Tuesday, August 20, 2013

8:00 Bonnie Blomberg (USA): Welcome and orientation

**Session 1: Leading edge research in microbiome and genomic aging – Chairperson: Bonnie Blomberg (USA)**
- 8:10 Rebecca Fuldner (USA): The Aging Immune System: From understanding mechanisms to new directions for targeting interventions
- 8:30 Gonzalo Garcia (USA): Genetic approaches to the study of aging
- 8:50 Claudio Franceschi (Italy): Genetics, epigenetics and transcriptomics in centenarians
- 9:10 Paul O’Toole (Ireland): Microbiome and aging
- 9:30 General Discussion

**Break – 9:50-10:20**

**Session 2: Aging of the innate immune system – Chairperson: Tamas Fulop (Canada)**
- 10:20 Sudhir Gupta (USA): Dendritic cell biology in human aging
- 10:40 Janet M. Lord (UK): Stress responses, neutrophils and aging
- 11:00 Elizabeth Kovacs (USA): Macrophages and aging
- 11:20 Rafael Solana (Spain): NK and NKT cells and aging
- 11:40 General Discussion

**Poster Session with light lunch (finger food buffet) – 12:00-14:00**

**Session 3: Aging, repertoire and T cell response – Chairperson: Arne Akbar (UK)**
- 14:00 Susan L. Swain (USA): Memory CD4+ T cells and implications for T cell aging
- 14:20 Abbe De Vallejo (USA): Immune repertoire remodeling and successful aging
- 14:40 Nan-ping Weng (USA): Age-associated changes of the TCRβ CDR3 repertoire measured by RAP-SEQ
- 15:00 Jorg J. Goronzy (USA): T cell development and cell markers with aging
- 15:20 Beatrix Grubeck-Loebenstein (Austria): CD8+ memory T cell responsiveness in old age
- 15:40 General Discussion

**Break – 16:00-16:30**

**Session 4: Aging, infection and T cell response – Chairperson: Rafael Solana (Spain)**
- 16:30 Arne Akbar (UK): Immune responses in the skin in old age
- 16:50 Graham Pawelec (Germany): Role of CMV in immunosenescence
- 17:10 Sean Leng (USA): Chronic CMV infection: its diagnosis and potential role in influenza vaccine failure in older adults
- 17:30 Victor Appay (France): Exhaustion of primary immune resources with advanced age
- 17:50 General Discussion

**Dinner on your own**
Wednesday, August 21, 2013

8:20 Daniela Frasca (USA): Orientation

**Session 5: B cell regulation of immunity in old age – Chairperson: Daniela Frasca (USA)**
8:30 Michael P. Cancro (USA): B cells and aging: Balancing the homeostatic equation
8:50 Giuseppina Colonna-Romano (Italy): B cell subsets in old age
9:10 Deborah Dunn-Walters (UK): B cell repertoire
9:30 **General Discussion**

**Break – 10:00-10:30**

**Session 6: Metabolism, inflammation and senescence – Chairperson: Rebecca Fuldner (USA)**
10:30 Daniela Frasca (USA): Inflammation, metabolic syndrome and immunity
10:50 Janko Nikolic-Zugich (USA): Inflammation, nutritional modulation, aging and immunity against infection
11:10 Tamas Fulop (Canada): Early and metabolic signalling changes in T cells with aging
11:30 Carlos Orihuela (USA): Inflammation and cellular senescence
11:50 **General Discussion**

**Poster Session with small snacks – 12:15-13:00**

**Oral presentations from selected abstracts – Chairperson: Bonnie Blomberg (USA)**

13:00 Connie Jackaman (Australia): Targeting macrophages rescues age-related immune deficiencies in C57BL/6J geriatric mice
13:15 Nichol Holodick (USA): Aging of the B-1a Cell Pool
13:30 Niharika Arora Duggal (UK): The effect of ageing on regulatory CD19+CD24hiCD38hi B cells
13:45 Birgit Weinberger (Austria): Memory immune response to booster vaccination in old age depends on adequate priming earlier in life
14:00 Wim Adriaensen (Belgium): CD4/CD8 ratio>5 is associated with a dominant naïve T-cell phenotype and an impaired physical functioning in the very elderly - results from the BELFRAIL study
14:15 Anne Wertheimer (USA): Impact of age and latent viral infection in circulating T cell subsets in humans
14:30 Luka Cicin-Sain (Germany): Mouse CMV infection delays antibody class switch upon an unrelated virus challenge
14:45 Florian Kern (UK): CMV-induced regulatory-type CD4 T cells markedly increase in older age substantiating a role for CMV in immune ageing
15:00 Peder Olofsson (Sweden): Neural circuits in the regulation of immunity in old age
15:15 Sveta Radyuk (USA): The role of peroxiredoxins in regulating humoral immunity and aging

**Session 7: Vaccine responses and biomarkers for immune aging – Chairperson: Beatrix Grubeck-Loebenstein (Austria)**
15:30 Janet McElhaney (Canada): T cell response to vaccines and infection
15:50 Bonnie Blomberg (USA): B cell vaccine response in aging
16:10 Albert Shaw (USA): Aging and signatures of influenza vaccine response
16:30 Bali Pulendran (USA): Systems vaccinology and aging
16:50 **General Discussion**

**Break – 17:10-17:40**

**Session 8: Immunological interventions and vaccine development for the elderly – Chairperson: Graham Pawelec (Germany)**
17:40 Giuseppe Del Giudice (Italy): Vaccine development
18:00 Hiroshi Kiyono (Japan): Aging and mucosal immunity
18:20 Claudia Gravekamp (USA): Cancer vaccines in old age
18:40 **General Discussion**

**Dinner – 20:00-22:00**