

ESF-JSPS Frontier Science Conference for Young Researchers

Cutting Edge Immunology and its Clinical Application

1-6 March 2011

Apollo Hotel de Beyaerd, Hulshort, The Netherlands



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In Partnership with:



Chairs:

- **Prof. Åke Lernmark** - Department of Clinical Sciences, Lund University and CRC, Lund, SE
- **Prof. Kazuo Sugamura** - President of Miyagi Cancer Center Research Institute, Miyagi, JP

Co-Chair:

- **Prof. Hajime Karasuyama** - Department of Immune Regulation, Tokyo Medical and Dental University Graduate School, Tokyo, JP

Tuesday 1 March	
16:00 - 19:00	Registration at ESF desk
19:00 - 19:45	Welcome drink
19:45	Dinner
Wednesday 2 March	
9:00 - 9:15	Welcome message by the Chairs, Prof. Åke Lernmark , <i>Lund University and CRC, Malmö, SE</i> and Prof. Kazuo Sugamura - <i>President of Miyagi Cancer Center Research Institute, Miyagi, JP</i> Welcome message Jona Freysdottir , <i>ESF Rapportuer, Landspítali University Hospital, Reykjavik, IS</i> And Hisashi Kato , <i>Japan Society for the Promotion of Science, Tokyo, JP</i>

Session 1: Development of hemato-poietic and immune system

Chair: **Philippe Pierre**, *Centre Immunologie de Marseille Luminy, Marseille, FR*

9:15 - 10:00	Ana Cumano , <i>Institut Pasteur, Paris, FR</i> Ontogeny of the hematopoietic system
10:00 - 10:45	Toshiaki Ohteki , <i>Tokyo Medical and Dental University, Tokyo, JP</i> Regulatory role of interferon in HSC homeostasis – an old cytokine with a new function
10:45 - 11:15	Coffee break
11:15 – 12:00	Yousuke Takahama , <i>University of Tokushima, Tokushima, JP</i> Thymic microenvironments that shape T lymphocyte repertoire
12:00 – 12:15	Jasper Koning , <i>Vrije University Medical Center, Amsterdam, NL</i> Stromal organizer cell precursors
12:15 – 12:30	Olympe Chazara , <i>University of Cambridge, Cambridge, UK</i> Immunogenetics of KIR and HLA-C in pregnancy
12:30 – 12:45	Maaïke Joerink , <i>Karolinska Institutet, Stockholm, SE</i> Epigenetics in fetal programming of allergic diseases
12:45 – 13:00	Antonio Baptista , <i>Vrije University Medical Center, Amsterdam, NL</i> Toll-like receptor expression on lymph node stromal cells regulates lymphocyte accumulation via chemokine and adhesion molecule induction
13:00 - 14:30	Lunch and break

Session 2: Immune regulation

Chair: **Hajime Karasuyama**, *Department of Immune Regulation, Tokyo Medical and Dental University Graduate School, Tokyo, JP*

14:30 - 15:15	Maria Yazdanbakhsh , <i>Leiden University Medical Center, Leiden, NL</i> Immune polarization by parasites.
15:15 – 16:00	Yoshinori Fukui , <i>Kyushu University, Fukuoka, JP</i> Immune regulatory functions of DOCK2 in health and disease
16:00 – 16:15	Keisuke Nagao , <i>Keio University, Tokyo, JP</i> Hair follicles and dendritic cell trafficking.
16:15 – 16.30	Masahiro Kitano , <i>RIKEN, Yokohama, JP</i> BCL6 Protein Expression Shapes Pre-Germinal Center B Cell Dynamics and Follicular Helper T Cell Heterogeneity
16:30 – 17:00	Coffee break
17:00 – 17:15	Akihiko Muto , <i>Tohoku University, Sendai, JP</i> The repression of plasma cell differentiation by Bach2 allows activated B cells to exclude class switch recombination

17:15 – 17:30	Tomoyoshi Yamano , <i>Tokyo University of Science, Chiba, JP</i> Ex-vivo expanded DC induces donor-specific central and peripheral tolerance and prolonged donor skin graft
Plenary lecture Chair: Åke Lernmark , <i>Department of Clinical Sciences, Lund University and CRC, Lund, SE</i>	
17:30 – 18:30	Jean-François Bach , <i>Hôpital Necker, Paris, FR</i> Infections, immunoregulation and autoimmune diseases.
18:30 – 19:30	Poster session I <i>Please note that posters are split in two different sessions: you can refer to the list at the end of the programme to see when your poster will be displayed</i>
20:00	Dinner
Thursday 3 March	
Session 3: Innate and mucosal immunity Chair: Hiroshi Kiyono , <i>The University of Tokyo, Tokyo, JP</i>	
9:00 - 9:45	Philippe Pierre , <i>Centre Immunologie de Marseille Luminy, Marseille, FR</i> Activation of the integrated stress response pathway is essential for innate immunity
9:45 - 10:30	Kiyoshi Takeda , <i>Osaka University, Osaka, JP</i> Regulation of intestinal homeostasis by innate immunity
10:30 - 11:00	Coffee Break and group picture
11:00 - 11:45	Sidonia Fagarasan , <i>RIKEN, Yokohama, JP</i> New aspects of IgA synthesis in gut
11:45 – 12:00	Manabu Taura , <i>Kumamoto University, Kumamoto, JP</i> Toll-like receptor 3 is up-regulated by p53 and is induced by anti-cancer drugs to potentiate poly I:C-induced tumor cell apoptosis
12:00 – 12:15	Ryusuke Yoshimi , <i>Yokohama City University, Yokohama, JP</i> Autoantigen TRIM21 as a therapeutic target for systemic lupus erythematosus and Sjogren's syndrome
12:15 – 12:30	Lillian Wayua Wambua , <i>Universita della Tuscia, Viterbo, IT</i> Trypanosomiasis: parasite glycoprotein and DNA in immune response
12:30 – 12:45	Benjamin Michael Joseph Owens , <i>University of Oxford, Oxford, UK</i> IL-10+ IL-27+ conventional DC negatively regulate immunity to <i>Leishmania donovani</i>
12:45 - 14:15	Lunch

Session 4: Immunological memory and tolerance

Chair: **Jean-Francois Bach**, *Hôpital Necker, Paris, FR*

14:15 – 15:00	Kazuo Sugamura , <i>President of Miyagi Cancer Center Research Institute, Miyagi, JP</i> Regulation of memory T cell development by OX40 costimulatory signals.
15:00 – 15:45	Andreas Radbruch , <i>Deutsches Rheuma-Forschungszentrum Berlin (DRFZ) DE</i> The organisation of immunological memory
15:45 – 16:15	Coffee break
16:15 – 17:00	Shimon Sakaguchi , <i>Kyoto University, Kyoto, JP</i> Control of immune responses by regulatory T cells.
17:00 – 17:45	Ed Palmer , <i>University of Basel, Basel, CH</i> Affinity thresholds determine central and peripheral tolerance
17.45-18.00	Georg Pongratz , <i>University Regensburg, Regensburg, DE</i> Norepinephrine inhibits proinflammatory IL-7R+ B cells in arthritis
18.00-18.15	Ahmad Jalili , <i>Medical University of Vienna, Vienna, AT</i> Administration of a DNA vector encoding CCL21
18:15 – 19:30	Poster session II <i>Please note that posters are split in two different sessions: you can refer to the list at the end of the programme to see when your poster will be displayed</i>
20:00	Dinner

Friday 4 March

Session 5: immune disorders

Chair: **Maria Yazdanbakhsh**, *Leiden University Medical Center, Leiden, NL*

9:00 - 9:45	Bart Lambrecht , <i>Ghent University, Ghent, BE</i> Dendritic cell-epithelial cell crosstalk in asthma
9:45 - 10:30	Haijme Karasuyama , <i>Tokyo Medical and Dental University Graduate School, Tokyo, JP</i> Novel roles for basophils in allergy and protective immunity.
10:30 - 11:00	Coffee Break
11:00 - 11:45	Toshio Hirano , <i>Osaka University and RIKEN, Osaka, JP</i> Interleukin 6 amplifier and autoimmune disease: a four step model.
11:45 – 12:30	Antonio Lanzavecchia , <i>Institute for Research in Biomedicine, Bellinzona, CH</i> Dissecting the human immune response to pathogens
12:30 – 12:45	Anette Wolff , <i>University of Bergen, Bergen, NO</i> revealing mechanisms behind pathological autoimmunity by studying the monogenic disease APS I

12:45 – 13:00	Takahiro Kato , <i>Kyushu University, Fukuoka, JP</i> Neuro-immunological hypothesis of schizophrenia via microglia
13:00 – 14:00	Lunch
14:00	Departure for Excursion – guided tour of the Kröller Müller Museum – return scheduled for 18:00
19:00	Get together drink and conference dinner
Saturday 5 March	
Plenary lecture	
Chair: Kazuo Sugamura , <i>President of Miyagi Cancer Center Research Institute, JP</i>	
9:00 – 10:00	Tadamitsu Kishimoto , <i>Osaka University, Osaka, JP</i> IL-6: from its discovery to medicine and back again.
Session 6: Treatment and prevention of diseases I	
Chair: Shimon Sakaguchi , <i>Kyoto University, Kyoto, JP</i>	
10:00 – 10:45	Peter Taylor , <i>Imperial College London, London, UK</i> TNF blockade in rheumatoid arthritis and other chronic inflammatory diseases
10:45 – 11:15	Coffee break
11:15 – 12:00	Herman Waldmann , <i>University of Oxford, Oxford, UK</i> Infectious tolerance and immune therapy.
12:00 – 12:15	Shigeru Iwata , <i>University of Occupational and Environmental Health, Fukuoka, JP</i> The role of Syk in activation of B cell subsets and its relevance to SLE
12:15 – 12:30	Hiroshi Fujii , <i>Tohoku University, Sendai, JP</i> hTERT insufficiency in rheumatoid arthritis causes PUMA-mediated T-cell apoptosis
12:30 – 12:45	Mayumi Ueta , <i>Doshisha University, Kyoto, JP</i> Regulation of Ocular Surface Inflammation by Prostaglandin E Receptor Subtype EP3
12:45 – 13:00	Cecilia Gruntman , <i>Innsbruck Medical University, Innsbruck, AT</i> HSP65 effects on aortal athersclerotic plaque
13:00 – 14:30	Lunch and break
Session 7: Treatment and prevention of diseases II	
Chair: Herman Waldmann , <i>University of Oxford, Oxford, UK</i>	
14:30 – 15:15	Rudolf Valenta , <i>University of Vienna, Vienna, AT</i> Regulation of allergen responses.
15:15 – 16:00	Hiroshi Kiyono , <i>The University of Tokyo, Tokyo, JP</i> Mucosal immunity and symbiosis for the development of needle-free vaccine
16:00 – 16:30	Coffee break

16:30 – 16:45	Hidetoshi Takedatsu , <i>Kurume University School of Medicine, Kurume, JP</i> The new therapeutic approach for inflammatory bowel disease using a oligonucleotide delivery system, antisense Macrophage-migration inhibitory factor (MIF) / Schizophyllan (SPG) complex
16:45 – 17:00	Devendra Bansal , <i>Centre for Infection and Immunity, Institute Pasteur, Lille, FR</i> Auto-antibodies targeting brain antigens in cerebral malaria
17:00 – 17:15	Yoko Oyama , <i>Kagoshima University, Kagoshima, JP</i> High-mobility Group Box-1 Protein Promotes Granulomatous Nephritis in a Cycle involving Monocyte Chemoattractant Protein-1
17:15 – 17:30	Chantal Hargreaves , <i>King's College London, London, UK</i> Thyroid stimulating antibodies in Graves' disease
17:30 – 18:30	Åke Lernmark , <i>Lund University/CRC, Malmö, SE</i> Immunotherapy of type 1 diabetes.
19:00	Dinner

Sunday 6 March

Breakfast and departure at 9:00

List of accepted posters

Poster Session I – Tuesday 2 March – 18:30-19:30

1. Akihiko Murata	Function of a Notch ligand, Delta-like 1 as an adhesion molecule
2. Baba Tomohisa	Thymic S1rp alpha+ conventional dendritic cells orchestrate central tolerance system against blood-borne antigens
3. Belyaev Nikolai	Response of the Early Haematopoietic Compartment to Acute Malarial Infection
4. Broere Femke	Heat shock protein (HSP)70-specific regulatory T cells suppress established chronic inflammation
5. Colombo Monica	Intraclonal diversification and stereotyped IGHV-D-J gene rearrangements in MZ B cells from human spleens.
6. Djoumerska-Alexieva Igljika	Antibodies with induced polyreactivity improve survival in experimental sepsis
7. Engelmann Peter	Forkhead transcription factor FoxP3 is turned on in human invariant natural killer T cells
8. Fujii Hiroshi	hTERT insufficiency in rheumatoid arthritis causes PUMA-mediated T-cell apoptosis
9. Gold Stefan	Dynamic development of glucocorticoid resistance in experimental autoimmune encephalomyelitis and multiple sclerosis

10. Hatipoglu Ibrahim	Antigenicity and Immunogenicity of Hepatitis B Surface Antigen Displayed on pIII Protein of Filamentous Bacteriophage M13
11. Ishikawa Tetsuhiro	Gene transfection of rat cells with precursor of endogenous endorphin in rat cancer pain model
12. Iwata Shigeru	The role of Syk in activation of B cell subsets and its relevance to SLE
13. Kitano Masahiro	BCL6 Protein Expression Shapes Pre-Germinal Center B Cell Dynamics and Follicular Helper T Cell Heterogeneity
14. Korotkova Evgenia	Autoimmune processes in microbial pathology
15. Kubelkova Klara	Characterization of Immune Response to Francisella tularensis Live Vaccine Strain (LVS) Infection Using Gamma-Irradiated Mice
16. Aneesh Thakur	Effect of age at immunization and quality of immune response following multi-antigen MAP vaccination
17. Kyogoku Chieko	Genetic approach to identify risk genes in SLE
18. Maekawa Akiko	GPR17 Regulates Immune Pulmonary Inflammation Induced By House Dust Mite
19. Matsushita Kazufumi	Zc3h12a is an RNase essential for controlling immune responses by regulating mRNA decay
20. Mehta Ratnesh Bhai	Characterization of human trophoblasts as immunomodulators
21. Mihaylova Nikolina	Target silencing of disease-associated B-lymphocytes by chimeric molecules in SCID model of pristane-induced autoimmunity
Poster Session II – Wednesday 3 March – 18:15-19:30	
1. Muto Akihiko	The repression of plasma cell differentiation by Bach2 allows activated B cells to exclude class switch recombination
2. Nguyen Minh-Hue	Phosphorylation and activation of cell division cycle associated 5 by MAPK plays a crucial role in human lung carcinogenesis
3. Nishikawa Yumiko	Aire-dependent organization of thymic microenvironment for the establishment of self-tolerance
4. Oyama Yoko	High-mobility Group Box-1 Protein Promotes Granulomatous Nephritis in a Cycle involving Monocyte Chemoattractant Protein-1
5. Schickel Jean-Nicolas	Carabin, a regulator of primary B cell response, is low during lupus
6. Sekine Yuichi	STAP-2 modulates activation-induced cell death by influencing caspase-8 activation
7. Shiratori Souichi	Identification of ZAPS as a new regulator of RIG-I-mediated antiviral response
8. Sogut Ibrahim	Development of Monoclonal Antibodies to Hepatitis B Core Antigen Displayed on Filamentous Bacteriophage

9. Takedatsu Hidetoshi	The new therapeutic approach for inflammatory bowel disease using a oligonucleotide delivery system, antisense Macrophage-migration inhibitory factor (MIF) / Schizophyllan (SPG) complex
10. Taura Manabu	Toll-like receptor 3 is up-regulated by p53 and is induced by anti-cancer drugs to potentiate poly I:C-induced tumor cell apoptosis
11. Thunberg Sarah	Effects of immunosuppressants on a flow cytometry monitored whole blood lymphocyte proliferation assay
12. Tiba Tsafack Fabrice Rene	Changes in activation and maturation of peripheral blood T-cells during infection with the human immunodeficiency virus type-1 (HIV-1) in West African patients at different stages of disease
13. Tsuboi Hiroto	Analysis of epitopes and function of anti-M3 muscarinic acetylcholine receptor antibodies in patients with Sjögren's syndrome
14. Ueta Mayumi	Regulation of Ocular Surface Inflammation by Prostaglandin E Receptor Subtype EP3
15. Weichhart Thomas	Inhibition of mTOR blocks the anti-inflammatory effects of glucocorticoids in myeloid immune cells
16. Yamamoto Masahiro	Suppression of host immunity by a Toxoplasma virulence factor ROP18
17. Yamano Tomoyoshi	Ex-vivo expanded DC induces donor-specific central and peripheral tolerance and prolonged donor skin graft
18. Yindom Louis-Marie	The influence of HLA class I and HLA-KIR compound genotypes on HIV-2 infection and markers of disease progression in a Manjako community in West Africa
19. Yoshimi Ryusuke	Autoantigen TRIM21 as a therapeutic target for systemic lupus erythematosus and Sjogren's syndrome
20. Yoshizawa Atsushi	The Impact of Donor Specific Antibody on Liver Allograft Survival after Living Donor Liver Transplantation