exit of the parasite from the host cell. **Martina Paoletta**, INTA - CONICET

**46** 2:15 pm Phospholipase activity within the parasitophorous vacuole is essential for blood stage growth and efficient egress in *Plasmodium falciparum*. **Abhinay Ramaprasad**, The Francis Crick Institute

**47** 2:30 pm *Babesia divergens* cGMP-dependent kinase (PKG) is required to exit the replication cycle and initiate egress. **Brendan Elsworth**, Harvard T. H. Chan School of Public Health

**48** 2:45 pm Actomyosin forces and the energetics of red blood cell invasion by the malaria parasite *Plasmodium falciparum*. **Thomas Blake**, Imperial College London

3:00 pm Session 8A, Mitochondrial Biology

**49** 3:05 pm Divergent proteins of unknown function in a *Plasmodium* mitoribosomal complex. **Swati Dass**, Drexel University College of Medicine

**50** 3:20 pm Understanding the role of mitochondrial-pellicle membrane contact sites in *Toxoplasma gondii*. **Kylie Jacobs**, Indiana University School of Medicine

**51** 3:35 pm Developmental regulation of edited CYb and COIII mitochondrial mRNAs is achieved by distinct mechanisms in *Trypanosoma brucei*. **Joseph Smith**, University at Buffalo

**52** 3:50 pm Site-Specific and Substrate-Specific Control of Accurate mRNA Editing by a Helicase Complex in Trypanosomes. **Zachary Goodall**, Texas A&M University

Tuesday, September 22

2:00 pm - 4:05 pm

**Session 7B: Organellar Biology/Session 8B:**

**Invasion**

*Session Chairs:*

**Sumiti Vinayak**, University of Illinois at Urbana-Champaign

**Gira Bhabha**, NYU School of Medicine

**53** 2:00 pm Complexome profile of *Toxoplasma gondii* mitochondria identifies a divergent cytochrome bc1 complex.

**Andrew Maclean**, University of Glasgow

**54** 2:15 pm Deciphering the mitochondrial quality control mechanism in the parasite *Trypanosoma brucei*. **Caroline Dewar**,

University of Bern

**55** 2:30 pm Mitochondrial keto-acid dehydrogenases are essential for the generation of acetyl-CoA in asexual *Plasmodium falciparum* parasites. **Justin Munro**, Pennsylvania State

University

**56** 2:45 pm Plastid biogenesis in malaria parasites requires the interactions and catalytic activity of the Clp proteolytic system.

**Anat Florentin**, Hebrew university in Jerusalem

3:00 pm Session 8B, Invasion

**57** 3:05 pm An *Alveolata* secretory machinery adapted to parasite-host cell invasion. **Marta Cova**, CNRS, University of

Montpellier

**58** 3:20 pm Rapid BioID in *Plasmodium* ookinetes identifies a protein with dual function during mosquito infection. **Jessica**

**Kehrer**, University of Heidelberg Medical School

**59** 3:35 pm Loss of a conserved MAPK causes catastrophic failure in assembly of a specialized cilium-like structure in *Toxoplasma*

*gondii*. **William O'Shaughnessy**, UT Southwestern Medical Center

**60** 3:50 pm Screening the TCAMS library of small molecules for inhibitors of AMA1-RON2 interaction. **Geervani Daggupati**, Johns

Hopkins University

Tuesday, September 22

4:15 pm - 6:00 pm

**Keynote Address by Akhil Vaidya**

Introduction of Keynote Speaker, Akhil Vaidya. **David Roos**, University of Pennsylvania

Stumbling Towards Truth: Basic Research Guiding Antimalarial Drug Discovery. **Akhil Vaidya**, Drexel University College of Medicine

Wednesday, September 23

9:45 am - 10:00 am

**MPM Direct Polling**

Wednesday, September 23

10:00 am - 12:05 pm

**Session 9A: Biology for Vaccines/Session**

**10A: Biology for Drugs**

*Session Chairs:*

**Sophie Uyoga**, KEMRI Wellcome Trust Research Programme

**Maria Francia**, Institut Pasteur de Montevideo

**62** 10:00 am Moving Junction Complexes: Promising Targets for Vaccination against Toxoplasmosis. **Rania Najm**, American

University of Beirut

**63** 10:15 am Blocking *Plasmodium falciparum* sporogonic development in the mosquito with human-derived single-chain

antibodies. **Anna Maria Weyrich**, Max Planck Institute for Infection Biology

**64** 10:30 am TcTASV antigens delivered in Baculovirus confer protection against *Trypanosoma cruzi* infection, notably reducing

levels of circulating trypomastigotes, parasite tissue load and mortality. **Yamil Ezequiel Masip**, Instituto de Investigaciones Biotecnológicas "Dr. Rodolfo Ugalde", IIBIO (UNSAM - CONICET)

**65** 10:45 am Biological and morphological consequences of dsRNA-induced suppression of tetraspanin mRNA in developmental stages of *Echinococcus granulosus*. **Seyed**

**mohammad mousavi**, Research Center for Hydatid Disease in Iran, Kerman University of Medical Sciences, Kerman

11:00 am Session 10A, Biology for Drugs

**66** 11:05 am The parasite coat protein VSGsur binds suramin to confer drug resistance. **Johan Zeelen**, Deutsches

Krebsforschungszentrum

**67** 11:20 am Whole-cell phenotypic screening of MMV pathogen box unravels new small molecules affecting late-stage

development of plasmodium. **Alok Patra**, Singapore University of Technology and Design

**68** 11:35 am Killing parasites within the *Anopheles* female as a new strategy for malaria control. **Douglas Paton**, Harvard TH

Chan School of Public Health

**69** 11:50 am Chemogenomic approach to identifying nematode chemoreceptor drug targets in the entomopathogenic nematode

*Heterorhabditis bacteriophora*. **Damien O'Halloran**, George Washington University

Wednesday, September 23

10:00 am - 12:05 pm

**Session 9B: Drug Development/Session 10B: Metabolites and Lipids**

*Session Chairs:*

**Mattie Pawlowic**, School of Life Sciences University of Dundee  
**Jennifer Guler**, University of Virginia

**70** 10:00 am Phenotypic characterization of trypanosomes cells treated with tetracyclic iridoid, ML F52 suppression of flagella attachment proteins. **Georgina Djameh**, Noguchi Memorial Institute for Medical Research

**71** 10:15 am Development of azithromycin analogues with dual-modality antimalarial activity. **Amy Lee Burns**, Pennsylvania State University

**72** 10:30 am IRON OXIDE NANOPARTICLES FORTIFIED ARTESUNATE – can we use a nanomedicine approach for warfare against malarial parasites? **Deepika Kannan**, Shiv Nadar University

**73** 10:45 am Discovery of a novel antiparasitic compound that promotes leishmanial tubulin polymerization. **Dawn Wetzel**, UT Southwestern Medical Center

11:00 am Session 10B, Metabolites and Lipids

**74** 11:05 am De novo synthesis of phosphatidylcholine is essential for the promastigote but not amastigote stage in *Leishmania major*. **Samrat Moitra**, Texas Tech University

**75** 11:20 am Gut metabolites influence susceptibility to *Cryptosporidium* infection. **Lisa Funkhouser-Jones**, Washington University School of Medicine

**76** 11:35 am Accessible Cholesterol in the Erythrocyte Plasma Membrane is Essential for *P. falciparum* Invasion and Growth. **Avantika Ahiya**, College of Medicine, Drexel university

**77** 11:50 am *Plasmodium berghei* Sporozoites in Nonreplicative Vacuoles Are Eliminated by a PI3P-mediated Autophagy-independent Pathway. **Annina Bindschedler**, University of Bern

Wednesday, September 23

10:00 am - 12:05 pm

**Session 9A: Biology for Vaccines/Session 10A: Biology for Drugs**

*Session Chairs:*

**Sophie Uyoga**, KEMRI Wellcome Trust Research Programme  
**Maria Francia**, Institut Pasteur de Montevideo

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Wednesday, September 23

2:00 pm - 4:05 pm

**Session 11A: Metabolism/Session 12A:  
Tissue Tropism**

*Session Chairs:*

**Cyrille Botté**, CNRS, Université Grenoble Alpes

**Anita Koshy**, University of Arizona

**78** 2:00 pm Save it for later: insect stages of *Trypanosoma cruzi* use fatty acids to grow and differentiate. **Rodolpho Ornitz Oliveira Souza**, Institute of Biomedical Sciences - University of São Paulo

**79** 2:15 pm Defining *P. berghei* parasite host interplay *in vivo* at the single cell level. **Franziska Hentzschel**, University of Glasgow

**80** 2:30 pm Endogenous fatty acid synthesis via the fatty acid elongase (ELO) pathway is critical for *Trypanosoma cruzi* growth. **Lucas Pagura**, Harvard T.H. Chan School of Public Health

**81** 2:45 pm Characterization of *Toxoplasma gondii* acyl-CoA synthetases reveal the critical roles in lipid synthesis and parasite development of *TgACS1* and *TgACS3*. **Serena Shunmugam**, Institute of Advanced Biosciences

3:00 pm Session 12A, Tissue Tropism

**82** 3:05 pm Variant Surface Glycoprotein Expression in Tissue-resident *Trypanosoma brucei*. **Alexander Beaver**, Johns Hopkins School of Medicine

**83** 3:20 pm Trypanosomes having pHun: cyclic AMP signalling in perception and response to pH gradients. **Sebastian Shaw**, Department of Pathobiology, University of Pennsylvania

**84** 3:35 pm Fatty acid- and retinol- binding proteins secreted by parasitic nematodes dampen host immune responses by interfering with host lipid signaling mechanisms. **Sophia Parks**, University of California Riverside

**85** 3:50 pm The fibrinolytic system enables the onset of *Plasmodium* infection in the mosquito. **Thiago Silva**, NIH

Wednesday, September 23

2:00 pm - 4:05 pm

**Session 11B: Evolution and  
Genomics/Session 12B: Antigenic  
Variation**

*Session Chairs:*

**Monica Mugnier**, Johns Hopkins Bloomberg School of Public Health

**Praveen Nina**, Central University of Tamil Nadu

**86** 2:00 pm Diverse evolutionary pathways thwart the use of collateral sensitivity as a strategy to suppress resistance for *Plasmodium* dihydroorotate dehydrogenase inhibitors. **Rebecca Mandt**, Harvard T.H. Chan School of Public Health

**87** 2:15 pm Genetic analysis of transmission stage production and virulence in schistosome parasites. **Winka Le Clec'h**, Texas Biomedical Research Institute

**88** 2:30 pm Reevaluation of the *Toxoplasma gondii* and *Neospora caninum* genomes reveals misassembly, karyotype differences and chromosomal rearrangements. **Luisa Berná**, Institut Pasteur de Montevideo

**89** 2:45 pm Development of a computational workflow for functional variant detection in *Plasmodium falciparum* drug selections. **Madeline Luth**, University of California, San Diego

3:00 pm Session 12B, Antigenic Variation

**90** 3:05 pm The VSG-exclusion (VEX) complex orchestrates VSG allele-exclusive interactions with the spliced-leader locus in trypanosomes. **Joana R Correia Faria**, School of Life Sciences, University of Dundee

**91** 3:20 pm *Trypanosoma brucei* RAP1 has an RNA binding activity that is essential for VSG monoallelic expression. **Amit Gaurav**, Cleveland State University

**92** 3:35 pm The location of *Trypanosoma cruzi* glycoproteins in the plasma membrane is determined by their GPI anchor acceptor sequence. **Giannina Carlevaro**, Biotechnology Research Institute

**93** 3:50 pm A VSG epitope defined by calcium binding is associated with immunodominance in the host antibody repertoire. **Francisco Aresta-Branco**, German Cancer Research Center (DKFZ)

Wednesday, September 23

4:05 pm - 6:05 pm

**Parasite Trivia**

*Session Chairs:*

**Omar Harb**, University of Pennsylvania

**Selina Bopp**, Harvard University

Wednesday, September 23

4:45 pm - 5:45 pm



## Meet the Professors

During this session lab heads will host tables in Remo where students and postdocs can come by to meet them and discuss science. This is a great way to virtually meet future labs you want to work in or collaborate with. Anyone is welcome to attend.

Thursday, September 24  
8:45 am - 4:00 pm

## Young Investigators in Parasitology

**Private event must be pre-registered**

Thursday, September 24  
10:00 am - 11:30 am

## Session 13A: New Tools, New Vistas

*Session Chairs:*

**Marc-Jan Gubbels**, Boston College

**Friedrich Frischknecht**, University of Heidelberg

**94** 10:00 am Development of a conditional protein degradation system to study essential gene function in the diarrheal parasite, *Cryptosporidium parvum*. **Maria G Nava**, University of Illinois at Urbana Champaign

**95** 10:15 am Use automated Spatially Targeted Optical Micro Proteomics (autoSTOMP) to explore the effector proteins near the parasitophorous vacuole membrane (PVM) of *Toxoplasma*. **B. Yin**, University of Virginia

**96** 10:30 am Untargeted metabolomic characterization of chronically infectious *Toxoplasma gondii* forms in a novel in vitro model identifies an unexpected mechanism of persistence. **Céline Christiansen**, Robert Koch Institute

**97** 10:45 am Cellular barcoding reveals permissive host brain colonization by *Toxoplasma gondii*. **Matthew Child**, Imperial College London

**98** 11:00 am Single Cell Sequencing of *Plasmodium falciparum*. **Shiwei Liu**, University of Virginia

**99** 11:15 am Development of tsetse fly-transmitted African trypanosomes in primary human skin equivalents. **Christian Reuter**, University of Würzburg

Thursday, September 24

10:00 am - 11:30 am

**Session 13B: Functional Screens, New**

**Horizons**

*Session Chairs:*

**Jean-Claude Dujardin**, Institute of Tropical Medicine

**Scott Lindner**, Pennsylvania State University

**100** 10:00 am Bulk Segregant Approaches to Nutritional Genomics in *Plasmodium falciparum*. **Xue Li**, Texas Biomedical Research Institute

**101** 10:15 am Identification of Multiple Determinants Associated with Chloroquine and Quinine Resistance in a Novel *Plasmodium falciparum* Genetic Cross. **Mariko Kanai**, Columbia University Irving Medical Center

**102** 10:30 am A single-cell RNAseq atlas of *Schistosoma mansoni* identifies a key regulator of blood feeding. **Lu Zhao**, UT Southwestern Medical Center

**103** 10:45 am Establishment of quantitative RNAi-based forward genetics in *Entamoeba histolytica* and identification of genes required for growth. **Akhila Bettadapur**, UC Davis

**104** 11:00 am High-throughput functionalization of the *Toxoplasma gondii* proteome. **Tyler Smith**, Whitehead Institute for Biomedical Research

**105** 11:15 am A SplitCas9 based phenotypic screen identifies two crucial genes involved in egress in *Toxoplasma gondii*. **Wei Li**, Ludwig Maximilian University of Munich

Thursday, September 24

11:30 am - 12:30 pm

**VEuPathDB community discussion on database feedback, needs, and priorities**

**106A** 12:15 pm Entomological assessment of lymphatic filariasis transmission in Ghana. **Dhikrullahi Shittu**, University of Ghana

**107A** 12:15 pm Environmental elasticity impacts parasite migration during transmission of malaria. **Johanna Ripp**, Heidelberg University Medical School

**108A** 12:15 pm Just a spoonful of sugar helps the trypanosome hide: unraveling the antibody repertoires of O-glycosylated VSG3 and its sugar-less mutants. **Anastasia Gkeka**, The German Cancer Research Centre (DKFZ)

**109A** 12:15 pm Small Molecule Based Disruption of an ApiAP2 Transcription Factor in the Human Malaria Parasite *Plasmodium falciparum*. **Timothy Russell**, The Pennsylvania State University

**110A** 12:15 pm Elucidating the temporal events of Apolipoprotein L-1-mediated African Trypanosome lysis. **Sara Fresard**, Hunter College

**111A** 12:15 pm *Toxoplasma gondii* co-opts host repressor complexes to inhibit interferon induced necroptosis. **Alexander Rosenberg**, Washington University School of Medicine in St. Louis

**112A** 12:15 pm Nanobodies Reveal Extensive Immunoaccessibility of the Trypanosome Coat. **Alex Hempelmann**, German Cancer Research Center

**113A** 12:15 pm A conserved malaria parasite antigen Pb22 plays a critical role in male gametogenesis in *Plasmodium berghei*. **Fei Liu**, China Medical University

**114A** 12:15 pm The Strategies of the Cloning Equilibrative Nucleoside Transporters (ENT's) family of *Trichomonas vaginalis* using *Leishmania mexicana* as a model organism. **Manal Jamal Natto**, Institute of Infection, Immunity and Inflammation

**115A** 12:15 pm Fussing about fission: defining apicomplexan cell division modes. **Marc-Jan Gubbels**, Boston College

**116A** 12:15 pm Metabolomic approaches to discovering resistance-resistant antimalarial drug targets. **Gabriel Rangel**, Pennsylvania State University

**117A** 12:15 pm *Toxoplasma gondii* AP2XII-2 contributes to proper progression through S-phase of the cell cycle. **SANDEEP SRIVASTAVA**, Indiana University-Purdue University (IUPUI)

**118A** 12:15 pm *In vitro* evolution and population genomics identify intrinsically resistant *Plasmodium falciparum* isolates to Acyl Co-A Synthetase inhibitors. **Selina Bopp**, Harvard T.H. Chan School of Public Health

**119A** 12:15 pm *In vivo* imaging reveals that establishment of tissue reservoirs by *Trypanosoma brucei* is multi-factorial. **Mariana De Niz**, Instituto de Medicina Molecular

**120A** 12:15 pm Elucidating the Functions of Polyamines for the Proliferation and Survival of *Leishmania* Parasites. **Sigrid Roberts**, Pacific University Oregon

**121A** 12:15 pm New Targets (Infiltrin) as a Vaccine Against Leishmaniasis. **Abdulaziz Alouffi**, King Abdulaziz City for Science and Technology

**122A** 12:15 pm Intestinal expression of miR-130b, miR-410b, and miR-98a in experimental canine echinococcosis by stem-

loop RT-qPCR. **ashkan faridi**, Kerman university of medical sciences

**123A** 12:15 pm Evaluation of immunodiagnostic potential of schistosomula crude antigen (SCA) in *Schistosoma mansoni* infected human population. **Oyetunde Oyeyemi**, University of Medical Sciences

**124A** 12:15 pm Metabolic targets of miR-302/372/373/520 family in *Leishmania*-infected human THP-1 macrophages. **Juliane Fernandes**, University of São Paulo

**125A** 12:15 pm No vagina, one vagina, or multiple vaginae? An integrative study of *Pseudaxine trachuri* (Platyhelminthes, Monogenea) leads to a better understanding of the systematics *Pseudaxine* and related genera. **Chahinez Bouguerche**, Université des Sciences et de la Technologie Houari Boumediene

**126A** 12:15 pm Molecular detection and seasonal prevalence of *Theileria annulata* in blood samples of cattle collected from District Layyah in Punjab (Pakistan). **Asia Parveen**, Institute of Pure and Applied Biology, Bhauddin Zakariya University, 60800, Multan, Pakistan

**127A** 12:15 pm Elevated *Plasmodium* sporozoite infection and multiple insecticide resistance in the principal malaria vectors *Anopheles funestus* and *Anopheles gambiae* in a forested locality close to the Yaoundé airport, Cameroon. **Nkemngó Francis Nongley**, Centre for Research in Infectious Diseases (CRID)

**128A** 12:15 pm A study on molecular detection, seasonal prevalence and phylogenetic evaluation of *Anaplasma marginale* in blood samples of Cattle collected from District Layyah in Punjab (Pakistan). **sehrish ashraf**, Institute of Pure and Applied Biology Bhauddin Zakariya University Multan

**129A** 12:15 pm The Spatial Organization of the *Plasmodium yoelii* DOZI/CITH/ALBA mRNP Complex During and After Translational Repression. **Kelly Rios**, Pennsylvania State University

**130A** 12:15 pm *Trypanosoma brucei* TIF3 is a novel telomere protein that is essential for cell viability and affects VSG switching. **Bibo Li**, Cleveland State University

**131A** 12:15 pm Rap1b activation and ERK phosphorylation during cAMP/Epac-mediated invasion by *Trypanosoma cruzi*. **Gabriel Ferri**, IQUIBICEN - CONICET

**132A** 12:15 pm Generation of Novel *Plasmodium falciparum* NF135 and NF54 Lines Expressing Fluorescent Reporter Proteins Under the Control of Strong and Constitutive Promoters. **Shinya Miyazaki**, Leiden University Medical Center

**133A** 12:15 pm Exploiting helminth-derived immunomodulators; current challenges and gaps. **Mahdi Borhani**, Research Center for Hydatid Disease in Iran, Kerman University of Medical Sciences, Kerman, Iran

**134A** 12:15 pm Unconventional kinetochore kinases KKT2 and KKT3 have a unique zinc finger that promotes their kinetochore localization. **Gabriele Marciano**, University of Oxford

**135A** 12:15 pm Ribosome heterogeneity and potential functional differences in the specialized ribosomes of *Plasmodium spp.*. **James McGee**, Pennsylvania State University

- 136A** 12:15 pm Dissecting the regulatory role of an enriched DNA sequence motif found upstream of *Plasmodium falciparum* gametocyte-associated genes. **Riette van Biljon**, Pennsylvania State University
- 137A** 12:15 pm Kinetoplast RNA Editing Helicase 1 plays a distinct role in RNA editing profile of mitochondrial transcripts in *Trypanosoma brucei*. **Amartya Mishra**, State University of New York at Buffalo
- 138A** 12:15 pm The calcium-responsive proteome of an apicomplexan parasite. **Alice Herneisen**, Whitehead Institute and Massachusetts Institute of Technology
- 139A** 12:15 pm Interaction of Signaling Lymphocytic Activation Molecule Family 1 (SLAMF1) receptor with *Trypanosoma cruzi* is strain-dependent and affects NADPH oxidase expression and activity in macrophages. **Alfonso Herberos Cabello**, Centro de Biología Molecular Severo Ochoa (CSIC-UAM)
- 140A** 12:15 pm Role of Plasmodium falciparum Kelch 13 Protein Mutations in P. falciparum Populations from Northeastern Myanmar in Mediating Artemisinin Resistance. **Faiza Siddiqui**, University of South Florida
- 141A** 12:15 pm Investigation of sequence-specific transcription factors with similar DNA binding specificities in the human malaria parasite *Plasmodium falciparum*. **Victoria Bonnell**, The Pennsylvania State University
- 142A** 12:15 pm Interaction of Signaling Lymphocytic Activation Molecule Family 1 (SLAMF1) receptor with *Trypanosoma cruzi* is strain-dependent in mice modulating the immune response. **Alfonso Herberos-Cabello**, Centro de Biología Molecular Severo Ochoa (CSIC-UAM)
- 143A** 12:15 pm The essential roles of the paralogous CAF1-CCR4-NOT complex scaffold, NOT1-G, in sexual development and transmission in *Plasmodium yoelii*. **Bridget Power**, Pennsylvania State University
- 144A** 12:15 pm Functional characterization of two RAP proteins essential for the mitochondrial biogenesis of *P. falciparum* asexual stages. **Thomas Hollin**, University of California, Riverside
- 145A** 12:15 pm Delving in one carbon metabolism in the parasite *Leishmania* through a genomic Mut-seq screening. **Sophia Bigot**, Laval University, Infectiology Research Center
- 146A** 12:15 pm The mammalian fibrinolytic system facilitates sporozoite infection. **Thiago Silva**, NIH
- 147A** 12:15 pm Comprehensive *P. falciparum* RNA-protein interactome identification: beyond conventional crosslinking. **Megan Gliozi**, U.S. Food and Drug Administration
- 148A** 12:15 pm Importin  $\alpha$  of *Trypanosoma cruzi*: A nucleolar protein which binds a classical nuclear localization signal of the bipartite type. **Israel Canela**, UNAM
- 149A** 12:15 pm *Cryptosporidium parvum* exports proteins into the cytoplasm of the epithelial host cell. **Jennifer Dumaine**, University of Pennsylvania
- 150A** 12:15 pm Characterization of natural trypanosomes infection in animals. **Theresa Manful Gwira**, University of Ghana
- 151B** 12:15 pm mRNA decapping by an ApaH-like phosphatase in trypanosomes. **Paula Castaneda**, Biozentrum
- 152B** 12:15 pm Characterizing the phosphoregulation of exocytosis in *Toxoplasma gondii*. **Alex Chan**, Massachusetts Institute of Technology
- 153B** 12:15 pm Breakdown in Membrane Asymmetry Regulation Leads to Monocyte Recognition of *P. falciparum*-infected Red Blood Cells. **Merryn Fraser**, The Australian National University
- 154B** 12:15 pm Cell Cycle-Dependent TERRA Foci and the TERRA Level Are Regulated by TbTRF with a TERRA Binding Interface Independent of Its DNA Binding Activity. **Arpita Saha**, Cleveland State University
- 155B** 12:15 pm Diversity in the intrinsic apoptosis pathway of nematodes. **neil young**, University of Melbourne
- 156B** 12:15 pm Identifying a specific inhibitor of the invasion of red blood cells by *Plasmodium falciparum*. **Madeline Dans**, Burnet Institute
- 157B** 12:15 pm Imiquimod targets toxoplasmosis through modulating host Toll Like receptor-MyD88 signaling. **Maguy Hamie**, American University of Beirut
- 158B** 12:15 pm 18S rDNA Sequence-Structure Phylogeny of the Trypanosomatida (Kinetoplastea, Euglenozoa) with Special Reference on *Trypanosoma*. **Alyssa Borges**, Universität Würzburg
- 159B** 12:15 pm Unexpected rate of Alternative Splicing Events in the Early Strobilar Development of *Echinococcus granulosus*. **Mohammad Ali mohammadi**, Research Center for Hydatid Disease in Iran
- 160B** 12:15 pm Altered functionalities of two organellar DNA base excision repair enzymes of *Plasmodium falciparum*. **Anupama Tiwari**, Council of Scientific and Industrial Research-Central Drug Research Institute
- 161B** 12:15 pm The lateral diffusion of non-VSG, GPI-anchored proteins of *Trypanosoma brucei*. **Thomas Mueller**, Universität Würzburg
- 162B** 12:15 pm Pathogen box compounds as possible leads for new interventions against leishmaniasis. **Wandayi E. Amlabu**, University of Ghana, P. O. Box LG54, Legon, Accra, Ghana
- 163B** 12:15 pm Divergent acyl carrier protein mediates mitochondrial iron-sulfur cluster metabolism in malaria parasites. **Seyi Falekun**, University of Utah
- 164B** 12:15 pm Role of mitochondrial thioredoxins in promoting survival of *Toxoplasma gondii* under redox stress. **Mariana Silva**, Federal University of Uberlandia
- 165B** 12:15 pm Development and application of loop-mediated isothermal amplification for the diagnosis of schistosomiasis in Tomefa, an endemic community in Ghana. **Isaac Owusu-Frimpong**, CSIR - Water Research Institute
- 166B** 12:15 pm Essential exon floxing shows that Cysteine repeat modular proteins are critical for Invasion in *Toxoplasma gondii*. **Mirko Singer**, LMU Munich
- 167B** 12:15 pm Vps32 is required for endocytic trafficking to the lysosome in *Trypanosoma brucei*. **Nadia Maricel Barrera**, INGEBI- CONICET
- 168B** 12:15 pm *Plasmodium berghei* hemozoin bound to DNA confers partial protection against liver stage infection in

BALB/c mice. **Adriano Franco**, Johns Hopkins Bloomberg School of Public Health

**169B** 12:15 pm The role(s) of conserved motifs within the 3' untranslated region of the variant surface glycoprotein of African trypanosomes. **Majeed Bakari Soale**, Universität Würzburg

**170B** 12:15 pm Characterization of calcium signaling in bradyzoites of *Toxoplasma gondii*. **Yong Fu**, Washington University School of Medicine

**171B** 12:15 pm The role of Acetyl-CoA Synthetase in *P. falciparum* epigenetic control. **Isadora Prata**, University of São Paulo (USP)

**172B** 12:15 pm A lysine stretch in coronin modulates directionality of gliding motility in malaria parasites. **Julia Sattler**, University Hospital Heidelberg

**173B** 12:15 pm The development and motility of *T. brucei* in artificial human skin. **Laura Hauf**, Universität Würzburg

**174B** 12:15 pm Ivermectin, a new old drug for Chagas disease? **Maria Daniela Ruiz**, ICT Milstein - CONICET

**175B** 12:15 pm Exploring MKT1-PBP1-LSM12 complex as a novel stage-specific regulator of translation in *Plasmodium* gametocyte. **Elisha Mugo**, University of Pretoria, Institute for Sustainable Malaria Control

**176B** 12:15 pm A novel quinoline-like action for the heme-artemisinin adduct metabolite. **Victoria Balta**, Johns Hopkins Bloomberg School of Public Health

**177B** 12:15 pm *Trypanosoma brucei* proteins: new allies in the fight against malaria? **Adriana Temporão**, Instituto de Medicina Molecular João Lobo Antunes

**178B** 12:15 pm Grumpy lncRNA regulates life cycle progression of *Trypanosoma brucei*. **Fabien Guegan**, Instituto de Medicina molecular

**179B** 12:15 pm Addressing the VSG expression hierarchy in *Trypanosoma brucei* using single-cell RNA-sequencing. **Kirsty McWilliam**, Ludwig-Maximilians-Universität München

**180B** 12:15 pm The target of ergosterol biosynthesis inhibitors, CYP51 is dispensable for *Trypanosoma cruzi* epimastigote growth. **Peter Dumoulin**, Harvard T.H. Chan School of Public Health

**181B** 12:15 pm Identification of clinically approved small molecules that inhibit growth and affect transcript levels of developmentally regulated genes in the African trypanosome. **Madison Walsh**, Harvey Mudd College

**182B** 12:15 pm Identification and characterization of iron transporters in the glycosomes of Leishmania. **Romário Boy**, Institute of Biosciences, University of São Paulo

**183B** 12:15 pm Trypanosome RNA Editing Substrate Binding Complex integrity and function depends on the upstream action of RESC10. **ASHUTOSH DUBEY**, University at Buffalo

**184B** 12:15 pm Investigation of Puf2-Mediated Post-Transcriptional Regulation in Sporozoites. **Michael Walker**, Pennsylvania State University

**185B** 12:15 pm Unraveling the role of TcVps34-Vps15 complex as a modulator of autophagy and metacylogenesis in *Trypanosoma cruzi*. **Alejandra Schoijet**, Institute for

Research on Genetic Engineering and Molecular Biology (INGEBI-CONICET-UBA)

**186B** 12:15 pm *Trypanosoma brucei* DNA Polymerase  $\theta$  is Essential for Telomere Integrity and Suppresses VSG Switching. **M A G Rabbani**, Cleveland State University

**187B** 12:15 pm Distribution and phylogenetic diversity of *Anopheles* species in main malaria endemic areas of Honduras. **DENIS ESCOBAR**, National Autonomous University of Honduras

**188B** 12:15 pm Structural and phylogenetic analysis of *Trypanosoma cruzi*'s major intrinsic proteins (MIP). **Fiorella Tesan**, Cátedra de Física, FFYB (Universidad de Buenos Aires); IQUIFIB (UBA/CONICET)

**189B** 12:15 pm Cyclic AMP binding proteins in *Trypanosoma cruzi*. **Jose Escalona**, Universidad de Buenos Aires

**190B** 12:15 pm Role of a TgVps15 in the development of *Toxoplasma gondii*. **Rahul Singh Rawat**, National Institute of Immunology

**191B** 12:15 pm Molecular characterization of acute virulence loss in heme-deficient *Toxoplasma gondii*. **Amy Bergmann**, Clemson University

**192B** 12:15 pm TgCEP250L1 is essential for cell division in *Toxoplasma gondii*. **Ramiro Tomasina**, Institut Pasteur de Montevideo

**193B** 12:15 pm Crystal violet structural analogues as candidates for drug repurposing in trypanosomatid diseases. **Chantal Reigada**, IDIM, CONICET-UBA

**194B** 12:15 pm Cathepsin C-like protease 1 post-translationally modifies *Toxoplasma gondii* secretory proteins for optimal invasion and egress. **Brock Thornton**, Clemson University

**195B** 12:15 pm Insights on new Phosphatidylinositol transfer proteins (PITPs) in *Toxoplasma gondii*. **Angela Arabiotorre**, Texas A&M University

**196C** 12:15 pm An insight into the penetration process of a tsetse bite. **Stephan Löwe**, Biozentrum, Universität Würzburg

**197C** 12:15 pm Ultrastructural and functional analysis of extra-axonemal structures in trichomonads. **veronica coceres**, Instituto Tecnológico Chascomús (INTECH)

**198C** 12:15 pm Nested PCR for the detection of *Taenia solium* DNA in stool samples. **Carlos Franco-Muñoz**, Instituto Nacional de Salud

**199C** 12:15 pm Effect of lysine acetylation on the regulation of *Trypanosoma brucei* glycosomal aldolase activity. **Ariely Leite**, Unifesp - Federal University of São Paulo

**200C** 12:15 pm Importance of Animal Models in Prevention, Control and elimination of malaria during Pregnancy: the Baboon Model of Placental Malaria. **Faith Onditi**, Institute of Primate Research

**201C** 12:15 pm A *Plasmodium falciparum* E3 ubiquitin ligase regulates transporter expression and drug responses. **Brajesh K Singh**, NIH/NIAID

**202C** 12:15 pm Mapping *Cryptosporidium* infection *in vivo* using 2-photon microscopy. **Bethan Wallbank**, University of Pennsylvania

- 203C** 12:15 pm A mutagenesis screen to identify genes involved in *T. gondii* autophagy during chronic infection. **Fengrong Wang**, University of Michigan
- 204C** 12:15 pm Plasma *Plasmodium falciparum* Histidine-Rich Protein-2 concentrations in children with various forms of clinical malaria in Kilifi, Kenya. **Sophie Uyoga**, KEMRI Wellcome Trust Research Programme
- 205C** 12:15 pm RTP4 inhibits IFN-I response and enhances experimental cerebral malaria and neuropathology. **XIAO HE**, NIH
- 206C** 12:15 pm Investigating the coding transcriptome of steady-state and reactivating exogenous stages of *Eimeria tenella*. **Perryn Kruth**, University of Guelph
- 207C** 12:15 pm 3D-cultures of Human Placental Trophoblasts Resemble the Maternal-Fetal Interface and Restrict Growth of *Trypanosoma cruzi*. **Erica Silberstein**, CBER-Food and Drug Administration
- 208C** 12:15 pm *Plasmodium yoelii* 17XNL infection induces macrophage dysfunction and blockage of erythrocyte maturation. **Keyla Tumas**, NIAID, NIH
- 209C** 12:15 pm Structural Studies of the Harpoon-Like Invasion Organelle of Microsporidia. **Mahrukh Usmani**, New York University School of Medicine
- 210C** 12:15 pm *Plasmodium vivax* strains use alternative pathways for invasion. **Usheer Kanjee**, Harvard T.H. Chan School of Public Health
- 211C** 12:15 pm Elucidating the role of receptor-type adenyl cyclases in *Trypanosoma cruzi*. **Noelia Lander**, University of Georgia
- 212C** 12:15 pm Small ribosomal subunit rna (SSU/rRNA) sequence analysis of parasites isolates from patients diagnosed with visceral leishmaniasis with multiple relapses. **Nayore Tamie Takamiya**, Federal University of São Carlos/UFSCar
- 213C** 12:15 pm Segmental changes in chromosomal allele frequency and loss of heterozygosity in *Trypanosoma cruzi* I. **Lissa Cruz Saavedra**, Universidad el Rosario
- 214C** 12:15 pm Adipose Tissue Resident *Trypanosoma brucei*: a Population of Slow Growers. **Sandra Trindade**, Instituto de Medicina Molecular João Lobo Antunes (iMM)
- 215C** 12:15 pm Identifying Amphibian Pathogens in the Field Using Quantitative PCR. **Ana Cvetkovic**, North Central College
- 216C** 12:15 pm Gene disruption of flagellar and cytoskeleton components of *Trypanosoma cruzi*. **José Sáenz**, UFPR
- 217C** 12:15 pm *Cyclospora cayetanensis* whole genome sequencing: Improving the quality and diversity of available genomes. **Christine Yanta**, University of Guelph
- 218C** 12:15 pm Discovery of a novel and essential member of the *Plasmodium falciparum* basal complex. **Alex Morano**, Harvard Medical School
- 219C** 12:15 pm Discovery of novel proteins within the *Plasmodium falciparum* inner membrane complex. **Ana Karla Cepeda Diaz**, Harvard Medical School
- 220C** 12:15 pm Investigating Variant Surface Glycoprotein dynamics under inhibition of fatty acid synthesis in *Trypanosoma brucei*. **Nava Poudyal**, Clemson University
- 221C** 12:15 pm *Plasmodium vivax* infection destabilizes the host reticulocyte. **Martha Clark**, Harvard TH Chan School of Public Health
- 222C** 12:15 pm Post-pairing transcriptome analysis of *Schistosoma mansoni* identifies a key mediator in the male parasites for female reproduction development stimulation. **Rui Chen**, UT Southwestern Medical Center
- 223C** 12:15 pm Leucine Carboxyl Methyltransferase (LCMT) from *Leishmania infantum* and its interactome. **Arijit Bhattacharya**, Adamas University
- 224C** 12:15 pm Genetic Diversity of *Diectophyma renale* in Northeast Argentina and Southern Brazil. **Lucas Federico Arce**, Institute of Research on Microbiology and Medical Parasitology (IMPaM), School of Medicine
- 225C** 12:15 pm Potentially zoonotic nodular worms infecting free-ranging non-human primates in Kenyan urban centres: potential reservoirs for human infections. **Peris Mbutia**, Egerton University
- 226C** 12:15 pm Nanobodies as biological tools to characterize the 6-cysteine proteins of *Plasmodium falciparum* and to develop interventions to inhibit parasite infection. **Melanie Dietrich**, Walter and Eliza Hall Institute of Medical Research
- 227C** 12:15 pm Small molecule targeting of an essential *Plasmodium* CDK enzyme. **Aditya Paul**, Harvard T.H. Chan School of Public Health
- 228C** 12:15 pm The chaperone *PbHscB* plays a crucial role in *Plasmodium berghei* liver stage development. **Raphael Beyeler**, Institute of Cell Biology, University of Bern
- 229C** 12:15 pm Targeting Host Cell Death Pathways to Promote Clearance of *Leishmania donovani*. **Michelle Clark**, The Walter and Eliza Hall Institute
- 230C** 12:15 pm Hi-C reveals dynamic interactions between the active VSG gene and a potential, unconventional enhancer. **Vanessa Luzak**, Ludwig-Maximilians-Universität München
- 231C** 12:15 pm Allele-specific genome assembly of the *Trypanosoma brucei* Lister 427 isolate. **Raúl Oscar Cosentino**, Ludwig-Maximilians-Universität München
- 232C** 12:15 pm Investigating the role of *Plasmodium falciparum* exported proteins that bind the new permeability pathway complex protein RhopH2. **Thorey Jonsdottir**, The Burnet Institute
- 233C** 12:15 pm Preliminary characterization of myosin D from *Plasmodium falciparum*. **Andrea Johana Lopez Moreno**, University of Bergen
- 234C** 12:15 pm Loss of fat mass during a *Trypanosoma brucei* infection prolongs host survival. **Henrique Machado**, Instituto de Medicina Molecular João Lobo Antunes, Faculdade de Medicina, Universidade de Lisboa
- 235C** 12:15 pm Involvement of the exported FIKK kinases of *P. falciparum* in modulating the cytoadhesive properties of the host cell. **Heledd Davies**, The Francis Crick Institute
- 236C** 12:15 pm Iron storage in *Toxoplasma gondii* requires VIT1. **Clare Harding**, University of Glasgow

- 237C** 12:15 pm Golgi or no Golgi: How do proteins choose between transport pathways to the apicoplast in *Toxoplasma gondii*? **Aparna Prasad**, Indian Institute of Technology Bombay
- 238C** 12:15 pm The single CCA-adding enzyme of *T. brucei* has distinct functions in the cytosol and in mitochondria. **Shikha Shikha**, Wellcome Centre for Integrative Parasitology
- 239C** 12:15 pm *Toxoplasma* FER1 Mediates Trafficking and Discharge of the Micronemes. **Allison Drozda**, Boston College
- 240C** 12:15 pm Glutamine is an important metabolite for *T. cruzi* to survive throughout the life cycle. **Flávia Damasceno**, University of São Paulo - USP
- 241D** 12:15 pm An apicoplast-resident folate transporter is essential for sporogony of malaria parasites. **Francois Korbmacher**, Humboldt University Berlin
- 242D** 12:15 pm Same parasite - different coats: A case of surface functionality transfer between trypanosome species. **Erick Aroko**, Universität Würzburg
- 243D** 12:15 pm *Plasmodium falciparum* apicomplexan-specific glucosamine-6-phosphate *N*-acetyltransferase is key for amino sugar metabolism and asexual blood stage development. **Luis Izquierdo Lázaro**, Barcelona Institute for Global Health
- 244D** 12:15 pm Cancelled/Unprogrammed
- 245D** 12:15 pm *Cre*-like retroelements: ancient components of kinetoplastid genomes with recent activity in *Trypanosoma cruzi*. **ADRIANA LUDWIG**, Instituto Carlos Chagas, Fiocruz-PR
- 246D** 12:15 pm An Alba-domain protein required for proteome remodelling during trypanosome differentiation and host transition. **Shubha Bevkal Subramanyaswamy**, University of Bern, Bern, Switzerland
- 247D** 12:15 pm Novel telomere-associated proteins and their impact on VSG expression site regulation in *Trypanosoma brucei*. **Nadine Weisert**, Universität Würzburg
- 248D** 12:15 pm Antileishmanial chemotherapy through clemastine fumarate mediated inhibition of the *Leishmania* inositol phosphorylceramide synthase. **Edubiel Alpizar**, Durham University
- 249D** 12:15 pm New insights into *Trypanosoma brucei* chromatin dynamics. **Tim Vellmer**, University Würzburg
- 250D** 12:15 pm *Brucei*Hisnstein: generation of *Trypanosoma brucei* cell lines expressing *Trypanosoma cruzi*'s histidine degradation pathway. **Gabriela Torres Montanaro**, LabTryps - Instituto de Ciencias Biomedicas - Universidade de São Paulo
- 251D** 12:15 pm Lysine residues are critical for heterogenous accumulation of *P. falciparum* PCNA1 among nuclei. **Severina Klaus**, Centre for Infectious Diseases, Heidelberg University Hospital
- 252D** 12:15 pm Expansion microscopy of TAC protein-complex arrangement in *T. brucei*. **Ana Kalichava**, University Bern
- 253D** 12:15 pm Parasitophorous vacuole morphology and modulation of pH at the time of *Plasmodium falciparum* egress from erythrocytes. **Matthias Garten**, National Institutes of Health
- 254D** 12:15 pm The serine-cysteine interconversion is catalyzed by serine acetyltransferase and cysteine synthase in *Trypanosoma cruzi*. **Ana Milena Murillo Giraldo**, University of Sao Paulo
- 255D** 12:15 pm Effects of Trypanocidal drugs on DNA synthesis: insights into the mode of Killing of Melarsoprol. **Galadriel Hovel-Miner**, George Washington University
- 256D** 12:15 pm Participation of an Enoyl-CoA hydratase in the catabolism of branched chain amino acids in *Trypanosoma cruzi*. **Sabrina Marsiccobetre**, Institute of Biomedical Sciences, University of São Paulo
- 257D** 12:15 pm Bioactive trypanocidal compounds from a locally used herbal preparation in Ghana. **Pearl Akazue**, University of Ghana
- 258D** 12:15 pm VSG Specific Nanobodies Hamper Mobility of the Surface Protein and Lead to Shedding of Nanotubes. **Laura Hartleb**, Universität Würzburg
- 259D** 12:15 pm Counting cycles or counting on sensing? – Possible mechanisms allowing for *P. falciparum* persistence during the dry season. **Carolina Andrade**, Heidelberg University Hospital
- 260D** 12:15 pm Histidine ammonia-lyase knockout alters bioenergetics of *Trypanosoma cruzi* without affecting its infection capability in the insect vector. **Janaina de Freitas Nascimento**, Universidade de São Paulo
- 261D** 12:15 pm New approach for understanding the interface between host antibody and Variant Surface Glycoprotein in *Trypanosoma brucei* using Phage Immunoprecipitation Sequencing. **Bailin Zhang**, Johns Hopkins University, Bloomberg School of Public Health
- 262D** 12:15 pm Similarities and differences of metacyclic to bloodstream Variant Surface Glycoprotein (VSG) in *Trypanosoma brucei*. **Monica Chandra**, German Cancer Research Center
- 263D** 12:15 pm Characterizing the intracellular niche of human microsporidian parasite *Encephalitozoon intestinalis*. **Noelle Antao**, NYU School of Medicine
- 264D** 12:15 pm Activity of epigenetic inhibitors against *Babesia divergens*. **Leen Vanheer**, Weill Cornell Medicine
- 265D** 12:15 pm In vitro infection and genomic analysis of *Crithidia*-like parasites isolated from human cases of visceral leishmaniasis in Brazil. **Luana Aparecida Rogerio**, Federal University of São Carlos
- 266D** 12:15 pm Environmental sensing and social motility are regulated by mechanosensation in *Trypanosoma brucei*. **Veronica Jimenez**, California State University Fullerton
- 267D** 12:15 pm The interface between the parasite *Trypanosoma brucei* and the mammalian host's adaptive immune system. **Joseph Verdi**, Deutsche Krebsforschungszentrum
- 268D** 12:15 pm Calmodulin-specific small interfering RNA induces consistent expression suppression and morphological changes in *Echinococcus granulosus*. **Seyed mohammad mousavi**, Kerman University
- 269D** 12:15 pm Understanding Praziquantel Resistance in Juvenile Schistosomes at the Cellular Level. **Sarah Cobb**, UT Southwestern Medical Center

- 270D** 12:15 pm The Malaria Box compound MMV007113 targets the parasite Na<sup>+</sup>/H<sup>+</sup> P-type ATPase, PfATP4. **Suyash Bhatnagar**, Drexel University
- 271D** 12:15 pm The kinesin of the flagellum attachment zone in *Leishmania* is required for cell division, proliferation in the sand fly vector and virulence in the mammalian host. **Rosa Milagros Corrales**, Univ. Montpellier / CNRS
- 272D** 12:15 pm Development of a CRISPR-Cas nuclease-based rapid diagnostic test for *P. falciparum*. **Holly Barkwill**, USFDA
- 273D** 12:15 pm A Multi-omics Approach to Understand the Mode of Action of a Kalihinol Analogue, a Potent New Antimalarial against *Plasmodium falciparum*. **Zeinab Chahine**, UC Riverside
- 274D** 12:15 pm Different sensitivity to ruthenium-based inhibitors of the mitochondrial calcium uniporter complex of control and MICU1- and MICU2-ablated *Trypanosoma cruzi*. **Mayara Bertolini**, University of Georgia
- 275D** 12:15 pm Consequences of Na<sup>+</sup> homeostasis disruption on the phosphoproteome of blood-stage *Plasmodium falciparum*. **Aarti Ramanathan**, Drexel University
- 276D** 12:15 pm Identifying specificity of histone reader domains in malaria parasites. **Jiacheng Liu**, Weill Cornell Medicine
- 277D** 12:15 pm Atypical Leishmaniasis in an endemic focus: Host and parasite determinants of disease outcome. **Nilakshi Samaranayake**, Faculty of Medicine, University of Colombo
- 278D** 12:15 pm The first evidence of operon gene clusters in Orthonectida genomes. **DARIA SHAFRANSKAYA**, Saint Petersburg State University
- 279D** 12:15 pm Revealing the biological role of the *Trypanosoma cruzi* Alanine racemase using CRISPR-Cas9. **Richard Girard**, Universidade de São Paulo
- 280D** 12:15 pm Characterizing RNA-binding proteins essential for *Plasmodium falciparum* sexual development. **Andrew Stasic**, US Food and Drug Administration
- 281D** 12:15 pm TgOTUD5, an essential phosphorylation-regulated deubiquitinase, controls *Toxoplasma gondii* plasma membrane homeostasis. **Anthony Sinai**, University of Kentucky College of Medicine
- 282D** 12:15 pm Unabated malaria transmission in a peri-urban community of Akure, southwestern Nigeria: A cross-sectional and Hospital-based study of the prevalence, intensity and risk factors enhancing transmission. **Oluwaseun Awosolu**, Federal University of Technology, Akure, Nigeria
- 283D** 12:15 pm Nucleosome landscape differs at strategically genomic regions in replicative and non- replicative forms of *Trypanosoma cruzi*. **Julia Cunha**, Butantan Institute
- 284D** 12:15 pm Dissecting primary human erythroblast responses to *Plasmodium falciparum* infection. **Tamar Feldman**, Stanford University School of Medicine
- 285D** 12:15 pm Phenotypic Characterization of an Essential Myxozoan-specific Mitochondrial Protein with Unknown Function in *Plasmodium falciparum*. **ian lamb**, Drexel University College of Medicine
- 286E** 12:15 pm Stage-specific downregulation of SPATR impacts malaria sporozoite motility and infectivity. **David Costa**, Instituto de Investigação e Inovação em Saúde (i3S)/Instituto de Biologia Molecular e Celular (IBMC)
- 287E** 12:15 pm Discovering new targets for a malaria vaccine. **Ana Rafaela Teixeira**, Instituto de Investigação e Inovação em Saúde (i3S)/Instituto de Biologia Molecular e Celular (IBMC)
- 288E** 12:15 pm PfCoronin is a major determinant of artemisinin resistance *in vitro*. **Sara Shin**, Harvard T. H. Chan School of Public Health
- 289E** 12:15 pm The Architecture of the Native Apicomplexan Nuclear Pore Complex. **Pravin Dewangan**, UT Southwestern Medical center
- 290E** 12:15 pm *Plasmodium* SAXO1 is a conserved, redox-active protein that binds and stabilizes microtubules. **Stefan Kanzok**, Loyola University Chicago, Lake Shore Campus
- 291E** 12:15 pm The rhythmic day of malaria parasites. **Filipa Rijo-Ferreira**, UT Southwestern
- 292E** 12:15 pm Demonstration of genetic exchange between New World and Old World strains of *Leishmania* with different karyotypes. **Eliza Vanessa Carneiro Alves Ferreira**, National Institutes of Health
- 293E** 12:15 pm Exploring the uncertainty of protein localization in *Toxoplasma* by Bayesian analysis of the spatial proteome. **Konstantin Barylyuk**, University of Cambridge
- 294E** 12:15 pm Genome-wide CRISPR/cas9 screen identifies host factors essential for optimal *Plasmodium* liver stage development. **Kamalakannan Vijayan**, Seattle Children's Research Institute
- 295E** 12:15 pm Investigating nonenzymatic functions of an essential citrate synthase-like protein in *Plasmodium falciparum*. **Sezin Nicklas**, Drexel University College of Medicine
- 296E** 12:15 pm A Secretory Phospholipid Binding GM2 Activator Protein is Essential for Cuticular Integrity in *Caenorhabditis elegans*. **NJUME FERDINAND NGALE**, University of California Merced
- 297E** 12:15 pm When is a DNA Polymerase Not a Polymerase? **Stephanie Delzell**, University of Massachusetts Amherst
- 298E** 12:15 pm *Trypanosoma brucei gambiense* Variant Surface Glycoprotein expression in patients with African Trypanosomiasis. **Sarah Sudlow**, Johns Hopkins Bloomberg School of Public Health
- 299E** 12:15 pm A forward genetic screen identifies genes essential for gametocyte development and transmission of the malaria parasite *Plasmodium falciparum*. **Jyotsna Chawla**, Center for Global Health and Infectious Diseases Research, University of South Florida
- 300E** 12:15 pm Investigating the Essential Function of a Divergent Family A DNA Polymerase in *Trypanosoma brucei* kDNA replication. **Raveen Armstrong**, University of Massachusetts Amherst
- 301E** 12:15 pm Molecular characterization of *Cryptosporidium* and *Giardia* in human and cattle in



Chittagong ,Bangladesh. **Zebunnahar Yasmin**, Chattogram Veterinary & Animal Sciences University

**302E** 12:15 pm Target identification efforts for fast-killing inhibitors of the malaria parasite, *Plasmodium falciparum*. **Leah Imlay**, UT Southwestern Medical Center

**303E** 12:15 pm Deciphering *Magnivittellinum* sp. (Digenea: Alloglossiidae) from Salta, Argentina, with genetic markers. **Carolina Davies**, CONICET

**304E** 12:15 pm *In silico* design of *Eimeria tenella* vaccine candidates. **Tean Zaheer**, University of Agriculture, Faisalabad

**305E** 12:15 pm Decoding combinatorial patterns of histone posttranslational modifications of *Plasmodium falciparum*. **Hilde von Grüning**, University of Pretoria

**306E** 12:15 pm Inhibition of the *Plasmodium falciparum* Acetyl-CoA Synthetase by multiple chemotypes disrupts protein acetylation and epigenetic regulation in blood stage parasites. **Robert Summers**, Harvard T.H. Chan School of Public Health

**307E** 12:15 pm Study of gibbon APOL1-like apolipoprotein lytic activity in *Trypanosoma brucei* and mammalian cells. **Bernardo Gonzalez Baradat**, Hunter College. City University of New York

**308E** 12:15 pm Optimisation of a Loop-Mediated Isothermal Amplification (LAMP) assay: improving the performance of the reaction in diagnostics of *Schistosoma mansoni* in human and snail samples. **Silvia Mesquita**, Oswaldo Cruz Foundation (Fiocruz)

**309E** 12:15 pm Multiplex species-specific isothermal DNA amplification for rapid molecular detection of viscerotropic and dermatropic *Leishmania* species in Brazil. **Rubens Monte-Neto**, Instituto Rene Rachou - Fundação Oswaldo Cruz

**310E** 12:15 pm MAPK2 is a conserved Alveolate MAPK required for *Toxoplasma* cell cycle progression. **Xiaoyu Hu**, UT Southwestern Medical Center

**311E** 12:15 pm Phosphoglycerate kinase: A versatile glycolytic enzyme in kinetoplastids. **Diego Andrade**, Universidad de Los Andes

**312E** 12:15 pm Serotyping, host genes and cytokines response in human ocular toxoplasmosis. **Jorge Gomez Marin**, Universidad del Quindío

**313E** 12:15 pm Establishing high-throughput *Plasmodium falciparum* transcription inhibition assays for compound screening and drug discovery. **Philippa Reuterswärd Waldner**, The Pennsylvania State University

**314E** 12:15 pm Long-term live-microscopy of *Cryptosporidium* reveals direct development of sexual stages. **Elizabeth English**, University of Pennsylvania

**315E** 12:15 pm Dissecting the Unique Invasion Machinery of Apicomplexan Parasites. **Li-av Segev Zarko**, Stanford University

**316E** 12:15 pm mRNA localization: a possible role in the regulation of stage-specific gene expression during *Trypanosoma cruzi* development. **Karina Sabalette**, IIBIO-UNSAM

**317E** 12:15 pm Probing the role of MFR4 in Halofuginone Resistance and the Adaptive Proline Response. **Akansha Pant**, Harvard TH Chan School of Public Health

**318E** 12:15 pm Robotic *Plasmodium* sporozoite extraction from *Anopheles* mosquito salivary glands. **Tess Seltzer**, Center for Global Infectious Disease Research, Seattle Children's Research Institute

**319E** 12:15 pm Knockdown of EXP2 in the *Plasmodium* liver stage suggests major differences from blood stage function. **Tahir Hussain**, Iowa State University

**320E** 12:15 pm Comparative Analysis of Features that Contribute to CNV Formation in Various *Plasmodium* Species. **Luke Dillard**, University of Virginia

**321E** 12:15 pm : Molecular Characterization of *Toxoplasma gondii* in Pregnant Women from Mali and Nigeria. **HENRIETTA AWOBODE**, University of Ibadan

**322E** 12:15 pm Changes in the expression of glucose transporters before and after evagination of the scolex in *Taenia solium*. **David Castañeda Carpio**, Universidad Peruana Cayetano Heredia

**323E** 12:15 pm Characterization of a novel endolysosomal complex localized Ca<sup>2+</sup> binding protein during the *Toxoplasma gondii* lytic cycle. **Noopur Dave**, Indiana University School of Medicine

**324E** 12:15 pm Cancelled/Unprogrammed

**325E** 12:15 pm Host adaptation in *Toxoplasma gondii*- What makes this parasite the most successful eukaryotic parasite in nature? **Adit Naor**, Stanford

**326E** 12:15 pm Mild starvation of *P. falciparum* increases tolerance to DHA. **Audrey Brown**, University of Virginia

**327E** 12:15 pm Characterization of an Endoplasmic Reticulum-Resident Calcium-binding protein in *Toxoplasma gondii*. **Miryam Hortua**, University of Georgia

**328E** 12:15 pm A PfCRK4-regulated protein plays a role for cell-cycle progression of *P. falciparum*. **Marta Maia Machado**, Heidelberg University Hospital

**329E** 12:15 pm Inhibition of Poly(ADP-Ribose)Glycohydrolase activity affects lysosomal function and hampers *T. cruzi* infection in Vero cells. **Salome Vilchez Larrea**, Instituto de Investigaciones en Ingeniería Genética y Biología Molecular "Dr. Héctor N. Torres"

**330E** 12:15 pm Placental immune response against *Toxoplasma gondii* could promote fetal maintenance but congenital transmission in late pregnancy. **Fernando Gómez-Chávez**, Cátedras CONACyt - Instituto Nacional de Pediatría, México

**331F** 12:15 pm Comparative transcriptomics of the hemoglobin digestion pathway in three lizard malaria parasites. **Sarah Pangburn**, The Graduate Center, CUNY

**332F** 12:15 pm Assessment of known Molecular Markers of *Plasmodium falciparum* Resistance Markers to Sulohodixine-Pyrimethamine in the Buea Health Area SouthWest, Cameroon. **Ntui Vincent Ntui-Njock**, University of Buea Southwest Cameroon

**333F** 12:15 pm Exploring growth inhibition and invasion blocking activity of diffrenet low molecular wight heparin

against *Plasmodium falciparum* parasite. **Muqdad Hmoud**, Keele University

**334F** 12:15 pm Eukaryotic Pathogen, Vector and Host Omics Data-Mining for Everyone. **Omar Harb**, University of Pennsylvania

**335F** 12:15 pm *Toxoplasma gondii* matrix cyst wall protein MAG1 is a secreted immunomodulatory effector and critical for acute virulence and establishing chronic infection . **Tadakimi Tomita**, Albert Einstein College of Medicine

**336F** 12:15 pm Characterization of genes involved in Glycosylation process as potential virulence factors in *Leishmania braziliensis* . **Gabrielle Ariadine Bento**, Federal University of Minas Gerais

**337F** 12:15 pm The metamorphosis of *Taenia solium* into its adult form depends on Notch signaling. **Juan Blume**, Universidad Peruana Cayetano Heredia

**338F** 12:15 pm Murine gut parasite *Tritrichomonas musculus* drives changes in the metabolism of intestinal microbiota. **Ana Popovic**, The Hospital for Sick Children

**339F** 12:15 pm Malaria parasites require a divergent heme oxygenase for apicoplast transcription and biogenesis. **Amanda Mixon**, University of Utah

**340F** 12:15 pm *In silico* analysis of ADMET properties for compounds that present anti-schistosoma activity. **SANDRA GAVA**, René Rachou Institute

**341F** 12:15 pm Bioinformatic and cell-based tools for reverse and forward genetics using CRISPR in mosquitos. **Raghuvir Viswanatha**, Harvard Medical School

**342F** 12:15 pm Mechanistic Insight into the Invasion Apparatus for Infection by Microsporidia Parasites. **Breane Budaitis**, Skirball Institute of Biomolecular Medicine, NYU

**343F** 12:15 pm Knowledge, attitude and practices associated with toxoplasmosis in pet owners of province Punjab, Pakistan. **Abrar Hussain**, University of Veterinary and Animal Sciences

**344F** 12:15 pm Knowledge, Attitude and Practices of *Echinococcus granulosus* in different slaughter house worker of Punjab Pakistan. **SABIR HUSSAIN**, University of Veterinary and Animal Sciences, Lahore

**345F** 12:15 pm Genetic diversity of the neglected *Plasmodium malariae* parasite using targeted amplicon sequencing techniques. **Eniyou Cheryll Oriero**, MRCG at LSHTM

**346F** 12:15 pm Identification of immunogenic non-Variant Surface Glycoprotein (VSGs) surface protein on wild *Trypanosoma vivax*. **Kwadwo O. Oworae**, University of Ghana

**347F** 12:15 pm "So different yet so much alike": a new cryptic species *Microcotyle isyebi* (Monogenea, Platyhelminthes ) from *Boops boops* (Teleostei) off the Algerian coast. **Chahinez Bouguerche**, Université des Sciences et de la Technologie Houari Boumediene

**348F** 12:15 pm Transcriptional activation of multiple clonally variant genes in *Plasmodium falciparum* after passage through transmission stages and exposure to human host conditions. **Anastasia Pickford**, ISGlobal

**349F** 12:15 pm Control of VSG expression by a phosphoinositide-regulated telomeric expression site complex. **Igor Cestari**, McGill University

**350F** 12:15 pm Complete arrest of *Plasmodium falciparum* liver stage development in parasites lacking Multidrug resistance protein 2 (MRP2)/ABC-Binding Cassette transporter 2 (ABCC2). **Debashree Goswami**, Seattle Childrens Research Institute

**351F** 12:15 pm The generation of extra-chromosomal DNA amplicons in antimalarial resistant *Plasmodium falciparum*. **Jennifer Guler**, University of Virginia

**352F** 12:15 pm Molecular composition of the micropore in *Toxoplasma*. **Ludek Koreny**, University of Cambridge

**353F** 12:15 pm ID-ing the Dense Granule Proteome of *P. falciparum*. **Manuel Fierro**, Iowa State University

**354F** 12:15 pm Development of Pro-uncompetitive *Plasmodium falciparum* cytoplasmic prolyl-tRNA synthetase inhibitors. **Mark Tye**, Harvard Graduate School of Arts and Sciences

**355F** 12:15 pm Arginine methylation is tightly regulated throughout *Leishmania (Viannia) braziliensis* life cycle. **Angela Cruz**, University of São Paulo

**356F** 12:15 pm *Trypanosoma brucei* Tim50 Show Connection with Mitochondrial Cardiolipin synthesis and Plays Critical role in Parasite Infectivity. **Minu Chaudhuri**, Meharry Medical College

**357F** 12:15 pm High speed, 3D imaging reveals chemotactic behavior specific to human-infective *Leishmania* parasites. **Pegine Walrad**, University of York

**358F** 12:15 pm MKT1 interacting RNA-binding protein and its role in the trypanosome Variant Surface Glycoprotein mRNA stabilization. **Larissa Nascimento**, Zentrum für Molekulare Biologie der Universität Heidelberg

**359F** 12:15 pm Molecular biodiversity and evolution of ascorbate peroxidase in *Trypanosoma cruzi*. **Rafael Miranda de Souza**, René Rachou Institute-Oswaldo Cruz Foundation-IRR

**360F** 12:15 pm *TbRAP1* Has a Duplex DNA Binding Activity That is Required for Telomere Localization and Monoallelic VSG Expression. **Marjia Afrin**, Cleveland State University

**361F** 12:15 pm Role of *TbRRM1* in transcriptional regulation in *Trypanosoma brucei*. **Analia Nittolo**, Instituto de Investigaciones Biotecnológicas (IIB-UNSAM)

**362F** 12:15 pm Understanding and characterization the first steps of proline biosynthesis in *Trypanosoma cruzi*. **Letícia Marchese**, Instituto de Ciências Biomédicas, Univesidade de São Paulo

**363F** 12:15 pm Different roads to search for novel trypanocidal strategies. **Laura Fraccaroli**, ICT Milstein - CONICET

**364F** 12:15 pm Disease and mixed species *Theileria* spp. infection among sheep in Oman. **Salama Al-Hamidhi**, Sultan Qaboos university

**365F** 12:15 pm Misregulation of Alba domain-containing proteins in *Plasmodium falciparum* blood stages differentially affects growth and the parasite transcriptome. **Dimple**

**Acharya**, Institute of Bioinformatics and Applied Biotechnology

**366F** 12:15 pm The mode of action of *T. gondii* tissue cyst inhibitors. **Deborah Maus**, Robert Koch Institute

**367F** 12:15 pm Identification of a nuclear protease that is associated to histone H3 clipping and DNA replication in blood stages of malaria parasites. **Shruthi Vembar**, Institute of Bioinformatics and Applied Biotechnology

**368F** 12:15 pm Resolvin D1 Administration is Beneficial in *Trypanosoma cruzi* Infection. **Aline Horta**, Albert Einstein College of Medicine

**369F** 12:15 pm Analysis of the Hippo pathway role in *Tritrichomonas foetus* cell division. **Lucrecia Iriarte**, INTECH

**370F** 12:15 pm Investigation of protein acetylation function in *Leishmania*: Zn-dependent lysine deacetylases as model of study. **Suellen Maran**, Unifesp - Federal University of São Paulo

**371F** 12:15 pm Molecular epidemiology of resistance markers of Artemisinin-based Combination Therapies among *Plasmodium falciparum* isolates in Lagos, Nigeria. **Chinaza Nnam**, Nigerian Institute of Medical Research

**372F** 12:15 pm Alternative approaches for control of gene expression in trypanosomatids. **Gabriela Niemirowicz**, Instituto de Investigaciones Biotecnológicas

**373F** 12:15 pm Towards development of an auxin-inducible degron system for use in *Plasmodium falciparum*. **Madeline Farringer**, Iowa State University

**374F** 12:15 pm Molecular prevalence of intestinal parasites infections in children with diarrhea in Franceville, Southeast of Gabon. **Sandrine OYEGUE**, Centre International de Recherches Médicales de Franceville

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