

# Poster Programme

Poster Session 1

Wednesday 07<sup>th</sup> November 2018, 11:30-13:00

Room: Tramuntana 1

## MOLECULAR DIAGNOSIS, EPIDEMIOLOGY AND TAXONOMY

- [P1.1.01] Two Beijing strains lead the transmission of tuberculosis among the cases recently diagnosed in Colon, Panama.**  
D. Sambrano<sup>\*1</sup>, F. Acosta<sup>2</sup>, V. Batista<sup>1</sup>, L. Pérez-Lago<sup>2</sup>, P. Muñoz<sup>2,3</sup>, M. Garay<sup>1</sup>, M. Mayrena<sup>4</sup>, L. Solís<sup>5</sup>, D. Garcia de Viedma<sup>2,3</sup>, A. Goodridge<sup>1</sup>, <sup>1</sup>Instituto de Investigaciones Científicas y Servicios de Alta Tecnología, Panama, <sup>2</sup>Instituto de Investigación Sanitaria Gregorio Marañón, Spain, <sup>3</sup>CIBER Enfermedades respiratorias, CIBERES, Spain, <sup>4</sup>Complejo Hospitalario Amador Guerrero, Caja de Seguro Social, Panama, <sup>5</sup>Laboratorio Interinstitucional de Tuberculosis, Ministerio de Salud, Panama
- [P1.1.02] Frequency of human papillomavirus in a population of asymptomatic women in a regional Peruvian hospital: Determination of circulating genotypes**  
L. Becerra-Goicochea<sup>1</sup>, M.A. Aguilar-Luis<sup>\*2,3</sup>, C. Palomares-Reyes<sup>2</sup>, L.J. del Valle<sup>4</sup>, L. Pinillos-Vilca<sup>1</sup>, W. Silva-Caso<sup>2,3</sup>, J. Bazán-Mayra<sup>5</sup>, V. Zavaleta Gavidea<sup>5</sup>, J. Alvitrez-Arana<sup>1,6</sup>, J. Del Valle-Mendoza<sup>2,3</sup>, <sup>1</sup>Hospital Regional Docente de Cajamarca, Peru, <sup>2</sup>Universidad Peruana de Ciencias Aplicadas, Peru, <sup>3</sup>Instituto de Investigación Nutricional, Peru, <sup>4</sup>Universitat Politècnica de Catalunya, Spain, <sup>5</sup>Dirección Regional de Salud de Cajamarca (DIRESA), Peru, <sup>6</sup>Instituto de Investigación de Enfermedades Infecciosas, Peru
- [P1.1.03] Simplified targeted surveillance of tuberculosis transmission in Panama.**  
J. Domínguez<sup>1,2</sup>, F. Acosta<sup>\*2,3</sup>, L. Pérez-Lago<sup>3</sup>, D. Sambrano<sup>2</sup>, V. Batista<sup>2</sup>, C. De La Guardia<sup>2</sup>, E. Abascal<sup>3</sup>, A. Chiner-Oms<sup>4</sup>, I. Comas<sup>5,6</sup>, P. González<sup>1</sup>, J. Bravo<sup>1</sup>, P. Del Cid<sup>1</sup>, S. Rosas<sup>1</sup>, P. Muñoz<sup>3,7</sup>, A. Goodridge<sup>2</sup>, D. García de Viedma<sup>3,7</sup>, <sup>1</sup>Instituto Conmemorativo Gorgas de Estudios de la Salud, Panama, <sup>2</sup>Instituto de Investigaciones Científicas y Servicios de Alta Tecnología (INDICASAT-AIP), City of Knowledge, Panama, <sup>3</sup>Hospital General Universitario Gregorio Marañón, Spain, <sup>4</sup>Universitat de València, Spain, <sup>5</sup>Instituto de Biomedicina de Valencia (IBV) Consejo Superior de Investigaciones Científicas (CSIC), Spain, <sup>6</sup>CIBER en Epidemiología y Salud Pública, Spain, <sup>7</sup>CIBER Enfermedades respiratorias, CIBERES, Spain
- [P1.1.04] R. helvetica intraspecific genetic diversity**  
T. Azagi<sup>\*1,2</sup>, M.J. Coimbra-Dores<sup>1</sup>, <sup>1</sup>National Institute for Public Health and the Environment, The Netherlands, <sup>2</sup>The Academic Medical Center (AMC), Universiteit van Amsterdam, The Netherlands, <sup>3</sup>University of Lisbon, Portugal
- [P1.1.05] Prevalence and genetic properties of Bartonella species in northern bats and its ectoparasites in Japan.**  
K. Nabeshima<sup>\*</sup>, S. Sato, H. Kabeya, M. Amano, S. Maruyama, Nihon University, Japan
- [P1.1.06] Molecular typing of Mycobacterium tuberculosis isolates from university hospital in Thailand by mycobacterial interspersed repetitive unit: Variable number tandem repeat analysis**  
A. Sangka<sup>\*1</sup>, C. Wilailuckana<sup>1</sup>, P. Pinlaor<sup>1</sup>, W. Namwat<sup>1</sup>, K. Faksri<sup>1</sup>, S. Tanuchit<sup>2</sup>, <sup>1</sup>Khon Kaen University, Thailand, <sup>2</sup>Ministry of Public Health, Thailand
- [P1.1.07] Phylogenetic analysis of hepatitis E virus in domestic pigs and wild boars in Slovakia**  
A. Jackova<sup>\*</sup>, S. Salamunova, R. Mandelik, J. Novotny, L. Molnar, S. Vilcek, University of Veterinary Medicine and Pharmacy in Kosice, Slovakia
- [P1.1.08] Herpes virus acquisition in infancy: Association with the salivary microbiome?**  
F. Blostein<sup>\*</sup>, S. Foote, E. Salzman, E. Martin, M. Marazita, B. Foxman, University of Michigan School of Public Health, USA
- [P1.1.09] Genetic diversity of Dirofilaria immitis in Portugal: Evaluation of microsatellites in relation to internal transcribed spacer 2 and cytochrome oxidase I**  
M.A. Domingos, S. Belo, M. Calado, I.M. Mauricio<sup>\*</sup>, Instituto de Higiene e Medicina Tropical, Universidade Nova de Lisboa, Portugal
- [P1.1.10] Molecular detection of arboviruses in Aedes sp. mosquitoes in Rio de Janeiro, Brazil**  
T. Ayllón<sup>\*1</sup>, D.C.P. Câmara<sup>1</sup>, R.M. Campos<sup>2</sup>, P. Brasil<sup>1</sup>, F.C. Morone<sup>1</sup>, M.S. Carvalho<sup>1</sup>, D.F. Ferreira<sup>2</sup>, N.A. Honório<sup>1</sup>, <sup>1</sup>Fundação Oswaldo Cruz, Brazil, <sup>2</sup>Universidade Federal do Rio de Janeiro, Brazil
- [P1.1.11] Genetic characterization of foot-and-mouth disease virus type A circulating in Anatolia-Turkey during 2005-2018**  
P. Tuncer Göktuna<sup>\*</sup>, U. Parlak, F. Özyörük, G.N. Müftüoğlu, A. Kurt, V. Gülyaz, Foot-and-Mouth Disease Institute, Turkey
- [P1.1.12] Cervus elaphus papillomavirus in red deer: New insights from a Portuguese clinical case.**  
L. Gallina<sup>\*1</sup>, A. Garces<sup>2</sup>, I. Pires<sup>2</sup>, F. Savini<sup>1</sup>, A. Scagliarini<sup>1</sup>, <sup>1</sup>Alma Mater Studiorum Università di Bologna, Italy, <sup>2</sup>University of Trás-os-Montes and Alto Douro Vila Real, Portugal
- [P1.1.13] The hidden virome of bovine papillomas**  
L. Gallina<sup>\*1</sup>, F. Granberg<sup>2</sup>, S. Belák<sup>1</sup>, A. Guercio<sup>3</sup>, F. Savini<sup>1</sup>, A. Scagliarini<sup>1</sup>, <sup>1</sup>Alma Mater Studiorum Università di Bologna, Italy, <sup>2</sup>Swedish University of Agricultural Sciences Uppsala, Sweden, <sup>3</sup>Istituto Zooprofilattico della Sicilia, Italy
- [P1.1.14] Molecular epidemiology of rotavirus and norovirus strains circulating among pediatric patients with gastroenteritis in Qatar**  
S. Mathew<sup>1</sup>, M. Smatti<sup>1</sup>, A. Al Thani<sup>1</sup>, K. Al Ansari<sup>2</sup>, H. Yassine<sup>\*1</sup>, <sup>1</sup>Qatar University, Qatar, <sup>2</sup>Hamad Medical Corporation, Qatar

- [P1.1.15] **Deer carrying *Anaplasma capra*: A new zoonotic tick-transmitted pathogen in Europe?**  
M. Jouglin<sup>1</sup>, B. Blanc<sup>2</sup>, N. de la Cotte<sup>1</sup>, K. Ortiz<sup>2</sup>, L. Malandrin<sup>\*1</sup>, <sup>1</sup>INRA, Oniris, Université Bretagne Loire, France, <sup>2</sup>Muséum National d'Histoire Naturelle, Réserve Zoologique de la Haute Touche, France
- [P1.1.16] **First isolation of dengue virus serotype 3 in a north region of Peru: molecular diagnosis and clinical characteristics**  
M.A. Aguilar-Luis<sup>\*1,2</sup>, J. Martins-Luna<sup>1</sup>, L.J. del Valle<sup>3</sup>, V. Zavaleta<sup>4</sup>, C. Palomares-Reyes<sup>1,2</sup>, J. Bazán-Mayra<sup>4</sup>, W. Silva-Caso<sup>1,2</sup>, D. Cornejo<sup>4</sup>, R. Aquino-Ortega<sup>1,2</sup>, J. Bazán-Zurita<sup>5</sup>, <sup>1</sup>Universidad Peruana de Ciencias Aplicadas (UPC), Peru, <sup>2</sup>Instituto de Investigación Nutricional, Peru, <sup>3</sup>Universitat Politècnica de Catalunya, Spain, <sup>4</sup>Dirección Regional de Salud de Cajamarca, Peru, <sup>5</sup>Universidad Privada Antonio Guillermo Urrello, Peru
- [P1.1.17] **Geographic distribution and risk assessment of dengue and its associations with the El Niño phenomenon in an endemic region of Peru during 2004-2015**  
W. Silva-Caso<sup>1,2</sup>, M.A. Aguilar-Luis<sup>1,2</sup>, J. Martins-Luna<sup>\*1</sup>, E. Misaico<sup>3</sup>, N. Espinoza<sup>4</sup>, L. Stimmmer<sup>2</sup>, F. Soto Febres<sup>5</sup>, Y. Cabrera Cortez<sup>6</sup>, C. Palomares-Reyes<sup>1</sup>, J. del Valle-Mendoza<sup>1</sup>, <sup>1</sup>Universidad Peruana de Ciencias Aplicadas (UPC), Peru, <sup>2</sup>Instituto de Investigación Nutricional, Peru, <sup>3</sup>Hospital de Tingo Maria, Peru, <sup>4</sup>Universidad Nacional Agraria de la Selva, Peru, <sup>5</sup>Hospital Guillermo Almenara, Peru, <sup>6</sup>Red de Salud Leoncio Prado, Peru
- [P1.1.18] **The first report of hare treponematosis in European brown hare (*Lepus europaeus*) in the Czech Republic**  
M. Nováková<sup>\*1</sup>, D. Najt<sup>2</sup>, L. Pašteková<sup>1</sup>, E. Vrbová<sup>1</sup>, M. Strouhal<sup>1</sup>, M. Kostková<sup>3</sup>, D. Šmajš<sup>1</sup>, <sup>1</sup>Masaryk University, Czech Republic, <sup>2</sup>University of Veterinary Hygiene and Ecology, Czech Republic, <sup>3</sup>State Veterinary Institute Jihlava, Czech Republic
- [P1.1.19] **Recent challenges posed by the outbreak of listeriosis in South Africa: Lessons from this incidence**  
M.A. Nyila, University of South Africa, South Africa
- [P1.1.20] ***Trichuris trichiura* isolated from *Macaca sylvanus*: Zoonotic implications**  
A. Zurita<sup>\*</sup>, J. Rivero, R. Callejón, C. Cutillas, University of Seville, Spain
- [P1.1.21] **Syntheses and biological evaluation of novel 4(1H)-pyridone derivatives targeting cytochrome bc1 Q<sub>i</sub> site of *plasmodium falciparum* based on *in-silico* studies**  
O.Y. Audu<sup>\*1</sup>, A. Stander<sup>1</sup>, O.O. Ajani<sup>1,2</sup>, N. October<sup>1</sup>  
<sup>1</sup>University of Pretoria, South Africa, <sup>2</sup>Covenant University, Nigeria

**Poster Session 2**  
**Thursday 08<sup>th</sup> November 2018, 12:00-13:30**  
**Room: Tramuntana 1**

### CO-EVOLUTION BETWEEN HOSTS, PATHOGENS AND VECTORS

- [P2.1.01] **Characterization of host genetic markers in the context of HIV-1 and/or Tuberculosis and their impact on the occurrence of Immune Reconstitution Inflammatory Syndrome (IRIS)**  
N.B.R. De Sa<sup>1</sup>, N.C.S. De Souza<sup>1</sup>, M. Ribeiro-Alves<sup>1</sup>, T.P. Silva<sup>1</sup>, J.H.S. Pilotto<sup>1</sup>, V.C. Rolla<sup>1</sup>, C.B.W. Giacoia-Gripp<sup>1</sup>, D. Scott-Algara<sup>2</sup>, M.G. Morgado<sup>1</sup>, S.L.M. Teixeira<sup>\*1</sup>, <sup>1</sup>FIOCRUZ, Brazil, <sup>2</sup>Institut Pasteur, France
- [P2.1.02] **MHC genes associated with cure of infection with *T. cruzi* in the indigenous people from the north of Colombia.**  
J. Dib<sup>\*1,3</sup>, M.T. Mojica Ortiz<sup>2</sup>, A. Aristizábal<sup>3</sup>, H. San Juan Vergara<sup>1</sup>, <sup>1</sup>Universidad del Norte, Colombia, <sup>2</sup>Universidad del Magdalena, Colombia, <sup>3</sup>Fundación Salud Para el Trópico, Colombia
- [P2.1.03] **Molecular assessment of *Bartonella* prevalence, diversity and zoonotic potential of indigenous Tete Veld rats (*Aethomys ineptus*) from Roodeplaat Nature Reserve, South Africa**  
L.M. Hatyoka<sup>1</sup>, H. Brettschneider<sup>1</sup>, N.C. Bennett<sup>1</sup>, D.J. Kleynhans<sup>\*1</sup>, S.P. Muteka<sup>1</sup>, A.D.S. Bastos<sup>1</sup>, <sup>1</sup>University of Pretoria, South Africa, <sup>2</sup>University of Namibia, Namibia
- [P2.1.04] **Positively selected and recombinant genes in treponemal pathogens: Syphilis-, yaws-, and bejel-causing strains differ in sets of genes showing adaptive evolution**  
D. Maderánková<sup>1</sup>, L. Mikalová<sup>2</sup>, I. Provazník<sup>1</sup>, D. Šmajš<sup>\*2</sup>, <sup>1</sup>Brno University of Technology, Czech Republic, <sup>2</sup>Masaryk University, Czech Republic
- [P2.1.05] **Evaluation of common genetic variants in 23 candidate genes as risk factors for pulmonary tuberculosis: a case-control study in Moldavian population**  
A.M. Varzari<sup>\*1</sup>, I.V. Deyneko<sup>2</sup>, M. Schieck<sup>3</sup>, E. Tudor<sup>1</sup>, I. Vladei<sup>1</sup>, H. Grallert<sup>4</sup>, T. Illig<sup>3</sup>, <sup>1</sup>Chiril Draganiuc Institute of Phthisiopneumology, Republic of Moldova, <sup>2</sup>Technische Universität Braunschweig, Germany, <sup>3</sup>Hannover Medical School, Germany, <sup>4</sup>Helmholtz Zentrum München German Research Center for Environmental Health, Germany
- [P2.1.06] **Metagenomics in *Ixodes* spp.: Is there a species-specific microbiota?**  
S. Díaz-Sánchez<sup>\*1</sup>, A. Hernández-Jarguín<sup>1</sup>, J. de La Fuente<sup>1,2</sup>, <sup>1</sup>Instituto Investigación en Recursos Cinegéticos, UCLM, Spain, <sup>2</sup>Oklahoma State University, USA
- [P2.1.07] **Simulation of intra-patient HIV populations reveals variability of global haplotype reconstruction**  
M.L. Bendall, K.M. Gibson, P. Avdeev, M. Pérez-Losada<sup>\*</sup>, K.A. Crandall, George Washington University, USA
- [P2.1.08] **Genetic diversity of *Echinococcus granulosus* in Sardinia (Italy)**  
P. Bonelli<sup>\*</sup>, A. Peruzzu, S. Dei Giudici, T. Piseddu, G. Masu, C. Santucci, G. Masala  
Istituto Zooprofilattico Sperimentale (IZS) of Sardinia, Italy

### VIRULENCE AND RESISTANCE IN PATHOGENS

- [P2.2.01] **Whole-genome-sequencing coupled with a strain-specific PCR defined with higher accuracy a nosocomial outbreak involving a MDR-*Pseudomonas aeruginosa* strain**  
F. Acosta<sup>1,2</sup>, A. Fernández-Cruz<sup>1,2</sup>, S.R. Maus<sup>1,2</sup>, M. Marín<sup>1,2</sup>, E. Cercenado<sup>1,2</sup>, P. Muñoz<sup>1,2</sup>, D. García de Viedma<sup>1,2</sup>, L. Pérez-Lago<sup>\*1,2</sup>, <sup>1</sup>Instituto de Investigación Biomédica Gregorio Marañón, Spain, <sup>2</sup>Hospital General Universitario Gregorio Marañón, Spain, <sup>3</sup>CIBER Enfermedades respiratorias, CIBERES, Spain

- [P2.2.02] **Fading trends of formerly predominant multidrug-resistant strains of *Mycobacterium tuberculosis* in Argentina disclosed by novel tailored molecular strategy**  
J. Monteserin<sup>1,2</sup>, L. Pérez-Lago<sup>3</sup>, N. Yokobori<sup>2,4</sup>, R. Paul<sup>1</sup>, I. Wainmayer<sup>1</sup>, N. Simbolí<sup>1</sup>, V. Eldholm<sup>5</sup>, B. López<sup>\*1</sup>, D. García de Viedma<sup>3</sup>, V. Ritacco<sup>1</sup>, <sup>1</sup>Instituto Nacional de Enfermedades Infecciosas ANLIS, Argentina, <sup>2</sup>CONICET, Argentina, <sup>3</sup>Instituto de Investigación Sanitaria Gregorio Marañón, Spain, <sup>4</sup>Instituto de Medicina Experimental, Argentina, <sup>5</sup>Norwegian Institute of Public Health, Norway
- [P2.2.03] **CS26 pilus of enterotoxigenic *Escherichia coli* determines adherence to intestinal cells**  
L. Cádiz<sup>\*1</sup>, A. Torres<sup>1</sup>, R. Valdés<sup>1</sup>, O. Colin Stine<sup>2</sup>, R. Vidal<sup>1</sup>, F. Del Canto<sup>1</sup>, <sup>1</sup>University of Chile, Chile, <sup>2</sup>University of Maryland, USA
- [P2.2.04] **Biological roles of antioxidant glutathione transferases of *Clonorchiasis sinensis***  
J-G. Kim<sup>\*</sup>, C-S. Ahn, Y. Kong, Sungkyunkwan University School of Medicine, Republic of Korea
- [P2.2.05] **Molecular characterization and epidemiology of plasmid-mediated quinolone resistance in extended spectrum  $\beta$ -lactamase-producing *klebsiella pneumoniae* from the university hospital establishment of oran-algeria.**  
A. Zemmour<sup>\*1</sup>, R. Abi-aya<sup>2,3</sup>, N. Saidi-Ouahrani<sup>1</sup>, B. Rahmani<sup>1</sup>, G.C. Giske<sup>4,5</sup>, <sup>1</sup>University of Sciences & Technology of Oran, Algeria, <sup>2</sup>University Hospital Establishment of Oran, Algeria, <sup>3</sup>Medical Faculty of Oran, Algeria, <sup>4</sup>Karolinska Institute, Sweden, <sup>5</sup>Karolinska University Hospital, Sweden
- [P2.2.06] **Highly clarithromycin-resistant *Helicobacter pylori* infection in children from a rural community of Cajamarca (Peru)**  
M.A. Aguilar-Luis<sup>\*2,3</sup>, F. Palacios-Cuervo<sup>1</sup>, F. Espinal-Reyes<sup>1</sup>, A. Calderón-Rivera<sup>1</sup>, S. Levy-Blitchein<sup>1</sup>, C. Palomares-Reyes<sup>2,3</sup>, W. Silva Caso<sup>2</sup>, A. Cornejo Tapia<sup>2</sup>, J. del Valle Mendoza<sup>2,3</sup>, L.J. del Valle<sup>4</sup>, <sup>1</sup>Medicine School, Health Sciences Faculty, Universidad Peruana de Ciencias Aplicadas (UPC), Peru, <sup>2</sup>Investigation Center and Innovation of the Health Sciences Faculty, Universidad Peruana de Ciencias Aplicadas (UPC), Peru, <sup>3</sup>Instituto de Investigación Nutricional, Peru, <sup>4</sup>Universidad Politecnica de Catalunya, Spain
- [P2.2.07] **Antimicrobial activity of *Lactobacillus paracasei* culture filtrate against *Candida albicans* biofilms**  
R.D. Rossoni<sup>\*</sup>, P.P. Barros, F.C. Ribeiro, G.R. Hurtado, R.P. Medina, D.H.S. Silva, J.C. Junqueira, São Paulo State University (Unesp), Institute of Science and Technology, Brazil

#### TRANSCRIPTOMICS/PROTEOMICS

- [P2.3.01] **Transcriptome profile of mature biofilm of *Escherichia coli* O157:H7 on stainless steel surface and comparison of transcriptional response of biofilm and planktonic cells to sodium hypochlorite**  
E.S. Lim<sup>\*1</sup>, J.S. Kim<sup>1,2</sup>, <sup>1</sup>Korea University of Science & Technology, Republic of Korea, <sup>2</sup>Korea Food Research Institute, Republic of Korea
- [P2.3.02] **Proteomic analysis of *Mycobacterium tuberculosis* Beijing B0/W148 cluster**  
J.A. Bespyatykh<sup>\*1</sup>, A.V. Smolyakov<sup>2</sup>, G.P. Arapidi<sup>2,1</sup>, E.A. Shitikov<sup>1</sup>, E.N. Ilina<sup>1</sup>, <sup>1</sup>Federal Research and Clinical Centre of Physical-Chemical Medicine, Russia, <sup>2</sup>Institute of bioorganic chemistry RAS, Russia
- [P2.3.03] **Comparison of hydatid fluid proteome of *Echinococcus multilocularis* and *Echinococcus granulosus* and molecular properties of EmAgB3**  
C.S. Ahn<sup>\*</sup>, J.G. Kim, Y. Kong, Sungkyunkwan University, Republic of Korea

#### PHYLOGENETICS, PHYLOGENOMICS, PHYLOGEOGRAPHY

- [P2.4.01] **Phylogenetic characterization of the first lineage 2 West Nile virus detected in Spain**  
N. Busquets<sup>\*1</sup>, R. Villalba<sup>2</sup>, M. Laranjo<sup>1</sup>, R. Rivas<sup>1</sup>, N. Torner<sup>3</sup>, M. Soler<sup>3</sup>, O. Nicolàs<sup>4</sup>, S. Napp<sup>1</sup>, <sup>1</sup>Centre de Recerca en Sanitat Animal (CRESA), Spain, <sup>2</sup>Laboratorio Central de Veterinaria, Spain, <sup>3</sup>Generalitat de Catalunya, Spain, <sup>4</sup>Vallcalent Wildlife Recovery Center, Spain
- [P2.4.02] **How to get rid of host DNA in *Plasmodium*-infected blood samples to generate good quality *Plasmodium* genomes?**  
C. Arnathau<sup>\*</sup>, A. Boissière, P. Durand, F. Renaud, V. Rougeron, F. Prugnolle, CNRS, France

#### GENOMICS

- [P2.5.01] **Genetic mapping of an adaptive parasite trait: A major locus on chromosome 1 determines cercarial shedding time in schistosomes**  
G. Mouahid<sup>1</sup>, F. Chevalier<sup>2</sup>, J. Langand<sup>1</sup>, M.A. Idris<sup>3</sup>, S. Al Yafae<sup>4</sup>, M. McDew-White<sup>2</sup>, T.J.C. Anderson<sup>2</sup>, H. Mone<sup>\*1</sup>, <sup>1</sup>University of Perpignan, France, <sup>2</sup>Texas Biomedical Research Institute, USA, <sup>3</sup>Sultan Qaboos University, Oman, <sup>4</sup>Sultan Qaboos Hospital Salalah, Oman
- [P2.5.02] **Comparative genome analysis of skin disease-related *Mycobacteria***  
B. Chavarro-Portillo<sup>\*1,2</sup>, M.I. Guerrero-Guerrero<sup>1</sup>, C.Y. Soto-Ospina<sup>2</sup>, A. Pinzón<sup>2</sup>, <sup>1</sup>Hospital Universitarios Centro Dermatológico Federico Lleras Acosta, Colombia, <sup>2</sup>Universidad Nacional de Colombia, Colombia

#### EXPERIMENTAL EVOLUTION

- [P2.6.01] **Diurnal and nocturnal chronotypes in schistosomes: Do post-mating barriers prevent interbreeding?**  
G. Mouahid<sup>\*1</sup>, F. Chevalier<sup>2</sup>, J. Langand<sup>1</sup>, M.A. Idris<sup>3</sup>, S. Al Yafae<sup>4</sup>, M. McDew-White<sup>2</sup>, T.J.C. Anderson<sup>2</sup>, H. Mone<sup>1</sup>, <sup>1</sup>University of Perpignan, France, <sup>2</sup>Texas Biomedical Research Institute, USA, <sup>3</sup>Sultan Qaboos University, Oman, <sup>4</sup>Sultan Qaboos Hospital Salalah, Oman

## IN-SILICO EVOLUTION

[P2.7.01] **The evolutionary relationship, gene expression and *in-silico* analysis of plasmid-mediated CTX-M-15 extended spectrum  $\beta$ -lactamase in a ceftazidime resistance clinical isolate of *Acinetobacter baumannii***

M.R. Shakibaie\*<sup>1</sup>, O. Azizi<sup>1</sup>, F. Modarresi<sup>1</sup>, <sup>1</sup>*Kerman University of Medical Sciences, Iran*, <sup>2</sup>*Torbat Heydariyeh University of Medical Sciences, Iran*, <sup>3</sup>*Jahrom University of Medical Sciences, Iran*