# Symposium Plan

## 3<sup>rd</sup> of November 2014

## 08:45 - 09:15 Gather together and On-site Registration

## <u>09:15 - 09:30 Introduction</u>

David Hartley, The XLP Research Trust and Professor Bobby Gaspar, UCL Institute of Child Health, UK Sumathi Iyengar- Amir Kedar, WAS organizations and Professor Adrian Trasher, UCL Institute of Child Health, UK

## 09:30 - 10:00 - Plenary Session A (XLP - WAS)

**Prof. Luigi Notarangelo –** Harvard Medical School, Boston, USA.

"The immune dysregulation of WAS: novel insights"

## 10:00 - 10:30 - Plenary Session B (XLP - WAS)

**Prof. Stuart Tangye** - Garvan Institute of Medical Research, NSW, Australia.

"XLP: 1974 to the present day"

#### 15 minute talks with 5 minutes discussion after each talk

## 10:40 - 11:40 -First WAS Session **Chair: Adrian Thrasher**

10:40-11:00 Prof. Hans Ochs - Seattle Children's, USA.

"Reversion of WAS gene mutation: Does it affect immune function, and clinical phenotype?"

11:00-11:20 Prof. Silvia Giliani - - University of Brescia,

"Low platelet counts in female carriers of WAS mutations showing high level of X-inactivation of the non-mutated chromosome in hematopoietic precursors and myeloidderived leukocytes"

11:20-11:40 Dr. Pamela Lee - Queen Mary Hospital, Hong

"Improving awareness and genetic diagnosis of Wiskott-Aldrich syndrome in Asia: A multi-centered collaborative study on 90 patients from the Asian Primary Immunodeficiency (APID) Network"

## 11:40 - 12:10 - Break

## 12:10 - 13:30 - Second WAS Session Chair: Siobhan Burns

12:10–12:30 Dr. Pamela Lee - Queen Mary Hospital, Hong

"Wiskott-Aldrich Syndrome Protein Targets Enteropathogens to Autophagy and Limits Inflammasome Activation"

12:30-12:50 Dr. Junfeng Wu- Children's Hospital of Chongqing Medical University, China.

"TCR diversity is selectively skewed in T-cell populations of Wiskott-Aldrich syndrome patients"

12:50-13:10 Prof. Silvia Giliani -University of Brescia, Italy.

"Influence of WAS gene alterations on late stages of human B cell differentiation'

13:10-13:30 Dr. Brian Davis - University of Texas, USA.

"Genetic correction of induced pluripotent stem cells from a Wiskott-Aldrich Syndrome patient normalizes the immune defects"

## 10:40 - 11:40 - First XLP Session Chair: Bobby Gaspar

10:40-11:00 Dr Hirokazu Kanegane - University of Toyama,

"Whole exome sequencing reveals atypical phenotype of X-linked lymphoproliferative syndrome"

11:00-11:20 Prof Stuart Tangye - Garvan Institute of Medical Research, NSW, Australia.

"Primary immunodeficiencies as models to delineate requirements for anti-EBV immunity"

11:20-11:40 Prof Colin Duckett - University of Michigan Medical School, USA.

"Why do defects in XIAP, a protein with many cellular roles, lead to XLP2, and how can this guide our treatment of the disease"

## 12:10 - 13:30 - Second XLP Session Chair: Claire Booth

12:10-12:30 Dr Andrew Snow - University of the Health Sciences, Bethesda, MD, USA.

"SAP facilitates recruitment and activation of LCK at NTB-A receptors during restimulation-induced cell death"

12:30-12:50 Dr Pamela Schwarzberg - National Human Genome Research Institute, NIH, USA

"Defective Lymphocyte Interactions in XLP and other Primary **Immunodeficiencies** 

12:50-13:10 Dr Philipp Jost - Technical University of Munich, Germany.

"XIAP restricts TNF- and RIP3-dependent cell death and inflammasome activation"

13:10-13:30 Prof. Andrea Graziani - University of Piemonte Orientale, Novara, Italy

"Inhibition of Diacylglycerol kinase alpha rescues TCR-induced diacylglycerol signaling and restimulation induced cell death in XLP lymphocytes"

## 13:30 - 14:30 - Lunch

## 14:30 - 16:10 - Third WAS Session Chair: Austen Worth

14:30 - 14:50 Dr. Mira Barda Saad - Bar Ilan University, Israel.

"The negative regulation of the Wiskott-Aldrich syndrome protein"

**14:50 – 15:10 Prof. Ramesh Narayanaswamy** - Harvard Medical School, Boston, USA.

"Assembly Binding of the WASP/N-WASP interacting protein WIP to actin regulates focal adhesion and adhesion"

**15:10 – 15:30 Dr. Steve Thomas** -University of Birmingham, UK.

"Platelet actin nodules are podosome-like structures dependent on Wiskott-Aldrich Syndrome protein and Arp2/3 complex"

**15:30 – 15:50 Dr. Lucia Sereni** - San Raffaele Scientific Institute, Milan, Italy.

"Evaluation of platelet defect in a new mouse model lacking WASp in the megakaryocytic lineage"

**15:50 – 16:10 Prof. Fabio Candotti -** Division of immunology and Allergy, CHUV, Switzerland.

"New Findings On Platelets And Red Blood Cells (Rbc) In Wiskott-Aldrich Syndrome (WAS)"

## <u>16:15 - 16:45 - Fourth WAS Session</u> <u>Chairs: Sumathi Iyengar, Amir Kedar</u>

#### The WAS Patient perspective

16:15 - 16:25 Mrs. Helen Mahony

16:25 - 16:35 Mr. Mike Wheeler

16:35 - 16:45 Mrs. Rebecca Rolfe

## <u>14:30 - 15:50 - Third XLP Session</u> <u>Chair: TBA</u>

**14:30 – 14:50 Dr. Sujal Ghosh** - University Hospital Düsseldorf, Germany.

"ITK deficiency - clinical and immunological findings in nine patients"

14:50 – 15:10 Dr Kim Nichols - Children's Hospital of Philadelphia, USA.

"Janus kinase inhibition as a novel treatment for hemophagocytic Lymphohistiocytosis"

**15:10 – 15:30 Prof. Rebecca Marsh** - Cincinnati Children's Hospital, USA.

"Reduced Intensity Conditioning Regimens Containing Alemtuzumab, Fludarabine, and Melphalan Are Safe for Patients with XIAP Deficiency"

15:30 - 15:50 Dr. Troy Messick - The Wistar Institute, USA.

"Development of small molecule inhibitors of EBV for the treatment of XLP-associated diseases"

## <u>16.15 – 16.45 – Fourth XLP Session</u> Chair David Hartley

The XLP Research Trust – moving forward supporting the XLP research community.

Open discussion of future plans and direction for the charity.

## 16:45 - 17:30 - Plenary Session C (XLP - WAS) Chair Adrian Thrasher

**Prof. Mike Dustin** – Kennedy Institute of Rheumatology, University of Oxford, UK.

"The immunological synapse"

#### 17:30 - 18:30 - Welcome reception

An informal get-together to renew acquaintances and meet new colleagues will be held at the Meeting Venue. All registered participants are invited to join.



# 4th of November 2014 (Joined clinical session WAS - XLP)

## 08:30- 09:00 - Second day registration

## 10 minute talks with 5 minute discussion after each talk

## <u>09:00- 10:00- HSCT session</u> Chair: Bobby Gaspar

- Advances in HSCT newer chemotherapeutic agents, prevention and treatment of GvHD, haplo-identical transplant, Reduced Intensity Conditioning, mixed chimerism
- Long term outcome of HSCT
- **09:00 09:15 Dr. Paul Veys -** Great Ormond Street Hospital for Children, London, UK "Recent advances in stem cell transplantation for immunodeficiency diseases"
- **09:15 09:30 Prof. Lisa Filipovich** Cincinnati Children's Hospital, USA.
- **09:30 09:45 Dr. Philipp Agyeman** Great North Children's Hospital, Newcastle upon Tyne, UK.

  "Successful outcome of HSCT for children with WAS using treosulfan and fludarabine UK experience"
- **09:45 10:00 Dr. Michael Albert** Dr. von Hauner Childrens Hospital, Munich, Germany.

  "Results of allogeneic stem cell transplantation from matched donors after myeloablative busulfan-based conditioning"

## <u>10:00 - 11:00 - Clinical manifestation and outcome</u> Chair: TBA

- Long term outcome for patients, QOL
- New treatments
- 10:00 10:15 Dr. Kim Nichols Children's Hospital of Philadelphia, USA.

"Treatment of epstein-barr virus-induced hemophagocytic lymphohistiocytosis with rituximab containing chemo-immunotherapeutic regimens"

10:15 – 10:30 Prof. Anna Shcherbina - Federal Research and Clinical Center, Moscow, Russia.

"Treatment of thrombocytopenia in Wiskott-Aldrich Syndrome"

**10:30 – 10:45 Dr. Nizar Mahlaoui** - Centre de Référence National Déficits Immunitaires Héréditaires (CEREDIH), Hôpital Necker-Enfants, Paris, France.

TBA

**10:45 – 11:00 Dr. Michael Albert -** - Dr. von Hauner Childrens Hospital, Munich, Germany.

"Effect of splenectomy, stem cell transplantation, gene therapy or no definite treatment on frequency of disease related complications and physician-perceived quality of life in WAS"

## 11:00-11:30 - Break



## 11:30 - 13:30 - Gene Therapy Chair: Adrian Thrasher

- Advances in GT Site specific gene corrections, Zinc finger nucleases, non-viral techniques
- Outcome of GT
- **11:30 11:45 Dr. Maximilian Witzel** The Gene Center of the University of Munich, Germany.

  "Haematopoietic Stem Cell Gene Therapy for Wiskott-Aldrich Syndrome- The German trial"
- **11:45 12:00 Dr. Alessandro Aiuti** San Raffaele-Telethon Institute for Gene Therapy, Milan, Italy. "Lentiviral gene therapy for WAS"
- **12:00 12:15 Dr. Anne Galy** Inserm Unit 951, Genethon, Evry, France.

  Clinical Efficacy of Gene Therapy for Severe Wiskott-Aldrich Syndrome: Results of an international study.
- **12:15 12:30 Dr. Sung Yun Pai -** Harvard Medical school, Boston, USA. "Gene therapy for WAS: Results from Boston"
- **12:30 12:45 Dr. Claire Booth -** Great Ormond Street Hospital for Children, London, UK. "Gene therapy for XLP"
- **12:45 13:00 Dr. Toni Cathomen** Medical Center University of Freiburg, Germany. TBA
- 13:00- 13:30 Open Discussion

## 13:30 - 14:00 - Summary

Prof. Bobby Gaspar, Prof. Adrian Thrasher, UCL Institute of Child Health, London, UK