British Council Researcher Links Workshop Mexico-UK 2015
Programme

Genome research and human health: current applications and translational potential in inflammation and infectious diseases
Oaxtepec, Mexico, June 24-28, 2015

Venue and hotel:
Hotel Amacuzac, Centro Vacacional IMSS Oaxtepec
Oaxtepec, Morelos, México
Tel.: +52 (55) 5238-2703, +52 (735) 356 0101, +52 (735) 356 0202
http://centrosvacacionales.imss.gob.mx/Paginas/pagina_oaxtepec_informacion.html

Main Restaurant: Restaurante Quetzalli
Dinner Friday evening: Restaurante Chula Vista
Internet points: restaurants, Hotel Amacuzac, Sala Amaranto, Torre Parlamentaria, Casa Club, lobby Hotel Tepozteco (most don’t require a password)

Wednesday June 24
Meeting room: Sala Amaranto

Arrival, overview and introductions

7:30h-9h -> Breakfast

9h-10:30h -> Registration and poster set-up

10:30h-11:15h -> Welcome from organisers:

- Welcome by Prof. Constantino López-Macías (Mexico Coordinator) (5 minutes)
- Researcher Links and Workshop objectives Antonio J. Berlanga-Taylor (UK Coordinator) (5 minutes)
- Mtra. Carla Martínez-Castuera, International Relations, Coordination for Health Research, IMSS (10 minutes)
- Existing collaborations:
  - IMSS-Birmingham and IMSS-Oxford (Constantino López-Macías) (10 minutes)
  - NDM Oxford-TEC-BUAP-UMSNH (Arturo Reyes-Sandoval) (10 minutes)
- Programme and housekeeping (Miguel García-Knight) (5 minutes)
11:15h-12:30h -> Genomics overview and bio-sketchn presentsations

“Genomics in health and disease: current state, applications and future directions.”
Antonio J. Berlanga-Taylor (15 minutes)

Bio-sketches session I: 5-minute presentations

12:30h-14h -> Lunch

Keynote speakers, bio-sketches and poster session

14h-15:30h -> Bio-sketches session II: 5-minute presentations

15:30h-16:30h -> Keynote “Combination of Mycobacterium tuberculosis immunodominant peptides and serum host response biomarkers for the diagnosis of tuberculosis.”
Prof. José Antonio Enciso-Moreno
Medical Research Unit
Mexican Social Security Institute
Zacatecas

16:30h-17h -> Coffee and poster session I

17h-18h: Keynote “Dynamic control of inflammation by NF-kappaB in cells and tissues.”
Prof. Michael White
Professor of Systems Biology and Head of Systems Microscopy Centre
Faculty of Life Sciences
University of Manchester

18h-20h -> Social and networking activities. Swimming pool open at Hotel Tepozteco.

20h -> Dinner, social and networking

End of day
Thursday June 25
Meeting room: Sala Amaranto

Genomics and computational methods

7:30h-9h -> Breakfast and coffee

9h-11h -> Computational methods and analysis: ‘Omics’ talks (20 minutes plus 5, 4)
Chair: Antonio J. Berlanga-Taylor

“NGS and Bioinformatics methods for parasite genomics: Does one approach fit all?”
Alejandro Sánchez

“Preliminary analysis for the evaluation of risk prediction methods using SNP-based genomic profile data.”
Faviel Gonzalez

“Microarrays in public health and clinical research applications.”
Laura Uribe (Affymetrix)

“Applying Shotgun RNA Sequencing (RNA-Seq) to ex vivo HIV-2 Samples Taken in a Tropical Setting: Challenges, Perspectives and Successes.”
Katherine James

11h-11:30h -> Coffee break and poster session II

11:30h-12:30h -> Keynote “CGAT - Functional Genomics in Practice.”
Dr. Andreas Heger
CGAT Technical Director
MRC CGAT Programme
MRC Functional Genomics Unit
Department of Anatomy, Genetics and Physiology
University of Oxford
www.cgat.org

12:30h-14h -> Lunch

Immunity to viruses and vaccine development

14h-16:30h -> Viral immunity (20 plus 5 minutes, 5)
Chair: Arturo Reyes-Sandoval

“Making use of reverse vaccinology to tackle highly variable pathogens.”
Arturo Reyes Sandoval

“Evidence for T-cell-driven viral evolution in infant acute HIV-1 infection.”
Miguel García Knight
“CD4 TCM cell gene expression signature in HIV infection is consistent with promoted entry to cell cycle, and G2/M arrest, and unexpected reduced apoptosis.”
Enrique Espinosa

“Relationship between CD4+ T cell subsets and the neutralisation breadth of the antibody response generated during HIV-1 infection.”
Isabela Pedroza

“Some aspects of the immune system and HPV infection.”
Sofía Bernal

“Impaired cytokine production by CD4+ T cells in Common Variable Immunodeficiency (CVID) associated with the absence of memory B cells.”
Laura Bonifaz

16:30h-17h -> Coffee break and poster session III

17h-18h -> Keynote “Epidemiological Research and Surveillance.”
Prof. César González Bonilla
Division Head
Epidemiological Surveillance and Investigation Laboratory
Epidemiological Surveillance Centre
Mexican Social Security Institute, Mexico City

18h-20h -> Social and networking activities, visit to XVI century former convent and archaeological site.

20h -> Dinner, social and networking

End of day
Friday June 26
Meeting room: Sala Amaranto

Immunogenomics

7:30h-9h -> Breakfast and coffee

9h-11h -> Immunogenomics (20 plus 5, 4 talks)
   Chair: Miguel García-Knight

   “Primary Immune Deficiencies: genetics and functional characterization.”
   Gabriela López Herrera

   “KIR and HLA Systems on Renal Trasplant Outcome.”
   Gamaliel Benitez

   “Mining The B cell repertoire in response to infection and vaccination.”
   Jesus Martínez

   “Secuenciación de nueva generación para la tipificación de genes HLA.” / “Next generation sequencing for typing of HLA genes.”
   Carmen Alaez (sponsored by Biotech del Norte)

11h-11:30h -> Coffee break and poster session IV

11:30h-12:30h -> Keynote “Genomic complexities of HLA and its relevance in matching and outcome of haematopoietic stem cell transplantation.”
   Prof. Alejandro Madrigal MD, PhD, FRCP, FRCPath, DSc, HonDSci, FMedSci
   Scientific Director and Professor of Haematology;
   UCL Pro-Vice-Provost for the Americas;
   Anthony Nolan Research Institute
   Royal Free Hospital
   www.anthonynolan.org

12:30h-12:45h -> Group photo

12:45h-14h -> Lunch

Immunity to bacteria and inflammatory response

14h-16:30h -> Immunity to bacteria and inflammatory response (20 plus 5, 5)
   Chair: Constantino López-Macías

   “Infections in immunocompromised patients.”
   Guadalupe Miranda

   “Inflammatory Cytokines And Autoantibodies Discriminate Between Different Stages Of Rheumatoid Arthritis: A Strategy For Classification.”
   Julio Enrique Castañeda
“About the immaturity of newborn immune system.”
Arturo Cérbulo Vázquez

“Induction of Long-Lasting Immunity by Pamptigens.”
Constantino López Macías

“An introduction to the National Laboratory for Advanced Microscopy (LNMA) in Mexico.”
Chris Wood

16:30h-17h -> Coffee break and poster session V

17h-18h -> Keynote “The modulation of immune function by infection.”
Prof. Adam Cunningham
Professor of Functional Immunity
School of Immunity and Infection
MRC Centre for Immune Regulation
University of Birmingham

18h-20h -> Social and networking activities. Walk through the ecology path, visit to geodesic dome and sulphur pools.

20h -> Dinner at Restaurante Chula Vista, social and networking

End of day

**Saturday June 27**
Meeting room: Torre Parlamentaria

**Epidemiology, statistical genetics and surveillance**
Chair: Antonio J. Berlanga-Taylor

7:30h-9h -> Breakfast and coffee

9h-11h -> Epidemiology and statistical genetics of non-communicable diseases (20 plus 5, 4)

“The Mexico City Prospective Study: a blood-based study of 150,000 Mexican adults prospectively followed for 15 years.”
Jonathan Emberson

“Producing reliable biomarker data for large-scale research.”
Mike Hill

“Integration of phenotypic and genomic data for rare disease gene discovery: an overview of the available methods with real data examples.”
Valentina Cipriani

“Genomics Strategy to Accelerate Translational Research in Pre-Eclampsia.”
Eleonora Staines
11h-11:30h -> Coffee break

11:30h-12:30h -> Genetics and epidemiology of infectious diseases (20 minutes plus 5, 3)  
Chair: Miguel García-Knight

“Polymorphisms in promoter region of Th2 and Th3 cytokines conferring genetic susceptibility to cervical cancer and differential profile of the microbiota in the cervix as a microbiological marker of dysbiosis associated to women with premalignant lesions and cervical cancer.”  
Kirvis J. Torres

“Large scale integration of disparate systems for real time infectious disease research.”  
John Finney

13h-14h -> Lunch

Social activities and networking

From 14h -> Trip to Tepoztlán, networking and dinner at “El Ciruelo” Restaurant (Tepoztlán)

End of day

**Sunday June 28**  
Meeting room: Torre Parlamentaria

**Next steps**

7:30h-9h -> Breakfast and coffee

9h-12h -> Funding opportunities for Mexico-UK collaborations  
Funding for projects and mobility at the Mexican Social Security Institute  
Mtra. Carla Martínez-Castuera  
IMSS CIS International Cooperation Office

- Discussion (all participants) (coffee and drinks available):
  - Possible projects, second meeting, funding sources
  - Integrating genomics technologies to research and healthcare
  - Themes to propose

12:30h -> Departures, coaches for Mexico City and airport

End of meeting