

SM3 - Aging and the immune system

Meliá Milano Hotel

Milan, August 20-21, 2013

PROGRAM

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 TCR β 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+CD24^{hi}CD38^{hi} 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