Conference Program

The Fourth International Conference on Regulatory T Cells and Th Subsets and Clinical Application in Human Diseases

November 1-4, 2014, Shanghai, China

Conference Founder and President: Dr Shuiping Jiang

Conference Website: http://www.chinatregs.com

FRIDAY, October 31, 2014

14:00 - 18:00	**Registration (Lobby, 4th Floor, Renaissance Hotel)**

SATURDAY, November 1st, 2014

07:00 – 18:00	**Registration (Lobby, 4th Floor, Renaissance Hotel)**
08:30 – 10.15	**Plenary Session 1: Keynote Lectures**
	Chair: William Paul (USA), Shizuo Akira (Japan)
08:30	**Xuetao Cao**, Chinese Academy of Medical Sciences, China Identification of molecules in controlling DCs in the initiation of T cell response (S-01)
09:00	**David Artis**, University of Pennsylvania, USA Immune regulation at barrier surfaces (S-02)
09:30 – 09:50	**Coffee Break, Poster Viewing**
09:50 – 12:30	**Plenary Session 2: Molecular Control of Regulatory T Cell Differentiation and Development**
	Chairs: Steven Ziegler (USA), Sankar Ghosh (USA)
09:50	**Nicholas Gascoigne**, National University of Singapore, Singapore Themis in development of conventional and regulatory T cells (S-04)
10:15	**Yun-Cai Liu**, Tsinghua University, China SHARPIN controls regulatory T cells by modulating T cell receptor complex (S-05)
10:40	**Sankar Ghosh**, Columbia University, USA The role of NF-κB in T-regulatory cell development and function (S-06)
11:05	**Steven Ziegler**, University of Washington School of Medicine, USA Type I interferon-mediated inflammation primes naïve $CD4^+$ T cells for enhanced peripheral Foxp3 induction and Treg differentiation (S-07)
11:30	Short Talk: **Michael A. Farrar**, University of Minnesota, USA

	TNF receptor superfamily costimulation couples TCR signal strength to thymic Treg differentiation (P003)
11:45	Short Talk: **Yohko Kitagawa**, Osaka University, Japan The genome organizer Satb1 differentially controls thymic and peripheral development of regulatory T cells (P064)
12:00	Short Talk: **Fuping Zhang**, Institute of Microbiology, China Dynamic changes in E-protein activity regulate Treg cell development (P121)
12:30 – 14:00	**Lunch, Poster Viewing**
14:00 – 16:00	**Plenary Session 3: Modulation of Regulatory T Cell Stability and Function**
	Chairs: Mark Greene (USA), Nicholas Gascoigne (Singapore)
14:00	**Mark I. Greene**, University of Pennsylvania, USA Structural and biochemical analyses of the FOXP3 transcription complex identify enzymatic targets to therapeutically modify Treg activity in vivo (S-08)
14:25	**Ye Zheng**, The Salk Institute for Biological Studies, USA Conserved non-coding sequence 2 (CNS2) of the Foxp3 gene is essential for the stability and function of regulatory T cells (S-09))
14:50	**Shohreh Issazadeh-Navikas**, University of Copenhagen, Denmark FoxA1 directs the lineage and immunosuppressive properties of novel FoxA1$^+$ T regulatory cells important in EAE and MS (S-10))
15:15	**Fan Pan,** John Hopkins School of Medicine, USA Control of Foxp3 and regulatory T cell phenotype by a Traf6-mediated ubiquitination pathway (S-11)
15:40	Short Talk: **Paula Oliver**, University of Pennsylvania, USA Ubiquitin-mediated events that regulate Treg function (P002)
15:55	Short Talk: **Guo Fu**, Xiamen University, China Protein kinase C-η controls CTLA-4-mediated regulatory T cell function (P061)
16: 10 – 16: 30	**Coffee Break, Poster Viewing**
16:20 – 18:30	**Plenary Session 4: Regulation of Treg/Th 17 Balance**
	Chairs: Vijay Kuchroo (USA), Jeff Zhu (USA)
16:20	**Vijay Kuchroo,** Harvard Medical School, USA Transcriptional network controlling development of Tregs and Th17 cells (S-12)
16:45	**Jinfang (Jeff) Zhu**, National Institute of Health, USA Dynamic expression and redundant functions of T-bet and GATA3 in regulatory T cells (S-13))
17:10	**Bin Li**, Institute of Pasteur Shanghai, China Ubiquitination-mediated regulation of FOXP3 and RORγt and the balance of Treg and Th17 under inflammation (S-14)
17:35	Short Talk: **Wilfried Ellmeier**, Medical University of Vienna, Austria CD4$^+$ T cell lineage integrity is controlled by the histone deacetylases HDAC1and HDAC2 (P033)

17:50	Short Talk: **Vanja Lazarevic**, National Cancer Institute, USA T-bet and Runx transcription factors are required for the ontogeny of pathogenic IFN-γ-producing Th17 cells (P013)
18:05	Short Talk: **Chung-Gyu Park**, Seoul National University, South Korea Murine mesenchymal stem cell-derived exosomes suppress Th17, but not Th1 differentiation (P083)

SUNDAY, November 2nd, 2014

08:00 -09:40	**Plenary Session 5: Control of Regulatory T Cell Homeostasis**
	Chairs: Ethan Shevach (USA), Ed Palmer (Switzerland)
08:00	**Ethan Shevach**, National Institute of Health, USA Control of T regulatory cell homeostasis (S-15)
08:25	**Ed Palmer**, University of Basel, Switzerland How do Tregs function as clonally selected T cells? (S-16)
08:50	Short Talk: **Daniel Gray**, University of Melbourne, Australia How apoptosis controls regulatory T cell differentiation and homeostasis (P023)
09:05	Short Talk: **Friederike Berberich-Siebelt,** Julius-Maximilians-University of Wuerzburg, Germany Follicular regulatory T cells control humoral autoimmunity via NFAT2-regulated CXCR5 expression (P027)
09:20	Short Talk: **Nathan Karin**, Technion- Israel Institute of Technology, Israel The role of chemokines in directing the polarization and biological function of regulatory T cells (P005)
09:35	Short Talk: **Toshinori Nakayama**, Chiba University, Japan Pathogenic memory Th2 cells in airway inflammation (P009)
09:50 –10:10	**Coffee Break, Poster Viewing**
10:10 - 12:30	**Plenary Session 6: Regulatory T Cells in Immune Tolerance and Disease**
	Chairs: Shimon Sakaguchi (USA), Jeff Bluestone (USA)
10:10	**Shimon Sakaguchi**, Osaka Univeristy, Japan Treg-mediated control of the cell fate of autoimmune T cells (S-17)
10:35	**Chris Hunter**, University of Pennsylvania, USA A role for Tregs in the regulation of plasma cells (S-18)
11:00	**Ignacio Anegon**, INSERM, France $CD8^+$ Tregs in a rat organ transplantation model and in humans (S-19)
11:25	**Dario Vignali**, St Jude Children's Research Hospital, USA Targeting Tregs in tumors (S-20)
11:50	**Jeffrey A. Bluestone**, University of California at San Francisco, USA Tregs and Treg-friendly therapeutics to induce tolerance (S-21)

12:15	Short Talk: **Koji Hase**, Keio University School of Medicine, Japan Commensal bacteria shapes gut immune system through epigenetic modifications (P022)
12:30 – 14:00	**Lunch, Poster Viewing**
14:00 - 16:25	**Plenary Session 7: Generation of Regulatory T Cells**
	Chairs: Abul Abbas (USA), Harvey Cantor (USA)
14:00	**Abul Abbas**, University of California at San Francisco, USA Generation and maintenance of peripheral regulatory T cells (S-22)
14:25	**Wanjun Chen**, National Institute of Health, USA Understanding and generating thymic and peripheral Tregs in vivo (S-23)
14:50	**Harvey Cantor**, Harvard Medical School, USA Regulatory T-cells and disease: targets of opportunity (S-24)
15:15	Short Talk: **Akihiko Yoshimura**, Keio University School of Medicine, Japan Treg induction by gram-positive bacterium clostridium butyricum in the intestine is mediated by TLR2- and Smad3-dependent TGF-β1 production in dendritic cells (P116)
15:30	Short Talk: **Luis Graca**, University of Lisbon, Portugal $Foxp3^+$ follicular regulatory T (Tfr) cells and T follicular helper (Tfh) cells involved in the same germinal centre response differ in their antigen specificity (P046)
15:45	Short Talk: **Makoto Miyara**, Hôpital Pitié-Salpêtrière, France Sialyl Lewis x (CD15s) identifies human effector regulatory T cells with high expression of FoxP3 (P095)
16:00	Short Talk: **Marc Beyer**, University of Bonn, Germany Identification of hydroxyprostaglandin dehydrogenase mediated metabolization of PGE2 as a novel suppressor mechanism of regulatory T cells (P075)
16:15 – 16:35	**Coffee Break, Poster Viewing**
16:35 - 18:30	**Plenary Oral Session I: Tregs and Th Subsets: Differentiation**
	Chairs: Dario Vignali (USA), Wanjun Chen (USA)
16:40	**Takashi Maruyama**, Gifu University, Japan The nuclear IκB family protein "$I\kappa B_{NS}$"control Th17 cells differentiation (P058)
16:50	**Siquan Sun**, Janssen Research and Development, USA Oxysterols are agonist ligands of RORγt and drive Th17 cell differentiation (P059)
17:00	**Tse-Hua Tan**, National Health Research Institutes, Taipei HGK/MAP4K4 deficiency induces TRAF2 stabilization and Th17 differentiation leading to insulin resistance (P102)
17:10	**Baohua Zhou**, Indiana University School of Medicine, USA FOXP3 regulates RNA alternative splicing in Tregs (P103)

17:20	**Mark Travis**, University of Manchester, UK Integrin αvβ8-mediated TGFβ activation by effector regulatory T-cells is essential for suppression of T-cell-mediated inflammation (P029)
17:30	**Ulus Atasoy**, University of Missouri, USA The RNA-binding protein HuR regulates $CD4^+$ T cell differentiation and is required for normal IL-2 homeostasis and allergic airway inflammation (P107)
17:40	**Wen-Hsien Liu**, Xiamen University, China MicroRNA-155 regulates T follicular helper cell generation and function through the Peli1-c-Rel axis (P098)
17:50	**Huang-Yu Yang**, Chang Gung University College of Medicine, Taipei The MicroRNA miR-17 modulates regulatory T cell activity by targeting Foxp3 co-regulators (P012)
18:00	**Makio Iwashima**, Loyola University Chicago, USA Human $CD14^+$ $CD36^{hi}$ monocytes induce extrathymic Treg differentiation from naïve $CD4^+$ T cells (P094)
18:10	**Carlo Riccardi**, University of Perugia, Italy GILZ regulates production of pTreg and tTreg cells and is necessary for glucocorticoid-mediated induction of Treg cells (P070)

MONDAY, November 3rd, 2014

08:00 – 09:30	**Plenary Session 8: Cytokines and Innate Lymphoid Cells** Chairs: William Paul (USA), Wenjun Ouyang (USA)
08:00	**Wenjun Ouyang**, Genentech, USA The regulation and function of IL-17 and IL-22 in T cells and ILCs in diseases (S-25)
08:25	**William Paul**, National Institute of Health, USA IL-25-responsive, lineage-negative, KLRG1-bright cells are multipotential "inflammatory" ILC2s (S-26)
08:50	**Dingding An**, Harvard Medical School, USA Symbiotic sphingolipids shape the host immune development and homeostasis (S-27))
09:15	Short Talk: **Ana Izcue**, Max Planck Institute of Immunobiology and Epigenetics, Germany E-cadherin and its receptor KLRG1 limit Treg accumulation in the gut (P091)
09:30–09:50	**Coffee Break, Poster Viewing**
09:50 – 12:30	**Plenary Session 9: Cytokines in Immune Tolerance and Therapy** Chairs: Tadamitsu Kishimoto (Japan), Eddy Liew (UK)
09:50	**Eddy Liew,** University of Glasgow, UK IL-33 and immune regulation (S-28)
10:15	**Axel Kallies**, University of Melbourne, Australia

	IRF4/BATF and interleukin-33 orchestrate development and maintenance of adipose tissue resident regulatory T cells (S-29))
10: 40	**Tadamitsu Kishimoto**, Osaka University, Japan IL-6: Balance between Arid5a and regnase-1 in autoimmune inflammatory diseases (S-30)
11:05	**Dhaval Patel**, Novartis Institutes for BioMedical Research, Switzerland Cytokine blockade in autoimmune and autoinflammatory diseases (S-31)
11:30	**Thomas Malek**, University of Miami, USA A molecular basis for selective IL-2R signaling by human regulatory T cells to low-dose IL-2 (S-32)
11:55	Short Talk: **Di Yu**, Monash University, Australia A super-agonist monoclonal antibody modulates the conformation of helper T cell cytokine interleukine-21 to potentiate its anti-infection capability (P117)
12:10	Short Talk: **Bruce Hall**, University of Sydney, Australia Interleukin-5 therapy prevents chronic allograft rejection by induction of Ts2 type regulatory cells that are antigen specific and express the IL-5 receptor (P068)
12:30 – 14:00	**Lunch, Poster Viewing**
14:00 – 15:40	**Plenary Oral Session II: Tregs and Th Subsets in Disease I**
	Chairs: Chris Hunter (USA), Bin Li (China)
14:00	**Yu Yao**, University of British Columbia, Canada Type 1 regulatory T cells, but not $Foxp3^+$ regulatory T cells, inhibit activation of the NLRP3 inflammasome (P025)
14:10	**Xuerui Luo**, Institute Pasteur Shanghai, China PARP1 regulates the function of regulatory T cells through poly(ADP)-ribosylation of FOXP3 under inflammation (P028)
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14:20	**Qi-Jing Li**, Duke University Medical Center, USA MeCP2 enforces Foxp3 expression to determine natural regulatory T cells' resilience to inflammation (P007)
14:30	**Ling Lu**, Nanjing Medical University, China All-trans retinoic acid stable human regulatory T cells under inflammatory conditions (P074)
14:40	**Xuehui He**, Radboud University Medical Centre, The Netherlands PKC inhibitor sotrastaurin stabilizes human Treg phenotype and prevents psoriatic dermal T cells producing IL-17 and IFNγ (P071)
14:50	**Dan Li**, Institute Pasteur Shanghai, China MiR-125a-5p stabilizes Treg cells exposed to inflammation through targeting IL-6R and STAT3 (P055)
15:00	**Li Wang**, Third Military Medical University, China An altered peptide ligand derived from the HLA-A*0201-restricted immunodominant type 1 diabetes autoantigen insulin A-chain (2-10) peptide protect from type 1 diabetes in humanized NOD mice by inducing $CD8^+CD25^+$ regulatory T cells (P037)

15:10	**Xanthou Georgina**, Biomedical Research Foundation of the Academy of Athens, Greece Activin-A-induced regulatory T cells give rise to tolerogenic dendritic cells that attenuate allergic airway inflammation through induction of $Foxp3^+$ regulatory T cells
15:20	**Lerisa Govender**, University of Lausanne, Switzerland IL2/mAB-IL2 complex in vivo expansion of Tregs in combination with costimulation blockade promotes major MHC-mismatched allograft tolerance (P040)
15:30	**Francine Jotereau**, INSERM, France Identification of CD4CD8αα (DP8α) T cells as a new human regulatory T cell subset induced by *Faecalibacterium prausnitzii* and deficient in patients with inflammatory bowel disease (P026)
15:40 – 16:00	**Coffee Break, Poster Reviewing**
16:00 – 18:00	**Plenary Oral Session III: Tregs and Th Subsets in Disease II** Chairs: Thomas Malek (USA), Fan Pan (USA)
16:00	**Lionel Apetoh**, INSERM and Universit éde Bourgogne, France The transcription factor IRF1 dictates the IL-21-dependent anticancer functions of Th9 cells (P024)
16:10	**Jing Yang**, Institut Pasteur of Shanghai, China Ubiquitin-specific protease 4 promotes Th17 cell function under inflammation by deubiquitinating and stabilizing RORγt (P015)
16:20	**Hui Xiao**, Institute Pasteur Shanghai, China SHP2 mediates dectin-induced SYK activation and anti-fungal Th17 response (P042)
16:30	**Lynn Soong**, University of Texas Medical Branch, USA Hepatic stellate cell-derived retinoic acid regulates group 3 innate lymphoid cells and modulates viral hepatitis (P014)
16:40	**Jun Wang**, Dalhousie University, Canada PC61-mediated Treg depletion markedly reduces antibody production during genital *Chlamydia* infection
16:50	**Maria Xydia**, German Cancer Research Center, Germany The impact of secondary iTreg clones in the TCR repertoire of tumor patients (076)
17:00	**Li-Fan Lu**, University of California San Diego, USA DC-intrinsic IFNγR signaling promotes $Tbet^+$Treg cell-mediated immunoregulation during parasitic infection (P077)
17:10	**Gretchen Pritchard**, University of Pennsylvania, USA Diverse roles for T-bet in the effector responses required for resistance to infection (P101)
17:20	**Stephen Alexander**, University of Sydney, Australia Tregs and TFH cells in pediatric patients with vasculitic renal disease and following transplantation (P093)

17:30	**Simon Barry**, University of Adelaide, Australia PI16: a novel biomarker on human Treg and T helper subsets which identifies defective Treg in Type 1 diabetes (P106)
17:40	**Gaia Muallem**, University of Pennsylvania, USA The cytokine IL-27 limits acute and chronic manifestations of lung disease in a mouse model of post viral asthma (P109)
17:50	**Haiyan Liu**, Soochow university, China The graft versus leukemia effect of donor γδT cells in allogeneic hematopoietic stem cell transplantation (P036)
18:30-20:00	**Poster Viewing with Beer and Snacks**

TUESDAY, November 4th, 2014

08:00– 10:05	**Plenary Session 10: Microbiota and Immune Regulation at Barrier Surfaces** Chairs: Yasmine Belkaid (USA), Michael Rosenblum (USA)
08:00	**Michael Rosenblum**, University of California at San Francisco, USA A unique population of neonatal Tregs is required to establish tolerance to skin commensal bacteria (S-33))
08:25	**Hiroshi Ohno**, RIKEN Center for Integrative Medical Sciences, Japan The role of gut microbial short-chain fatty acids in host defense and the immune system (S-34))
08:50	**Yasmine Belkaid**, National Institute of Health, USA Commensal-dendritic cell dialogue specifies unique skin immune signature (S-35)
09:15	Short Talk: **Yeonseok Chung**, Seoul National University, South Korea Proatherogenic condition promotes autoimmune Th17 cell responses (P049)
09:30	Short Talk: **Anton Gisterå**, Karolinska Institute, Sweden Transforming growth factor-beta signaling in T cells promotes stabilization of atherosclerotic plaques through an interleukin-17 dependent pathway (P021)
09:45 –10:10	**Coffee Break, Poster Viewing**
10:10 – 12:30	**Plenary Session 11: Inflammasome and Innate Immune Regulation** Chairs: Shizuo Akira (Japan), David Hafler (USA)
10:10	**Shizuo Akira**, Osaka University, Japan Regnase-1; a ribonuclease that controls the immune reaction (S-36)
10:35	**David Hafler**, Yale School of Medicine, USA TLR-7 induced $CD4^+$ T cell anergy (S-37)
11:00	**Thirumala-Devi Kanneganti**, St Jude Children's Research Hospital, USA Mediators of inflammatory responses (S-38)

11:25	Short Talk**: Noriko Tsuji**, National Institute of Advanced Industrial Science and Technology, Japan Double-stranded RNA in lactic acid bacteria modulates anti-inflammation and T cell differentiation via interferon-beta (P060)
11:40	Short Talk: **Richard Lo-Man**, Institut Pasteur, France Inflammatory effector memory CD4 T cells develop in the sterile environment of the fetus (P045)
11:55	Short Talk: **Stuart Berzins**, Federation University, Ballarat, Australia The contribution of NKT cell and MAIT cell defects to solid and hematological human cancers (P020)
12:30-14:00	**Lunch and Poster Viewing**
14:00 – 15:55	**Plenary Session 12: Follicular T Helper Cells and Humoral Immunity**
	Chairs: Chen Dong (China), Hai Qi (China)
14:00	**Chen Dong**, Tshinghua University, China Molecular control of effector T cell function (S-39)
14:25	**Hai Qi**, Tsinghua University, China When short is more and long is less: visualization of Tfh-mediated help and Treg-mediated suppression (S-40))
14:50	Short Talk: **Lucy Walker**, Univeristy College London, UK New roles for the CTLA-4 pathway in regulating humoral immunity (P047)
15:05	Short Talk: **James Wing**, Osaka University, Japan Regulatory T-cells control antigen-specific Tfh expansion and humoral immune responses via CTLA-4 (P067)
15:20	Short Talk: **Nengming Xiao**, La Jolla Institute for Allergy and Immunology, USA The E3 ubiquitin ligase Itch is required for the differentiation of follicular helper T cells (P114)
15:35	Short Talk: **Deyu Fang**, Northwestern University Feinberg School of Medicine, USA Identification of the E3-ligase down-regulated in tolerance (EDIT) as a novel negative regulator of T cell activation and follicular T helper cell differentiation (097)
15:50	Short Talk: **Changchun Xiao**, The Scripps Research Institute, USA. MicroRNA control of T follicular helper cell generation and function (P057)
16:05 – 16:30	**Coffee Break, Poster Viewing**
16:30– 18:30	**Plenary Session 13: Determinants of Inflammation and Autoimmune Disease**
	Chairs: Antonio Lanzavecchia (Switzerland), Lars Klareskog (Sweden)
16:30	**Antonio Lanzavecchia**, Institute for Research in Biomedicine, Bellinzona, Switzerland Dissecting the human immune response to pathogens and vaccines (S-41)

16:55	**Lars Klareskog**, Karolinska Institute, Sweden Gene-environment interactions as a basis for unravelling adaptive immunity in rheumatoid arthritis (S-42)
17:20	**Alexander Marson**, University of California at San Francisco, USA Genetic and epigenetic fine-mapping of causal autoimmune disease variants (S-43))
17:45	**Liang Liu**, Macau University of Science and Technology, China The role of cysteine-46 of IKK-beta in modulating inflammatory responses (S-44)
18: 10	Short Talk: **Jean Pieters**, University of Basel, Switzerland The T cell protein coronin 1 defines a subset of naïve T cells important for autoimmune responses but dispensable for immunity against infections (P118)
18:30	**End of Conference**