



# ISOPPS



## 10<sup>th</sup> International Symposium On Phlebotomine Sandflies

15 - 19 July 2019

San Cristóbal - Ecuador

### SCIENTIFIC PROGRAM

Time		Session		
<b>Monday July, 15<sup>th</sup></b>				
<b>9:00</b>	15:30	<b>REGISTRATION</b>		
<b>15:30</b>	15:40	Opening ceremony	Sonia Zapata Mena	
<b>15:40</b>	15:45	Welcome speech	Tlgo. Henry Cobos, San Cristobal's Major	
<b>15:45</b>	16:00	SOVE	Major Dhillon	Society for Vector Ecology - Its benefits and why should one join SOVE
<b>16:00</b>	16:30	<b>COFFEE BREAK</b>		
<b>Systematics and Phylogeny</b> <b>Chairperson: Sonia Zapata</b>				
Time		Presentation	Speaker	Title
<b>16:30</b>	17:00	Keynote speaker	Eunice Galati	Gaps in Phlebotominae distribution and its taxonomic implications
<b>17:00</b>	17:15	Oral Presentation 1	Sofía Lorián Moya	Phlebotomine DNA barcodes and new records for Argentina
<b>17:15</b>	17:30	Oral Presentation 2	Fano Randrianambinintsoa	An overview of the Phlebotomine sandflies of Madagascar
<b>17:30</b>	17:45	Oral Presentation 3	Mathieu Loyer	New data about the genus <i>Idiophlebotomus</i>
<b>17:45</b>	18:00	Oral Presentation 4	Sonia Zapata	A molecular systematics of the Psychodopygina (Diptera; Psychodidae) inferred from ribosomal and mitochondrial DNA
<b>18:00</b>	18:20	Discussion		
<b>19:20</b>	21:00	<b>Welcome Cocktail</b> GAIAS - USFQ		
<b>Tuesday July, 16<sup>th</sup></b>				

**Vector and Parasite**  
**Chairperson: Jérôme Depaquit**

Time		Presentation	Speaker	Title
<b>08:00</b>	08:30	Keynote speaker	Shaden Kamhawi	Immune events triggered in host skin by a <i>Leishmania</i> -infected sand fly bite govern pathogenesis of leishmaniasis
<b>08:30</b>	08:45	Oral Presentation 1	Rodrigo Soares	<i>Lutzomyia longipalpis</i> salivary gland extract modulates <i>Leishmania enriettii</i> infection in <i>Cavia porcellus</i>
<b>08:45</b>	09:00	Oral Presentation 2	Flávia Benini da Rocha Silva	Attractiveness of golden hamster ( <i>Mesocricetus auratus</i> ) to <i>Lutzomyia longipalpis</i> (Diptera:Psychodidae) before and after infection with <i>Leishmania (Leishmania) amazonensis</i>
<b>09:00</b>	09:15	Oral Presentation 3	Luigi Gradoni	A hamster model of defective sand-fly transmission may explain the occurrence of canine <i>Leishmania</i> seroreactors without evidence of infection in endemic areas of zoonotic visceral leishmaniasis
<b>09:15</b>	09:30	Oral Presentation 4	Terka Lestinova	<i>Leishmania mexicana</i> amastigotes of various origin: proteomic and developmental comparison
<b>09:30</b>	10:00	Discussion		
<b>10:00</b>	10:30	COFFEE BREAK		
<b>Chairperson: Petr Volf</b>				
<b>10:30</b>	10:45	Oral Presentation 5	Carla Maia	Antibody response to Toscana virus, sandfly fever Sicilian virus and <i>Phlebotomus perniciosus</i> saliva in cats naturally exposed to sand fly bites
<b>10:45</b>	11:00	Oral Presentation 6	Mattia Calzolari	Host preference of the sand fly <i>Phlebotomus perfiliewi</i> in northern Italy
<b>11:00</b>	11:15	Oral Presentation 7	Felipe Dutra Rêgo	An overview of Brazilian sand flies: Almost a century of scientific data and how fast are we moving on to uncover which are the truly vectors?
<b>11:15</b>	11:30	Oral Presentation 8	Myrthe Pareyn	Ecology and biting behavior of <i>Phlebotomus pedifer</i> in a cutaneous leishmaniasis hotspot in southern Ethiopia
<b>11:30</b>	11:45	Oral Presentation 9	Louis Maes	Influence of paromomycin resistance on <i>Leishmania</i> fitness inside the sandfly vector
<b>11:45</b>	12:00	Oral Presentation 10	Guy Caljon	Miltefosine resistance in <i>Leishmania</i> : What do sand fly infections teach us?
<b>12:00</b>	12:30	Discussion		
<b>12:30</b>	14:30	LUNCH		
<b>Chairperson: Shaden Kamhawi</b>				

<b>14:30</b>	15:00	Keynote speaker	Petr Volf	Antibodies against sand fly saliva: markers of host exposure to sand fly vectors
<b>15:00</b>	15:15	Oral Presentation 11	Barbora Vojtkova	Repeated sand fly bites have effect on <i>Leishmania</i> infection in BALB/c mice
<b>15:15</b>	15:30	Oral Presentation 12	Mary Cameron	Visceral leishmaniasis transmission in India: the role of xenomonitoring in a post-elimination setting.
<b>15:30</b>	15:45	Oral Presentation 13	Jovana Sadlova	Are <i>Arvicantis</i> and <i>Mastomys</i> Sub-Saharan reservoirs for <i>Leishmania major</i> and <i>L. donovani</i> ? Xenodiagnoses by <i>P. duboscqi</i> and <i>P. orientalis</i>
<b>15:45</b>	16:00	Oral Presentation 14	Thais Lemos da Silva	<i>Leishmania infantum chagasi</i> gene expression journey inside <i>Lutzomyia longipalpis</i> , the main vector of visceral leishmaniasis in Brazil
<b>16:00</b>	16:30	Discussion		
<b>16:30</b>	17:00	COFFEE BREAK		
<b>17:00</b>	18:30	<b>POSTER SESSION 1</b>		

**Thursday July, 18<sup>th</sup>**

**Ecology and Epidemiology  
Chairperson: Eunice Galati**

<b>Time</b>	<b>Presentation</b>	<b>Speaker</b>	<b>Title</b>	
<b>08:00</b>	08:30	Keynote speaker	Oscar Daniel Salomón	How to make a perfect cutaneous leishmaniasis outbreak in the Americas
<b>09:00</b>	09:15	Oral Presentation 1	Wagner de Souza Fernandes	Ecology of sand flies (Diptera: Psychodidae: Phlebotominae) in the municipality of Campo Grande, MS, Brazil
<b>09:15</b>	09:30	Oral Presentation 2	Sandra Enríquez	Diversity, species composition and natural infection of sand flies vectors of cutaneous leishmaniasis along an altitudinal gradient on the Northwestern slopes of the Ecuadorian Andes
<b>09:30</b>	09:45	Oral Presentation 3	José Dilermando Andrade Filho	Sand fly behavior: much more than weak-flying
<b>09:45</b>	10:15	Discussion		
<b>10:15</b>	10:30	<b>ISOPS X Group Photo</b>		
<b>10:30</b>	10:50	COFFEE BREAK		

**Chairperson: Oscar Daniel Salomón**

<b>10:50</b>	11:05	Keynote speaker	Iván Darío Vélez	Bionomy of the phlebotomine sandflies vectors and ecoepidemiological modulation of leishmaniasis epidemic outbreaks in America, Africa, Europe and Asia
<b>11:05</b>	11:20	Oral Presentation 5	Fatima Amaro	Sandfly-borne phleboviruses circulating in Portugal: five and still counting
<b>11:20</b>	11:35	Oral Presentation 6	Cristina Daniela Cazan	Updates on the distribution, diversity and abundance of sand flies (Diptera: Psychodidae) in Romania
<b>11:35</b>	11:50	Oral Presentation 7	Agathe Chavy	Multi-scale environmental influences on sandflies community structure in Amazonia
<b>11:50</b>	12:05	Oral Presentation 8	Iván Darío Vélez	Impact of anthropic activities on the diversity and distribution of sandflies species in the eastern region of Caldas, Colombia
<b>12:05</b>	12:35	Discussion		
<b>12:35</b>	14:15	LUNCH		

**Chairperson: Iván Darío Velez**

<b>14:15</b>	14:45	Keynote speaker	Jérôme Depaquit	Phlebotomine sand flies and leishmaniasis in Oman
<b>14:45</b>	15:00	Oral Presentation 10	Nil Rahola	Diversity and ecology of phlebotomine sand flies (Diptera: Psychodidae) in the Quang Ninh province, a new update for Vietnam
<b>15:00</b>	15:15	Oral Presentation 11	Jorian Prudhomme	Altitude and hillside orientation as main factors of population structuring of <i>Phlebotomus ariasi</i> , vector of <i>Leishmania infantum</i>
<b>15:15</b>	15:30	Oral Presentation 12	Nazli Ayhan	What we have learned from sandfly-borne Phlebovirus researches in old world?
<b>15:30</b>	15:45	Oral Presentation 13	Alessandra Gutierrez de Oliveira	Phlebotominae (Diptera: Psychodidae) and Biomes in the State of Mato Grosso do Sul, Brazil
<b>15:45</b>	16:00	Oral Presentation 14	Nazli Ayhan	Sand Fly-borne Phleboviruses in the Balkan Countries
<b>16:00</b>	16:30	Discussion		
<b>16:30</b>	16:50	COFFE BREAK		
<b>16:50</b>	18:20	POSTER SESSION 2		
<b>19:30</b>	22:30	Farewell Cocktail Hotel Miconia Sea Side		

<b>Friday July, 19<sup>th</sup></b>				
<b>Sandflies control Chairperson: Luigi Gradoni</b>				
Time		Presentation	Speaker	Title
<b>08:00</b>	08:15	Oral Presentation 1	Marcelo Ramalho-Ortigao	Bacterial infection and innate immune responses in sand fly larvae midgut
<b>08:15</b>	08:30	Oral Presentation 2	Alongkot Ponlawat	Field evaluation of transfluthrin treated military materials against Phlebotomine sand flies (Diptera: Psychodidae) in Thailand
<b>08:30</b>	08:45	Oral Presentation 3	Vicente Estevam Machado	Attractiveness of a controlled release system with 1-hexanol to <i>Nyssomyia neivai</i> (Diptera: Psychodidae) in wind tunnel
<b>08:45</b>	09:00	Oral Presentation 4	Rosa Galvez Esteban	<i>Phlebotomus perniciosus</i> biological adaptation under laboratory conditions
<b>09:00</b>	09:15	Oral Presentation 5	Mary Cameron	A comparative study of three trapping methods for indoor sampling of <i>Phlebotomus argentipes</i> in the Indian subcontinent
<b>09:15</b>	09:30	Oral Presentation 6	Mary Cameron	Indoor residual spraying for the control of <i>Phlebotomus argentipes</i> in the Indian subcontinent: a review of the available evidence
<b>09:30</b>	09:45	Oral Presentation 8	Luigi Gradoni	Laboratory reassessment of the anti-feeding effect of Scalibor <sup>®</sup> deltamethrin collar against the sand fly <i>Phlebotomus perniciosus</i> in dogs confirms elevated and sustained efficacy for one year following treatment
<b>9:45</b>	10:10	Discussion		
<b>10:10</b>	10:40	COFFEE BREAK		
<b>Modern tools for sandflies studies Chairperson: Vit Dvorak</b>				
<b>10:40</b>	10:55	Oral Presentation 1	Petra Cikrtova	Yellow-related proteins in saliva of <i>Phlebotomus orientalis</i> : amine-binding and antigenic properties
<b>10:55</b>	11:10	Oral Presentation 2	Mary Ann McDowell	Population structure of two sand fly genomes: <i>Phlebotomus papatasi</i> and <i>Lutzomyia longipalpis</i>

<b>11:10</b>	11:25	Oral Presentation 3	Jan Votypka	<i>Sergentomyia schwetzi</i> : salivary gland transcriptome, proteome and salivary enzymes
<b>11:25</b>	11:40	Oral Presentation 4	Nagila Costa Secundino	Bacterial diversity of wild-caught <i>Lutzomyia longipalpis</i> (a vector of Visceral Leishmaniasis) under distinct physiological conditions, by metagenomics and cultivable analysis
<b>11:40</b>	11:55	Oral Presentation 5	Vit Dvorak	MALDI-TOF mass spectrometry: useful tool for species identification and blood meal analysis of phlebotomine sand flies
<b>11:55</b>	12:10	Oral Presentation 6	Emma Howson	The Gnatwork: building capacity for research on sandflies, biting midges and blackflies
<b>12:10</b>	12:30	Discussion		
<b>12:30</b>	13:00	Closing Ceremony		

## POSTERS PRESENTATION

Tuesday July, 16<sup>th</sup>

### SESSION 1

Time		Speaker	Title
17:00	17:02	Barbora Vojtková	Central Asian rodents as model animals for leishmaniasis: susceptibility to <i>Leishmania major</i> and infectiousness to <i>Phlebotomus duboscqi</i>
17:02	17:04	Fátima Amaro	Ultrastructural studies on Alcube virus, a new sandfly-borne virus isolated in Portugal
17:04	17:06	Tereza Lestinova	Adaptive gene-loss coupled to <i>Leishmania infantum</i> expansion in Brazil
17:06	17:08	Tomas Becvar	Development of <i>Leishmania</i> of the subgenus <i>Mundinia</i> in sand flies and guinea-pigs
17:08	17:10	Wagner de Souza Fernandes	Genetic Structure Analyses of <i>Lutzomyia longipalpis</i> and <i>Lutzomyia cruzi</i> using Next-Generation Sequencing
17:10	17:12	Sofía Lorián Moya	Molecular taxonomic identification and genetic relationships among <i>Lutzomyia longipalpis</i> complex and closely related species inferred from cytochrome c oxidase subunit 1
17:12	17:14	Jérôme Depaquit	A robust phylogeny of the subgenus <i>Paraphlebotomus</i> inferred by large-scale sequencing (RAD-seq)
17:14	17:16	Alessandra Gutierrez de Oliveira	Endemism Areas of Phlebotominae in the Upper Paraguay River Basin, Mato Grosso do Sul, Brazil
17:16	17:18	Oscar Daniel Salomón	Impact of productive subsistence activities on the abundance dynamic of <i>Nyssomyia whitmani</i> , a <i>Leishmania braziliensis</i> vector in Misiones
17:18	17:20	Andrey Jose de Andrade	Blood feeding of <i>Sciopemyia microps</i> (Mangabeira, 1942) and <i>Sciopemyia sordellii</i> (Shannon & Del Ponte, 1927) in caves of Minas Gerais state
17:20	17:22	Myrthe Pareyn	Evaluation of a pan- <i>Leishmania</i> SL-RNA qPCR assay for parasite detection in laboratory and field collected sand flies
17:22	17:24	Andrei Mihalca	A historical overview on sand fly distribution and epidemiology of human and animal leishmanioses in Eastern Europe
17:24	17:26	Yester Basmadjian	mtDNA genetic variability of <i>Lutzomyia longipalpis</i> from Uruguay highlights its invasion route to the country
17:26	17:28	Andreia Fernandes Brilhante	Diversity of the phlebotomine fauna (Diptera: Psychodidae) in an area of occurrence of American cutaneous leishmaniasis, State of Acre, Brazilian Western Amazonia
17:28	17:30	Carla Maia	Human seroprevalence of Toscana virus and Sandfly fever Sicilian virus in Setúbal district
17:30	17:32	Carla Maia	Phlebotomine sand fly survey in Algarve region, south of Portugal, 2018: molecular screening of <i>Leishmania</i> and <i>Phlebovirus</i> , and blood meal identification
17:32	17:34	Herintha Coeto Neitzke-Abreu	Presence of <i>Lutzomyia longipalpis</i> in Brazilian areas without cases of visceral leishmaniasis

<b>17:34</b>	17:36	Mariza Fordellone Rosa Cruz	Ecological study and risk factors for the transmission of American Cutaneous Leishmaniasis(ACL) in conservation areas - Paraná – Brazil
<b>17:36</b>	17:38	Blima Fux	Ecological niche of <i>Lutzomyia longipalpis</i> (diptera: Psychodidae), vector of visceral leishmaniasis, in the state of Espírito Santo, Brazil
<b>17:38</b>	17:40	Mariza Fordellone Rosa Cruz	Survey of sandfly fauna in areas of transmission of American Cutaneous Leishmaniasis (ACL), evaluating abundance, diversity and equitability indices under influence of hydroelectric plants in the Parana panema River, Paraná
<b>17:40</b>	17:42	Renato León	Baseline sand fly data and monitoring of cutaneous leishmaniasis in an endemic area close to the Toachi-Pilaton hydroelectric dam: Joint initiative between HIDROTOAPI and LEMMT-USFQ
<b>17:42</b>	17:44	Renato León	Leishmaniasis in Galapagos: Past reported cases and, entomological data to address if local transmission is possible
<b>17:44</b>	17:46	Franklin Espinosa	Leishmanicidal activity of Ishpink and Moringa

**Thursday July, 18<sup>th</sup>**

**SESSION 2**

Time		Speaker	Title
<b>17:15</b>	17:17	Agathe Chavy	Multi-scale environmental influences on sandfly community structure in Amazonia
<b>17:17</b>	17:19	Juan Ramón Rosa	Phlebotomine in transitional area, Chaco, Argentina. Meteorological variation
<b>17:19</b>	17:21	María Lucrecia Villarquide	Seasonal distribution of <i>Lutzomyia longipalpis</i> in Santo Tomé, Corrientes, Argentina.
<b>17:21</b>	17:23	Everton Falcão de Oliveira	Nichtemeral rhythm of sand flies (diptera: psychodidae) in campo grande, mato grosso do sul, Brazil
<b>17:23</b>	17:25	Oscar Daniel Salomón	Where does <i>Nyssomyia whitmani</i> breed? Habitats and conditions that favour the vector in rural areas of Misiones, Argentina
<b>17:25</b>	17:27	Márcia Moreira de Ávila	Aspects of the phlebotomine fauna (Diptera: Psychodidae) and of the infection by <i>Leishmania</i> spp. in an area of high incidence of Cutaneous Leishmaniasis in Rio Branco, Acre
<b>17:27</b>	17:29	Horacio Cadena Peña	Spatial distribution of immature and adults of <i>Lutzomyia</i> sp in a periurban focus of leishmaniasis in the Caribbean region of Colombia
<b>17:29</b>	17:31	Elyes Zhioua	Emergence of Toscana virus and other sandfly-borne phleboviruses in arid bio-geographical areas of central Tunisia
<b>17:31</b>	17:33	Elyes Zhioua	Irrigation in the arid regions of Tunisia impacts the abundance of sand flies population and <i>Leishmania infantum</i> infection



<b>17:33</b>	17:35	Fredy Galvis Ovallos	Natural infection of <i>Lu. longipalpis</i> (Cembrene-1) with <i>Leishmania infantum</i> in a VL focus of the East region of São Paulo State, Brazil
<b>17:35</b>	17:37	Fredy Galvis Ovallos	Detection of DNA of <i>Leishmania infantum</i> in <i>Nyssomyia intermedia</i> in a new focus of visceral leishmaniasis in São Paulo State, Brazil. What is the role of this sandfly in VL transmission?
<b>17:37</b>	17:39	María Gabriela Quintana	Seasonal assemblage of Phlebotominae species, Tucumán, Argentina
<b>17:39</b>	17:41	Nilsa González Brítez	Distribution, Abundance and Infection of <i>Lutzomyia longipalpis</i> , vector of Visceral Leishmaniasis in three Municipalities of the Department of Caaguazú, Paraguay
<b>17:41</b>	17:43	Nilsa González Brítez	Sandflies fauna (Diptera: Psychodidae) in a border area of Paraguay and the influence of environmental variables on the vector density of <i>Lutzomyia longipalpis</i>
<b>17:43</b>	17:45	Ognyan Mikov	Checklist and distribution maps of the phlebotomine sandflies of Bulgaria
<b>17:45</b>	17:47	Rosa Galvez Esteban	Field collection of sand flies as one of the funded projects of local participatory budget in Torrelodones municipality (Madrid), Spain
<b>17:47</b>	17:49	Rosa Galvez Esteban	Harnessing student citizen science in and around the classroom to study sand fly populations in Madrid (Spain)
<b>17:49</b>	17:51	Vit Dvorak	Ecological and seasonal aspects of sand fly populations in Austria
<b>17:51</b>	17:53	Felipe Dutra Rêgo	Ecological niche modelling of <i>Nyssomyia trapidoi</i> and <i>Nyssomyia ylephiletor</i> , vectors of <i>Leishmania</i> , with comments on their geographical distribution
<b>17:53</b>	17:55	Mary Ann McDowell	VectorBase: A bioinformatics resource for invertebrate vectors and other organisms related with human diseases
<b>17:55</b>	17:57	María Gabriela Quintana	Multi scale environmental determinants of <i>Leishmania</i> vectors in urban and rural context
<b>17:57</b>	17:59	Sonia Zapata	Identification of vectors and possible vectors of leishmaniasis in north region of Ecuador