Looking beyond the horizon of integrated cytokine research

PROGRAM

Cytokines 2017

in Kanazawa, Japan

The 5th Annual Meeting of the International Cytokine and Interferon Society (ICIS 2017)



Our passion ignites progress

At Eisai, *human health care* is our goal. We give our first thoughts to patients and their families as well as helping to increase the benefits health care provides. Our therapies are designed to make a difference and have an impact on patients' lives. We are Eisai, where medicine is more than just our business — it's our passion.



phe

human health care



The 5th Annual Meeting of the International Cytokine and Interferon Society

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General Information

Theme	Looking Beyond the Horizon of Integrated Cytokine, Interferon and Chemokine Research
Host Organization	International Cytokine and Interferon Society
Co-host Organizations	Japanese Society of Interferon & Cytokine Research Japanese Society for Molecular Cellular Biology of Macrophages
Date	October 29th – November 2nd, 2017
Venue	Ishikawa Ongakudo 20-1 Showa-machi, Kanazawa, Ishikawa 920-0856, Japan ANA Crowne Plaza Kanazawa 16-3 Showa-machi, Kanazawa, Ishikawa 920-8518, Japan

Venue – Floor Map + Wi-Fi Access Code

ANA CROWNE PLAZA KANAZAWA

Wi-Fi Network: CrownePlaza_BQT / Access Code: anacp12h





Ishikawa Ongakudo

Wi-Fi Network: Cytokines2017 / Access Code: kanazawa

* Wi-Fi is available only in Poster/Exhibition/Tea and Coffee area.





Committees

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The Japanese Biochemical Society The Japanese Cancer Association The Japanese Pharmacological SocietyThe Japanese Society of Inflammation and Regeneration The Molecular Biology Society of Japan

* Listed in alphabetical order

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Greetings from the Organizing Committee

Dear Colleagues;

It is our great honor and pleasure to host the 5th Annual Meeting of the International Cytokine and Interferon Society, ICIS 2017 in Kanazawa, Japan. In 2013, the ICS (International Cytokine Society) and ISICR (International Society for Interferon and Cytokine Research) merged to form ICIS. ICIS-related international meetings that have been held in Japan previously include the Cytokine Workshop in Kobe in 1993, organized by Professor Tadamitsu Kishimoto, and the Cytokine and Interferon Workshop in Tokyo, also in 1993, organized by Professor Fumimaro Takaku. ICIS2017 is being co-organized with the Japanese Society of Interferon and Cytokine Research (JSICR) and the Japanese Society of Molecular Cell Biology of Macrophages (MMCB).

The field of cytokine and interferon research has seen tremendous scientific progress over the last two decades. Recent developments include the characterization of various mechanisms of cell death and systems for danger signal recognition, the linkage of innate and acquired immunity through chemokines, the discovery of autoinflammatory diseases caused by aberrant activation of the inflammasome, the elucidation of the effects of microbiota on the systemic immune system, clarification of the ontogeny and development of tissue macrophages and DCs, the discovery of innate lymphoid cells, and various advances in the development of biological therapeutics for intractable inflammatory and immune diseases. Some of these therapeutics include the development of antibodies against TNF α , IL-6 receptor, IL-17 and IL-1 receptor antagonist/anti-IL-1 β antibody. In addition, the recent development of CAR-T cell therapy and immune-checkpoint antibodies, such as anti-CTLA-4 and anti-PD-1/-L1, has revolutionized our approach to cancer therapy.

The main theme of this year's Meeting of the International Cytokine and Interferon Society is "Looking beyond the horizon of integrated cytokine, interferon, and chemokine research". The meeting will provide an outstanding forum for investigators in basic science and clinical research to present their most recent findings on the role of cytokines (including interferons, chemokines, and various pro-inflammatory/anti-inflammatory factors) in infection, cancer, allergy and autoimmunity, as well as in various other inflammatory and immune diseases. The meeting will also provide an opportunity for updates on the development of novel therapeutic interventions in these fields.

Kanazawa is a beautiful castle town that was ruled from the 17th century to the second half of the 19th century by the influential Maeda family, who invested the region's wealth in the promotion of culture and learning. The town was spared devastation during the second World War, and the Kanazawa's rich culture can still be experienced today. A high-speed railway line from Tokyo to Kanazawa opened in March 2015, improving accessibility and reducing travel time from Tokyo to around 2.5 hours. Participants will enjoy the beauty of the Japanese Alps and the Sea of Japan coastline in their best season, when the autumn leaves are in full color.

The organizing committee is looking forward to hosting an exciting, fruitful and enjoyable meeting in Kanazawa and encourage your participation. We hope that this meeting will promote international collaboration and spur new progress in the field of cytokine, interferon, and chemokine research among scientists from both industry and academia.

Very sincerely yours,

Kouji Matsushima (The University of Tokyo)



Invited speakers

Andrea Ablasser **Christopher Hunter** Ecole Polytechnique Fédérale de Lausanne (EPFL), University of Pennsylvania, United States Switzerland Masaru Ishii Shizuo Akira Osaka University Graduate School of Medicine, Japan Osaka University, Japan Toshihiro Ito Masayuki Amagai Nara Medical University, Japan Keio University School of Medicine, Japan Yoichiro Iwakura Tokyo University of Science, Japan Tomohisa Baba Kanazawa University, Japan Akiko Iwasaki Glen N. Barber Yale University School of Medicine and Howard Hughes University of Miami Miller School of Medicine, United Medical Institute, United States States Carl H. June University of Pennsylvania, Perelman School of Medicine, Anne-Sophie Bergot University of Queensland, Australia United States Kenji Kabashima Gordon D Brown Department of Dermatology, Kyoto University Graduate University of Aberdeen, United Kingdom School of Medicine, Japan **Doreen Cantrell** University of Dundee, United Kingdom Dhan V. Kalvakolanu University of Maryland School of Medicine, United States Rachel R. Caspi National Eye Institute, NIH, United States Yutaka Kawakami Keio University School of Medicine., Japan Kazuaki Chayama Hiroshima University, Japan Khalid S. A. Khabar King Faisal Specialist Hospital and Research Centre, Ann Chen Saudi Arabia National Defense Medical Center, Taiwan Motoko Kimura Chen Dong Chiba University, Japan School of Medicine, Tsinghua University, China Tadamitsu Kishimoto Marc Feldmann Osaka University, Japan Kennedy Institute of Rheumatology, United Kingdom Hiroshi Kivono **Richard Flavell** The University of Tokyo, Japan Yale University School of Medicine, United States Christopher A. Klebanoff Takashi Fujita Memorial Sloan Kettering Cancer Center, United States Kyoto University, Japan Manfred Kopf Cem Gabay ETH Zürich, Switzerland University Hospitals of Geneva, Switzerland James G. Krueger Frederic Geissmann The Rockefeller University, United States Memorial Sloan Kettering Cancer Center, United States Masato Kubo Florent Ginhoux Tokyo University of Science, Japan Agency for Science, Technology and Research (A*STAR), Singapore Vijay K. Kuchroo Harvard Medical School and Brigham and Women's Gerald Gleich Hospital, United States School of Medicine University of Utah, United States Atsushi Kumanogo John A. Hamilton Graduate School of Medicine, Osaka University, Japan University of Melbourne, Australia Kristin M. Leiferman Shinichi Hashimoto University of Utah Health Care, United States Kanazawa University, Japan Warren Leonard Kenya Honda NIH, United States Keio University School of Medicine, Japan Xiaoxia Li Shie-Liang Edmond Hsieh

National Yang-Ming University School of Medicine, Taiwan Cleveland Clinic Lerner Research Institute, United States Dan Littman Ekaterina Litvinova Kazuko Shibuya Siberian Branch of the Russian Academy of Sciences, University of Tsukuba, Japan Russia Reiko Shinkura Richard M. Locksley Nara Institute of Science and Technology, Japan University of California at San Francisco, United States Koh-Hei Sonoda Graduate School of Medical Sciences Kyushu **Diane Mathis** Harvard Medical School, United States University, Japan Kouji Matsushima Jens V. Stein The University of Tokyo, Japan University of Bern, Switzerland Nagahiro Minato Satoshi Takaki Kyoto University, Japan National Center for Global Health and Medicine, Japan Laurel Monticelli Akinori Takaoka Weill Cornell Medical College, Cornell University, United Hokkaido University, Japan States Hiroshi Takayanagi The University of Tokyo, Japan Kazuyo Moro **RIKEN IMS, Japan** Kiyoshi Takeda Masaaki Murakami Osaka University Graduate School of Medicine, Japan Hokkaido University, Japan Osamu Takeuchi Hiroshi Nakajima Kyoto University, Japan Graduate School of Medicine, Chiba University, Japan Tsutomu Takeuchi Toshinori Nakayama Division of Rheumatology, Department of Internal Chiba University, Japan Medicine, Keio University School of Medicine., Japan **Gabriel Nunez** Yoshiya Tanaka University of Michigan, United States University of Occupational and Environmental Health, Japan Luke A.J. O'Neill Trinity College Dublin, United Kingdom Tadatsugu Taniguchi The University of Tokyo / Max Planck-The University of Toshiaki Ohteki Tokyo Center for Integrative Inflammology, Japan National University Corporation Tokyo Medical and Dental University, Japan Michio Tomura Osaka Ohtani University, Japan Keiko Ozato National Institute of Child Health and Human Noriko M Tsuji Development (NICHD), United States Bipmedical Research Institute (AIST), Japan Chung-Gyu Park David Vöhringer Seoul National University College of Medicine, Korea, Department of Infection Biology, University Hospital Republic of (South) Erlangen, Germany Fiona M Powrie Yingjie Wu University of Oxford, United Kingdom Dalian Medical University, China Nancy Reich Sho Yamasaki Stony Brook University, United States Kyushu University, Japan Shinobu Saijo Koji Yasutomo Chiba University, Japan Tokushima University, Japan Shimon Sakaguchi Mitsutoshi Yoneyama Osaka University, Japan Chiba University, Japan Hiroki Yoshida Shinichiro Sawa Hokkaido University, Japan Saga University, Japan Georg Schett Akihiko Yoshimura University Hospital Erlangen, Germany Keio University School of Medicine, Japan Ganes C. Sen Howard A. Young Cleveland Clinic, United States National Cancer Institute at Frederick, United States Tsukasa Seya Hokkaido University Graduate School of Medicine, Japan

NIH / NIAID, United States

New York University School of Medicine, United States

Alan Sher

Award Winners

The Seymour and Vivian Milstein Award for Excellence in Interferon and Cytokine Research

Richard A. Flavell, Ph.D., FRS, Sterling Professor of Immunobiology, Yale University School of Medicine, Investigator, Howard Hughes Medical Institute at Yale

Dr. Flavell receives the 2017 Seymour and Vivian Milstein Award in recognition of his numerous contributions to cytokine biology. His work has defined and continues to shape our understanding of the pivotal role of cytokines in innate and adaptive immunity and how cytokines contribute to immune mediated diseases.

○ Presentation on Sunday, 29 October, 16:40 – 17:20 in ANA Crowne Plaza "Ohtori" Room B

The ICIS-Biolegend William E. Paul Award for Excellence in Cytokine Research



Alan Sher, Ph.D., Chief, Laboratory of Parasitic Diseases, NIAID

Dr. Sher receives the 2017 ICIS-Biolegend William E. Paul Award for defining the role of Th1/Th2 cytokines in parasite infection models. At the same time Sher and his colleagues helped define the regulatory pathways which prevent immunopathology in polarized anti-parasitic responses and in particular elucidating the role of Interleukin-10 induction in that process. In more recent work, the Sher lab has defined the cytokine and eicosanoid pathways regulating host resistance to *Mycobacterium tuberculosis*.

○ Presentation on Wednesday, 1 November, 12:40 – 13:30 in Room: ANA Crowne Plaza "Ohtori" Room C

Honorary Lifetime Membership Award

Ganes Sen, Ph.D., The Thomas Lord Endowed Chair in Molecular Biology, Lerner Research Institute, Cleveland Clinic

Dr. Sen receives the 2017 Honorary Lifetime Membership Award for his contributions that have advanced our understanding of the role of IFNs in antiviral responses. He has served in many capacities to the ICIS, most notably his long term involvement as editor in chief of the *Journal of Interferon & Cytokine Research*, and has trained many young scientists who have stayed in the field of cytokines.

○ Presentation on Wednesday, 1 November, 15:30 – 16:05 in Ishikawa Ongakudō Hogaku Hall

ICIS Distinguished Service Award

Eleanor Fish, PhD, Canada Research Chair in Women's Health & Immunobiology, Senior Scientist, Division of Advanced Diagnostics, Toronto General Research Institute, University Health Network, Associate Chair, International Collaborations & Initiatives and Professor, Department of Immunology

Dr. Fish receives the 2017 Distinguished Service Award in recognition of her extraordinary contributions to the Society. Dr. Fish, an accomplished, award winning scientist (including the Milstein Award among many others), has contributed tirelessly to the Society in numerous roles over the years, (President, scientific meeting organizer, awards committee co-chair and as a member of several committees) and reaches out internationally, most notably her research activities involves global outreach, specifically to resource poor regions. She is a member of a WHO Working Group to evaluate the therapeutic effectiveness of different vaccine and antiviral interventions against Ebola virus.

○ Award Acceptance on Wednesday, 1 November, 16:25 – 16:35 in Ishikawa Ongakudō Hogaku Hall

Milstein Young Investigator Awards

Ari B Molofsky, Dept. of Laboratory Medicine, UCSF, San Francisco, United States

🔿 Presentation on Wednesday, 1 November, 16:05 – 16:25 in Ishikawa Ongakudō Hogaku Hall

Christian Kanstrup Holm, Aarhus University Department of Biomedicine, Aarhus C, Denmark

○ Presentation on Tuesday, 31 October, 17:07 – 17:24 in ANA Crowne Plaza "Ohtori" Room C

Tatsuma Ban, Yokohama City University Graduate School of Medicine, Yokohama, Japan

○ Presentation on Tuesday, 31 October, 17:24 - 17:41 in ANA Crowne Plaza "Ohtori" Room C

Kiyoshi Hirahara, Department of Immunology, Graduate School of Medicine, Chiba University, Chiba, Japan

O Presentation on Tuesday, 31 October, 17:41 - 17:58 in ANA Crowne Plaza "Ohtori" Room C

The Christina Fleischmann Award to Young Women Investigators

Susan Carpenter, Department of Molecular, Cell and Developmental Biology, University of California Santa Cruz., Santa Cruz, United States

○ Presentation on Tuesday, 31 October, 18:03 - 18:20 in ANA Crowne Plaza "Ohtori" Room C

The Sidney & Joan Pestka Post-Graduate Award

E. Ashley Moseman, National Institute of Neurological Disorders and Stroke, National Institutes of Health, Bethesda, United States

O Presentation on Tuesday, 31 October, 18:43 - 19:00 in ANA Crowne Plaza "Ohtori" Room C

The Sidney & Joan Pestka Graduate Award

Charlotte Nejad, Centre for Innate Immunity and Infectious Diseases, Hudson Institute of Medical Research, Clayton, Australia

O Presentation on Tuesday, 31 October, 18:43 - 19:00 in ANA Crowne Plaza "Ohtori" Room C

The Milstein Travel Awards

Lauren Danielle Aarreberg (United States) Adrian Achuthan (Australia) Sebastian Aguirre (United States) Afsar U. Ahmed (Australia) Hajera Amatullah (United States) Scott Biering (United States) lain L Campbell (Australia) Jorge Cervantes (United States) Yaping Chen (Australia) Wai Po Chong (China) Soo-hyun Chung (Japan) Joseph Thomas Clark (United States) Sophia Davidson (Australia) Pamela C De La Cruz-Rivera (United States) Praik Deb (United States) Sarah C Edwards (Ireland) Marlys S Fassett (United States) Theresa Frenz (Germany) Serge Y. Fuchs (United States) Silvia Galván-Peña (United Kingdom) Michael Paul Gantier (Australia) Ebrahim Hassan (Germany)

Harry James Hurley (United States) Akimichi Inaba (United Kingdom) Min Kyung Jung (Korea, Republic of (South)) Takeshi Kawabe (United States) You-Me Kim (Korea, Republic of (South)) George Kollias (Greece) Andrew Charles Larner (United States) Chien-Kuo Lee (Taiwan) Suki Lee (Hong Kong) Dan Li (United States) Niamh E Mangan (Australia) Elizabeth Rebecca Mann (United Kingdom) Katrina Mar (United States) Lisa A Mielke (Australia) Hong-Hua Mu (United States) David Olagnier (Denmark) Dane Parker (United States) Shauna Quinn (Ireland) Carl D Richards (Canada) Johannes Schwerk (United States) Ellora Sen (India) Luisa Margarida da Fonte Senra (Switzerland) Nikaïa Smith (Germany) Peter Staeheli (Germany) Megan L Stanifer (Germany) Justin Taft (United States) Ken Takashima (Japan) Ce Tang (Japan) Michelle Tate (Australia) Hock L Tay (Australia) Michele Teng (Australia) Le Son Tran (Australia) Evelyn Tsantikos (Australia) Julio Cesar Valencia (United States) Theresa L. Wampler Muskardin (United States) Kathryn McGuckin Wuertz (United States) Yang Xu (Japan) Chao Yang (Australia) Di Yu (Australia) Annett Ziegler (Germany)



Kishimoto Travel Award

Overseas

Jun Abe **Desiree Anthony** Sharee Ann Basdeo Cristina Bergamaschi Mithun Das Virginie Deswaerte Navneet Kumar Dubey Tania Dubovik Wentao Fan Rafael Casarin Penha Filho Adriana Forero Yu-Hsiang Hsu Wanwan Huai Vladimir Jurisic Chidchamai Kewcharoenwong Md Gulam Musawwir Khan

Vijay Kumar Kee Woong Kwon Ting-Yu Lai Kate Lawlor Hyun-Cheol Lee Jaeseon Lee Jaechan Leem Samuel Maldonado Yohei Mikami Veronica A. Obregon-Perko Arif Ahmad Pandit Jeongho Park Jin-Sil Park Arifuzzaman Sarder Martijn J. Schuijs Peter See Su Song Pia-Katharina Tegtmeyer

Piotr Topolewski Po-Chun Tseng Thomas Whitehead Xiaoqin Yang Hyun Seung Yoo Jeong-Hwan Yoon Karolina Zakrzewska

Japan

Yukiko Akahori Mitsuhiro Akiyama Muhammad Baghdadi Sho Hanakawa Tetsuo Hasegawa Masahisa Hemmi Ryoyo Ikebuchi Takashi Ito Masashi Kanayama Kenta Kikuchi Yoshitaka Kimura Satoshi Koga Hideo Kudo Makoto Kuwahara Kaito Masaki Taiki Mihara Taiki Moriya Ryunosuke Muro Yoshinari Nakatsuka Allah Nawaz Takuo Ota Sho Sendo Cuiming Sun Asuka Terashima Miyuki Watanabe Rikio Yabe

Acknowledgement

Organizing Committee wishes to gratefully acknowledge the following companies / foundations for supporting ICIS2017.

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Companies with "*" are exhibitors. Their booths are located in Ishikawa Ongakudo, the first basement level. Exhibition is open from 30 October to 1 November.

Ishikawa Prefecture Kanazawa City The Federation of Pharmaceutical Manufacturers' Associations of JAPAN

Speakers' and Poster Instructions

Speakers' Instruction

- There is NO Speaker Ready Room. Please bring your own laptops and any adapters required to the operator's desk in your session room at least 15 minutes before your session begins and stay near the podium.
- We ask that all speakers be ready at the beginning of the session. We will have VGA switchers available that will accommodate six laptops at one time. When it is your time to present, it will be only necessary to switch to your laptop.
- It is recommended that your slide size is in the standard (4:3) ratio.
- Please set the computer screen resolution for your computer to 1024 × 768 for the best result.
- We strongly encourage you to have a backup of your presentation on a USB storage device in the event your laptop has a technical problem or is incompatible with the LCD projector.
- There will also be a countdown timer to aid the speakers in keeping track of time.

Poster Instruction



Social Events

Welcome Reception October 29th, Sunday 18:00-20:00 ANA Crowne Plaza Kanazawa "Zuiun" Free of charge Conference Banquet November 1st, Wednesday 18:00-20:00 (18 : 00 Door Open) ANA Crowne Plaza Kanazawa "Ohtori" 5,000 JPY

Food and Drink

Coffee	Coffee is available in the exhibition corner located in Ishikawa Ongakudo.
Lunch	Box lunches will be provided at sponsored Lunchtime Lectures.
Refreshments	Light refreshments will be served at sponsored Evening Symposia.
Wine and Cheese	Wine and cheese will be provided during poster sessions.

Meeting App with Interactive Program & Abstracts

To access the Mobile App, scan the QR Code to the right or put this URL in your web browser:

https://coms.events/ICIS2017



Program at a glance

DATE	VENUE	ROOM	8:0	0 8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:	30
Sunday, 29 October 2017 Ishikawa Ongakudo		Ohtori											
		Zuiun											
		Entrance Hall											
		A [Ohtori 1/3]											
	ANA CROWNE PLAZA KANAZAWA	B [Ohtori 1/3]											
Monday, 30 October 2017		C [Ohtori 1/3]											
		Hogaku Hall		Keyn	ote Lecture 4			Sympo	sium 1				
	Ishikawa Ongakudo										Poste	r Set up	
		Entrance Hall											
		A [Ohtori 1/3]											
ANA CROWNE PLAZA KANAZAWA Tuesday, 31 October 2017	B [Ohtori 1/3]												
		C [Ohtori 1/3]											
		Hogaku Hall		Keyn	ote Lecture 5			Sympo	sium 2				
	lshikawa Ongakudo	Interchange Hall									Poste	r Set up	
		Entrance Hall											
		A [Ohtori 1/3]											
	ANA CROWNE PLAZA KANAZAWA	B [Ohtori 1/3]											
Wednesday, 1 November 2017		C [Ohtori 1/3]											
	Ishikawa Ongakudo	Hogaku Hall		Keyn	ote Lecture 6			Sympo	sium 3				
		Entrance Hall										R	egistrati
Thursday, 2 November 2017	Ishikawa Ongakudo	Hogaku Hall		Keyn	ote Lecture 7			Sympo	sium 4				
		Entrance Hall		1	F	Registration							

13:00 13:30	0 14:00 14:30 15:0	0 15:30 16:00 16:30 17	7:00 17:30 18:00 18:	30 19:00 19:30 20	:00 20:30 21:00	0
		Opening K Opening Remarks	eynote Lecture	Welcome reception		
		Registration				
Lunch -tme Lecture 1	Workshop 1	Workshop 2	Evening Symposium			
Lunch -tme Lecture 2	Workshop 3	Workshop 4	Sponsored Evening Symposiu	m 1		
Lunch -tme Lecture 3	Workshop 5	Workshop 6	Evening Symposium			
				Post	er Session	
Registration						
Lunch -tme Lecture 4	Workshop 7	Workshop 8	Evening Symposium			
Lunch -tme Lecture 5	Workshop 9	Workshop 10	Sponsored Evening Symposiu	m 2		
Lunch -tme Lecture 6	Workshop 11	Workshop 12	Evening Symposium			
				Post	er Session	
Registration						
Lunch -tme Lecture 7	Workshop 13					
Lunch -tme Lecture 8	Workshop 14	ICIS Award Lectures, Honorary Life) Time	Banquet		
	Workshop 15	YI Award Presentation, Distinguished AwardPresentation and ICIS Presiden	Service Lecture			
ICIS-BioLegend W Paul Award Le	/illiam E. cture		ICIS Membe	's Business Meeting		
JSICR G	eneral Assembly 12:30~					-

Program

Sunday, 2	9 October 2017	
15:55~16:00	Opening Remarks	ANA Crowne Plaza "Ohtori"
16:00~18:00	Session : Opening Keynote Lectures 1 Room: ANA Crowne Plaza "Ohtori" Chair/s: Kouji Matsushima, Akihiko Yoshimura, Ta	-3 adatsugu Taniguchi
16:00~	Su-K-1 From the discovery of IL-6 to the development Tadamitsu Kishimoto Laboratory of Immune Regulation, Immunology Frontier Research	t of anti-IL-6R anti body. Center, Osaka University, Osaka, Japan
16:40~	Su-K-2 Anti-microbial action of inflammasomes at the <u>Richard A Flavell</u> Yale University and Howard Hughes Medical Institute, New Haven	mucosa , CT, United States
17:20~	Su-K-3 STAT3 is a master regulator of epithelial idention Nancy C Reich, Alkiviadis Pierrajeas, Stephen Department of Molecular Genetics and Microbiology, Stony Brook	ty in KRAS driven tumorigenesis D'Amico, Oleski Petrenko <i>University, Stony Brook, NY, United States</i>
18:00~20:00	Welcome Reception	ANA Crowne Plaza "Zuiun"

Program

Monday, 3	30 October 2017
08:30~09:20	Session: Keynote Lecture 4
	Room: Ishikawa Ongakudō Hogaku Hall Chair/s: Takashi Fujita
08:30~	Mo-K4-1 Krebs Cycle repurposed for cytokines <u>Luke A.J. O'Neill</u> <i>Trinity College Dublin, Dublin, United Kingdom</i>
09:30~12:10	Session : Symposium 1, Philip Marcus Memorial Symposium ~ "Innate immunity and cytokines"
	This symposium is partly sponsored by the JICR / Mary Ann Liebert, Inc.
	Room: Ishikawa Ongakudō Hogaku Hall
	Chair/s: Ganes C. Sen, Gordon D Brown
	Dr. Takashi Fujita is the Philip Marcus Memorial Lecture's speaker this year.
09:30~	Mo-S1-1 Regnase-1 is a key endoribonuclease that controls the inflammatory and immune responses Shizuo Akira
	Laboratory of Host Defense, WPI Immunology Frontier Research Center, and Department of Host Defense, Research Institute for Microbial Diseases, Osaka University, Osaka, Japan
09:55~	Mo-S1-2 STING Controlled Innate Immunity; Infectious Disease, Inflammation and Cancer. <u>Glen N. Barber</u>
10:20~	Mo-S1-3 MelLec: A new player in antifungal immunity
	Gordon D Brown
	University of Aberdeen, Aberdeen, United Kingdom

10:45~10:55 **Break**

10:55~	Mo-S1-4 Gain of Function Mutation of RIG-I-Like Receptor Causes Autoimmune Symptoms
	Ahmed Abu Tayeh ^{1, 2} , Lianne Francine Emralino ^{1, 2} , Taisuke Ohto ¹ , Shota Shimizu ^{1, 2} ,
	Hideo Onizawa ¹ , Nobumasa Soda ^{1, 2} , Sumin Lee ^{1, 2} , Yuki Shimada ^{1, 2} ,
	Masahide Funabiki ¹ , Masamichi Takami ³ , Hiroki Kato ^{1, 2} , <u>Takashi Fujita^{1, 2}</u>
	¹ Laboratory of Molecular Genetics, Institute for Frontier Life and Medical Sciences, Kyoto University, Kyoto, Japan, ² Laboratory of Molecular Cell Biology, Graduate School of Biostudies, Kyoto University, Kyoto, Japan, ³ Department of Dental Pharmacology, School of Dentistry, Showa University, Tokyo, Japan
11:20~	Mo-S1-5 Metabolic regulation of innate immune function at barrier surfaces
	Laurel Monticelli
	Weill Cornell Medicine, Cornell University, New York, United States
11:45~	Mo-S1-6
	Recognition of intracellular metabolites through C-type lectin receptors
	Sho Yamasaki
	Molecular Immunology, Research Institute for Microbial Diseases, Osaka University, Osaka, Japan
12:40~12:20	Session : Lunch time Lecture 1
12 • 40 • 13 • 30	
	Sponsored by: ONO PHARMAGEUTICAL CO., LID.
	Room: ANA Crowne Plaza "Ohtori" Room A
	Chair/s: Kouji Matsushima
12:40~	Mo-L1-1 Immune checkpoint blockade therapy in cancer and beyond Nagahiro Minato Graduate School of Medicine, Kyoto University, Kyoto, Japan
12:40~ 12:40~13:30	Mo-L1-1 Immune checkpoint blockade therapy in cancer and beyond <u>Nagahiro Minato</u> Graduate School of Medicine, Kyoto University, Kyoto, Japan Session : Lunch-time Lecture 2, Sponsored by: Pfizer Japan Inc.
12:40~ 12:40~13:30	Mo-L1-1 Immune checkpoint blockade therapy in cancer and beyond Nagahiro Minato Graduate School of Medicine, Kyoto University, Kyoto, Japan Session : Lunch-time Lecture 2, Sponsored by: Pfizer Japan Inc. Boom: ANA Crowne Plaza "Ohtori" Boom B
12 : 40~ 12 : 40~13 : 30	Mo-L1-1 Immune checkpoint blockade therapy in cancer and beyond <u>Nagahiro Minato</u> Graduate School of Medicine, Kyoto University, Kyoto, Japan Session : Lunch-time Lecture 2, Sponsored by: Pfizer Japan Inc. Room: ANA Crowne Plaza "Ohtori" Room B Chair/s: Yoshiya Tanaka
12:40~ 12:40~13:30 12:40~	Mo-L1-1 Immune checkpoint blockade therapy in cancer and beyond <u>Nagahiro Minato</u> Graduate School of Medicine, Kyoto University, Kyoto, Japan Session : Lunch-time Lecture 2, Sponsored by: Pfizer Japan Inc. Room: ANA Crowne Plaza "Ohtori" Room B Chair/s: Yoshiya Tanaka
12:40~ 12:40~13:30 12:40~	Mo-L1-1 Immune checkpoint blockade therapy in cancer and beyond Nagahiro Minato Graduate School of Medicine, Kyoto University, Kyoto, Japan Session : Lunch-time Lecture 2, Sponsored by: Pfizer Japan Inc. Room: ANA Crowne Plaza "Ohtori" Room B Chair/s: Yoshiya Tanaka Mo-L2-1 Phase-orientated disease control by cytokines- lessons from rheumatoid
12:40~ 12:40~13:30 12:40~	Mo-L1-1 Immune checkpoint blockade therapy in cancer and beyond Nagahiro Minato Graduate School of Medicine, Kyoto University, Kyoto, Japan Session : Lunch-time Lecture 2, Sponsored by: Pfizer Japan Inc. Room: ANA Crowne Plaza "Ohtori" Room B Chair/s: Yoshiya Tanaka Mo-L2-1 Phase-orientated disease control by cytokines- lessons from rheumatoid arthritis
12:40~ 12:40~13:30 12:40~	Mo-L1-1 Immune checkpoint blockade therapy in cancer and beyond <u>Nagahiro Minato</u> Graduate School of Medicine, Kyoto University, Kyoto, Japan Session : Lunch-time Lecture 2, Sponsored by: Pfizer Japan Inc. Room: ANA Crowne Plaza "Ohtori" Room B Chair/s: Yoshiya Tanaka <u>Mo-L2-1</u> Phase-orientated disease control by cytokines- lessons from rheumatoid arthritis <u>Georg Schett</u>
12:40~ 12:40~13:30 12:40~	Mo-L1-1 Immune checkpoint blockade therapy in cancer and beyond Nagahiro Minato Graduate School of Medicine, Kyoto University, Kyoto, Japan Session : Lunch-time Lecture 2, Sponsored by: Pfizer Japan Inc. Room: ANA Crowne Plaza "Ohtori" Room B Chair/s: Yoshiya Tanaka Mo-L2-1 Phase-orientated disease control by cytokines- lessons from rheumatoid arthritis Georg Schett University of Erlangen, Nuremberg, Germany
12:40~ 12:40~13:30 12:40~ 12:40~ 12:30	Mo-L1-1 Immune checkpoint blockade therapy in cancer and beyond Nagahiro Minato Graduate School of Medicine, Kyoto University, Kyoto, Japan Gession : Lunch-time Lecture 2, Sponsored by: Pfizer Japan Inc. Room: ANA Crowne Plaza "Ohtori" Room B Chair/s: Yoshiya Tanaka Mo-L2-1 Phase-orientated disease control by cytokines- lessons from rheumatoid arthritis Georg Schett University of Erlangen, Nuremberg, Germany Session : Lunch-time Lecture 3, Sponsored by: Maruho Co., Ltd. / Novartis International AG Room: ANA Crowne Plaza "Ohtori" Room C Chair/s: Masayuki Amagai

12:40~	Mo-L3-1 The Role of IL-17A in Psoriasis Pathogenesis and Treatment James G. Kruegera The Rockefeller University, New York, United States
13:40~15:10	Session: Workshop 1, "Innate immunity and infection"
	Room: ANA Crowne Plaza "Ohtori" Room A
	Chair/s: Mitsutoshi Yoneyama, Shinobu Saijo
13:40~	Mo-WS1-1 Roles of cytokines in the anti-fungal immunity Shinobu Saijo Medical Mycology Research Center, Chiba University, Chiba, Japan
13:50~	Mo-WS1-2 Pathogenic fungus, <i>Trichophyton mentagrophytes</i> negatively regulates host immune responses via Siglec receptors. <u>Yasunobu Miyake</u> ¹ , Eri Suematsu ¹ , Shinobu Saijo ² , Sho Yamasaki ^{2, 3, 4} , Hiroki Yoshida ¹
	'Saga University, Faculty of Medicine, Saga, Japan, ² Chiba University, Medical Mycology Research Center, Chiba, Japan, ³ Osaka University, Research Institute for Microbial Diseases, Osaka, Japan, ⁴ Kyushu University, Medical Institute of Bioregulation, Fukuoka, Japan
14:00~	Mo-WS1-3 Two distinct ITAM-coupled receptors recognize mycobacterial mycolic acid- containing lipids and differently regulate immune responses. Ei'ichi lizasa ¹ , Takayuki Uematsu ² , Yasushi Chuma ³ , Hideyasu Kiyohara ³ ,
	Mio Kutobta ⁴ , Masayuki Umemura ⁵ , Goro Matsuzaki ⁵ , Sho Yamasaki ⁶ , Hiromitsu Hara ¹
	¹ Department of Immunology, Division of Infection and Immunity, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, Japan, ² Research and Development Department, Japan BCG Laboratory, Tokyo, Japan, ³ Division of Biomedical Laboratory, Department of Biomedical Research Kitasato University Medical Center, Saitama, Japan, ⁴ Department of Biomolecular Sciences, Faculty of Medicine, Saga University, Saga, Japan, ⁵ Tropical Biosphere Research Center University of the Ryukyus, Naha, Japan, ⁶ Department of Molecular Immunology, Division of Host Defense, Research Institute for Microbial Disease, Osaka University, Osaka, Japan
14:10~	Mo-WS1-4 Immune-modulating capacity of a plant-derived dsRNA and its potential applications
	Takara majake ² , Dacquin iviunandwa Kasumba ^{1,2} , Haruka Oda ^{1,2} , Keita Matsuno [°] , Masatoshi Okamatsu ⁴ , Yoshihiro Sakoda ^{3,4} , Hiroki Kato ^{1,2} , Takashi Fuiita ^{1,2}
	¹ Laboratory of Molecular Genetics, Institute for Frontier Life and Medical Sciences, Kyoto University, Kyoto, Japan, ² Laboratory of Molecular and Cellular Immunology, Graduate School of Biostudies, Kyoto University, Kyoto, Japan, ³ Global Station for Zoonosis Control, Global Institution for Collaborative Research and Education (GI-CoRE), Hokkaido University, Sapporo, Japan, ⁴ Laboratory of Microbiology, Department of Disease Control, Faculty of Vaterinary Medicine, Hokkaido University, Sapporo, Japan

Veterinary Medicine, Hokkaido University, Sapporo, Japan

14:20~	Mo-WS1-5
	cGAS-STING signaling is required for host defense from WNV neuropathology
	Kathnyn McGuckin Wuertz ^{1, 2, 4, 5} Emily A. Hemann ^{2, 5} Courtney Wilkins ^{2, 5}
	$\frac{1}{1} \frac{1}{2} \frac{1}$
	Jessica Snyder", Piper IVI. Treuting", Michael Gale Jr.
	¹ University of Washington, Department of Global Health, Seattle, WA, United States, ² University of Washington, Department of Immunology, Seattle, WA, United States, ³ University of Washington, Department of Comparative Medicine, Seattle, WA, United States, ⁴ Department of Defense; United States Army Medical Department, San Antonio, TX, United States, ⁵ Center for Innate Immunity and Immune Disease, University of Washington, Seattle, WA, United States
14:30~	Mo-WS1-6
	Dengue virus degrades cGAS to prevent mitochondrial DNA sensing during infection
	Sebastian Aquirre ¹ . Priva Luthra6. Maria Teresa Sanchez ^{1, 2} . Ana Maria Maestre ¹ .
	Tongtong Zhu ^{1,3} Jessica Pintado Silva ^{1,3} Laurece Webh ^{1,3}
	Density P_{1} and P_{2} a
	Dabelba Bernal-Rubio, Alexander Solovyov, Berljannin Greenbaum,
	Viviana Simon", ", "Christopher Basier", Lubbertus Mulder",
	Adolfo Garcia-Sastre ^{1, 2, 4} , Ana Fernandez-Sesma ^{1, 3, 4}
	¹ Department of Microbiology, Icahn School of Medicine at Mount Sinai, New York, United States, ² Global Health and Emerging Pathogens Institute, Icahn School of Medicine at Mount Sinai, New York, United States, ³ Graduate School of Biological Sciences, Icahn School of Medicine at Mount Sinai, New York, United States, ⁴ Department of Medicine, division of Infectious Diseases, Icahn School of Medicine at Mount Sinai, New
	York, United States, ⁵ Tisch Cancer Institute, Division of Hematology and Medical Oncology, Department of Medicine, Department of Pathology, New York, United States, ⁶ Center for Microbial Pathogenesis, Institute for Biomedical Sciences, Georgia State University, Atlanta, United States
14:40~	Mo-WS1-7
	In vivo evasion of MxA by avian influenza viruses requires human signature in the viral nucleoprotein
	Christoph M. Deeg ¹ , <u>Ebrahim Hassan^{1, 2, 3, 4},</u> Pascal Mutz ¹ , Lara Rheinemann ¹ ,
	Veronika Götz ¹ , Linda Magar ¹ , Mirjam Schilling ¹ , Carsten Kallfass ¹ ,
	Cindy Nürnberger ^{1, 2} , Sébastien Soubies ¹ , Georg Kochs ¹ , Otto Haller ¹ ,
	Martin Schwemmle ¹ . Peter Staeheli ¹
	¹ Institute of Virelegy Medical Conter Llawersity of Fraiburg, Fraiburg, Cormony, Fraiburg, Cormony, ² Spomonn
	Graduate School of Biology and Medicine (SGBM), University of Freiburg, Freiburg, Germany, ³ Microbiology Department, Faculty of Science, Ain Shams University, Cairo, Egypt, Cairo, Egypt, ⁴ These authors contributed equally to this work, Freiburg, Germany
14:5004	
14.50.0	Targeting of viral replication complexes by LC3-guided interferon-inducible
	GTPases
	Seungmin (Sam) Hwang ^{1, 2, 3} Scott B. Biering ² Javoung Choi ¹ Hailey M. Brown ³
	¹ The University of Chicago Department of Dethology Chicago United Clother
	² The University of Chicago, Department of Pathology, Chicago, United States, ³ The University of Chicago, Committee on Immunology, Chicago, United States
15:00~	Mo-WS1-9
	Gate-16 is required for LC3-independent antimicrobial host defense through
	cytosolic distribution of interferon-inducible GTPases.
	Miwa Sasai ^{1,2} Masahiro Yamamoto ^{1,2}
	Department of Immunoperpoitalogy Descerch Institute for Marchiel Discours, Ocalis University Ocalis, I
	Department of multiplopatasticious, research institute int Michonial Diseases. Usaka EnMoreity, Lisaka Jahan

¹Department of Immunoparasitology, Research Institute for Microbial Diseases, Osaka University, Osaka, Japan, ²Laboratory of Immunoparasitology, WPI Immunology Frontier Research Center, Osaka University, Osaka, Japan

13:40~15:10	Session:Workshop 3, "Cytokines in skin inflammatory diseases"
	Room: ANA Crowne Plaza "Ohtori" Room B
	Chair/s: Kristin M. Leiferman, Masayuki Amagai
13:40~	Mo-WS3-1 Itch and cytokines <u>Kristin M Leiferman</u> Department of Dermatology, University of Utah, Salt Lake City, Utah, United States
14:00~	Mo-WS3-2 Critical role of CCR7 in peripheral tolerance to CD4+ T cells specific for desmoglein 3 (Dsg3), an autoantigen in pemphigus vulgaris <u>Masayuki Amagai</u> ^{1, 2} , Hisato Iriki ¹ , Hayato Takahashi ¹ ¹ Department of Dermatology, Keio University School of Medicine, Tokyo, Japan, ² Laboratory for Skin Homeostasis, RIKEN Center for Integrative Medical Sciences, Tsurumi, Japan
14:20~	Mo-WS3-3 Pathogenesis of autoreactive Th17 cells is driven by homeostatic cytokines stimulated by commensal microbiota Shunsuke Chikuma ¹ , Hayato Takahashi ² , Masayuki Amagai ² , Akihiko Yoshimura ¹ 'Department of Microbiology and Immunology, School of Medicine, Keio University, Tokyo, Japan, ² Department of Dermatology, School of Medicine, Keio University, Tokyo, Japan
14:30~	Mo-WS3-4 IL-17E activates M2 macrophages to produce IL-8 and favors the recruitment of neutrophils in psoriatic skin. Luisa Margarida da Fonte Senra, Romaine Stalder, Wolf-Henning Boehncke, Nicolò Brembilla Department of Pathology and Immunology, University of Geneva,, Geneva, Switzerland
14:40~	Mo-WS3-5 IL-10 derived from regulatory T cells in the skin limits immune responses in percutaneous sensitization Sho Hanakawa, Akihiko Kitoh, Kenji Kabashima Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan
14:50~	Mo-WS3-6 Interleukin-31 Modulates Cutaneous Th2 Inflammation Marlys S Fassett ^{1, 2} , K Mark Ansel ² ¹ Department of Dermatology, University of California - San Francisco, San Francisco, United States, ² Department of Microbiology & Immunology, University of California - San Francisco, San Francisco, United States
15:00~	Mo-WS3-7 Establishment of a short and predictive mechanistic mouse model to support the development of topical JAK inhibitors Paola Lovato ¹ , Susanne Knoth Clausen ¹ , Daniel Rodriguez Greve ² ¹ Skin Research, LEO Pharma A/S, Ballerup, Denmark, ² Drug Design, LEO Pharma A/S, Ballerup, Denmark

13:40~15:10	Session: Workshop 5, "Genetic disorders in cytokines and inflammation"
	Room: ANA Crowne Plaza "Ohtori" Room C
	Chair/s: Koji Yasutomo, Warren Leonard
13:40~	Mo-WS5-1 Genetics of familial inflammatory disorders Koji Yasutomo Tokushima University, Tokushima, Japan
14:00~	Mo-WS5-2 Mutation of arginine 285 in IRF3 to glutamine selectively impairs activation of IRF3 by STING and TRIF dependent pathways. Line Lykke Andersen ¹ , Louise Kragh Dalskov ¹ , Hans Henrik Gad ¹ , Trine Hyrup Mogensen ² , <u>Rune Hartmann¹</u> ¹ Department of Molecular Biology and Genetics, Aarhus University, Aarhus. Denmark., Aarhus, Denmark, ² Department of Infectious Diseases, Aarhus University Hospital,, Aarhus, Denmark
14:10~	Mo-WS5-3 ADAR1 Deficiency Linked to Aicardi-Goutiéres Syndrome Causes Cell Death from RNase L Activation <u>Robert H Silverman</u> ¹ , Shuvojit Banerjee ¹ , Yize Li ² , Manisha Talukdar ³ , Stephen A Goldstein ² , Beihua Dong ¹ , Frank Sicheri ³ , Susan R Weiss ² ¹ Department of Cancer Biology, Lerner Research Institute, Cleveland Clinic, Cleveland, Ohio, United States, ² Department of Microbiology, Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, United States, ³ Program in Systems Biology, Lunenfeld-Tanenbaum Research Institute, Mount Sinai Hospital, Toronto, Ontario, Canada
14:20~	Mo-WS5-4 yc Family Cytokines, Immunodeficiency, and the Fine-tuning of Cytokine Signaling Warren Leonard, Peng Li, Suman Mitra, Edwin Wan, Rosanne Spolski, Jian-Xin Lin Laboratory of Molecular Immunology and the Immunology Center, National Heart, Lung, and Blood Institute, Bethesda, United States
14:40~	 Mo-WS5-5 XIAP deficiency results in excess NLRP3 inflammasome activation and cell death as a consequence of TLR-MyD88 induced cIAP1-TRAF2 degradation <u>Kate Lawlor</u>^{1, 2}, Rebecca Feltham^{1, 2}, Monica Yabal³, Stephanie Conos^{1, 2}, Kaiwen Chen⁴, Tan Nguyen^{1, 2}, Cathrine Hall¹, Simon Chatfield^{1, 2}, Damian D'Silva¹, Kenneth Pang⁵, Kate Schroder⁴, John Silke^{1, 2}, David Vaux^{1, 2}, Philipp Jost³, James Vince^{1, 2} ¹Walter and Eliza Hall Institute of Medical Research, Parkville, Australia, ²Department of Medical Biology, The University of Melbourne, Parkville, Australia, ³III. Medical Department for Hematology and Oncology, Klinikum rechts der Isar, Technische Universitat Munchen, Munchen, Germany, ⁴Institute for Molecular Bioscience and Centre for Inflammation and Disease Research, The University of Queensland, St Lucia, Australia, ⁵Department of

Paediatrics, University of Melbourne, Parkville, Australia

14:50~	Mo-WS5-6 Gain of function of MDA5 in CD11c-expressing cells is sufficient to induce lupus-like nephritis <u>Shota Shimizu</u> ^{1, 2} , Yuki Shimada ^{1, 2} , Hiroki Kato ^{1, 2} , Takashi Fujita ^{1, 2} ¹ Laboratory of Molecular Genetics, Department of Genetics and Molecular Biology, Institute for Frontier Life and Medical Sciences, Kyoto University, Kyoto, Japan, ² Laboratory of Molecular and Cellular Immunology, Department of
	Molecular and Cellular Biology, Graduate School of Biostudies, Kyoto University, Kyoto, Japan
15:00~	Mo-WS5-7 Virus-induced IFN-λ4 potently blocks IFN-α signaling by ISG15/USP18 in HCV infection Seon-Hui Hong Korea Advanced Institute of Science and Technology, Daejeon, Korea, Republic of (South)
15:20~16:50	Session: Workshop 2, "Allergic disease"
	Room: ANA Crowne Plaza "Ohtori" Room A Chair/s: David Vöhringer, Hiroshi Nakajima
15:20~	Mo-WS2-1 Regulation of type 2 immune responses by components of the innate and adaptive immune system. David Vöhringer
	Department of Infection Biology, University Hospital Erlangen, Nuremberg, Germany
15:40~	Mo-WS2-2 Inhibition of house dust mite-induced Th2 responses by Allergin-1 immunoreceptor on dendritic cells <u>Satoko Tahara-Hanaoka</u> ^{1, 3} , Haruka Miki ^{1, 2} , Kaori Hitomi ¹ , Mariana Silva Almeida ¹ , Kanako Iwata ¹ , Kazumasa Kanemaru ¹ , Shiro Shibayama ⁴ , Masato Kubo ^{5, 6} , Takayuki Sumida ² , Akira Shibuya ^{1, 3}
	¹ Department of Immunology, Tsukuba-city, Japan, ² Department of Internal Medicine, Tsukuba-city, Japan, ³ and Life Science Center of Tsukuba Advanced Research Alliance (TARA), Faculty of Medicine, University of Tsukuba, Tsukuba-city, Japan, ⁴ Research Center of Immunology, Tsukuba Institute, Ono Pharmaceutical Co., Ltd., Tsukuba- city, Japan, ⁵ Division of Molecular Pathology, Research Institute for Biomedical Science, Tokyo University of Science, Noda-city, Japan, ⁶ Laboratory for Cytokine Regulation, RIKEN Center for Integrative Medical Sciences (IMS), Yokohama-city, Japan
15:50~	Mo-WS2-3 IL-22 induces Reg3γ production from lung epithelial cells and inhibits allergic airway inflammation in house dust mite-induced asthma models
	<u>Iakashi Ito</u> ', Koichi Hirose', Yoshiyuki Goto ² , Hiroshi Kiyono ³ , Hiroshi Nakajima ¹ ¹ Department of Allergy and Clinical Immunology, Graduate School of Medicine, Chiba University, Chiba, Japan., Chiba City, Japan, ² Department of Molecular Immunology, Medical Mycology Research Center, Chiba University, Chiba City, Japan, ³ Division of Mucosal Immunology, Department of Microbiology and Immunology, The Institute of Medical Science, The University of Tokyo, Tokyo City, Japan

16:00~	Mo-WS2-4 The transcriptional repressor Bach2 controls Th2-type immune response via interaction with Batf <u>Makoto Kuwahara</u> ^{1, 2} , Tatsuya Sawasaki ³ , Masakatsu Yamashita ^{1, 2} ¹ Department of Immunology, Graduate School of Medicine, Ehime University, Toon, Japan, ² Division of Immune Regulation, Department of Proteo-Inovation, Proteo-Science Center, Ehime University, Toon, Japan, ³ Division of Cell-Free Sciences, Department of Proteo-Research, Proteo-Science Center, Ehime University, Matsuyama, Japan
16:10~	Mo-WS2-5 The 3D structure of the human IL-3 receptor complex and a novel mode of cytokine signalling <u>Angel F Lopez</u> ¹ , Denis Tvovrogov ¹ , Winne Kan ¹ , Tim Hercus ¹ , Sophie Broughton ² , Urmi Dhagat ² , Tracy Nero ² , Karen S CheungTungShin ² , Jeff Babon ³ , Jarrod Sandow ³ David Boss ⁴ Tim Huches ⁴ Michael Parker ²
	¹ The Centre for Cancer Biology, SA Pathology and the University of South Australia, Adelaide, Australia, ² ACRF Rational Drug Discovery Centre, St. Vincent's Institute of Medical Research, and Bio21 Institute, University of Melbourne, Melbourne, Australia, ³ The Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia, ⁴ SAHMRI and SA Pathology, Adelaide, Australia
16:30~	Mo-WS2-7 A unique DAMP with IL-33-inducing activity increases IL-33-expressing alveolar epithelial type II cells in lungs and induces primary cultured fibroblasts to produce IL-33 in vitro. Takumi Adachi ¹ , Koubun Yasuda ¹ , Taichiro Muto ² , Satoshi Serada ³ , Tomohiro Yoshimoto ¹ , Tetsuji Naka ³ , <u>Kenji Nakanishi¹</u>
16:40~	Mo-WS2-8 Roles of T-bet in ILC2-mediated eosinophilic airway inflammation <u>Hiroshi Nakajima</u> , Ayako Matsuki, Hiroaki Takatori Department of Allergy and Clinical Immunology, Graduate School of Medicine, Chiba University, Chiba, Japan
15:20~16:50	Session: Workshop 4, "Regulation of cytokine production"
	Room: ANA Crowne Plaza "Ohtori" Room B Chair/s: Howard A. Young, Osamu Takeuchi
15:20~	Mo-WS4-1 Posttranscriptional control of pro-inflammatory cytokine expression by Regnase-1 and Roquin Osamu Takeuchi Institute for Frontier Life and Medical Sciences, Kyoto University, Kyoto, Japan

15:40~	Mo-WS4-2 The Dark Side of Interferon-gamma
	Howard A. Young', Heekyong R. Bae', Deboran L. Hodge', Guo-Xiang Yang',
	Patrick S.C. Leung ² , Sathi Babu Chodisetti [°] , Megan Karwan ⁻ , Julio C. Valencia ⁺ ,
	Michael Sanford', John Fenimore', Seohyun Kim', Ziaur S.M. Rahman',
	Koichi Tsuneyama ⁵ , M. Eric Gershwin ²
	¹ Cancer and Inflammation Program, National Cancer Institute at Frederick and Leidos, Frederick, United States, ² Division of Rheumatology, Allergy and Clinical Immunology, University of California Davis School of Medicine, Davis, United States, ³ Department of Microbiology and Immunology, Pennsylvania State University College of Medicine, Hershey, United States, ⁴ Laboratory of Animal Science, National Cancer Institute at Frederick, Frederick, United States, ⁵ Department of Pathology and Laboratory Medicine, Institute of Biomedical Sciences, Tokushima University Graduate School, Tokushima, Japan
16:00~	No 14/84 2
10:00	The importance of aCAMP berizontal transfer in DNA demage driven
	inflammation
	Genevieve Penin ^{1,2} Michael Paul Gantier ^{1,2}
	1 Centre for Innate Immunity and Infectious Diseases. Hudson Institute of Medical Research. Clayton, Australia
	² Department of Molecular and Translational Science, Monash University., Clayton, Australia
16:08~	Mo-WS4-4
	Malonlyation as a novel inflammatory signal in macrophages
	<u>Silvia Galván-Peña^{1, 2}, Steve DeHaro³, George Royal³, Alan Nadin⁴, </u>
	Luke A.J O'Neill ^{1, 2}
	¹ School of Biochemistry and Immunology, Trinity College Dublin, Dublin, Ireland, ² Immunology Catalyst, GlaxoSmithKline, Stevenage, United Kingdom, ³ R&D Target Sciences, GlaxoSmithKline, Stevenage, United Kingdom, ⁴ NCE Molecular Tools Group, GlaxoSmithKline, Stevenage, United Kingdom
16:16~	Mo-WS4-5
	The protein kinase RIOK3 suppressed MDA5-dependent innate immune response
	Ken Takashima ^{1, 2} Hirovuki Oshiumi ³ Hiromi Takaki ¹ Misako Matsumoto ¹
	Tsukasa Seva ¹
	¹ Department of Vaccine Immunology Graduate School of Medicine, Hokkaido University Sannoro, Japan
	² Department of Immunology, Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ³ Department of Immunology, Graduate School of Medicine, Kumamoto University, Kumamoto, Japan
16:24~	Mo-W/S4-6
10.21	Functional diversity of zinc-finger antiviral protein isoforms during viral infection
	Johannes Schwerk Frank Soved Kerri Thomas Lauren Aarreberd Alison Kell
	Justin Boby Michael Gale Jr. Bam Savan
	Department of Immunology University of Washington, Seattle, United States
16:32~	Mo-WS4-7
	Differential antiviral cytokine responses in human astrocyte cells following infection with different Zika virus strains
	Mithun Das, Karla Helbig, Ross O'Shea
	Department of Physiology, Anatomy and Microbiology, School of Life Sciences, La Trobe University, Bundoora, Australia

16:40~	Mo-WS4-8 Intratumoral IRF5 regulates programs an anti-breast tumor immunity resulting in microenvironment that suppresses the suppression of breast tumor growth and metastasis Dan Li, Betsy Barnes Northwell Health, Manhasset, United States
15:20~16:50	Session: Workshop 6, "Cytokines in mucosal immunity"
	Room: ANA Crowne Plaza "Ohtori" Room C Chair/s: Rachel R. Caspi, Yoichiro Iwakura
15:20~	Mo-WS6-1 An eye commensal tunes the immune response at the ocular surface by eliciting IL-17 from mucosal γδ T cells Anthony J St. Leger ¹ , Jigar V Desai ¹ , Rebecca A Drummond ¹ , Abirami Kugadas ² , Fatimah Almaghrabi ¹ , Phyllis B Silver ¹ , Kumarkrishna Raychaudhuri ¹ , Mihaela Gadjeva ² , Yoichiro Iwakura ³ , Michail S Lionakis ¹ , <u>Rachel R Caspi¹</u> ¹ National Institutes of Health, Bethesda, MD, United States, ² Harvard University, Boston, MA, United States, ³ Tokyo University of Science, Tokyo, Japan
15:39~	Mo-WS6-2 The role of Dectin-1-IL-17F axis in the homeostasis of the intestinal immune system Yoichiro Iwakura Tokyo University of Science, Chiba, Japan
15:58~	Mo-WS6-3 Pulmonary Regnase-1 functions as a posttranscriptional switch in anti-bacterial immunity <u>Yoshinari Nakatsuka</u> ^{1, 2} , Takashi Mino ¹ , Masanori Yoshinaga ¹ , Takuya Uehata ¹ , Atsuyasu Sato ² , Tomohiro Handa ² , Kazuo Chin ³ , Toyohiro Hirai Hirai ² , Osamu Takeuchi ¹ ¹ Laboratory of Infection and Prevention, Department of Virus Research, Institute for Frontier Life and Medical Sciences, Kyoto University, Kyoto, Japan, ² Department of Respiratory Medicine, Graduate School of Medicine, Kyoto University, Kyoto, Japan, ³ Department of Respiratory Care and Sleep Medicine, Graduate School of Medicine, Kyoto University, Kyoto, Japan
16:11~	Mo-WS6-4 Lfc controls the formation of neutrophil extracellular traps against Candida albicans infection Chen-Min Weng ¹ , <u>Hao-Sen Chiang</u> ^{1, 2} ¹ Department of Life Science, National Taiwan University, Taipei, Taiwan, ² Genome and Systems Biology Program, National Taiwan University, Taipei, Taiwan

16:24~	Mo-WS6-5 Polarized interferon-mediated immune response against enteric pathogens reveal novel mechanisms of immune tolerance in the human gut Megan Stanifer ¹ , Dorothee Albrecht ² , Sina Bartfeld ⁴ , Jonathan Kagan ³ , Takashi Kanaya ⁵ , <u>Steeve Boulant</u> ^{1, 2} ¹ University Hospital Heidelberg, Heidelberg, Germany, ² DKFZ, Heidelberg, Germany, ³ Boston Children's Hospital, Boston, United States, ⁴ University of Wurzberg, Wurzberg, Germany, ⁵ RIKEN, Yokohama, Japan
16:37~	Mo-WS6-6 Myd88 deficiency results in dysbiosis favoring generation of spontaneous lymphomas and carcinogen-induced colonic tumors
	<u>Rosalba Salcedo</u> ', John McCulloch', Jonathan Badger', Colm Ohuigin', Kathryn Jones ¹ , Amiran Dzutsev ¹ , Ernesto Perez Chanona ¹ , Loretta Smith ¹ , Megan Karwan ² , Ren-Ming Dai ² , Soumen Roy ¹ , Asra Khan ¹ , Wuxing Yuan ¹ , Giorgio Trinchieri ¹
	¹ Cancer and Inflammation Program, National Cancer Institute, Bethesda, United States, ² Leidos Biomedical Research, Inc., CIP, Bethesda, United States
17:00~19:00	Session: Evening Symposium "Cytokines/IFNs in infection" incorporation with Hokkaido University and JSICR
	Room: ANA Crowne Plaza "Ohtori" Room A Chair/s: Akinori Takaoka, Keiko Ozato
17:00~	Mo-ES1-1 Innate sensor-mediated signaling for interferon induction during viral infection <u>Akinori Takaoka</u> Division of Signaling in Cancer and Immunology, Institute for Genetic Medicine, Hokkaido University, Sapporo, Japan
17:24~	Mo-ES1-2 Innate immune sensing of cytosolic chromatin fragments through cGAS promotes senescence Andrea Abasser Swiss Federal Institute of Technology, Lausanne, Switzerland
17:48~	Mo-ES1-3 Double Strended RNA in Lectic Acid Posterio Brime Protective Immunity via

18:12~	Mo-ES1-4 Chromatin binding factor BRD4 directs development of hematopoietic stem cells and regulates inflammatory responses in macrophages through super- enhancers <u>Keiko Ozato¹</u> , Wenjing Yang ² , Ryoji Yagi ³ , Anne Gegonne ⁴ , Akira Nishiyama ⁵ , Jun Zhu ² , Jingfang Zhu ³ , Dinah Singer ⁴ , Anup Dey ¹ ¹ NICHD, NHLBI, 3 NIAID, 4NCI, National Institutes of Health 5. Yokohama City University, Bethesda, United States, ² NHLBI, National Institutes of Health, Bethesda, United States, ³ NIAID, National Institutes of Health, Bethesda, United
	States, ⁴ NCI, National Institutes of Health, Bethesda, United States, ⁵ Yokohama City University, Yokohama, Japan
18:36~	Mo-ES1-5 Chronic hepatitis virus infection and interferon Kazuaki Chayama Hiroshima University, Hiroshima, Japan
17:00~19:00	Session:Sponsored Evening Symposium 1, Sponsored by Kyowa Hakko Kirin Co., Ltd.
	Room: ANA Crowne Plaza "Ohtori" Room B
	Chair/s: Kristin M. Leiferman, Kiyoshi Takatsu
17:00~	Mo-ES2-1 ILC2s: A window into the evolutionary role of allergic immunity Richard Michael Locksley, Christopher Schneider, Claire O'Leary University of California, San Francisco and Howard Hughes Medical Institute, San Francisco, United States
17:30~	Mo-ES2-2 IL-5-producing ILC2s and eosinophils in the development of pulmonary arteriopathy Satoshi Takaki Department of Immune Regulation, Research Institute, National Center for Global Health and Medicine, Ichikawa, Chiba, Japan
18:00~	Mo-ES2-3 Memory-type pathogenic Th2 (Tpath2) cells in airway inflammation Toshinori Nakayama Department of Immunology, Graduate School of Medicine, Chiba University, Chiba, Japan
18:30~	Mo-ES2-4 Eosinophilia, Interleukin-5, and Eosinophil-Related Diseases Gerald Joseph Gleich Departments of Dermatology and Medicine, University of Utah, , Salt Lake City, Utah, United States
17:00~19:00	Session : Asian - Middle East - Pacific Cytokine Network
	Room: ANA Crowne Plaza "Ohtori" Room C
	Chair/s: Yoichiro Iwakura, Khalid S. A. Khabar

17:00~	Mo-ES3-1 Negative Regulation of Cytokine and Interferon Expression Khalid S. A. Khabar King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia
17:20~	Mo-ES3-2 The priming effect of β-catenin to NF-κB p65 for interleukin 6 production via TCF4-mediated signaling in macrophage <u>Chung-Gyu Park</u> ¹ , Soung-Hoo Jeon ² ¹ Department of Microbiology and Immunology, Seoul National University College of Medicine, Seoul, Korea, Republic of (South), ² Xenotransplantation Research Center Seoul National University College of Medicine, Seoul, Korea, Republic of (South)
17:40~	Mo-ES3-3 Syk-CLRs and TLR2 are critical for dengue virus-induced NET formation and thrombocytopenia Shie-Liang Hsieh Genomics Research Center, Academia Sinica, Taipei, Taiwan
18:00~	Mo-ES3-4 The role of Mucin-2 and its monosaccharides in regulation of mucosal immunity <u>Ekaterina Litvinova</u> , Kseniya Achasova, Elena Kozhevnikova, Mariya Zolotykh, Mikhail Moshkin The Federal Research Center Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia
18:20~	Mo-ES3-5 Growth hormone-IGF1 axis and Nonalcoholic Fatty Liver Disease Xiaoshuang Wang ^{1, 2} , Dong Yu ^{1, 2} , Yan Liu ^{1, 2} , Xiaoxin Wang ^{1, 2} , Jin Wu ^{1, 2} , Xiangdong Liu ^{1, 2} , Ruijiao Jiang ^{1, 2} , Liyuan Ran ^{1, 2} , <u>Yingjie Wu^{1, 2}</u> ¹ Institute of Genome Engineered Animal Models for Human Diseases Dalian Medical University, Dalian, China, ² Institute of Integrative Medicine Dalian Medical University, Dalian, China
18:40~	Mo-ES3-6 Antigen specific immunotherapy for autoimmune disease targeting dendritic cells Anne-Sophie Bergot, Meghna Talekar, Hanno Nel, Ryan Galea, Mark Harris, Emma Hamilton-Williams, Ranjeny Thomas The University of Queensland Diamantina Institute, University of Queensland, Translational Research Institute, Brisbane, QLD, Australia, Woolloongabba, Australia
19:10~21:00	Poster Session - P1, P3, P5, P7, P9, P11, P13, P15 Ishikawa Ongakudō Interchange Hall

Program

Tuesday, 31 October 2017		
08:30~09:20	Session : Keynote Lecture 5 Room: Ishikawa Ongakudō Hogaku Hall Chair/s: Shimon Sakaguchi	
08:30~	Tu-K5-1 Tissue-Tregs and their nurturing cells Diane Mathis Harvard Medical School, Boston, United States	
09:30~12:10	Session : Symposium 2, "Autoimmunity, chronic inflammation and cytokines" Room: Ishikawa Ongakudō Hogaku Hall Chair/s: Chen Dong, Vijay K. Kuchroo	
09:30~	Tu-S2-1 Interleukin 2 signal transduction and control of T cell biology: more than STATS Doreen Cantrell Department of Cell Signalling Immunology, School of Life Sciences, University of Dundee, Dundee, United Kingdom	
09:55~	Tu-S2-2 IL-17 family cytokines in inflammation and cancer Chen Dong Institute for Immunology and School of Medicine, Tsinghua University, Beijing, China	
10:20~	Tu-S2-3 Overlapping and distinct activties of IL-36 and IL-1 cytokines in inflammatory and infectious diseases Manfred Kopf, Mareike Bindszus, Jan Kisielow ETH Zürich/ Institute of Molecular Health Sciences, Department of Biology, Zurich, Switzerland	
10:45~10:55	Break	
10:55~	Tu-S2-4 Cytokines networks in the induction and regulation of Th17 Cells Vijay K. Kuchroo Harvard Medical School and Brigham and Women's Hospital, Boston, United States	

11:20~	Tu-S2-5 An inflammatory cellular cascade of autoimmune Th17 cells, GM-CSF- producing synovial ILCs and stromal cells in autoimmune arthritis Shimon Sakaguchi ¹ , Keiji Hirota ² ¹ Osaka University, Immunology Frontier Research Center, Osaka, Japan, ² Kyoto University, Institute for Frontier Life and Medical Sciences, Kyoto, Japan
11:45~	Tu-S2-6 Osteoimmunology and autoimmunity Hiroshi Takayanagi Department of Immunology Graduate School of Medicine and Faculty of Medicine The University of Tokyo, Tokyo, Japan
12:40~13:30	Session: Lunch-time Lecture 4, Sponsored by: Illumina K. K.
	Room: ANA Crowne Plaza "Ohtori" Room A Chair/s: Hiroya Kumai
12:40~	Tu-L4-1Single-cell gene expression in tissues, tumors, and cell linesShinichi HashimotoGraduate School of Medical Sciences, Kanazawa University, Ishikawa, Japan
12:40~13:30	Session : Lunch-time Lecture 5, Sponsored by: ROHTO Pharmaceutical Co., Ltd.
	Room: ANA Crowne Plaza "Ohtori" Room B Chair/s: Akihiro Matsukawa
12:40~	Tu-L5-1 Lung Fibrosis: Future Directions in Research Toshihiro Ito Department of Immunology, Nara Medical University, Kashihara, Japan
12:40~13:30	Session: MMCB Sponsored Lunch-time Lecture
	Room: ANA Crowne Plaza "Ohtori" Room C Chair/s: Toshiaki Ohteki
12:40~	Tu-L6-1Development and functions of resident macrophagesFrederick GeissmannMemorial Sloan Kettering Cancer Center, New York, United States
13:40~15:10	Session : Workshop 7, "Signal transduction and metabolic regulation"
	Room: ANA Crowne Plaza "Ohtori" Room A Chair/s: Akihiko Yoshimura, Xiaoxia Li

13:40~	Tu-WS7-1 MyD88/IRAK2-dependent interplay between myeloid and adipocytes in the initiation and progression of obesity-associated inflammatory diseases Xiaoxia Li Cleveland Clinic Lerner Research Institute, Cleveland, United States
14:00~	Tu-WS7-2Induction of regulatory T cells from Th1 cells through metabolic reprogramingMitsuhiro Kanamori, Akihiko YoshimuraDepartment of Microbiology and Immunology, Keio University School of Medicine, Shinjuku-ku, Japan
14:10~	Tu-WS7-3 A critical role of mitochondrial oxidation in the production of type I interferon by human plasmacytoid dendritic cells <u>Harry James Hurley</u> ^{1, 2} , Zachary Rothkopf ² , Patricia Fitzgerald-Bocarsly ^{1, 2} ¹ Rutgers New Jersey Medical School, Newark, NJ, United States, ² Rutgers School of Graduate Studies, Newark, NJ, United States
14:20~	Tu-WS7-4 Stress-induced dynamic regulation of mitochondrial STAT3 and its association with cyclophilin D reduce mitochondrial ROS production Andrew Charles Larner, Jeremy A Meir, Moonjung Hyun, Marc Cantwell, Vidisha Raje, Jennifer Sisler Virginia Commonwealth University, Richmond, United States
14:30~	Tu-WS7-5 Insights into the tumor suppression mechanisms of Suppressor of Cytokine Signaling 1 (SOCS1) and SOCS3 in hepatocellular carcinoma Md Gulam Musawwir Khan ¹ , Mehdi Yeganeh ¹ , Rajani Kandhi ¹ , Diwakar Bobbala ¹ , Akihiko Yoshimura ² , Gerardo Ferbeyre ³ , Sheela Ramanathan ¹ , Subburaj Ilangumaran ¹ ¹ Immunology Division, Department of Pediatrics, Faculty of Medicine and Health Sciences, University of Sherbrooke, Sherbrooke, Canada, ² Department of Microbiology and Immunology, Keio University School of Medicine, Tokyo, Japan, ³ Department of Biochemistry, Faculty of Medicine, University of Montreal, Montreal, Canada
14:40~	Tu-WS7-6 IL-1b induced cell death under glucose deprivation is dependent on SIRT6- Hexokinase 2 cross talk Ellora SEN, Touseef Sheikh, Piyushi Gupta, Pruthvi Gowda

National Brain Research Centre, Manesar, India

14:50~	Tu-WS7-7 T-bet suppresses the IFN-gamma mediated induction of a T cell intrinsic type I IFN signature during T helper 1 responses <u>Yohei Mikami</u> ¹ , Fred Davis ¹ , Shigeru Iwata ¹ , Hong-Wei Sun ¹ , Brooks R Stephen ¹ , Shih Han-Yu ¹ , Takeshi Kawabe ² , Kan Jiang ¹ , Dragana Jankovic ² , Alan Sher ² , Yuka Kanno ¹ , John J O'Shea ¹
	¹ Lymphocyte Cell Biology Section, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, United States, ² Immunobiology Section, Laboratory of Parasitic Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, United States
15:00~	Tu-WS7-8 Involvement of the MAP kinase pathway in PKR inhibition by Theiler's virus Yohei Hayashi, <u>Thomas Michiels</u> de Duve Institute, University of Louvain, Brussels, Belgium, Brussels, Belgium
13:40~15:10	Session : Workshop 9, "Anti-cytokine therapy for inflammatory human diseases"
	Room: ANA Crowne Plaza "Ohtori" Room B
	Chair/s: John A. Hamilton, Yoshiya Tanaka
13:40~	Tu-WS9-1 Overview of anti-cytokine therapy and differential use of biologics based on lymphocyte phenotype in inflammatory autoimmune diseases Yoshiya Tanaka
	The First Department of Internal Medicine, School of Medicine, University of Occupational and Environmental Health, Japan, Kitakyushu, Japan
13:55~	Tu-WS9-2 TNFR2 ⁺ regulatory T cells (Tregs) subpopulations are highly suppressive and are increased on anti-TNF treatment in Rheaumtoid Arthritis (RA) patients.
	François Santinon ¹ , Maxime Batignes ¹ , Benoit Salomon ² ,
	Jorg Tost ⁴ , Florence Busato ⁴ , Patrice Decker ¹ , Marie-Christophe Boissier ^{1, 3} ,
	Luca Semerano ^{1, 3} , <u>Natacha Bessis</u> ¹
	¹ INSERM UMR 1125, Sorbonne Paris Cité, University Paris 13, 75011 Paris, France, ² Sorbonne Universities, UPMC University Paris 06, INSERM, CNRS, Centre d'Immunologie et des Maladies Infectieuses (CIMI-Paris), Paris, France, ³ Assistance Publique-Hôpitaux de Paris (AP-HP), Avicenne Hospital, Rheumatology Dept, Bobigny, France, ⁴ Laboratory for Epigenetics and Environment, Centre National de Génotypage, CEA-Institut de Génomique,, Evry, France
14:10~	Tu-WS9-3 TRAIL suppresses joint inflammation and osteoclastogenesis through inhibiting activated T cell responses in inflammatory arthritis
	I-Tsu Chyuan ^{1, 2} , Hwei-Fang Tsai ^{3, 4} , Ping-Ning Hsu ^{5, 6}
	¹ Department of Internal Medicine, Gathay General Hospital, Taipei, Taiwan, ² Graduate Institute of Clinical Medicine, College of Medicine, National Taiwan University, Taipei, Taiwan, ³ Department of Internal Medicine, Taipei Medical University Shuang Ho Hospita, Taipei, Taiwan, ⁴ Graduate Institute of Clinical Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan, ⁵ Department of Internal Medicine, National Taiwan University Hospital, Taipei, Taiwan, ⁶ Graduate Institute of Immunology, College of Medicine, National Taiwan University, Taipei, Taiwan

14:25~	Tu-WS9-4 Distinct single cell gene expression signatures of monocyte subsets differentiate between TNF-alpha inhibitor treatment response groups in Rheumatoid Arthritis <u>Theresa L. Wampler Muskardin</u> ¹ , Wei Fan ⁵ , Zhongbo Jin ⁴ , Mark A. Jensen ² , Jessica M. Dorschner ³ , Yogita Ghodke-Puranik ³ , Danielle Vsetecka ³ , Timothy B. Niewold ² ¹ NYU Langone Medical Center, Department of Medicine, Division of Rheumatology, New York, United States, ² NYU Langone Medical Center, Department of Medicine, Colton Center for Autoimmunity, New York, United States, ³ Mayo Clinic, Department of Medicine, Division of Rheumatology, Rochester, United States, ⁴ University of Florida School of Medicine, Department of Pathology, Immunology, and Laboratory Medicine, Gainesville, United States, ⁵ Shanghai
14:40~	Jiao Tong University, School of Medicine, Ren Ji Hospital, Department of Rheumatology, Shanghai, China Tu-WS9-5 Anti-CX3CL1 monoclonal antibody therapy suppresses the development of bleomycin-induced and growth factors-induced skin fibrosis in mice <u>Vu Huy Luong</u> ¹ , Takenao Chino ¹ , Noritaka Oyama ¹ , Takashi Obara ² , Yoshikazu Kuboi ³ , Naoto Ishii ³ , Akihito Machinaga ³ , Hideaki Ogasawara ³ ,
	Wataru Ikeda ^s , Toshio Imai ^s , Minoru Hasegawa ⁺ ¹ Department of Dermatology, Fukui University, Fukui, Japan, ² Eisai CoLtd., Tokyo, Japan, ³ KAN Research Institute. Inc., Hyogo, Japan
14:55~	Tu-WS9-6A new GM-CSF-dependent pathway in inflammationJohn A. HamiltonUniversity of Melbourne, Department of Medicine at Royal Melbourne Hospital, Parkville, Australia
13:40~15:10	Session : Workshop 11, "Emerging cytokines" Room: ANA Crowne Plaza "Ohtori" Room C Chair/s: Cem Gabay, Hiroki Yoshida
13:40~	Tu-WS11-1 The IL-1 family: new and old cytokines Cem Gabay Division of Rheumatology, University of Geneva, Geneva, Switzerland
14:05~	Tu-WS11-2 Interleukin 27 controls pain sensitivity in pathophysiological conditions; to immunity and beyond! Hiroki Yoshida ¹ , Tomoko Sasaguri ² , Asako Ishikawa ² , Yuzo Murata ³ , Toshiharu Yasaka ⁴ , Naomi Hirakawa ² , Hiromitsu Hara ⁴ ' ¹ Dept. Biomol. Sciences, Faculty of Medicine, Saga University, Saga, Japan, ² Dept. Anesthesiol. Critical Care Med., Faculty of Medicine, Saga University, Grad. Sch. Med. Dent. Sciences, Kagoshima, Japan
14:30~	Tu-WS11-3 Th22 cells as a new helper T cell subset involved in RA pathogenesis through their ability to promote osteoclast differentiation via IL-22 production Yusuke Miyazaki ¹ , Shingo Nakayamada ¹ , Satoshi Kubo ¹ , Kazuhisa Nakano ¹ , Kei Sakata ^{1, 2} , Shigeru Iwata ¹ , Ippei Miyagawa ¹ , Yoshiya Tanaka ¹ 'The First Department of Internal Medicine, School of Medicine, University of Occupational & Environmental Health, Japan, Kitakyusyu, Japan, ² Mitsubishi Tanabe Pharma, Yokohama, Japan
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14:40~	Tu-WS11-4 Interleukin-27 inhibits the generation of memory CD4+ T cells during malaria infection. Daisuke Kimura ¹ , Sayuri Nakamae ¹ , Odsuren Sukhbaatar ¹ , Mana Miyakoda ¹ , Masoud Akbari ¹ , Kazumi Kimura ¹ , Hiromitsu Hara ² , Hiroki Yoshida ³ , Katsuyuki Yui ¹ ¹ Division of Immunology, Department of Molecular Microbiology and Immunology, Graduate School of Biomedical Sciences, Nagasaki University, Nagasaki, Japan, ² Department of Immunology, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, Japan, ³ Department of Biomolecular Sciences, Faculty of Medicine, Saga University, Saga, Japan
14:50~	Tu-WS11-5 Structure of an engineered IFN-λ/IFN-λR1/IL-10Rβ complex provides insight into the functional dichotomy of type III versus type I IFNs Juan Luis Mendoza ¹ , William M Schneider ² , Hans-Heinrich Hoffman ² , Koen Vercauteren ² , Kevin M Jude ¹ , Anming Xiong ³ , Ignacio Moraga ¹ , Tim M Horton ¹ , Jeffrey S Glenn ³ , Ype P de Jong ^{2, 4} , K Christopher Garcia ¹ ¹ Howard Hughes Medical Institute, Department of Molecular and Cellular Physiology and Department of Structural Biology, Stanford University School of Medicine, Stanford, CA 94305, USA, Stanford, United States, ² Laboratory of Virology and Infectious Disease, The Rockefeller University, New York, NY 10065, USA, New York, United States, ³ Department of Medicine, Division of Gastroenterology and Hepatology, Department of Microbiology and Immunology, Stanford University School of Medicine, Stanford, CA 94305, USA Stanford University School of Medicine, Stanford, CA 94305, USA, Stanford, United States, ⁴ Center for the Study of Hepatitis C, Division of Gastroenterology and Hepatology, Weill Cornell Medicine, New York, NY 10065, USA, New York, United States
15:00~	Tu-WS11-6IL-33 potentiates the inflammatory response to Toxoplasma gondiiJoseph Thomas Clark, Jeongho Park, Christoph Konradt, Maxime Jacquet, Christopher HunterDepartment of Pathobiology, University of Pennsylvania School of Veterinary Medicine, Philadelphia, United States
15:20~16:50	Session : Workshop 8, "Cytokines and inflammatory factors in host defense" Room: ANA Crowne Plaza "Ohtori" Room A Chair/s: Christopher Hunter, Reiko Shinkura
15:20~	Tu-WS8-1 High-affinity monoclonal IgA derived from mouse Intestine as a modulator of the gut microbiota Reiko Shinkura Nara Institute of Science and Technology, Nara, Japan

15:40~	Tu-WS8-2 Antibiotics disrupt intestinal macrophage homeostasis to induce long-lived inflammatory T-cell responses and defective protection against bacterial and parasitic infections. Elizabeth Rebecca Mann ^{1, 2} , Peter Andersen ³ , Cristina Alcon-Giner ⁴ , Charlotte Leclaire ⁴ , Shabhonam Caim ⁴ , Hannah Wessel ¹ , Allison Bancroft ² , Alberto Bravo-Blas ¹ , Verena Kästele ¹ , Daniel Peterson ^{3, 5} , Richard Grencis ² , Xuhang Li ³ , Allan Mowat ¹ , Lindsay Hall ⁴ , Mark Travis ² , Simon Milling ¹ ¹ University of Glasgow, Glasgow, United Kingdom, ² University of Manchester, Manchester, United Kingdom, ³ Johns Hopkins Medicine, Baltimore, United States, ⁴ Quadrate Institute Bioscience, Norwich, United Kingdom,
	⁵ Eli Lilly Research Laboratories, Indianapolis, United States
15:50~	Tu-WS8-3 Osteoblasts mediate immunosuppression during sepsis by regulating lymphopoiesis Asuka Terashima ¹ , Kazuo Okamoto ¹ , Tomoki Nakashima ² , Koichi Ikuta ³ , Hiroshi Takayanagi ⁴
	¹ Department of Osteoimmunology, Graduate School of Medicine and Faculty of Medicine The University of Tokyo, Tokyo, Japan, ² Department of Cell Signaling, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, Tokyo, Japan, ³ Laboratory of Biological Protection, Department of Biological Responses, Institute for Virus Research, Kyoto University, Kyoto, Japan, ⁴ Department of Immunology, Graduate School of Medicine and Faculty of Medicine, The University of Tokyo, Tokyo, Japan
16:00~	Tu-WS8-4 IL-17A controls autoimmune disease by inhibiting the expression of IL-17 lineage cytokines through a negative feedback loop involving IL-24 Wai Po Chong ^{1, 2} , Kumarkrishna Raychaudhuri ² , Reiko Horai ² , Mary J Mattapallil ² , Phyllis B Silver ² , Yingyos Jittayasothorn ² , Chi-Chao Chan ² , Jun Chen ¹ , Rachel Caspi ² 'State Key Lab. Ophthalmol., Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, China, ² Lab of Immunology, National Eye Institute, National Institutes of Health, Bethesda, United States
16:10~	Tu-WS8-5 Non-linear scaling of CD8 ⁺ T cell responses by bystander DCs <u>Jun Abe¹</u> , Philipp Germann ^{2, 3} , Jorge Ripoll ^{4, 5} , James Sharpe ^{2, 3, 6} , Jens V Stein ¹ ¹ Theodor Kocher Institute, University of Bern, Bern, Switzerland, ² EMBL/CRG Systems Biology Research Unit, Centre for Genomic Regulation (CRG), The Barcelona Institute of Science and Technology, Barcelona, Spain, ³ Universitat Pompeu Fabra (UPF), Barcelona, Spain, ⁴ Department of Bioengineering and Aerospace Engineering, Universidad Carlos III of Madrid, Madrid, Spain, ⁵ Experimental Medicine and Surgery Unit, Instituto de Investigación Sanitaria del Hospital Gregorio Marañón, Madrid, Spain, ⁶ Institució Catalana de Recerca i Estudis Avançats (ICREA), Barcelona, Spain
16:20~	Tu-WS8-6 A Novel Role for Epstein-Barr Virus-Induced Gene 3 as An Intracellular Molecule That Enhances IL-23 Receptor Expression by Binding to Calnexin and IL-23 Receptor Izuru Mizoguchi, Yukino Chiba, Hideaki Hasegawa, Mio Ohashi, Mingli Xu, Toshiyuki Owaki, Takayuki Yoshimoto Department of Immunoregulation, Institute of Medical Science, Tokyo Medical University, Tokyo, Japan

16:30~	Tu-WS8-7 The role of BATF-3 dependent DC in the formation of fat associated lympoid clusters Christopher Hunter, David Christian University of Pennsylvania, Philadelphia, United States
15:20~16:50	Session: Workshop 10, "Cytokines in autoimmune diseases"
	Room: ANA Crowne Plaza "Ohtori" Room B
	Chair/s: Ann Chen, Masaaki Murakami
15:20~	Tu-WS10-1 Overview of WS10 Masaaki Murakami Division of Psychoimmunology, Institute for Genetic Medicine, Graduate School of Medicine, Hokkaido University, Sapporo, Japan
15:26~	Tu-WS10-2 Selective blockade of NLRP3 inflammasome by TCM in lupus nephritis
	<u>Ann Chen</u> ¹ , Shuk-Man Ka ² , Feng-Cheng Liu ³ , Kuo-Feng Hua ⁴ , Shozo Izui ⁵
	¹ Department of Pathology, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan, ² Graduate Institute of Aerospace and Undersea Medicine, Academy of Medicine, National Defense Medical Center, Taipei, Taiwan, ³ Department of Rheumatology/Immunology and Allergy, Department of Medicine, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan, ⁴ Department of Biotechnology and Animal Science, National Ilan University, Ilan, Taiwan, ⁵ Department of Pathology and Immunology, Faculty of Medicine, University of Geneva, Geneva, Switzerland
15:36~	Tu-WS10-3 NLRP3 and AIM2 inflammasome function in autoimmune NZB/W F1 mouse macrophages Sara Judith Thygesen, David P Sester, Katryn J Stacey
	School of Chemistry and Molecular Biosciences, The University of Queensland, Brisbane, Australia
15:44~	Tu-WS10-4 Interleukin-20 induces podocyte apoptosis and is upregulated in early diabetic nephropathy Yu-Hsiang Hsu ^{1, 2, 4} , Ming-Shi Chang ^{3, 4}
	¹ Institute of Clinical Medicine, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ² Research Center of Clinical Medicine, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ³ Department of Biochemistry and Molecular Biology, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ⁴ Research Center of New Antibody Drug, National Cheng Kung University, Tainan, Taiwan
15:52~	Tu-WS10-5 Aicardi-Goutières syndrome-like inflammation in mutant mice with constitutively activated MDA5 Hideo Onizawa ^{1, 2} Hiroki Kato ¹ Shota Shimizu ¹ Nohumasa Soda ¹ SuMin Lee ¹
	Francine Lianne Emralino ¹ , Ahmed Abu Taveh ¹ , Taisuke Ohto ¹ , Masahide Funabiki ¹ ,
	Takashi Fujita ¹
	¹ Institute for Frontier Life and Medical Sciences, Kyoto University, Kyoto, Japan, ² Department of Rheumatology and Clinical Immunology, Graduate School of Medicine, Kyoto University, Kyoto, Japan

16:00~	Tu-WS10-6 Regulation of glial cells by Tregs in the chronic phase after stroke Minako Ito, Akihiko Yoshimura
	Department of Microbiology and Immunology, Keio University School of Medicine, Tokyo, Japan
16:08~	Tu-WS10-7 Type I interferon receptor triggering of astrocytes and neurons orchestrates neuro-glial crosstalk that activates microglia and regulates accumulation of myeloid cells during viral encephalitis
	Chintan Chhatbar ¹ , Claudia N. Detie ¹ , Elena Grabski ¹ , Katharina Borst ¹ ,
	Julia Spanier ¹ , Luca Ghita ¹ , David A. Elliott ² , Marta Joana Costa Jordao ^{3, 4} ,
	Nora Mueller ⁵ , Chittappen K. Prajeeth ⁶ , Viktoria Gudi ⁶ , Michael A. Klein ⁵ ,
	Marco Prinz ^{3, 7} , Frank Bradke ² , Martin Stangel ^{6, 8} , <u>Ulrich Kalinke¹</u>
	¹ Institute for Experimental Infection Research, TWINCORE, Centre for Experimental and Clinical Infection Research, a joint venture between the Helmholtz Centre for Infection Research and the Hannover Medical School (E.Grabski: current PEI Langen), Hannover, Germany, ² Axonal Growth and Regeneration Group, German Center for Neurodegenerative Disease Research (DZNE), Bonn, Germany, ³ Institute of Neuropathology, Freiburg University Medical Centre, Freiburg, Germany, ⁴ Faculty of Biology, University of Freiburg, Freiburg, Germany, ⁵ Institute for Virology and Immunobiology, University of Wuerzburg, Wuerzburg, Germany, ⁶ Clinical Neuroimmunology and Neurochemistry, Department of Neurology, Hannover Medical School, Hannover, Germany, ⁷ BIOSS Centre for Biological Signaling Studies, University of Freiburg, Freiburg, Germany, ⁸ Center for Systems Neuroscience, Hannover, Germany
16:16~	Tu-WS10-8 The microbiome controls the development of CNS autoimmunity by regulating T cell activation and migration.
	Sarah C Edwards, Kingston HG Mills
	Immune regulation research group, Trinity Biomedical Sciences Institute, Trinity College Dublin, Dublin, Ireland
16:24~	Tu-WS10-9 Photopic light intensity inhibits retinal inflammation via down-regulating local adrenergic system Daisuke Kamimura ¹ , Andrea Stofkova ^{1, 2} , Takuto Ohki ¹ , Yasunobu Arima ¹ , Masaaki Murakami ¹
	¹ Molecular Neuroimmunology, Institute for Genetic Medicine, Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ² Normal, Pathological and Clinical Physiology, Third Faculty of Medicine, Charles University, Prague, Czech Republic
16:34~	Tu-WS10-10 Symmetrical inflammation is developed by the sensory neurons between joints in a rheumatoid arthritis model
	<u>Takuto Ohki</u> ¹ , Daisuke Kamimura ^{1, 2} , Masaya Harada ² , Fuminori Kawano ³ ,
	Ikuma Nakagawa ¹ , Tadafumi Kawamoto ⁴ , Yoshinobu Ohira ³ , Yasunobu Arima ^{1, 2} , Masaaki Murakami ^{1, 2}
	¹ Molecular Neuroimmunology, Institute for Genetic Medicine, Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ² Developmental Immunology, Graduate School of Frontier Biosciences, Graduate School of Medicine, and WPI Immunology Frontier Research Center, Osaka University, Osaka, Japan, ³ Health and Sports Sciences, Graduate School of Medicine, and Graduate School of Frontier Biosciences, Osaka University, Osaka, Japan, ⁴ Radioisotope Research Institute, Department of Dental Medicine, Tsurumi University, Yokohama, Japan

16:42~	Tu-WS10-11 Brain micro-inflammation at specific vessels establishes a new neural circuit, which dysregulates the gastrointestinal homeostasis under stress conditions
	Yasunobu Arima ¹ , Takuto Ohki ¹ , Naoki Nishikawa ¹ , Kotaro Higuchi ¹ ,
	Junko Nio-Kobayashi ² , Stofkova Andrea ¹ , Toshihiko Iwanaga ² , Marco Prinz ³ ,
	Daisuke Kamimura ¹ , Masaaki Murakami ¹
	¹ Division of Molecular Neuroimmunology, Institute for Genetic Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ² Department of Anatomy, Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ³ Institute of Neuropathology, Faculty of Medicine, University of Freiburg, and BIOSS Centre for Biological Signalling Studies, University of Freiburg, Freiburg, Germany
15:20~16:50	Session: Workshop 12, "Helper T cell differentiation"
	Room: ANA Crowne Plaza "Ohtori" Room C
	Chair/s: Masato Kubo, Motoko Y. Kimura
15:20~	Tu-WS12-1 Role of T follicular helper (T _{FH}) and T _H 1 in flu specific humoral immunity <u>Masato Kubo</u>
	Research Institute for Biomedical Science, Tokyo University of Science, Noda, Japan, RIKEN Center for Integrative Medical Sciences (IMS), Yokohama, Japan
15:41~	Tu-WS12-2 Hypoleptinemia impairs T _{FH} cell function and confers the risk of poor vaccine responses Jun Deng ^{1, 2, 3} , Liwei Lu ² , <u>Di Yu^{1, 3}</u> ¹ China-Australia Centre for Personalised Immunology, Benii Hospital Affiliated to Shanghai, Jiaotong University
	Medical School, Shanghai, China, ² Department of Pathology and Center of Infection and Immunology, The University of Hong Kong, Hong Kong, China, ³ Department of Immunology and Infectious Disease, John Curtin School of Medical Research, The Australian National University, Canberra, Australia
15:54~	Tu-WS12-3 E-box binding protein HEB fine-tunes the localization of pre- T_{FH} cells in the secondary lymphoid organs to promote subsequent maturation into germinal center T_{FH} cells
	<u>Hidehiro Yamane</u> ¹ , Anastassia A. Tselikova ¹ , Sundar Ganesan ² , Juraj Kabat ² ,
	Ke Weng ¹ , Pamela L. Schwartzberg ³ , William E. Paul ¹
	¹ Cytokine Biology Unit, Laboratory of Immunology, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, United States, ² Biological Imaging Section, Research Technology Branch, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, United States, ³ Cell Signaling and Immunity Section, Genetic Disease Research Branch, National Human Genome Research Institute, National Institutes of Health, Bethesda, United States
16:07~	Tu-WS12-4 Mechanisms underlying differentiation and function of adipose tissue resident regulatory T cells
	<u>AJITHKUMAR VASANTHAKUMAR</u> , RENEE GLOURY, YANG LIAO, WEI SHI, AXEL KALLIES
	Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia

16:20~	Tu-WS12-5 Tobet [*] memory-phenotype CD4 [*] T cells are spontaneously generated via tonic lu-12 in steady state and exert cytokine-dependent, innate-like effector function <u>Takeshi Kawabe^{1, 2}</u> , Dragana Jankovic ² , Shuko Kawabe ¹ , Yuefeng Huang ¹ , Ping-Hsien Lee ¹ , Hidehiro Yamane ¹ , Jinfang Zhu ³ , Alan Sher ² , Ronald N. Germain ^{1, 4} , William E. Paul ¹ [*] Cytokine Biology Unit, Laboratory of Immunology, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, ² Immunobiology Section, Laboratory of Parasitic Diseases, National Institutes of Health, Bethesda, MD, United States, ^a Molecular and Cellular Immunoregulation Unit, Laboratory of Immunology, National Institutes of Health, Bethesda, MD, United States, ^a Lymphocyte Biology Section, Laboratory of Systems Biology, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, ^a Lymphocyte Biology Section, Laboratory of Systems Biology, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, ^a Lymphocyte Biology Section, Laboratory of Systems Biology, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, ^a Lymphocyte Biology Section, Laboratory of Systems Biology, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, ^a Lymphocyte Biology Section, Laboratory of Systems Biology, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States, ^b Laboratory of Systems Biology, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States
16:33~	Tu-WS12-6Myosin light chain 9 and 12 are functional ligands for CD69 that regulate airway inflammationMotoko Y. Kimura, Koji Hayashizaki, Toshinori NakayamaDepartment of Immunology Graduate School of Medicine Chiba University, Chiba, Japan
17:00~19:00	Session : Evening Symposium "Chemokines Cell trafficking and beyond" Room: ANA Crowne Plaza "Ohtori" Room A Chair/s: Naofumi Mukaida, Dhan V. Kalvakolanu
17:00~	Tu-ES4-1 Pathological contribution of an inflammatory chemokine CCL3 in chronic myeloid leukemia as a stem cell inhibitor Tomohisa Baba, Naofumi Mukaida Division of Molecular Bioregulation, Cancer Research Institute, Kanazawa University, Kanazawa, Japan
17:20~	Tu-ES4-2 Chemokine and oxysterol regulation of immune cell migration and metabolism Jason G. Cyster, Eric Dang UCSF, Department of Microbiology & Immunology and Howard Hughes Medical Institute, San Francisco, United States
17:50~	Tu-ES4-3 Mechanism of skin immune responses to external stimuli: Proposal of inducible skin-associated lymphoid tissue (iSALT) Kenji Kabashima Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan
18:10~	Tu-ES4-4 Chemokine-dependent and -independent mechanisms of T cell immune surveillance Jens V. Stein Theodor Kocher Institute, University of Bern, Bern, Switzerland

18:40~	Tu-ES4-5 Specific features of Tregs migrated from skin and colon to the draining lymph node in the steady state and under inflammation Michio Tomura Laboratory of Immunology, Faculty of Pharmacy, Osaka Ohtani University, Tondabayashi-city, Japan
17:00~19:00	Session : Sponsored Evening Symposium 2, A Paradigm Shift in Rheumatoid Arthritis -The Importance of Cytokine Blocking Treatment, Sponsored by Chugai Pharmaceutical Co., Ltd.
	Room: ANA Crowne Plaza "Ohtori" Room B
	Chair/s: Tsutomu Takeuchi
17:00~	Tu-ES5-1 Pro-inflammatory cytokine therapy in rheumatoid arthritis and other inflammatory/autoimmune diseases.
	JOINTA. Hamilton
17:40~	Tu-ES5-2 In vivo pharmacological action of biologic agents visualized by intravital bone imaging Masaru Ishii Osaka University Graduate School of Medicine, Osaka, Japan
18:20~	Tu-ES5-3 The significance of RA treatment by IL-6 signaling inhibition learned from the translational research Tsutomu Takeuchi Division of Rheumatology, Department of Internal Medicine, Keio University School of Medicine., Tokyo, Japan
17:00~19:00	Session : Milstein Young Investigator Awards; Christina Fleischmann Award & Sidney & Joan Pestka Graduate & Post Graduate Awards
	Room: ANA Crowne Plaza "Ohtori" Room C
	Chair/s: Bryan Williams, Keiko Ozato
17:00~	Tu-ES6-1 Introduction & Presentation of the Milstein Young Investigator Awards Bryan Williams Hudson Institute of Medical Research, Clayton, Australia

17:07~	Tu-ES6-2 Nitro-fatty acids are formed in response to infection with virus and covalently modify the adaptor molecule STING to reduce production of type I IFN. A L Hansen ¹ , S D Anderson ¹ , M B Iversen ¹ , A Thielke ² , G Buchan ² , F J Schopfe ² , David Olagnier ¹ , <u>Christian Kanstrup Holm</u> ¹ 'Aarhus University Department of Biomedicine, Aarhus C, Denmark, ² University of Pittsburgh, Pittsburgh, United States
17:24~	Tu-ES6-3 Selective suppression of IRF5 activity by Lyn in the TLR-MyD88 pathway restrains the development of SLE-like disease <u>Tatsuma Ban</u> ¹ , Go Sato ¹ , Akira Nishiyama ¹ , Satoko Matsunaga ¹ , Ayuko Kimura ² , Yayoi Kimura ² , Hideyuki Yanai ³ , Yoshiko Matsumoto ⁴ , Hiroe Hihara ⁴ , Tadashi Yamamoto ⁵ , Hisashi Hirano ² , Akihide Ryo ¹ , Kappei Tsukahara ⁴ , Kentaro Yoshimatsu ⁴ , Tadatsugu Taniguchi ³ , Tomohiko Tamura ^{1, 2} ¹ Yokohama City University Graduate School of Medicine, Yokohama, Japan, ² Advanced Medical Research Center, Yokohama City University, Yokohama, Japan, ³ Institute of Industrial Science, The University of Tokyo, Tokyo, Japan, ⁴ Eisai Co., Ltd., Tsukuba, Japan, ⁵ Okinawa Institute of Science and Technology Graduate School, Okinawa, Japan
17:41~	Tu-ES6-4 Memory-type ST2*CD4* T cells participate in the steroid-resistant pathology of eosinophilic pneumonia <u>Kiyoshi Hirahara</u> ¹ , Naoko Mato ^{1, 2} , Tomomi Ichikawa ¹ , Jin Kumagai ¹ , Masayuki Nakayama ² , Hideaki Yamasawa ² , Masashi Bando ² , Koichi Hagiwara ² , Yukihiko Sugiyama ^{2, 3} , Toshinori Nakayama ¹ ¹ Department of Immunology, Graduate School of Medicine, Chiba University, Chiba, Japan, ² Division of Pulmonary Medicine, Department of Internal Medicine, Jichi Medical University, Tochigi, Japan, ³ Department of Respiratory Medicine, Nerima-Hikarigaoka Hospital, Tokyo, Japan
17:58~	Tu-ES6-5 Introduction and Presentation of the Christina Fleischmann Award to Young Women Investigators Bryan Williams Hudson Institute of Medical Research, Clayton, Australia
18:03~	Tu-ES6-6 A long noncoding RNA regulates the switch between macrophage differentiation and inflammation Susan Carpenter ¹ , Sergio Covarrubias ¹ , Sol Katzman ¹ , Ran Song ² , Edward Wakeland ² ¹ Department of Molecular, Cell and Developmental Biology, University of California Santa Cruz., Santa Cruz, United States, ² Department of Immunology, UT Southwestern Medical School,, Dallas, United States
18:20~	Tu-ES6-7 Introduction and Presentation of the Sidney & Joan Pestka Graduate & Post Graduate Awards Robert Pestka PBL Assay Science, Piscataway, United States

18:26~	Tu-ES6-8 T cells Protect the Brain after Nasal Virus Infection by Engaging Local Myeloid Cells that Cross-Present Antigen
	E. Ashley Moseman, Alexa F Ciesinski, Dorian B McGavern
	Viral Immunology & Intravital Imaging Section, National Institute of Neurological Disorders and Stroke, National Institutes of Health, Bethesda, United States
18:43~	Tu-ES6-9 Type-I interferon mediated degradation of microRNAs is sequence and length dependent
	Charlotte Nejad ^{1, 2} , Michael Paul Gantier ^{1, 2}
	¹ Centre for Innate Immunity and Infectious Diseases, Hudson Institute of Medical Research, Clayton, Australia, ² Department of Molecular and Translational Science, Monash University, Clayton, Australia
19:10~21:00	Poster Session - P2, P4, P6, P8, P10, P12, P14 Ishikawa Ongakudō Interchange Hall

Program

Wednesda	ay, 1 November 2017
08:30~09:20	Session : Keynote Lecture 6 Room: Ishikawa Ongakudō Hogaku Hall Chair/s: Kenya Honda
08:30~	We-K6-1 Microbiota Control of Gut Immune Homeostasis Dan Littman Skirball Institute New York University School of Medicine Howard Hughes Medical Institute, New York, United States
09:30~12:10	Session : Symposium 3, "Environment, chronic inflammation and cytokines"
	Room: Ishikawa Ongakudo Hogaku Hall Chair/s: Akiko Iwasaki, Hiroshi Kiyono
09:30~	We-S3-1 Modulation of the immune system by the gut microbiota <u>Kenya Honda</u> ^{1, 2} , Takeshi Tanoue ^{1, 2} , Koji Atarashi ^{1, 2} , Seiko Narushima ² ¹ Keio University School of Medicine, Tokyo, Japan, ² RIKEN Center for Integrative Medical Sciences, Yokohama, Japan
09:55~	We-S3-2 Type I interferons in pregnancy Akiko Iwasaki Yale University School of Medicine and Howard Hughes Medical Institute, New Haven, CT, United States
10:20~	We-S3-3 Mucosal Multi-ecosystem of Epithelial Cells, Innate Lymphoid Cells and Commensal Microbiota for the Control of Symbiosis and Diseases Hiroshi Kiyono Division of Mucosal Immunology, Department of Microbiology and Immunology, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan, International Research and Development Center for Mucosal Vaccines, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan, International Research and Development of Immunology, Graduate School of Medicine, Chiba University, Chiba, Japan
10:45~10:55	Break
10:55~	We-S3-4 Sensing and reacting to pathogens via cytokine signaling at the skin barrier Gabriel Nunez University of Michigan, Ann Arbor, United States

11:20~	We-S3-5 Gut reactions: Immune pathways in the intestine in health and disease Fiona Powrie Kennedy Institute of Rheumatology, University of Oxford, Oxford, United Kingdom
11:45~	We-S3-6 Regulation of intestinal inflammation by epithelial barriers Kiyoshi Takeda Department of Microbiology and Immunology, Graduate School of Medicine, Osaka University, Osaka, Japan, Immunology Frontier Research Center, Osaka University, Osaka, Japan
12:40~13:30	Session: Lunch-time Lecture 7,
	Sponsored by: Meso Scale Japan K.K.
	Room: ANA Crowne Plaza "Ohtori" Room A
	Chair/s: Yutaka Kawakami
12:40~	We-L7-1 Strategic development of combination cancer immunotherapy Kouji Matsushima Department of Molecular Preventive Medicine. Graduate School of Medicine. The University of Tokyo. Japan
12:40~13:30	Session : Lunch-time Lecture 8, Sponsored by: Alcon Pharma K.K.
	Room: ANA Crowne Plaza "Ohtori" Room B
	Chair/s : Akiniko Yoshimura
12:40~	We-L8-2 The role of cytokine in the pathogenesis of age-related macular degenerationThe role of cytokine in the pathogenesis of age-related macular degeneration Koh-Hei Sonoda Department of Ophthalmology, Graduate School of Medical Science, Kyushu University, Fukuoka, Japan
13:05~	We-L8-1 Involvement of semaphorins in pathogenesis of autoimmune and inammatory diseases. Atsushi Kumanogoh Department of Respiratory Medicine and Clinical Immunology, Osaka University Graduate School of Medicine, Osaka, Japan
12:40~13:30	Session: ICIS-BioLegend William E. Paul Award Lecture
	Room: ANA Crowne Plaza "Ohtori" Room C
	Chair/s: Michelle Tate, Weiping Jiang

12:40~	Short Talk <u>Shaoquan Ji</u>
12:50~	We-L9-1 Learning cytokine function from the host-pathogen encounter Alan Sher
	NIH / NIAID, Betnesda, United States
13:40~15:10	Session: Workshop 13, "Development and function of Macrophage and DC"
	Room: ANA Crowne Plaza "Ohtori" Room A
	Chair/s: Frederic Geissmann, Toshiaki Ohteki
13:40~	We-WS13-1 Identification of human common monocyte progenitors Toshiaki Ohteki
	Department of Biodefense Research, Medical Research Institute, Tokyo Medical and Dental University, Bunkyo-ku, Japan
13:58~	We-WS13-2 Repression of SMAD3 by STAT3 and c-SKI is essential for conventional dendritic cell differentiation
	<u>Jeong-Hwan Yoon</u> ^{1, 2} , Eunjin Bae ^{1, 2} , Katsuko Sudo ³ , Seok Hee Park ⁴ , Michael Weinstein ⁵ , Sungmi Park ⁶ , Jae-Han Jeon ^{1, 6} , Susumu Nakae ⁷ , In-Kyu Lee ^{1, 6} , Ji Hyeon Ju ⁸ , Isao Matsumoto ⁹ , Takayuki Sumida ⁹ , Masahiko Kuroda ² , Keiji Miyazawa ¹⁰ , Mitsuyasu Kato ¹¹ , Mizuko Mamura ^{1, 2, 12}
	¹ Biomedical Research Institute, Department of Internal Medicine, Kyungpook National University Hospital, Daegu, Korea, Republic of (South), ² Department of Molecular Pathology, Tokyo Medical University, Tokyo, Japan, ³ Animal Research Center, Tokyo Medical University, Tokyo, Japan, ⁴ Department of Biological Sciences, Sungkyunkwan University, Suwon, Korea, Republic of (South), ⁵ Department of Molecular Genetics, The Ohio University, Columbus, OH, Columbus, United States, ⁶ Leading-edge Research Center for Drug Discovery and Development for Diabetes and Metabolic Disease, Kyungpook National University Medical Center, Daegu, Korea, Republic of (South), ⁷ Laboratory of Systems Biology, Center for Experimental Medicine and Systems Biology, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan, ⁸ Department of Internal Medicine, University of Korea, Seoul St. Mary Hospital, Seoul, Korea, Republic of (South), ⁹ Department of Internal Medicine, University of Tsukuba, Tsukuba, Japan, ¹⁰ Departments of Biochemistry, University of Yamanashi, Yamanashi, Japan, ¹¹ Department of Experimental Pathology, Graduate School of Comprehensive Human Sciences and Faculty of Medical University of Tsukuba, Tsukuba, Japan, ¹² Physician, Student and Researcher Support Center, Tokyo Medical University, Tokyo, Japan
14:10~	We-WS13-3 Mapping the human DC lineage through the integration of high-dimensional techniques
	Peter See ¹ , Charles-Antoine Dutertre ^{1, 2} , Jinmiao Chen ¹ , Patrick Günther ³ ,
	Naomi McGovern', Sergio Erdal Irac ² , Merry Gunawan ⁴ , Marc Beyer ⁵ ,
	Kristian Handler", Kalbo Duan", Joachim L. Schultze", ", Evan W. Newell', Florent Ginhoux ¹
	¹ Singapore Immunology Network (SIgN), Singapore, Singapore, ² Program in Emerging Infectious Disease, Duke- NUS Medical School, Singapore, Singapore, ³ Genomics and Immunoregulation, Life and Medical Sciences (LIMES) Institute, University of Bonn, Bonn, Germany, ⁴ Institute of Cellular Medicine, Newcastle University,, Newcastle, United Kingdom, ⁵ Platform for Single Cell Genomics and Epigenomics at the German Center for

Neurodegenerative Diseases and the University of Bonn, Bonn, Germany

14:22~	We-WS13-4 SIRPo ⁺ dondritic colle regulate homeostasis of fibroblastic reticular colle via TNE
	receptor ligands in the adult spleen
	<u>Yasuyuki Saito</u> 1, Satomi Komori1, Datu Respatika1, Ken Washio1, Takenori Kotani1,
	Yoji Murata ¹ , Hiroshi Ohnishi ² , Katsuyuki Yui ³ , Koji Yasutomo ⁴ , Takashi Matozaki ¹
	¹ Division of Molecular and Cellular Signaling, Department of Biochemistry and Molecular Biology, Kobe University Graduate School of Medicine, Kobe, Japan, ² Department of Laboratory Sciences, Gunma University Graduate School of Health Sciences, Maebashi, Japan, ³ Division of Immunology, Department of Molecular Microbiology and Immunology, Graduate School of Biomedical Sciences, Nagasaki University, Nagasaki, Japan, ⁴ Department of Immunology and Parasitology, Institute of Health Biosciences, University of Tokushima Graduate School, Tokushima, Japan
14:34~	We-WS13-5 Glibenclamide reduces monocyte functions against <i>Mycobacterium</i> <i>tuberculosis</i> infection
	<u>Chidchamai Kewcharoenwong</u> ^{1, 2} , Wipawee Saenwongsa ^{2, 3} , Sam Willcocks ⁴ , Gregory Bancroft ⁴ , Helen Fletcher ⁴ , Ganjana Lertmemongkolchai ^{1, 2}
	¹ Mekong Health Science Research Institute, Khon Kaen, Thailand, ² Faculty of Associated Medical Sciences, Khon Kaen University, Khon Kaen, Thailand, ³ Disease Prevention and Control Region 10th, Ministry of Public Healthy, Ubonratchathani, Thailand, ⁴ Faculty of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, London, United Kingdom
14:46~	We-WS13-6 MIP1 α deficiency prevents lipotoxicity-induced hepatic insulin resistance and nonalcoholic steatohepatitis
	<u>Liang Xu</u> ¹ , Mayumi Nagashimada ¹ , Guanliang Chen ¹ , Naofumi Mukaida ² , Shuichi Kaneko ¹ , Tsuguhito Ota ^{1, 3}
	¹ Brain/Liver Interface Medicine Research Center, Kanazawa University., Kanazawa, Japan, ² Division of Molecular Bioregulation, Cancer Research Institute, Kanazawa University, Kanazawa, Japan, ³ Division of Metabolism and Biosystemic Science, Department of Internal Medicine, Asahikawa Medical University, Asahikawa, Japan
14:58~	We-WS13-7 The innate immune receptor Dectin-2 mediates the phagocytosis of cancer cells by Kupffer cells for the suppression of liver metastasis
	Yoshitaka Kimura ¹ , Asuka Inoue ¹ , Sho Hangai ^{1, 2} , Shinobu Saijo ³ , Hideo Negishi ¹ ,
	Junko Nishio ¹ , Sho Yamasaki ⁴ , Yoichiro Iwakura ⁵ , Hideyuki Yanai ^{1, 2} , Tadatsugu Taniguchi ^{1, 2}
	¹ Department of Molecular Immunology, Institute of Industrial Science, The University of Tokyo, Tokyo, Japan, ² Max Planck-The University of Tokyo Center for Integrative Inflammology, Tokyo, Japan, ³ Department of Molecular Immunology, Medical Mycology Research Center, Chiba University, Chiba, Japan, ⁴ Division of Molecular Immunology, Medical Institute of Bioregulation, Kyushu University, Fukuoka, Japan, ⁵ Center for Animal Disease Models, Research Institute for Biomedical Sciences, Tokyo University of Science, Chiba, Japan
13:40~15:10	Session : Workshop 14, "Cytokines in cancer development and antitumor immune therapy"
	Room: ANA Crowne Plaza "Ohtori" Room B
	Chair/s: Christopher A. Klebanoff, Tsukasa Seya

13:40~	We-WS14-1 A safe way for insulting antigen with adjuvant without cytokine toxicity in vaccines Tsukasa Seya Department of Microbiology and Immunology, Hokkaido University Graduate School of Medicine, Sapporo, Japan
14:00~	We-WS14-2 Role of HMGB1 in inflammation and cancer <u>Hideyuki Yanai</u> , Tadatsugu Taniguchi Institute for Industrial Science, The University of Tokyo, Tokyo, Japan
14:10~	We-WS14-3CD163 is involved in the protumour activation of macrophages in human and murine sarcoma.Yoshihiro Komohara, Yukio Fujiwara, Hasita Horlad, Yoichi Saito, Koji Ohnishi, Motohiro TakeyaKumamoto University, Kumamoto, Japan
14:20~	We-WS14-4 Combining depletion of myeloid-derived suppressor cells with dexamethasone ameliorate tumor regression in melanoma-bearing mice Abderrahim Naji Center For Innovative and Translational Medicine, Kochi Medical School, Kochi University, Nankoku, Japan
14:30~	We-WS14-5 IL-34 as a prognostic biomarker and a therapeutic target in cancer Muhammad Baghdadi, Ken-ichiro Seino Hokkaido University, Institute for Genetic Medicine, Sapporo, Japan
14:40~	We-WS14-6 Involvement of a chemokine, CCL3, in chemotherapeutic-induced tumor eradication by rapid recruitment of CD4-positive cytotoxic T cells into tumor sites Tomohisa Baba ² , Kazuyoshi Takeda ³ , Soichiro Sasaki ² , Yasunari Nakamoto ¹ , Naofumi Mukaida ² , <u>Tatsushi Naito¹</u> ¹ Second Department of Internal Medicine, Faculty of Medical Sciences, University of Fukui, Fukui, Japan, ² Division of Molecular Bioregulation, Cancer Research Institute, Kanazawa University, Kanazawa, Japan, ³ School of Medicine, Juntendo University, Tokyo, Japan
14:50~	We-WS14-7 Time-scale analysis of interplay between immunogenic tumor and immune response <u>Marija Mojic</u> ¹ , Kiyomi Shitaoka ² , Hiroyuki Kishi ² , Atsushi Muraguchi ² , Hideaki Tahara ³ , Yoshihiro Hayakawa ¹ ¹ Division of Pathogenic Biochemistry, Institute of Natural Medicine, University of Toyama, Toyama, Japan, ² Department of Immunology, Graduate School of Medicine and Pharmaceutical Sciences (Medicine), University of Toyama, Toyama, Japan, ³ Department of Surgery and Bioengineering, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan

15:00~	We-WS14-8 Notch-mediated conversion of activated T cells into stem cell memory T cells facilitates adoptive cancer immunotherapy <u>Taisuke Kondo</u> ¹ , Rimpei Morita ^{1, 2} , Akihiko Yoshimura ¹ ¹ Keio University School of Medicine, Tokyo, Japan, ² IUHW School of Medicine, Chiba, Japan
13:40~15:10	Session : Workshop 15, "Innate cells including ILC, NK, mast cell and $\gamma\delta T$ cells"
	Room: ANA Crowne Plaza "Ohtori" Room C Chair/s: Kazuyo Moro, Shinichiro Sawa
13:40~	We-WS15-1 Current topics in the innate immune system <u>Kazuyo Moro</u> RIKEN IMS, Yokohama, Japan
13:49~	We-WS15-2 Excessive Reactive Oxygen Species (ROS) blocks IL-17A ⁺ γδT cells and subsequent innate immunity required for efficient clearance of <i>Streptococcus</i> <i>pneumonia (Spn).</i> Desiree A. Anthony ¹ , Selcuk Yatmaz ¹ , Catherine Satzke ² , Huei Jiunn Seow ¹ , Eunice To ^{1, 3} , Hao Want ¹ , Selemidis Stavros ^{1, 3} , Gary Anderson ⁴ , Steven Bozinovski ¹
	'RMIT University, Melbourne, Australia, [∡] Murdoch Childrens Research Institute, Melbourne, Australia, ³Monash University, Melbourne, Australia, ^₄ Melbourne University, Melbourne, Australia
13:58~	We-WS15-3 The role of NK cell-derived interferon-γ in anti-viral immune responses <u>Katharina Borst</u> ¹ , Patrick Blank ¹ , Sven Flindt ² , Martin König ² , Pia-Katharina Tegtmeyer ¹ , Chintan Chhatbar ¹ , Jennifer Skerra ¹ , Zoe Waibler ³ , Veronika Sexl ⁴ , Theresa Frenz ¹ , Ulrich Kalinke ¹ ¹ TWINCORE – Centre for Experimental and Clinical Infection Research, Institute for Experimental Infection Research, Hannover, Germany, ² Paul-Ehrlich-Institut, Division of Immunology, Langen, Germany, ³ Paul-Ehrlich- Institut, Junior Research Group Novel Vaccination Strategies and Early Immune Responses, Langen, Germany, ⁴ University of Veterinary Medicine, Institute for Pharmacology and Toxicology, Vienna, Austria
14:07~	 We-WS15-4 T cell factor-1 is a Critical Factor in Determining Natural Killer and Group 1 Innate Lymphoid Cell Fate Decisions Lisa A Mielke^{1, 2}, Qiutong Huang^{1, 2}, Matthew A Firth^{1, 2}, Francisca F Almeida^{1, 2}, Hesham Abdulla^{1, 2}, Jai Rautela^{1, 2}, Swee Heng Milon Pang^{1, 2}, Waruni Abeysekera^{1, 3}, Hai-Hui Xue⁵, Nicholas D Huntington^{1, 2}, Gordon K Smyth^{1, 3}, Alexandra L Garnham^{1, 3}, Matthew P McCormack^{1, 4}, Eric Vivier^{6, 7}, Cyril Seillet^{1, 2}, Gabrielle Belz T Belz^{1, 2} ¹Walter and Eliza Hall Institute of Medical Research, Parkville, Melbourne, Australia, ²Department of Medical Biology, University of Melbourne, Parkville, Melbourne, Australia, ³Department of Mathematics and Statistics, University of Melbourne, Parkville, Melbourne, Australia, ⁴Australian Centre for Blood Diseases, Monash University, Melbourne, Australia, ⁵Department of Microbiology, Carver College of Medicine, University of Iowa, Iowa City, United States, ⁶Centre d'Immunologie de Marseille-Luminy, Aix-Marseille University, INSERM, CNRS, Marseille, France, ⁷Immunologie, Hôpital de la Timone, Assistance Publique – Hôpitaux de Marseille, Marseille, France

14:16~	We-WS15-5 Terminal differentiation of tissue-resident ILC2 occurs in peripheral tisssue
	<u>Satoshi Koga</u> 1, Katsuto Hozumi ² , Shigeo Koyasu ³ , Kazuyo Moro ^{1, 4}
	 ¹Laboratory for Innate Immune Systems RIKEN Center for Integrative Medical Sciences (IMS), Kanagawa, Japan, ²Department of Immunology, Tokai University School of Medicine, Kanagawa, Japan, ³Laboratory for Immune Cell Systems, RIKEN Center for Integrative Medical Sciences (IMS), Kanagawa, Japan, ⁴Department of Medical Life science, Yokohama City University, Kanagawa, Japan
14:25~	We-WS15-6 Live Cell Imaging of Secretion (LCI-S) to track the dynamics of cytokine production from individual immune cells
	Yoshitaka Shirasaki ^{1, 2} , Kaede Miyata ¹ , Yumiko Tanaka ¹ , Mai Yamagishi ^{1, 2} ,
	Nobutake Suzuki ¹ , Rie Baba ³ , Hiroki Kabata ³ , Koichi Fukunaga ³ ,
	Tomoko Betsuyaku ^s , Osamu Ohara ² , Kazuyo Moro ² , Sotaro Uemura'
	¹ Department of Biological Sciences, Graduate School of Science, The University of Tokyo, Tokyo, Japan, ² RIKEN Center for Integrative Medical Sciences, Yokohama, Japan, ³ Division of Pulmonary Medicine, Department of Medicine, Keio University, School of Medicine, Tokyo, Japan
14.040.	
14 . 34	We-WS15-7 Regulation of lipid metabolite-mediated IL-4 production in group 2 innate lymphoid cells
	Yasutaka Motomura ¹ , Shigeo Koyasu ² , Kazuyo Moro ^{1, 3}
	¹ RIKEN Center for Integrative Medical Sciences, Laboratory for Innate Immune Systems, Yokohama, Japan, ² RIKEN Center for Integrative Medical Sciences, Laboratory for Immune Cell Systems, Yokohama, Japan, ³ Department of Medical Life Science, Yokohama City University, Yokohama, Japan
14:43~	We-WS15-8 Neuronal regulation of group 2 innate lymphoid cell responses and type 2 inflammation
	Saya Moriyama, Jonathan R. Brestoff, Christoph S.N. Klose, Lucille C. Rankin,
	Naomi A. Yudanin, Gregory Garbès Putzel, David Artis
	Jill Roberts Institute for Research in Inflammatory Bowel Disease, Joan and Sanford I. Weill Department of Medicine, Department of Microbiology and Immunology, Weill Cornell Medicine, Cornell University, New York, United States
14:52~	We-WS15-9 LTi cells integrate mesenchymal cell-derived RANKL signals essential for lymph
	node organogenesis.
	Shinichiro SAWA
	Division of Immune System Biology, Institute for Genetic Medicine, Hokkaido University, Sapporo, Japan
15:01~	We-WS15-10 Blocking IL23R compared to neutralizing IL23p19 more effectively suppresses
	Juming Yan''', Stacey Allen', Dipti Vijayan ² ''', Kazuyoshi Takeda ⁺ , Daniel Cua ^s , Mark Smyth ^{2,3} , <u>Michele Teng</u> ^{1,3}
	¹ Cancer Immunoregulation and Immunotherapy Laboratory. QIMR Berghofer Medical Research Institute, Brisbane, Australia, ² Immunology in Cancer and Infection Laboratory, QIMR Berghofer Medical Research Institute, Brisbane, Australia, ³ School of Medicine, University of Queensland, Brisbane, Australia, ⁴ Division of Cell Biology, Biomedical Research Center, Graduate School of Medicine, Juntendo University, Tokyo, Japan, ⁵ Merck Research Laboratories, 901 California Avenue, Palo Alto, United States

15:30~17:10	Session : ICIS Award Lectures Award Lecture, 1st Distinguished Servic President Lecture	s, Honorary Life Time Membership Place Milstein YI Award Presentation, ce Award Presentation and ICIS
	Room: Ishikawa Ongakudō Hogaku H	all
	Chair/s: Bryan Williams, Nancy Reich,	Tadatsugu Taniguchi
15:30~	We-Awards-1 Honorary Lifetime Membership Awa Ganes C. Sen Cleveland Clinic, Cleveland, United States	rd Lecture - Title TBD
16:05~	We-Awards-2 1 st Place Milstein YI Award: Defining <u>Ari B Molofsky</u> Dept. of Laboratory Medicine, UCSF, San Francisco	group 2 innate lymphoid cell tissue niches
16:25~	We-Awards-3 Distinguished Services Award Acce Eleanor N Fish University Health Network & University of Toronto, C	ptance Canada, Toronto, Canada
16:35~	We-Awards-4 ICIS President's Lecture: From Type I IFN to HMGB1 and other DAMP molecules: Regulators of immunity, inflammation and cancer Tadatsugu Taniguchi Department of Molecular Immunology, Institute of Industrial Science, The University of Tokyo, Max Planck-The University of Tokyo Center for Integrative Inflammology, Tokyo, Japan	
17:10~17:45	ICIS Members Business Meetin	g Ishikawa Ongakudō Hogaku Hall
18:00~20:00	Conference Banquet	ANA Crowne Plaza Kanazawa "Ohtori"

Program

Thursday,	2 November 2017
08:30~09:20	Session : Keynote Lecture 7 Room: Ishikawa Ongakudō Hogaku Hall Chair/s: Hiroshi Takayanagi
08:30~	Th-K7-1Can we get closer to a cure for Rheumatoid Arthritis?Marc FeldmannKennedy Institute of Rheumatology, University of Oxford, Oxford, United Kingdom
09:30~12:10	Session : Symposium 4, "Tumor immunity, macrophages and cytokines"
	Room: Ishikawa Ongakudō Hogaku Hall Chair/s: Florent Ginhoux, Carl H. June
09:30~	Th-S4-1 'Insulating' adoptively transferred T cells from a hostile tumor environment Christopher A. Klebanoff Parker Institute for Cancer Immunotherapy and Center for Cell Engineering, Memorial Sloan Kettering Cancer Canter Memorial Sloan Kettering Cancer
10:00~	Th-S4-2 Macrophage, Monocyte and Dendritic Cell Biology: From Development to Functions <u>Florent Ginhoux</u> Singapore Immunology Network (SIgN), Agency for Science, Technology and Research (A*STAR),, Singapore,
10:30~	Singapore Th-S4-3 Updates in CAR T cells Carl H. June University of Pennsylvania, Perelman School of Medicine, Philadelphia, United States
11:00~11:10	Break
11:10~	Th-S4-4 Multiple mechanisms of immune-resistance in tumor microenvironments and their modulation Yutaka Kawakami Division of Cellular Signaling, Institute for Advanced Medical Research, Keio University School of Medicine, TOKYO, Japan

11:40~

Th-S4-5 Escape from tumor immunity by soluble CD155

Kazuko Shibuya

Department of Immunology, Faculty of Medicine, University of Tsukuba, Tsukuba, Japan

12:30~12:45 JSICR General Assembly

12:45~13:00 MMBC General Assembly

Poster sessions

Monday, 30 October 2017

19:10~21:00 Session: Poster Session 1 "Innate immunity and infection"

Room: Ishikawa Ongakudō Interchange Hall

Mo-P1-1

Nrf2 suppresses antiviral innate immunity by impairing STING transcription

David Olagnier, Marie B. Iversen, Anne L. Thielke, Aske M. Bandtoft,

Camilla Gunderstofte, Anne-Louise Hansen, Christian K. Holm

Department of Biomedicine, Aarhus Research Center for Innate Immunology, Aarhus University, Aarhus, Denmark

Mo-P1-2

CCR5-binding chemokines contribute to baboon natural resistance to SIV infection

<u>Veronica Obregon-Perko</u>^{1, 2}, Laura Parodi², Vida Hodara^{2, 3}, Jason T Ladner⁴, Michael R Wiley⁴, Gustavo F Palacios⁴, Luis D Giavedoni^{2, 3}

¹Department of Microbiology, Immunology, and Molecular Genetics, University of Texas Health Science Center, San Antonio, United States, ²Department of Virology and Immunology, Texas Biomedical Research Institute, San Antonio, United States, ³Southwest National Primate Research Center, Texas Biomedical Research Institute, San Antonio, United States, ⁴Center for Genome Sciences, United States Army Medical Research Institute of Infectious Diseases, Frederick, United States

Mo-P1-3

IFIT family genes play a key role in regulating CVB3 replication and in modulating viral myocarditis

Taishi L Kimura, Claudia T Flynn, J Lindsay Whitton

Department of Immunology and Microbiology, The Scripps Research Institute, La Jolla, United States

Mo-P1-4

Spatiotemporal analysis of the contribution of different recognition platforms to mouse cytomegalovirus-induced type I interferon

<u>Pia-Katharina Tegtmeyer</u>¹, Julia Spanier¹, Katharina Borst¹, Marius Doering², Christoph Hirche³, Stefan Lienenklaus⁴, Ilija Brizic⁵, Stipan Jonjic⁵, Ulrich Kalinke¹

¹Institute for Experimental Infection Research, Twincore - Centre of Experimental and Clinical Infection Research, Hannover, Germany, ²Human Innate Immunity, Unit Immunity and Cancer, Institute Curie, Paris, France, ³Hematopoietic Stem Cells and Stress, Division of Stem Cells and Cancer, German Cancer Research Center, Heidelberg, Germany, ⁴ZTL Imaging-Center, Hannover Medical School, Hannover, Germany, ⁵Department for Histology and Embryology, Center for Proteomics, School of Medicine, University of Rijeka, Rijeka, Croatia

Mo-P1-5

Grouping of subjects based on Immune Status using IFN/Cytokine production tests and serum cytokine/chemokine values using non-negative matrix factorization analysis

<u>Kazuko Uno</u>¹, Yuki Shimada², Masaharu Tsubokura², Yuki Shimada², Hitoshi Fujimiya³, Tomoyoshi Oikawa²

¹Louis Pasteur Center for Medical Research, Kyoto, Japan, ²Minami-soma Municipal General Hospital, Minamisoma, Japan, ³Dinacom.Ltd, Chiba, Japan

Elucidating a potential role of African swine fever virus multigene families in subverting the interferon response

Samuel Connell^{1, 2}, Ana Reis², Lynnette Goatley², Sarah Gilbert¹,

Steve Goodbourn³, Linda Dixon²

¹The University of Oxford, Oxford, United Kingdom, ²The Pirbright Institute, Pirbright, United Kingdom, ³St George's, University of London, London, United Kingdom

Mo-P1-7

Uncovering the role of chicken IFITM-mediated viral restriction.

<u>Thomas Whitehead</u>¹, Angela Steyn¹, Jessica Benkaroun¹, Irene Bassano², Alice Gray¹, Andrew Broadbent¹, Paul Kellam², Mark Fife¹

¹The Pirbright Institute, Pirbright, United Kingdom, ²Imperial College London, London, United Kingdom

Mo-P1-8

Gene knockout technology to characterise and ablate chicken Interferon Inducible Transmembrane Proteins (chIFITMs).

<u>Mark S Fife</u>¹, Thomas Whitehead¹, Jessica Benkaroun¹, Angela Steyn¹, Irene Bassano², Paul Kellam²

¹The Pirbright Institute, UK, Woking, United Kingdom, ²Imperial College London, London, United Kingdom

Mo-P1-9

Deacetylation of RIG-I is Indispensable for Viral RNA Sensing by HDAC6

Hyun-Cheol Lee¹, Joo-Yong Lee², Jong-Soo Lee¹

¹College of Veterinary Medicine, Chungnam National University, Daejeon, Korea, Republic of (South), ²Graduate School of Analytical Science and Technology (GRAST), Chungnam National University, Daejeon, Korea, Republic of (South)

Mo-P1-10

NQO1 suppresses Antiviral Immune Response against Virus Infection

Hyun-Cheol Lee, Tae-Hwan Kim, Jong-Soo Lee

College of Veterinary Medicine, Chungnam National University, Daejeon, Korea, Republic of (South)

Mo-P1-11

RIG-I-like receptor pathway is the major source of type I interferon upon severe fever with thrombocytopenia syndrome virus infection in vivo.

<u>Shintaro Yamada</u>^{1, 2}, Masayuki Shimojima³, Hiroki Kato^{1, 2}, Masayuki Saijo³, Takashi Fujita^{1, 2}

¹Laboratory of Molecular and Cellular Immunology, Graduate School of Biostudies, Kyoto University, Kyoto, Japan, ²Laboratory of Molecular Genetics, Institute for Frontier Life and Medical Sciences, Kyoto University, Kyoto, Japan, ³Department of Virology 1, National Institute of Infectious Diseases, Tokyo, Japan

Mo-P1-12

Roles of Tryptophanyl-tRNA-Synthetase as a Cytokine on Virus Infection Hyun-Cheol Lee, Tae-Hwan Kim, Jong-Soo Lee

College of Veterinary Medicine, Chungnam National University, Daejeon, Korea, Republic of (South)

mRNA for selenoprotein P, a hepatokine, binds RIG-I protein and inhibits the RIG-I-mediated type I interferon response

Kazuhisa Murai¹, Masao Honda^{1, 2}, Tetsuro Shimakami², Takayoshi Shirasaki¹,

Hirofumi Misu³, Toshinari Takamura³, Shuichi Kaneko²

¹Department of Laboratory medicine, Kanazawa University Graduate School of Health Medicine, Kanazawa, Japan, Kanazawa, Japan, ²Department of Gastroenterology, Kanazawa University Graduate School of Medicine, Kanazawa, Japan, Kanazawa, Japan, ³Department of Endocrinology and Metabolism, Kanazawa University Graduate School of Medicine, Kanazawa, Japan, Kanazawa, Japan

Mo-P1-14

Influenza A H7N9 virus infects human brain astrocytes and neuronal cells and induces inflammatory immune responses

Suki Lee, Tsz-Fung Yip, Malik JS Peiris

HKU-Pasteur Research Pole, School of Public Health, The University of Hong Kong, Hong Kong, Hong Kong

Mo-P1-15

Cell type-specific roles of mitochondrial antiviral signaling protein (MAVS) during Ebola virus infection

<u>Shelly Robertson</u>¹, Atsushi Okumura², Gail S Sturdevant¹, Angela Rasmussen², Sonja Best¹

¹National Institute of Allergy and Infectious Diseases, Hamilton, MT, United States, ²Center for Infection and Immunity, Columbia University Mailman School of Public Health, New York, NY, United States

Mo-P1-16

Impact of pneumococcal NanA-mediated host desialylation in Siglec-Toll-like receptor crosstalk

Yung-Chi Chang

Graduate Institute of Microbiology, College of Medicine, National Taiwan University, Taipei, Taiwan

Mo-P1-17

Nucleosides are endogenous ligands for TLR7 and TLR8

<u>Takuma Shibata</u>^{1, 3}, Umeharu Ohto², Hiromi Tanji², Toshiyuki Shimizu^{2, 3}, Kensuke Miyake¹

¹The Institute of Medical Science, The University of Tokyo, Tokyo, Japan, ²Graduate School of Pharmaceutical Sciences, The University of Tokyo, Tokyo, Japan, ³CREST, Japan Science and Technology agency, Saitama, Japan

Mo-P1-18

Influenza A virus NS1 inhibits IFN responses: identification of critical effector domains in NS1

Eleanor Fish^{1, 2}, Ben Xuhao Wang^{1, 2}

¹Department of Immunology University of Toronto, Toronto, Canada, ²Toronto General Hospital Research Institute, University Health Network, Toronto, Canada

Mo-P1-19

Interferon-stimulated gene LY6E enhances entry of diverse RNA viruses

Katrina Mar, Ian Boys, Jennifer Eitson, Matt McDougal, John Schoggins

Department of Microbiology, University of Texas Southwestern Medical Center, Dallas, United States

MxB is an interferon-induced restriction factor of human herpesviruses

Michel Crameri¹, Raphael Walker¹, Francesca D. Franzoso^{2, 3}, Nicole Caduff⁴,

Cornelia Gujer⁴, Michael Bauer⁵, Karin Boucke⁵, Fiona Steiner¹, Talissa Kucera¹,

Andrea Zbinden¹, Christian Münz⁴, Cornel Fraefel², Urs F. Greber⁵, Jovan Pavlovic¹

¹Institute of Medical Virology, University of Zurich, Zürich, Switzerland, ²Institute of Virology, University of Zurich, Zürich, Switzerland, ³INRA/ONIRIS and Atlantic Gene Therapies, Faculty of Veterinary Medicine, Food Science and Engineering, Nantes, France, ⁴Institute of Experimental Immunology, University of Zurich, Zürich, Switzerland, ⁵Institute of Molecular Life Sciences, University of Zurich, Zürich, Switzerland

Mo-P1-21

Pegylated IFN-alpha-2b decreases latent HIV measures in ART-suppressed subjects

Livio Azzoni¹, Emmanouil Papasavvas¹, Nicolas Chomont², Qingsheng Li³, Bonnie J. Howell⁴, Douglas D. Richman⁵, Pablo Tebas⁶, Karam Mounzer⁷,

Jay Kostman⁸, Luis J. Montaner¹

¹The Wistar Institute, Philadelphia, PA, United States, ²Universite de Montreal, Montreal, QC, Canada, ³University of Nebraska, Lincoln, Lincoln, NE, United States, ⁴Merck & Company, West Point, PA, United States, ⁵University of California San Diego, San Diego, CA, United States, ⁶University of Pennsylvania, Philadelphia, PA, United States, ⁷Philadelphia FIGHT, Philadelphia, PA, United States, ⁸Philadelphia FIGHT Community Health Centers, Philadelphia, PA, United States

Mo-P1-22

Loss of TAK1 leads to TLR-driven macrophage cell death and inflammation that occur by a TNF-independent mechanism

Hideki Sanjo, Shinsuke Taki

Department of Molecular and Cellular Immunology Shinshu University School of Medicine, Matsumoto, Japan

Mo-P1-23

Oligomannose-coated liposomes: a novel antigen-delivery vehicle to mononuclear phagocytes and an efficient platform for vaccines for induction of cellular immunity

Yuko Matsuoka, Yasuhiro Kuroda, Naoya Kojima

Department of Applied Biochemistry, Tokai University, Hiratsuka, Japan

Mo-P1-24

An Essential Role for TAGLN2 in Phagocytosis of Lipopolysaccharide-activated Macrophages

Chang-Duk Jun

School of Life Sciences, Immune Synapse and Cell Therapy Research Center, GIST, Gwangju 61005, Gwangju, Korea, Republic of (South)

Mo-P1-25

Mycobacterium tuberculosis Rv2626c contribute to the TLR-mediated signaling in innate immunity

Chul-Su Yang, Sun Young Kim

Hanyang University, ansan, Korea, Republic of (South)

Roles of the Mycobacterium tuberculosis antigen MPT63 and MPT64 in innate immunity

Sojin Kim¹, Chul-Su Yang²

¹Hanyang university, Ansan, Korea, Republic of (South), ²Hanyang university, Seoul, Korea, Republic of (South)

Mo-P1-27

TGF- β -mediated suppression of HBV RNA through AID-dependent recruitment of an RNA exosome complex

Kouichi Kitamura, Lusheng Que, Masamichi Muramatsu

Department of Molecular Genetics, Kanazawa University, Kanazawa, Japan

Mo-P1-28

Interferon- λ evokes the antiviral response of bystander brain microvascular endothelial cells against HIV infection

Jieliang Li¹, Runhong Zhou², Xu Wang¹, Wenzhe Ho^{1, 2}

¹Department of Pathology and Laboratory Medicine, Temple University Lewis Katz School of Medicine, Philadelphia, United States, ²School of Basic Medical Sciences/State Key Laboratory of Virology, Wuhan University, Wuhan, China

Mo-P1-29

CCL2/CCR2-dependent replication of human cytomegalovirus is inhibited by anti-inflammatory compound tricin

Tsugiya Murayama¹, Daiki Nema¹, Hidetaka Sadanari¹, Masaya Takemoto¹,

Tohru Daikoku¹, Naofumi Mukaida²

¹Department of Microbiology and Immunology, Faculty of Pharmaceutical Sciences, Hokuriku University, Kanazawa, Japan, ²Division of Molecular Bioregulation, Cancer Research Institute, Kanazawa University, Kanazawa, Japan

Mo-P1-30

C-type lectins and TLR2 play critical role in dengue virus-induced pathogenesis Pei-Shan Sung¹, Shie-Liang Hsieh^{1, 2}

¹Institute of Clinical Medicine, National Yang-Ming University, Taipei, Taiwan, ²Genomics Center, Academia Sinica, Taipei, Taiwan

Mo-P1-31

Effects of Mincle and Dectin-1 on myeloid cell function

Aiysha Thompson, Selinda Orr

Infection & Immunity, Cardiff University, Cardiff,, United Kingdom

Mo-P1-32

RSV-induced Gas6/Axl signal ultimately leads to severer bacterial pneumonia.

<u>Takehiko Shibata</u>¹, Ruiko Ogata², Arata Taniguchi³, Shigeki Nakamura⁴, Sohkichi Matsumoto³, Toshihiro Ito², Manabu Ato¹

¹Department of Immunology, National Institute of Infectious Diseases, Tokyo, Japan, ²Department of Immunology, Nara Medical University, Nara, Japan, ³Department of Bacteriology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan, ⁴Department of Chemotherapy and Mycoses, National Institute of Infectious Diseases, Tokyo, Japan

A Comparison of inflammatory innate immune response during Klebsiella pneumoniae B5055 induced pneumonia and sepsis

Vijay Kumar^{1, 2}, Sanjay Chiibber²

¹The university of Queensland, Brisbane, Australia, ²Department of Microbiology, Panjab University, Chandigarh, India

Mo-P1-34

Microbial recognition by C-type lectin receptors encoded in the Dectin-1/ Dectin-2 cluster

Rikio Yabe, Mutsuki Kobayashi, Maki Wakatsuki, Yukiko Akahori, Shinobu Saijo

Medical Mycology Research Center, Chiba University, Chiba city, Japan

Mo-P1-35

FAS-Associated Factor-1 (FAF1) enhances Antiviral Responses to RNA Virus Infection by Targeting NLRX1

Jae-Hoon Kim, Tae-Hwan Kim, Hyun-Cheol Lee, Jong-Soo Lee

College of Veterinary Medicine, Chungnam National University, Daejeon, Korea, Republic of (South)

Mo-P1-36

Rubicon suppresses Antiviral Immune Response against Virus Infection by targeting IRF3 dimerization

Jong-Soo Lee, Jae-Hoon Kim, Tae-Hwan Kim, Hyun-Cheol Lee

College of Veterinary Medicine, Chungnam National University, Daejeon, Korea, Republic of (South)

Mo-P1-37

SHP Negatively Regulates the Antiviral Innate Responses against Virus Infection

Jae-Hoon Kim, Jong-Soo Lee

College of Veterinary Medicine, Chungnam National University, Daejeon, Korea, Republic of (South)

Mo-P1-38

Microbially cleaved immunoglobulins are sensed by the innate immune receptor LILRA2

<u>Kouyuki Hirayasu</u>¹, Fumiji Saito², Tadahiro Suenaga^{1, 2}, Kyoko Shida1, Noriko Arase^{2, 3}, Keita Oikawa⁴, Toshifumi Yamaoka³, Hiroyuki Murota³, Hiroji Chibana⁵, Ichiro Nakagawa⁶, Tomoko Kubori⁷, Hiroki Nagai⁷, Yuji Nakamaru⁸, Ichiro Katayama³, Marco Colonna⁹, Hisashi Arase^{1, 2}

¹Laboratory of Immunochemistry, WPI Immunology Frontier Research Center, Osaka University, Suita, Japan, ²Department of Immunochemistry, Research Institute for Microbial Diseases, Osaka University, Suita, Japan, ³Department of Dermatology, Graduate School of Medicine, Osaka University, Suita, Japan, ⁴Department of Otolaryngology, Tenshi Hospital, Sapporo, Japan, ⁵Medical Mycology Research Center, Chiba University, Chuo-ku, Japan, ⁶Department of Microbiology, Kyoto University Graduate School of Medicine, Kyoto, Japan, ⁷Laboratory of Combined Research on Microbiology and Immunology, Research Institute for Microbial Diseases, Osaka University, Suita, Japan, ⁸Department of Otolaryngology-Head and Neck Surgery, Hokkaido University Graduate School of Medicine, Sapporo, Japan, ⁹Department of Pathology and Immunology, Washington University School of Medicine, St. Louis, United States

Anti-inflammatory effect of Morus alba L. bark suppresses Toll-like receptor activation in RAW264.7 macrophages

Rin Umeyama, Satoru Yokoyama, Yoshihiro Hayakawa

Division of Pathogenic Biochemistry, Institute of Natural Medicine, University of Toyama, Toyama, Japan

Mo-P1-40

Pasakbumin A controls the growth of *Mycobacterium tuberculosis* by enhancing autophagy signaling pathway and increasing nitric oxide (NO) production in mouse macrophages

Hyo-Ji Lee¹, Hyun-Jeong Ko², Yu-Jin Jung¹

¹Department of Biological Sciences, Kangwon National University, Chuncheon, Korea, Republic of (South), ²College of Pharmacy, Kangwon National University, Chuncheon, Korea, Republic of (South)

Mo-P1-41

Antimicrobial activity against *Listeria monocytogenes* induced by interleukin-22 on hepatocytes.

Masayuki Umemura, Yamato Okita, Goro Matsuzaki

Molecular Microbiology Group, Tropical Biosphere Research Center, University of the Ryukyus., Okinawa, Japan

Mo-P1-42

Association of immune responses of porcine alveolar macrophages and host immune responses against porcine reproductive and respiratory syndrome viruses

<u>Sang-Myeong Le</u>e¹, Nadeem Shabir³, Amina Khatun², Salik Nazki², Suna Gu¹, Myeon-Sik Yang², Bumseok Kim², Won-II Kim²

¹Division of Biotechnology, College of Environmental & Biosource Science Chonbuk National University, Iksan-si,, Korea, Republic of (South), ²College of Veterinary Medicine, Iksan-si,, Korea, Republic of (South), ³Division of Animal Biotechnology, Faculty of Veterinary Sciences and Animal Husbandry, Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir, Srinagar, India

Mo-P1-43

Assessment of the Antiviral Activity of MxA against Influenza A Virus

Fiona Steiner, Stefan Spirig, Michel Crameri, Eva Moritz, Jovan Pavlovic

University of Zurich, Zurich, Switzerland

Mo-P1-44

Type I interferon suppressed MERS-CoV replication in ex vivo human respiratory tract explants culture

<u>Hung Sing Li¹</u>, Kenrie Pui Yan Hui¹, Denise lok Teng Kuok¹, Man Chun Cheung¹, John Malcolm Nicholls², Michael Chi Wai Chan¹

¹School of Public Health, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Pokfulam, Hong Kong, ²Department of Pathology, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Pokfulam, Hong Kong

Mo-P1-45

NLRP3 mediates NF-kB activation and cytokine gene induction under various cellular stress conditions

Takeshi Kinoshita, Ryu Imamura, Takashi Suda

Cancer Research Institute, Kanazawa university, kakuma-machi, kanazawa, Japan

Mycobacterium tuberculosis Rv0351 exhibits vaccine potential against the highlyvirulent Beijing K strain: Interaction with dendritic cells, Th1 immunity generation, immune sensing by T cells, and maintenance of multifunctional T cells

Woo Sik Kim, Jong-Seok Kim, Kee Woong Kwon, Hongmin Kim, Sung Jae Shin

Department of Microbiology, Institute for Immunology and Immunological Diseases, Brain Korea 21 PLUS Project for Medical Science, Yonsei University College of Medicine, Seoul 120-752, South Korea, Seoul, Korea, Republic of (South)

Mo-P1-47

H-Ras exerts opposing effects on type I interferon (IFN-I) responses

Guann-An Chen

Institute of Microbiology and Immunology, National Yang-Ming University, Taipei City, Taiwan

Mo-P1-48

A novel vaccine antigen target highly conserved in *Mycobacterium tuberculosis* Beijing genotype displays protection against the hyper-virulent Mtb K strain

Kee Woong Kwon, Hong-Hee Choi, Jong-Seok Kim, Seung Jung Han,

Hongmin Kim, Sung Jae Shin

Department of Microbiology, Institute for Immunology and Immunological Disease, Brain Korea 21 PLUS Project for Medical Science, Yonsei University College of Medicine, Seoul, Korea, Republic of (South)

Mo-P1-49

Innate immune responses in murine blastocyst *in vitro* model using embryonic and trophoblast stem cell lines

Takuo Ota¹, Miho Tamai^{1, 2}, Hiroaki Aikawa¹, Yoh-ichi Tagawa¹

¹School of Life Science and Technology, Tokyo Institute of Technology, Tokyo, Japan, ²Graduate School of Dental Medicine, Hokkaido University, Hokkaido, Japan

Mo-P1-50

Fugal zymosan as an effective adjuvant in an intranasal delivery of inactivated enterovirus 71 vaccine

Chiao-Li Chin¹, Bor-Luen Chiang^{1, 2, 3}

¹Graduate Institute of Immunology, and College of Medicine, National Taiwan University, Taipei, Taiwan, ²Graduate Institute of Clinical Medicine College of Medicine, National Taiwan University, Taipei, Taiwan, ³Department of Medical Research, National Taiwan University Hospital, Taipei, Taiwan

Mo-P1-51

Lysine acetyltransferase 8 (KAT8) negatively regulates virus-induced type I IFN production by enhancing IRF3 acetylation

Wanwan Huai¹, Xingguang Liu², Xuetao Cao^{1, 2, 3}

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The role of the IL-1 receptor in the centrally-elicited sickness response	e to
ipopolysaccharide.	

<u>Takashi Matsuwaki</u>^{1, 2}, Kiseko Shionoya¹, Robert Ihnatko¹, Anna Eskilsson¹, Shigeru Kakuta³, Sylvie Dufour⁴, Markus Schwaninger⁵, Ari Waisman⁶, Werner Müller⁷, Emmanuel Pinteaux⁷, David Engblom¹, Anders Blomqvist¹

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Mo-P1-53

A liposomal dexamethasone targeting macrophages alleviates cytokine storm during H1N1 influenza virus infection.

Jeong Won Kwon, Seung Hyeok Seok, Yirang Na

Department of Microbiology and Immunology, Seoul National University College of Medicine, seoul, Korea, Republic of (South)

Mo-P1-54

Inhibition of glycolysis improves the anti-microbial function of macrophages against *Mycobacterium massiliense* infection

Hailian Quan, Sungmo Je, Seung Hyeok Seok

Department of Microbiology and Immunology, Seoul National University College of Medicine, Seoul, Korea, Republic of (South)

19:10~21:00 Session : Poster Session 3 "Cytokines in skin inflammatory diseases"

Room: Ishikawa Ongakudō Interchange Hall

Mo-P3-1

Inflammatory cytokine mediated induction of serine racemase in atopic dermatitis

<u>Yoko Yoshihisa</u>¹, Maho Nakagawa², Mati Ur Rehman³, Teruhiko Makino¹, Hisashi Mori⁴, Tadamichi Shimizu¹

¹Department of Dermatology, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan, ²Advanced Technology Research Center, Fancl Research Institute, Yokohama, Japan, ³Department of Radiological Sciences, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan, ⁴Department of Molecular Neuroscience, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan

Mo-P3-2

PI3K-Akt signaling pathway controls IL-10 producing regulatory B cell and an allergic disease

<u>Takashi Matsushita</u>¹, Doanh Le Huu^{1, 2}, Yasuhito Hamaguchi¹, Minoru Hasegawa³, Kazuhito Naka⁴, Atsushi Hirao⁵, Masamichi Muramatsu⁶, Kazuhiko Takehara¹,

Manabu Fujimoto⁷

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⁴Exploratory Project on Cancer Stem Cells, Cancer Research Institute, Kanazawa University, Kanazawa, Japan, ⁵Division of Molecular Genetics, Cancer Research Institute, Kanazawa University, Kanazawa, Japan, ⁶Department of Molecular Genetics, Kanazawa University Graduate School of Medical Sciences, Kanazawa, Japan, ⁷Department of Dermatology, Faculty of Medicine, University of Tsukuba, Tsukuba, Japan

Mo-P3-3

The itching of mycosis fungoides; the investigation of eosinophil infiltration, kallikrein 5 and IL-31

<u>Kyoko Shimizu</u>, Tsugunobu Andoh, Teruhiko Makino, Yoko Yoshihisa, Megumi Mizawa, Tadamichi Shimizu

University of Toyama, Toyama, Japan

Mo-P3-4

The role of IL-38 in IMQ-induced psoriasis-like skin inflammation

Ying Ying Han¹, Javier Mora², Mateusz Putyrski^{3, 4}, Andreas Ernst^{3, 4},

Michael Parnham⁴, Bernhard Bruene¹, Andreas Weigert¹

¹Institute of Biochemistry I, Goethe University Frankfurt,, Frankfurt am Main, Germany, ²Faculty of Microbiology, University of Costa Rica,, San Jose, Costa Rica, ³Institute of Biochemistry II, Goethe-University Frankfurt,, Frankfurt am Main, Germany, ⁴Fraunhofer Institute for Molecular Biology and Applied Ecology IME, Project Group Translational Medicine & Pharmacology TMP, Frankfurt am Main, Germany

Mo-P3-5

Interleukin-17A negatively regulates lymphangiogenesis in T helper 17 cellmediated inflammation

Seung Hyo Lee, Hyeung Ju Park, Chae Min Yuk

Graduate School of Medical Science and Engineering, KAIST, Daejeon, Korea, Republic of (South)

Mo-P3-6

Autoregulatory circuit by IL-25 in keratinocytes plays a pivotal role in psoriasisform skin inflammation

Miao Xu Xu¹, huiping lu¹, Xiaohu Wang¹, Wei Jin¹, Yuping Lai2, Chen Dong¹

¹Institute for Immunology and School of Medicine, Tsinghua University, Beijing, China, ²Shanghai Key Laboratory of Regulatory Biology, School of life sciences, East China Normal University, Shanghai, China

Mo-P3-7

Single-cell gene and protein expression analysis revealed functional and migratory heterogeneity in regulatory T cells of inflamed skin

<u>Ryoyo Ikebuchi^{1, 2}, Maika Fujimoto¹, Taiki Moriya¹, Hiromi Okuyama¹, Yutaka Kusumoto¹, Michio Tomura¹</u>

¹Laboratory of Immunology, Faculty of Pharmacy, Osaka Ohtani University, Tondabayashi, Japan, ²Research Fellow of Japan Society for the Promotion of Science, Tokyo, Japan



Mo-P5<u>-2</u>

IFN- $\lambda 4$ attenuates antiviral responses by enhancing negative regulation of IFN signaling

<u>Olusegun O Onabajo</u>¹, Adeola A Obajemu¹, Nina Rao¹, Kari A Dilley²,

Faruk Sheikh³, Raymond P Donnelly³, Reed S Shabman²,

Ludmila Prokunina-Olsson¹

¹Laboratory of Translational Genomics, Division of Cancer Epidemiology and Genetics, National Cancer Institute, National Institutes of Health, Bethesda, United States, ²Virology Group, J. Craig Venter Institute, Rockville, United States, ³Office of Biotechnology Products, Center for Drug Evaluation and Research, Food and Drug Administration, Silver Spring, United States

Mo-P5-3

Investigation of skeletal abnormalities in mice with constitutively activated MDA5

Nobumasa Soda^{1, 2}, Nobuhiro Sakai³, Hideo Onizawa^{2, 4}, Masamichi Takami³, Hiroki Kato^{1, 2}, Takashi Fujita^{1, 2}

¹Laboratory of Molecular and Cellular Immunology, Graduate School of Biostudies, Kyoto University, Kyoto, Japan, ²Laboratory of Genetics and Molecular Biology, Institute for Frontier Life and Medical Science, Kyoto University, Kyoto, Japan, ³Department of Pharmacology, School of Dentistry, Showa University, Tokyo, Japan, ⁴Department of Rheumatology and Clinical Immunology, Graduate School of Medicine, Kyoto University, Kyoto, Japan

Mo-P5-4

Crohn's disease-associated epigenetic reader SP140 orchestrates macrophage transcriptional programs through control of DNA unwinding mechanisms

Hajera Amatullah, Stuti Mehta, Sreehas Digumarthi, Kate L Jeffrey

1 Gastrointestinal Unit and Center for the Study of Inflammatory Bowel Diseases, Massachusetts General Hospital, Harvard Medical School, Boston, United States

Mo-P5-5

Longitudinal analysis of circulating interleukin-18 in patients with familial Mediterranean fever carrying *MEFV* mutation in exon 10

<u>Taizo Wad</u>a, Tomoko Toma, Hanae Miyazawa, Eiko Koizumi, Tetsushiro Shirahashi, Yusuke Matsuda, Akihiro Yachie

Department of Pediatrics, School of Medicine, Institute of Medical, Pharmaceutical and Health Sciences, Kanazawa University, Kanazawa, Japan

Mo-P5-6

Regulation and Genetic Heterogeneity of Select Interferon Stimulated Genes Independently Restrict ZIKV Infection

Justin Taft, Jennie Altman, Sofija Buta, Marta Martin-Fernandez, Dusan Bogunovic

Icahn School of Medicine at Mount Sinai Dept. of Microbiology, New York, United States

Mo-P5-7

The inflammasome adaptor ASC suppresses tumor cell apoptosis, independent of inflammation, via IL18 in gastric cancer.

Virginie Deswaerte¹, Paul Nguyen², Brendan Jenkins¹, Tracy Putoczki²

¹Centre for Innate Immunity and Infectious Diseases, Hudson Institute of Medical Research, Clayton, Australia, ²Inflammation Division, Walter and Eliza Hall Institute of Medical Research, Parkville, Australia

Mo-P5-8

Mycoplasma superantigen promotes HMGB1 and IFN α by auto-inflammatory synovial fibroblasts through TLR4/IRF7 signaling in collage-induced arthritis

Hong-Hua Mu, Jingyi Wang, Anita Trinh, Neil Xia

Department of Internal Medicine, University of Utah Health Science Center, Salt Lake City, United States

Mo-P5-9

Genetic analysis of DNA-responses

<u>Alexander Poltorak</u>¹, Vladimir Ilyukha²

¹Tufts University, Boston, United States, ²Petrozavodsk State University, Petrozavodsk, Russia

Mo-P5-10

Intestinal inflammation induced with Zearalenone (ZEA) is mediated by the NLRP3 inflammasome

Wentao Fan, Suquan Song

College of Veterinary Medicine, Nanjing Agricultural University, Nanjing, China

Mo-P5-11

Genome wide characterization of a STAT1-independent antiviral and immunoregulatory transcriptional program induced by the costimulation with IFN β and TNF α

Nathalie Grandvaux^{1, 2}, Melissa K Mariani^{1, 2}, Pouria Dasmeh², Audray Fortin¹,

Elise Caron¹, Sandra Cervantes-Ortiz^{1, 2}, Espérance Mukawera¹,

Adrian WR Serohijos²

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Mo-P5-12

The evolution of IL-2, IL-15 and IL-15L family cytokines; the first report on the function of ancient IL-15L.

Johannes M. Dijkstra², Takuya Yamaguchi¹, Uwe Fischer¹, Keiichiro Hashimoto²

¹Friedrich Loeffler Institute, Insel Riems, Germany, ²Fujita Health University, Toyoake, Japan

Mo-P5-13

Cytokine and Chemokine Profiling in Patients with Hand, Foot and Mouth Disease in Singapore and Malaysia.

Fiona Mei Shan Teo¹, Justin Jang Hann Chu^{1, 2}

¹Collaborative and Translation Unit for HFMD, Institute of Molecular and Cell Biology, Agency for Science, Technology and Research (A*STAR), Singapore, Singapore, ²Laboratory of Molecular RNA Virology and Antiviral Strategies, Department of Microbiology and Immunology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore

Mo-P5-14

IL-17C/IL-17RE augments T cell function in autoimmune hepatitis

Jinling Huang^{1, 2}, Qing Yuan³, Hui Zhu⁴, Lan Yin⁵, Shanjuan Hong^{1, 2}, Zhongjun Dong^{1, 2}, Chen Dong^{1, 2}

¹Institute for Immunology, Tsinghua University, Beijing, China, ²School of Medicine, Tsinghua University, Beijing, China, ³Organ Transplantation Center, Organ Transplantation Institute, 309th Hospital, Beijing, China, ⁴Shanghai Public Health Clinical Center, Shanghai, China, ⁵Department of Immunology and Pathogen Biology, Tongji University School of Medicine, Shanghai, China



Mo-P7-4

Caspase-1 serves as an apoptosis-initiating caspase in the absence of Gasdermin D (GSDMD)

Kohsuke Tsuchiya, Muhammad Mamunur Rashid Mahib, Takashi Suda

Division of Immunology and Molecular Biology, Cancer Research Institute, Kanazawa University, Kanazawa, Japan

Mo-P7-5

Outlining the unique characteristics of the type I and type III interferon sensing pathways

Adriana Forero, Snehal Ozarkar, Lomon So, Ram Savan

Department of Immunology, University of Washington, Seattle, United States

Mo-P7-6

NLRP3 inflammasome activation downstream of cytoplasmic LPS recognition by both caspase-4 and caspase-5

<u>Paul J Baker</u>^{1, 2}, Dave Boucher³, Natalie J Bitto⁴, Damien Bierschenk³, Christina Tebartz^{5, 6}, Paul G Whitney^{5, 6}, Sammy Bedoui^{5, 6}, Kate Schroder³, Richard L Ferrero⁴, Seth L Masters^{1, 2}

¹Inflammation division, Walter and Eliza Hall Institute of Medical Research, Parkville, Australia, ²Department of Medical Biology, University of Melbourne, Parkville, Australia, ³Cell Biology and Molecular Medicine division, Institute for Molecular Bioscience, University of Queensland, Brisbane, Australia, ⁴Centre for Innate Immunity and Infectious Diseases, Hudson Institute of Medical Research, Clayton, Australia, ⁵Peter Doherty Institute for Infection and Immunity, Melbourne, Australia, ⁶Department of Microbiology and Immunology, University of Melbourne, Parkville, Australia

Mo-P7-7

Immunomodulatory effects of focal adhesion kinase in human macrophages and pneumocytes during avian influenza A H5N1 virus infection

Mandy Man Ting Ng, Rachel Hiu Ha Ching, Michael Chi Wai Chan,

Kenrie Pui Yan Hui

School of Public Health, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Pokfulam, Hong Kong

Mo-P7-9

Phosphorylation of Ser386 is important post-translational modification for dimerization of the transcription factor IRF-3 via *trans*-interaction between Ser386 phosphate and IRF-3 basic pocket

Hiroto Abe^{1, 2}, Koh Takeuchi³, Hiroki Kato^{1, 2}, Takashi Fujita^{1, 2}

¹Laboratory of Molecular Genetics, Department of Genetics and Molecular Biology, Institute for Frontier Life and Medical Sciences, Kyoto University, Kyoto, Japan, ²Laboratory of Molecular and Cellular Immunology, Department of Molecular and Cellular Biology, Graduate School of Biostudies, Kyoto University, Kyoto, Japan, ³Biomedicinal Information Research Center & Molecular Profiling Research Center for Drug Discovery, National Institute of Advanced Industrial Science and Technology, Tokyo, Japan

Mo-P7-10

Reactive oxygen species suppress the cellular chemotaxis.

Akira Yamauchi, Shuichiro Okamoto, Futoshi Kuribayashi

Department of Biochemistry, Kawasaki Medical School, Kurashiki, Japan

Mo-P7-11

Fate decision of activated STAT3 for nuclear accumulation or export through regulated multiple conformational changes

Junhao Yang¹, Hiroyuki Kunimoto¹, Bumpei Katayama², Lingyu Wang¹, Hong Zhao¹, Toshiyuki Ozawa², Daisuke Tsuruta², Koichi Nakajima¹

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Mo-P7-12

Cell cycle does not contribute to cell-to-cell heterogeneity of interferon responses

Piotr Topolewski, Michal Komorowski

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Mo-P7-13

Sensing and remembering IFNs concentrations.

Karolina Ewa Zakrzewska, Tomasz Jetka, Karol Nienałtowski, Katrzyna Szymańska,

Katarzyna Andryka, Piotr Topolewski, Edyta Głów, Michał Komorowski

Institute of Fundamental Technological Research Polish Academy of Sciences, Warsaw, Poland

Mo-P7-14

STAT1 is essential for IL-21 expression in T follicular helper cells

Roza Nurieva, Anupama Sahoo, Andrei Alekseev

MD Anderson Cancer Center, Houston, United States

Mo-P7-15

Depletion of adipose tissue CD206 M2 macrophages improve insulin sensitivity

<u>Allah Nawaz</u>¹, Tomonobu Kado¹, Takashi Nakagawa², Kumiko Saeki³, Isao Usui¹, Shiho Fujisaka¹, Kazuyuki Tobe¹

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Mo-P7-16

Activation of CCR5 in breast cancer regulates metabolism to promote tumorigenesis

Eleanor N Fish^{1, 2}, Darrin Gao^{1, 2}

¹University Health Network & University of Toronto, Canada, Toronto, Canada, ²Toronto General Hospital Research Institute, University Health Network, Toronto, Canada

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Mo-P7-17

Zika virus NS5 protein interferes with the RIG-I signaling pathway and inhibits the expression of interferon lambda1 gene

<u>Ilkka Julkunen</u>¹, Rickard Lundberg¹, Krister Melen^{1, 2}, Miao Jiang², Veera Westenius², Olli Vapalahti³, Pamela Österlund², Laura Kakkola¹

¹Institute of Biomedicine/virology, University of Turku, Turku, Finland, ²Expert Microbiology Unit, National Institute for Health and Welfare, Helsinki, Finland, ³Deaprtment of Virology, University of Helsinki, Helsinki, Finland

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Mo-P7-18

E3 ubiquitin-protein ligase RBX1 interacts with RIG-I receptor to inhibit its helicase activity

<u>Seiichi Sato</u>, Naoya Katsuyama, Mei Hashizume, Nozomi Sakurai, Yohei Miyashita, Kai Li, Akinori Takaoka

Division of Signaling in Cancer and Immunology, Institute for Genetic Medicine, Molecular Medical Biochemistry Unit, Biological Chemistry and Engineering Course, Graduate School of Chemical Sciences and Engineering, Hokkaido University, Sapporo, Japan

Mo-P7-19

IL-4 recovers insulin signaling activity in FFA-induced insulin resistance in 3T3-L1 adipocytes.

<u>Iurii Stafeev</u>^{1, 2}, Svetlana Michurina^{1, 2}, Alexander Vorotnikov¹, Mikhail Menshikov¹, Yelena Parfyonova^{1, 2}

¹Russian Cardiology Research and Production Center, Moscow, Russia, ²Lomonosov Moscow State University, Moscow, Russia

Mo-P7-20

Differential effect of SUMO1 and SUMO3 on PKR localisation and activation

Ghizlane Maarifi, Laurent Dianoux, Mounira K Chelbi-Alix

INSERM UMR-S 1124, Université Paris Descartes, 45 rue des Saints-Pères, Paris 75006, France

Mo-P7-21

Comparative transcriptomic analysis of control metabolism and virulence of Mycobacterium tuberculosis

Jae-Sung Kim^{1, 2}, Yang Chul-Su^{1, 2}

¹Department of Molecular and Life Science, Hanyang University, Ansan, Korea, Republic of (South), ²Department of Bionano Technology, Hanyang University, Seoul, Korea, Republic of (South)

Mo-P7-22

Differential regulation of TLR2-mediated IFN- β production by SHP2 and Gsk3 β in macrophages

Soo Young Lee, Jin Hee Park, Ryeojin Ko

Ewha Womans University, Seoul, Korea, Republic of (South)

Mo-P7-23

Cbl dependent JAK2 K-63 conjugated ubiquitination is required for JAK2 phosphorylation and GM-CSF signal transduction

<u>Jeffrey JY Yen</u>¹, Chun-Shan Liu¹, Hsin-Fang Yang-Yen², Ming-Jing Hwang¹, Ching-Shu Suen¹

¹Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan,

²Institute of Molecular Biology, Academia Sinica, Taipei, Taiwan

Mo-P7-24

Inhibition of NALP3 signaling impaired skin wound healing

<u>Hiroyasu Ito</u>¹, Ayumu Kanbe¹, Hiroyasu Sakai², Mitsuru Seishima¹

¹Department of Informative Clinical Medicine, Gifu University Graduate School of Medicine, Gifu, Japan, ²Department of Gastroenterology, Internal Medicine, Gifu University Graduate School of Medicine, Gifu, Japan
Mo-P7-25

The role of IL-6 family cytokines in intestinal homeostasis and regeneration

Koji Taniguchi, Akihiko Yoshimura

Department of Microbiology and Immunology, Keio University School of Medicine, Tokyo, Japan

Mo-P7-26

Tumor-secreted factors induce the maturation and secretion of IL-1 β via glucose-mediated synergistic modulation of NF- κ B and mTOR signaling in bone marrow-derived macrophages

Yunseo Woo^{1, 2}, Gwang-Won Jang2, Yu-Jin Jung^{1, 2}

¹Department of Biological Sciences, Kangwon National University, Chuncheon, Rep. of Korea, 200-701., Chuncheon-si, Korea, Republic of (South), ²BIT Medical Convergence Program, Kangwon National University, Chuncheon, Rep. of Korea, 200-701., Chuncheon-si, Korea, Republic of (South)

Mo-P7-27

Identification of an EF-hand motif protein for regulation of Jak-Stat signaling pathway

Kazuo Okamoto¹, Maia Inoue², Hiroshi Takayanagi²

¹Department of Osteoimmunology, Graduate School of Medicine and Faculty of Medicine, The University of Tokyo, Tokyo, Japan, ²Department of Immunology, Graduate School of Medicine and Faculty of Medicine, The University of Tokyo, Tokyo, Japan

Mo-P7-28

mTORC2-mediated AKT activation in the early endosome of cells activated with growth factors

Suree Kim, Dongmin Kang

Ewha Womans University, SEOUL, Korea, Republic of (South)

Mo-P7-29

The Effects of Tumor Suppressor INPP4B Oxidation on Akt Signaling and Actin Polymerization in Cancer Cells.

Sukyeong Heo, Dongmin Kang

Ewha Womans University, Seoul, Korea, Republic of (South)

Mo-P7-30

Establishment of strategy to predict cytotoxicity of unknown drugs by monitoring autophagic flux with imaging methods.

Soohee Choi, Dongmin Kang

Ewha Womans University, Seoul, Korea, Republic of (South)

Mo-P7-31

Study on the Effect of Metformin and Succinate on the Differentiation and Functions of Mesenchymal Stem Cell

Hsin Ho¹, Bor-Luen Chiang²

¹Graduate Institute of Oral Biology, School of Dentistry, National Taiwan University, Taipei, Taiwan, ²Graduate Institute of Clinical Medicine College of Medicine of National Taiwan University, Taipei, Taiwan

Mo-P7-32

Regulatory action of toll-like receptor 2 in a non-alcoholic steatohepatitis mouse model

Min YI¹, Masashi KOHANAWA¹, Sanae HAGA², Michitaka OZAKI²

¹Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ²Graduate School of Health Sciences, Hokkaido University, Sapporo, Japan

Mo-P7-33

Ets-related transcription factor GABP α is involved in the survival of mouse embryonic stem cells.

Atsushi Ueda, Tadayuki Akagi, Takashi Yokota

Department of Stem Cell Biology, Faculty of Medicine, Institute of Medical, Pharmaceutical and Health Sciences, Kanazawa University, Kanazawa, Japan

Mo-P7-34

The Notch signal indiuce a novel naive-like memory T cells (iTscm) from activated T cells

Akihiko Yoshimura, Taisuke Kondo

Department of Microbiology and Immunology, Keio University School of Medicine, Tokyo, Japan

19:10~21:00 Session : Poster Session 9 "Anti-cytokine therapy for inflammatory human diseases"

Room: Ishikawa Ongakudō Interchange Hall

Mo-P9-1

Proliferative activity of immune cells is associated with the presence of TNFalpha receptors type 2

Alina Alshevskaya¹, Julia Lopatnikova¹, Irina Belomestnova², Julia Sennikova², Sergey Sennikov¹

¹Federal State Budgetary Scientific Institution "Research Institute of Fundamental and Clinical Immunology", Novosibirsk, Russia, ²Novosibirsk State Medical University, Novosibirsk, Russia

Mo-P9-2

A Novel System for the Quantification of the ADCC Activity of Therapeutic Antibodies

Michael Gerard tovey¹, Christophe Lallemand², Feifei Liang², Flore Staub²,

Maud Simansour², Benoit Vallette², Lue Huang², Rosa Ferrando-Miguel²

¹Laboratory of Biotechnology & Applied Pharmacology, Ecole Normale Supérieure de Cachan,, Cachan, France, ²Biomonitor SAS, Villejuif Bio Park, 1 Mail du Professeur Georges Mathé, Villejuif, France

Mo-P9-3

Global transcriptomic analysis identifies cytokine-regulated pathways that determine discrete synovial pathotypes in inflammatory arthritis

David Hill¹, Xiao Liu¹, Javier Uceda¹, Benjamin Cossins¹, Joanne Morgan¹, Nigel Williams¹, Robert Andrews¹, Anwen Williams¹, Costantino Pitzalis², Simon Jones¹, Gareth Jones¹

¹School of Medicine, Cardiff University, Cardiff, United Kingdom, ²Centre for Experimental Medicine and Rheumatology, William Harvey Research Institute, Barts and The London School of Medicine and Dentistry, Queen Mary University of London, John Vane Science Centre, London, United Kingdom

Mo-P9-4

Creating a super-cytokine: a structural perspective on the super-agonists of interluekin-21

Zhian Chen¹, Yanfang Cui¹, Yewann Leong¹, Dene Littler¹, Fiona Whightman², Travis Beddoe³, Jamie Rossjohn¹, Charles Mackay¹, Di Yu^{1, 4}

¹Monash Biomedicine Discovery Institute, Monash University, Clayton, Australia, ²Peter Doherty Institute for Infection and Immunity, University of Melbourne, Parkville, Australia, ³School of Life Sciences, La Trobe University, Melbourne, Australia, ⁴John Curtin School of Medical Research, The Australian National University, Canberra, Australia

Mo-P9-5

Transcriptome analysis reveals PDGF signaling-dependent regulation of myelofibrosis in murine chronic graft-versus-host diseases

Shigeyuki Shichino^{1, 2}, Satoshi Ueha^{1, 2}, Naoto Sudo^{1, 2}, Mizuha Kosugi-Kanaya^{1, 2, 3}, Francis HW Shand^{1, 2}, Teppei Morikawa⁴, Shin-ichi Hashimoto^{1, 2, 5},

Takanori Teshima³, Kouji Matsushima^{1, 2}

¹Deptartment of Molecular Preventive Medicine, the University of Tokyo, Tokyo, Japan, ²AMED, Tokyo, Japan, ³Department of Hematology, Hokkaido University Graduate School of Medicine, Sapporo, Japan, ⁴Department of Pathology, The University of Tokyo Hospital, Tokyo, Japan, ⁵Division of Nephrology, Department of Laboratory Medicine, Kanazawa University, Ishikawa, Japan

Mo-P9-6

IL-2 induces regulatory B cells

<u>Akimichi Inaba</u>¹, Rebeccah Mathews¹, Lucy Truman¹, Linda Wicker², John Todd², Frank Waldron-Lynch¹, Menna Clatworthy¹

¹University of Cambridge, Cambridge, United Kingdom, ²University of Oxford, Oxford, United Kingdom

Mo-P9-7

Novel anti-cytokine therapy targeting granulocyte-colony stimulating factor in chronic airway disease using adeno-associated viral vectors.

Evelyn Tsantikos¹, Margaret L Hibbs¹, Maverick Lau^{1, 2}, Gary P Anderson²

¹Monash University, Melbourne, Australia, ²University of Melbourne, Melbourne, Australia

Mo-P9-8

Newly identified molecular mechanism of glucocorticoid action in arthritis

Adrian Achuthan, Amy Hsu, Tanya Lupancu, Ming-Ching Lee, Reem Saleh, Andrew Fleetwood, Andrew Cook, John Hamilton

University of Melbourne, Parkville, Australia

Mo-P9-9

Interferon-alpha overexpression triggers an expansion of highly suppressive regulatory T lymphocytes protecting against experimental arthritis

Matthieu Ribon^{1, 2}, Katarzyna Matyja^{1, 2}, Roxane Hervé^{1, 2}, Delphine Lemeiter^{1, 2},

François Santinon^{1, 2}, Ken Tsumiyama³, Shunichi Shiozawa³,

Marie-Christophe Boissier^{1, 2, 4}, Natacha Bessis^{1, 2}, Patrice Decker^{1, 2}

¹University of Paris 13, Sorbonne Paris Cité, Li2P, Bobigny, France, ²Inserm, UMR 1125, Bobigny, France, ³Kyushu University Beppu Hospital, Department of Medicine, Rheumatic Diseases Unit, Beppu, Japan, ⁴Avicenne Hospital, Rheumatology Department, AP-HP, Bobigny, France

Mo-P9-10

NUE7770: A selective inhibitor of the first BET bromodomain with strong antiinflammatory activity in the absence of BET-associated toxicity

Søren Jensby Nielsen, Visnja Poljak, Margit Haahr Hansen, Luigi Stasi,

Thomas Franch, Jimmi Seitzberg, Loris Moretti, Christina Underwood, Gitte Friberg,

Berit Tonnesen, Lene Teuber, Mads Nørregaard-Madsen, Alex Gouliaev

Nuevolution A/S, Copenhagen, Denmark

Mo-P9-11

Interleukin-6 (IL-6) trans-presentation is a novel mode of IL-6 signaling that is crucial for the generation of pathogenic Th17 cells

Christoph Garbers¹, Sylvia Heink², Thomas Korn^{2, 3}, Stefan Rose-John¹

¹Institute of Biochemistry, Kiel University, Kiel, Germany, ²Klinikum rechts der Isar, Department of Neurology, Technical University of Munich, Munich, Germany, ³Munich Cluster for Systems Neurology, SyNergy, Munich, Germany

Mo-P9-12

Macrophage migration inhibitory factor is involved in dengue NS 1-induced glycocalyx degradation and vascular leakage

Trai Ming Yeh

National Cheng Kung University, Tainan, Taiwan

Mo-P9-13

Changes in Serum Cytokine and chemokine in Multicentric Castleman's disease after Tocilizumab IL-6 blocking Therapy

Kazuyuki Yoshizaki¹, Kazuko Uno²

¹The Institute of Scientific and Industrial Research, Osaka University, Osaka, Japan, ²Louis Pasteur Center for Medical Research, Kyoto, Japan

Mo-P9-14

Inhibition of Dengue virus infection by targeting on macrophage migration inhibitory factor-induced autophagy

YEN-CHUNG LAI¹, TRAI-MING YEH²

¹The Institute of Basic Medical Sciences, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ²Department of Medical Laboratory Science and Biotechnology,College of Medicine, National Cheng Kung University, Tainan, Taiwan

Mo-P9-15

The effects of biologic agents on osteoclast lineage cells evaluated by intravital two-photon microscopy.

Yoshinobu Matsuura, Junichi Kikuta, Masaru Ishii

Department of Immunology and Cell Biology, Graduate School of Medicine & Frontier Biosciences, Osaka University, Japan, osaka, Japan

Mo-P9-16 Targeting TNF-α against dengue virus-induced neurotoxicity and encephalitis Chiou-Feng Lin^{1, 2}, Ming-Kai Jhan^{1, 2}, Jo-Chi Kao^{1, 2}, Tsung-Ting Tsai¹, Min-Ru Ho^{1, 2}, Tina-Jina Shen^{1, 2} ¹Department of Microbiology and Immunology, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan, ²Graduate Institute of Medical Sciences, College of Medicine, Taipei Medical University, Taipei, Taiwan Mo-P9-17 Development of TNF- α Vaccine for Inflammatory Diseases Wei-Chun HuangFu^{1, 2}, Li-Tzu Chin¹ ¹The Ph.D. Program for Cancer Biology and Drug Discovery, College of Medical Science and Technology, Taipei Medical University, Taipei, Taiwan, ²Ph.D. Program in Biotechnology Research and Development, College of Pharmacy, Taipei Medical University, Taipei, Taiwan Mo-P9-18 IL-6 Promotes Cell Growth and Is Associated With Poor Prognosis In Patients With Oral Cancer Ling-Ying Wei^{1, 2}, Jang-jaer Lee², Jean-san Chia³ ¹National Taiwan University, Graduate Institute of Clinical Dentistry, Taipei, Taiwan, ²National Taiwan University Hospital, Oral and Maxillofacial Surgery Department, Taipei, Taiwan, ³National Taiwan University, Graduate Institute of Immunology, Taipei, Taiwan 19:10~21:00 Session : Poster Session 11 "Emerging cytokines" Room: Ishikawa Ongakudō Interchange Hall Mo-P11-1 What is a cytokine? Drawing meaning from structure, evolution & interactions J Fernando Bazan Bio-Techne, Minneapolis, MN, United States, Dept. of Pharmacology, Univ. of Minnesota School of Medicine, Minneapolis, MN, United States Mo-P11-2 Analysis of the roles of IL-1 on homeostasis using mice deficient for negative regulators of IL-1 signaling Shunta Sakanishi¹, Shigeru Kakuta^{1, 2}, Kenji Shimizu^{2, 3}, Aoi Akitsu^{2, 3}, Takashi Matsuwaki⁴, James Ken Chambers⁵, Kaito Masaki⁶, Sachiko Kubo^{2, 4}, Yang Liu², Akiko Nakajima², Reiko Horai^{2, 7}, Harumichi Ishigame^{2, 8}, Seiji Takashima⁶, Yoichiro Iwakura^{2, 4}, Shigeru Kyuwa¹ ¹Department of Biomedical Science, Graduate School of Agricultural and Life Sciences, The University of Tokyo, Tokyo, Japan, ²Center for Experimental Medicine and Systems Biology, Institute of Medical Science, The University of Tokyo, Tokyo, Japan, ³Center for Experimental Animal Models, Institute for Biomedical Sciences, Tokyo University of Science, Noda, Japan, ⁴Department of Veterinary Physiology, Graduate School of Agricultural and Life Sciences, The University of Tokyo, Tokyo, Japan, ⁵Department of Veterinary Pathology, Graduate School of Agricultural and Life Sciences, The University of Tokyo, Tokyo, Japan, ⁶Faculty of Textile Science and Technology, Shinshu University, Ueda, Japan, ⁷Laboratory of Immunology, National Eye Institute, NIH, Bethesda, United States, ⁸Laboratory of Tissue Dynamics, RIKEN Center for Integrative Medical Sciences, Yokohama, Japan

Mo-P11-3

Astrocyte-derived Interleukin-33 promotes microglial -synapse pruning during brain development

Ilia Vainchtein, Gregory Chin, Ari Molofsky, Anna Victoria Molofsky

University of California-San Francisco, San Francisco, United States

Mo-P11-4

IL-33 modulates lung inflammation induced by the IL-6-type (gp130) cytokine Oncostatin M

Fernando Botelho¹, Anisha Dubey¹, Rex Park¹, Alison Humbles², Roland Kolbeck², Carl D Richards¹

¹McMaster Immunology Research Centre, Department of Pathology and Molecular Medicine, McMaster University, Hamilton, Canada, ²Department of Respiratory, Inflammation and Autoimmunity, MedImmune LLC,, Gaithersburg, United States

Mo-P11-5

IL-36α plays an important role in the development of imiquimod-induced psoriasiform dermatitis through activation of skin-resident cells

Soo-hyun Chung

Center for Animal Disease Models, Research Institute for Biomedical Sciences (RIBS), Tokyo University of Science, Noda-city, Japan

Mo-P11-6

Interleukin-36y: roles in lungs innate immunity, inflammation and allergy

Hock L Tay, Alan Hsu, ThiHiep Nguyen, Chantal Donovan, Adam Collison,

Joerg Mattes, Gerard E Kaiko, Ming Yang, Philip M Hansbro, Paul S Foster

Priority Research Centre for Healthy Lungs, Department of Microbiology and Immunology, School of Pharmacy and Biomedical Sciences, Faculty of Health and Hunter Medical Research Institute, University of Newcastle, NSW, Australia., Newcastle, Australia

Mo-P11-7

Application of Adeno-Associated virus expressing human interleukin-37 in autoimmune cholangitis mice

Chia-I Lin, Bi-Jhen Syu, Ya-Hui Chuang

Department of Clinical Laboratory Sciences and Medical Biotechnology, College of Medicine, National Taiwan University, Taipei, Taiwan

Mo-P11-8

Dysregulated interleukin-37 signaling contributes to the increased collagen production in scleroderma skin.

Hideo Kudo, Masatoshi Jinnin, Hironobu Ihn

Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan

Mo-P11-9

IL-27 controls T cell subsets in Toxoplasmosis

Jeongho Park, Jonathan DeLong, Gaia Muallem, Christopher A Hunter

University of Pennsylvania, Philadelphia, United States

Mo-P11-10

IL-27 modulates the immune anti-tumor outcome of chronic levels of IFNgamma (IFN γ) in mice with underlying autoimmunity.

Julio Cesar Valencia, Michael Sanford, John Fenimore, Rebecca Erwin-Cohen,

Howard Young

NCI-Frederick, Frederick, United States

Mo-P11-11

Differential regulation of feed foreward and feedback signaling between IL27 and IFN γ in solid tumor cells

<u>Claude Haan</u>¹, Catherine Rolvering¹, Andreas D Zimmer¹, Aurélien Ginolhac², Ines Kozar¹, Petr N Nazarov³, Iris Behrmann¹

¹University of Luxembourg, Life Sciences Research Unit - Signal Transduction Laboratory, 6, avenue du Swing,, Belvaux, Luxembourg, ²University of Luxembourg, Life Sciences Research Unit – Bioinformatics core facility, 6, avenue du Swing, Belvaux, Luxembourg, ³Genomics Research Laboratory, Dept. of Oncology, Luxembourg Institute of Health, 84 Val Fleuri,, Luxembourg, Luxembourg

Mo-P11-12

IL-27-inducible novel microRNA, hsa-mir-7705, predominantly elicits IFN- α from human monocyte-derived macrophages in an RNA sequence and structure dependent manner

Taisuke Izumi¹, Deepak Poudyal², Jun Yang¹, Xiaojun Hu³, Marjorie Bosche¹,

Qian Chen², Whitney Bruchey¹, Rayan G Zamat¹, Brad T Sherman³, Clifford H Lane⁴, Tomozumi Imamichi^{1, 2, 3}

¹Translational Research Section, Laboratory of Human Retrovirology and Immunoinformatics, Leidos Biomedical Research, Inc., Frederick National Laboratory for Cancer Research, Frederick, United States, ²Basic Research Section, Laboratory of Human Retrovirology and Immunoinformatics, Leidos Biomedical Research, Inc., Frederick National Laboratory for Cancer Research, Frederick, United States, ³Bioinformatics Section, Laboratory of Human Retrovirology and Immunoinformatics, Leidos Biomedical Research, Inc., Frederick National Laboratory for Cancer Research, Frederick, United States, ⁴Laboratory of Immunoregulation, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, United States

Mo-P11-13

Electroporation pDNA encoding IL-10 into mouse bone marrow-derived immature dendritic cells

Julia Khantakova, Vasilii Kurilin, Amir Maksyutov, Sergey Sennikov

Federal State Budgetary Institution "Research Institute of Fundamental and Clinical Immunology", Department of Molecular Immunology, Novosibirsk, Russia

Mo-P11-14

Type I and III IFNs are produced by different cell types In Vivo

<u>Marvin Jose Sandoval</u>¹, Hsiang-Chi Tseng^{2, 3}, Heidi Risman², Russell K. Durbin⁴, Sergei V Kotenko^{4, 5, 6}, Joan E. Durbin^{2, 5, 6}

¹Department of Pathology, NYU School of Medicine, New York, United States, ²Department of Pathology and Laboratory Medicine, Rutgers New Jersey Medical School, Newark, United States, 3Graduate School of Biomedical Sciences, Rutgers-New Jersey Medical School, Newark, United States, ⁴Center for Immunity and Inflammation, Rutgers-New Jersey Medical School, Newark, United States, ⁵Department of Microbiology, Biochemistry, and Molecular Genetics, Rutgers-New Jersey Medical School, Newark, United States, Hospital Cancer Center, Rutgers-New Jersey Medical School, Newark, United States

Mo-P11-15

IFN- λ 3 induces dendritic cell maturation independently of type I IFN

Kazuhisa Murai¹, Masao Honda^{1, 2}, Tetsuro Shimakami², Takayoshi Shirasaki¹, Shiho Tanaka¹, Shuichi Kaneko²

¹Department of Laboratory medicine, Kanazawa University Graduate School of Health Medicine, Kanazawa, Japan, Kanazawa, Japan, ²Department of Gastroenterology, Kanazawa University Graduate School of Medicine, Kanazawa, Japan, Kanazawa, Japan

Mo-P11-16

A liver-derived secretory protein, LECT2, enhances the innate immune response and suppresses HCV replication

Takayoshi Shirasaki^{1, 2}, Masao Honda^{1, 2}, Kazuhisa Murai^{1, 2}, Tetsuro Shimakami¹,

Hirofumi Misu¹, Toshinari Takamura¹, Shuichi Kaneko¹

¹Kanazawa University Graduate School of Medical Sciences, Kanazawa, Japan,
²Kanazawa University Graduate School of Health Medicine, Kanazawa, Japan

Mo-P11-17

Prevention of lipopolysaccharide-induced preterm labor by the lack of CX3CL1-CX3CR1 interaction

<u>mika mizoguchi^{1, 2}</u>, yuko ishida¹, mizuho nosaka¹, akihiko kimura¹, tamaki yahata^{1, 2}, yumi kuninaka¹, sakiko nanjo², sawako minami², kazuhiko ino², naofumi mukaida³, toshikazu kondo¹

¹Department of Forensic Medicine, Wakayama Medical University, wakayama, Japan, ²Department of Obstetrics and Gynecology, Wakayama Medical University, wakayama, Japan, ³Division of Molecular Bioregulation, Cancer Research Institute, Kanazawa University, kanazawa, Japan

19:10~21:00 Session : Poster Session 13 "Development and function of Macrophage and DC"

Room: Ishikawa Ongakudō Interchange Hall

Mo-P13-1

Natural amines inhibit activation of human plasmacytoid dendritic cells through CXCR4 engagement

Nikaïa Smith^{1, 2}, Nicolas Pietrancosta¹, Sophia Davidson³, Jacques Dutrieux⁴,

Jan Münch², Andreas Wack³, Sébastien Nisole⁵, Jean-Philippe Herbeuval¹

¹CNRS-UMR8601 - Team CBMIT - Université Paris Descartes, 45 Rue des Saints Pères, France, ²Institute of Molecular Virology - Ulm University Medical Center, Ulm, Germany, ³Immunoregulation Laboratory, Francis Crick Institute, London, United Kingdom, ⁴INSERM UMR-S 1124, Université Paris Descartes, Paris, France, ⁵Institut de Recherche en Infectiologie de Montpellier (IRIM) CNRS UMR 9004 - Montpellier University, Montpellier, France

Mo-P13-2

Effect of high glucose on human alveolar macrophages phenotype and phagocytosis of mycobacteria

Jorge Cervantes¹, Jesse Vance¹, Laura Sadofsky^{2, 3}, Alyn Morice³

¹Paul L. Foster School of Medicine, Texas Tech University Health Sciences Center, El Paso, TX, U.S.A., El Paso, United States, ²School of Biological, Biomedical and Environmental Sciences, University of Hull, Hull, U.K., Hull, United Kingdom, ³The Hull York Medical School, University of Hull, Hull, U.K., Hull, United Kingdom

Induction of live cell phagocytosis by a specific combination of inflammatory stimuli

Takamasa Ishidome^{1, 2}, Rikinari Hanayama^{1, 2}

¹Department of Immunologty, Kanazawa University Graduate School of Medicine, Takaramachi, Japan, ²Laboratory of Immune Network, Immunology Frontier Research Center (IFReC), Osaka University, Yamadaoka, Japan

Mo-P13-4

The recruited CCR2-expressing alveolar macrophages under the guidance of interstitial macrophage-derived CCL2 drive hepatocellular carcinoma lung metastasis by generating leukotriene B₄.

Takuto Nosaka^{1, 2}, Tomohisa Baba², Yamato Tanabe², Soichiro Sasaki²,

Makoto Arita³, Yasunari Nakamoto¹, Naofumi Mukaida²

¹Second Department of Internal Medicine, Faculty of Medical Sciences, Fukui University, Yoshida-gun, Japan, ²Division of Molecular Bioregulation, Cancer Research Institute, Kanazawa University, Kanazawa, Japan, ³Laboratory for Metabolomics, RIKEN Center for Integrative Medical Sciences, Yokohama, Japan

Mo-P13-5

Pirfenidone prevents and reverses lipotoxicity-induced hepatic insulin resistance and steatohepatitis by polarizing M2 macrophages

<u>Guanliang Chen</u>¹, Yinhua Ni¹, Naoto Nagata¹, Liang Xu¹, Mayumi Nagashimada¹, Shuichi Kaneko¹, Tsuguhito Ota^{1, 2}

¹Brain/Liver Interface Medicine Research Center, Kanazawa University, Kanazawa, Japan, ²Division of Metabolism and Biosystemic Science, Department of Internal Medicine, Asahikawa Medical University, Asahikawa, Japan

Mo-P13-6

Identification of FIt3-ligand producing cells by generating FIt3-ligand mCherry reporter mouse.

Nobuyuki Onai^{1, 2}, Toshiaki Ohteki²

¹Department of Immunology, Kanazawa Medical University, Ishikawa, Japan, ²Department of Biodefense Research, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan

Mo-P13-7

The origin of osteoclasts in pannus in arthritis

Tetsuo Hasegawa^{1, 2}, Junichi Kikuta¹, Masaru Ishi¹

¹Osaka University, Osaka, Japan, ²Keio University, Tokyo, Japan

Mo-P13-8

Spred-2 protects mice from ConA-induced liver injury

<u>Cuiming Su</u>n, Teizo Yoshimura, Masatoshi Fujisawa, Toshiaki Ohara, Xu Yang, Akihiro Matsukawa

Department of Pathology and Experimental Medicine, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan

Identification of a functional and transcriptional signature for tumor-infiltrating dendritic cells in mouse

Satoshi Ueha¹, Haru Ogiwara¹, Shigeyuki Shichino¹, Jun Abe^{1, 2},

Francis HW Shand¹, Shinichi Hashimoto^{1, 3}, Kouji Matsuhsima¹

¹Department of Molecular Preventive Medicine, The University of Tokyo, Tokyo, Japan, ²Theodor Kocher Institute, University of Bern, Bern, Switzerland, ³Department of Laboratory Medicine, Kanazawa University, Kanazawa, Japan

Mo-P13-10

CLEC5A is a critical receptor in innate immunity against bacteria infection

Szu-Ting Chen¹, Fei-Ju Li¹, Shie-Liang Hsieh²

¹National Ynag-Ming University, Taipei, Taiwan, ²Acdemia Sinica, Taipei, Taiwan

Mo-P13-11

Monocyte maturation stage determines preferential recruitment to solid tumors in mice

Francis HW Shand¹, Suang S Koid^{1, 2}, Satoshi Ueha¹, Kouji Matsushima¹

¹Department of Molecular Preventive Medicine, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan, ²Department of Clinical Laboratory, The University of Tokyo Hospital, Tokyo, Japan

Mo-P13-12

Cohesive transcriptional regulation plays critical role in CD4⁺ dendritic cell development

Prafullakumar Tailor¹, Irene Saha¹, Hemant Jaiswal¹, Jaring Schreuder²,

Monika kaushik¹, Shalin Naik², Kuldeep Singh Chauhan¹

¹Laboratory of Innate Immunity, National Institute of Immunology (NII), New Delhi, India, ²Molecular Medicine Division, Walter and Eliza Hall Institute of Medical Research (WEHI), Parkville, Australia

Mo-P13-13

Immunization induces migration of MHC class II intermediate dendritic cells from immunized sites to draining lymph nodes.

Taiki Moriya¹, Ryoyo Ikebuchi^{1, 2}, Mizuki Ueda¹, Yutaka Kusumoto¹, Michio Tomura¹

¹Laboratory of Immunology, Faculty of Pharmacy, Osaka Ohtani University, Osaka, Japan, ²Research Fellow of Japan Society for the Promotion of Science, Tokyo, Japan

Mo-P13-14

IFN- α inducible dendritic cells matured with OK-432 exhibit professional antigen-presentation and anti-tumor activity

Terutsugu Koya¹, Shigetaka Shimodaira^{1, 2}

¹Department of Regenerative Medicine, Kanazawa Medical University, Uchinada, Japan, ²Center for Advanced Cell Therapy, Shinshu University Hospital, Matsumoto, Japan

Mo-P13-15

Blimp-1 is required for IFN-I production in plasmacytoid dendritic cells

<u>Kuo-I Lin, Yi-An Ko</u>

Genomics Research Center, Academia Sinica, Taipei, Taiwan

Increased expression of BAFF receptor on monocytes is a contributory factor of IgG overproduction in patients with primary Sjögren's syndrome.

Keiko Yoshimoto, Katsuya Suzuki, Tsutomu Takeuchi

Keio University School of Medicine, Tokyo, Japan

Mo-P13-17

Involvement of Hexokinase 2 in autophagy dependent monocyte differentiation

Ellora SEN, Ankita Singh

National Brain Research Centre, Manesar, India

Mo-P13-18

Serum CC-chemokine ligand 18 level reflects disease activity, but not allergic manifestations of IgG4-related disease

Mitsuhiro Akiyama, Hidekata Yasuoka, Keiko Yoshimoto, Tsutomu Takeuchi

Division of Rheumatology, Department of Internal Medicine, Keio University School of Medicine, Tokyo, Japan, Tokyo, Japan

Mo-P13-19

Unique and Overlapping Actions of Type I and III IFNs in Influenza A Virus Infection and Implications for Therapy.

Sophia Davidson^{1, 2}, Teresa M McCabe², Stefania Crotta², Hans Henrik Gad³, Rune Hartmann³, Edith M Hessel⁴, Soren Beinke⁴, Andreas Wack²

¹Division of Inflammation, The Walter and Eliza Hall Institute of Medical Research, Parkville, Australia, ²Immunoregulation Laboratory, Francis Crick Institute, London, United Kingdom, ³Department of Molecular Biology and Genetics, Aarhus University, Aarhus, Denmark, ⁴Refractory Respiratory Inflammation Discovery Performance Unit, Respiratory Therapy Area, GSK, Stevenage, United Kingdom

Mo-P13-20

Change in intestinal macrophages subset expressing α 7nACh receptor during inflammation

Taiki Mihara, Juri Nakashima, Noriyuki Kaji, Hiroshi Ozaki, Masatoshi Hori

Department of Veterinary Pharmacology, Graduate School of Agriculture and Life Sciences, The University of Tokyo, Tokyo, Japan

Mo-P13-21

Prognostic value of diametrically polarized tumor-associated macrophages in multiple myeloma

Xinyi Chen¹, Jin Chen², Wenyan Zhang³, Ruixue Sun¹, Ting Liu¹, Yuhuan Zheng¹, Yu Wu¹

¹Department of Hematology and Hematology Research Laboratory, West China Hospital, Sichuan University, 37# Guoxue Xiang, 610041, Chengdu, Sichuan Province, China., Chengdu, China, ²Department of Rheumatology and Immunology, West China Hospital, Sichuan University, Chengdu, China, ³Department of Pathology, West China Hospital, Sichuan University, Chengdu, China

CD11b⁺Gr1^{dim} Tolerogenic Dendritic Cell-like Cells are Expanded in Interstitial Lung Disease in SKG Mice

Sho Sendo, Jun Saegusa, Hirotaka Yamada, Yoshihide Ichise, Ikuko Naka,

Takaichi Okano, Soshi Takahashi, Yo Ueda, Kengo Akashi, Akio Morinobu

Department of Internal Medicine, Kobe University Graduate School of Medicine, Kobe City, Japan

Mo-P13-23

Regulation of inflammatory cytokine expression and osteoclastgenesis by gap junctional protein in vitro and in vivo.

<u>Seiji Shimomura</u>¹, Shinji Tsuchida¹, Yuji Arai², Shuji Nakagawa², Hiroaki Inoue¹, Shohei Ichimaru¹, Yuta Fujii¹, Osam Mazda³, Toshikazu Kubo¹

¹Department of Orthopaedics, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Kyoto, Japan, ²1) Department of Sports and Para-Sports Medicine, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Kyoto, Japan, ³Department of Immunology, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Kyoto, Japan

Mo-P13-24

Role of scavenger receptors as damage-associated molecular pattern receptors in Toll-like receptor activation

Kyoko Komai, Akihiko Yoshimura

Department of Microbiology and Immunology, Keio University School of Medicine, Tokyo, Japan

Mo-P13-25

Folate deficiency or leptin may exacerbate the inflammatory activity of LPSinduced RAW264.7 macrophages

Chun-Wai Chan, Bi-Fong Lin

Department of Biochemical Science and Technology, College of Life Science, National Taiwan University, Taipei, Taiwan

Mo-P13-26

Absence of CCR5 axis inhibits thrombus resolution through reduced uPA, tPA and VEGF expression in murine DVT model

Mizuho Nosaka¹, Yuko Ishida¹, Akihiko Kimura¹, Hiroki Yamamoto¹,

Yumi Kuninaka¹, Emi Shimada¹, Naofumi Mukaida², Toshikazu Kondo¹

¹Department of Forensic Medicine, Wakayama Medical University, Wakayama, Japan, ²Division of Molecular Bioregulation, Cancer Research Institute, Kanazawa University, Kanazawa, Japan

Mo-P13-27

Characteristics and functional regulation of dendritic cells in hepatitis B patients

<u>Atsushi Yonejima</u>, Eishiro Mizukoshi, Noriho lida, Masaaki Kitahara, Masao Honda, Shuichi Kaneko

Department of Gastroenterology, Kanazawa University Hospital, Kanazawa, Japan

Mo-P13-28

The absence of CCL3 exaggerated CaCl₂-induced aortic aneurysm

<u>yuko ishida</u>¹, yumi kuninaka¹, mizuho nosaka¹, akihiko kimura¹, naofumi mukaida², toshikazu kondo¹

¹department of forensic medicine, wakayama medical university, wakayama, Japan, ²Division of Molecular Bioregulation, Cancer Research Institute, Kanazawa University, kanazawa, Japan



Mo-P15-3

Deciphering lineage-specific TCR signaling in IL-17-producing $\gamma\delta T$ cell development

Ryunosuke Muro^{1, 2}, Takeshi Nitta¹, Harumi Suzuki², Hiroshi Takayanagi¹

¹Department of Immunology, Graduate School of Medicine and Faculty of Medicine, The University of Tokyo, Tokyo, Japan, ²Department of Immunology and Pathology, National Center for Global Health and Medicine, Chiba, Japan

Mo-P15-4

Expanded Natural Killer (NK) Cells: Immunotherapeutics against Aspergillosis

<u>Win Mar Soe^{1, 3}</u>, Masaru Imamura², Joan Lim¹, Sally M. H Chai², Jessamine Goh¹, Zhaohong Tan¹, Qi Hui Sam¹, Sharada Ravikumar¹, Dario Campana², Louis Yi Ann Chai^{1, 3, 4}

¹Division of Infectious Diseases, University Medicine Cluster, National University Health System, Singapore, Singapore, ²Department of Pediatrics, National University of Singapore, Singapore, Singapore, Singapore, ³Department of Haematology-Oncology, National University Cancer Institute of Singapore, National University Health System, Singapore, Singapore, Singapore, ⁴Department of Medicine, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore, Singapore

Mo-P15-5

Measurement of secreted granzymes after stimulation of phytohemagglutinin and PROMOCA[™] in whole blood

<u>Kyeong-Hee Kim</u>¹, Ri-Young Goh¹, Gyu-Dae An¹, Hyeon-Ho Lim¹, Min-Chan Kim², Sang Yeob Lee³

¹Dong-A University, School of Medicine Department of Laboratory Medicine, Busan, Korea, Republic of (South), ²Dong-A University, School of Medicine Department of Surgery, Busan, Korea, Republic of (South), ³Dong-A University, School of Medicine Department of Rheumatology, Busan, Korea, Republic of (South)

Mo-P15-6

Anti-metastatic effect of immunomodulatory drugs (IMiDs) through the regulation of NK cell homeostasis

Kiho Miyazato¹, Hideaki Tahara², Yoshihiro Hayakawa¹

¹Division of Pathogenic Biochemistry, Department of Bioscience, Institute of Natural Medicine, University of Toyama, Toyama, Japan, ²Department of Surgery and Bioengineering, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan

Mo-P15-7

Type 2 innate lymphoid cells exacerbate severe amebic liver abscess in mice

Risa Nakamura^{1, 2}, Sharmina Deloer^{1, 2}, Kazuyo Moro³, Shinjiro Hamano^{1, 2}

¹Department of Parasitology, NEKKEN, Nagasaki University, Nagasaki, Japan, ²Nagasaki University Graduate School of Biomedical Sciences Doctoral Leadership Program, Nagasaki, Japan, ³Laboratory for Immune Cell Systems, RIKEN IMS, Yokohama, Japan

Mo-P15-8

Identification of an essential epigenetic regulator of early iNKT cell development

Maia Inoue¹, Kazuo Okamoto¹, Tomoki Nakashima², Hiroshi Takayanagi¹

¹Department of Immunology, Graduate School of Medicine and Faculty of Medicine, The University of Tokyo, Tokyo, Japan, ²Department of Cell Signaling, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, Tokyo, Japan

Mo-P15-9

Interluekin-15-priming generates innate lymphoid cell-1-like phenotype during dendritic cell differentiation and these cells contribute to control *Mycobacterium tuberculosis* infection

Kee Woong Kwon, So Jeong Kim, Hongmin Kim, Woo Sik Kim, Sung Jae Shin

Department of Microbiology, Institute for Immunology and Immunological Disease, Brain Korea 21 PLUS Project for Medical Science, Yonsei University College of Medicine, Seoul, Korea, Republic of (South)

Mo-P15-10

The regulatory effects of Hirsutella sinensis mycelium on cytokine production and cellular immunity in murine model

Miaw-Ling Chen¹, Chi-Hsing Yu², Yu-Lun Tsai³, Wei-Jen Chen⁴

¹Miaw-Ling Chen, Tainan City, Taiwan, ²Chi-Hsing Yu, Tainan City, Taiwan, ³Yu-Lun Tsai, Tainan City, Taiwan, ⁴Wei-Jen Chen, Tainan City, Taiwan

Poster sessions

Tuesday, 31 October 2017

19:10~21:00 Session: Poster Session 2 "Allergic disease"

Room: Ishikawa Ongakudō Interchange Hall

Tu-P2-1

ILC2-activation exacerbates nasal type 2 inflammation in mice

<u>Taiyo Morikawa</u>^{1, 2}, Ayumi Fukuoka³, Kazufumi Matsushita¹, Shigeharu Fujieda², Tomohiro Yoshimoto^{1, 3}

¹Laboratory of Allergic Diseases, Institute for Advanced Medical Sciences, Hyogo College of Medicine, Nishinomiya, Hyogo, Japan, ²Department of Otorhinolaryngology-Head and Neck Surgery, Faculty of Medical Science, University of Fukui, Fukui, Japan, ³Department of Immunology, Hyogo College of Medicine, Nishinomiya, Hyogo, Japan

Tu-P2-2

Epithelial TRAF6 signaling initiates and propagates interleukin-17-mediated inflammation

Reiko Matsumoto, Teruki Dainichi, Kenji Kabashima

Department of Dermatology, Kyoto University Graduate School of Medicine, Kyoto, Japan

Tu-P2-4

Regulatory role of a lysosome-resident oligopeptide transporter SLC15A4 in the inflammatory responses of mast cells

Toshihiko Kobayashi, Hidemitsu Tsutsui, Daisuke Ohshima, Noriko Toyama-

Sorimachi

Department of Molecular Immunology & Inflammation Research, Research Institute, National Center for Global Health & Medicine, Tokyo, Japan

Tu-P2-5

Bilirubin nanoparticles ameliorate allergic lung inflammation in a mouse model of asthma

Dong Eon Kim, Yonghyun Lee, MinGyo Kim, Soyoung Lee, Sangyong Jon, Seung-Hyo Lee

Korea Advanced Institute of Science and Technology, Daejeon, Korea, Republic of (South)

Tu-P2-6

Hyper-responsiveness to TLR-4 stimulation in SLE: Association with high levels of serum IFN-alpha and a distinct inflammatory cytokine profile

Uma Thanarajasingam², Mark A. Jensen¹, Jessica M. Dorschner²,

Danielle M. Vsetecka², Shreyasee Amin², Ashima Makol², Floranne Ernste²,

Thomas Osborn², Kevin Moder², Vaidehi Chowdhary², Timothy B. Niewold¹

¹New York University Colton Center for Autoimmunity, New York, United States, ²Mayo Clinic Division of Rheumatology, Rochester, United States

Tu-P2-7

The role of Tfh cells, DCs and iBALT formations in inhaled fine particle-induced allergic inflammation in the lungs.

Etsushi_Kuroda^{1, 2}, Ken J Ishii^{1, 2}

¹Center for Vaccine and Adjuvant Research (CVAR), National Institutes of Biomedical Innovation, Health and Nutrition (NIBIOHN), Ibaraki, Japan, ²WPI Immunology Frontier Research Center (iFReC), Osaka University, Suita, Japan

Tu-P2-8

House dust mite increases pro-Th2 cytokines, IL-25 and IL-33 via the activation of TLR1/6 signaling

Sang-Hyun Kim¹, Yong Hyun Jang²

¹Department of Pharmacology, Kyungpook Natioinal University Medical School, Daegu, Korea, Republic of (South), ²Department of Dermatology, Kyungpook Natioinal University Medical School, Daegu, Korea, Republic of (South)

Tu-P2-9

IL-25 could be involved in the development of allergic rhinitis sensitized to house dust mite

Dae Woo Kim¹, Dong-Kyu Kim², Yong Min Kim³, Ji-Hun Mo⁴

¹Boramae Medical Center, Seoul National University College of Medicine, Seoul, Korea, Republic of (South), ²Sacred Heart Hospital, Hallym University College of Medicine, Chuncheon, Korea, Republic of (South), ³Chungnam National University School of Medicine, Daejeon, Korea, Republic of (South), ⁴Dankook University College of Medicine, Cheonan, Korea, Republic of (South)

Tu-P2-10

Increased serum IL-17A and Th2 cytokines in severe uncontrolled asthma

Takehiro Hasegawa^{1, 2}, Hitoshi Uga¹, Akio Mori³, Hirokazu Kurata¹

¹Sysmex Corporation, Kobe, Japan, ²Division of System Biology of Disease, Department of Internal Related, Kobe University Graduate School of Medicine, Kobe, Japan, ³Clinical Research Center for Allergy and Rheumatology, Sagamihara National Hospital, Sagamihara, Japan

Tu-P2-11

Indeno[1,2,3-cd]pyrene, a common environmental polycyclic aromatic hydrocarbon, enhances allergic lung inflammation via aryl hydrocarbon receptor

Tzu-Hsuan Wong¹, Chon-Lin Lee², Hsiang-Han Su¹, Shau-Ku Huang³,

Jau-Ling Suen¹

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Tu-P2-12

Basophil-specific protease mMCP-8 induces cutaneous inflammation accompanied by chemokine-mediated leukocyte infiltration

<u>Hidemitsu Tsutsui</u>¹, Yoshinori Yamanishi², Hiromi Ohtsuka², Shingo Sato², Soichiro Yoshikawa², Hajime Karasuyama²

¹National Center for Global Health and Medicine, Research Institute, Department of Molecular Immunology and Inflammation, Tokyo, Japan,

²Tokyo Medical and Dental University (TMDU), Department of Immune Regulation, Tokyo, Japan

Tu-P2-13

Th2 and Th9 cells induce airway eosinophilic inflammation by distinct mechanisms.

<u>Mayumi Saeki</u>¹, Osamu Kaminuma^{1, 2, 3}, Tomoe Nishimura¹, Noriko Kitamura¹, Akio Mori^{1, 3}, Takachika Hiroi¹

¹Pollen Allergy Project, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan, ²Center for Life Science Research, University of Yamanashi, Yamanashi, Japan, ³Clinical Research Center for Allergy and Rheumatology, National Hospital Organization, Sagamihara National Hospital, Kanagawa, Japan

Tu-P2-14

Dichloroacetate, an inhibitor of aerobic glycolysis, ameliorates neutrophilic airway inflammation through suppressing Th17 population and inducing regulatory T cell population

<u>Jaechan Leem</u>^{1, 3}, Sujeong Kim², Han-Ki Park², Hoyul Lee³, Eun Soo Kim², Jae-Han Jeon^{2, 3}, In-Kyu Lee^{2, 3}

¹Department of Immunology, Catholic University of Daegu School of Medicine, Daegu, Korea, Republic of (South), ²Department of Internal Medicine, Kyungpook National University School of Medicine, Daegu, Korea, Republic of (South), ³Leading-edge Research Center for Drug Discovery and Development for Diabetes and Metabolic Disease, Kyungpook National University Hospital, Daegu, Korea, Republic of (South)

Tu-P2-15

IK cytokine alleviates allergic dermatitis-like skin lesions in mice

Sang-Myeong Lee, JeHee Son

Division of Biotechnology, College of Evironmental & Bioresources Science, Chonbuk National University, Iksan-si,, Korea, Republic of (South)

Tu-P2-16

Toll-like receptor 2 ligation of mesenchymal stem cells alleviates asthmatic airway inflammation

Hui Chieh Yu, Bor Luen Chiang

Graduate Institute of Clinical Medicine, National Taiwan University, Taipei City, Taiwan

Tu-P2-17

Studies on the mechanisms of self-renewal and immune regulatory mechanism of SSEA-1+ pulmonary stem/progenitor cells

Chien Chia Liao¹, Bor Luen Chiang^{1, 2}, Chiao Jung Chiu¹

¹Graduate Institute of Immunology, School of Medicine, National Taiwan University, Taipei, Taiwan, ²Graduate Institute of Immunology, College of Medicine, National Taiwan University, Taipei, Taiwan

Tu-P2-18

Influence of environmental tobacco smoke on murine models of allergic nasal inflammation

<u>Tomoe Nishimura</u>¹, Osamu Kaminuma^{1, 2, 3}, Mayumi Saeki¹, Noriko Kitamura¹, Akio Mori², Takachika Hiroi¹

¹Allergy and Immunology Project, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan, ²Clinical Research Center for Allergy and Rheumatology, National Hospital Organization, Kanagawa, Japan, ³Center for Life Science Research, University of Yamanashi, Yamanashi, Japan

Tu-P2-19

Studies on molecular mechanisms and development of a novel stem cell therapeutic strategy to target Atopic dermatitis

Hyun Seung Yoo^{1, 3}, Kwangmin Na^{1, 2}, Myung-Shin Jeon^{1, 2, 3}

¹Translational Research Center Inha University Hospital, Incheon, Korea, Republic of (South), ²IRIMS, Incheon, Korea, Republic of (South), ³Department of Molecular Biomedicine INHA University School of Medicine, Incheon, Korea, Republic of (South)

19:10~21:00 Session : Poster Session 4 "Regulation of cytokine production"

Room: Ishikawa Ongakudō Interchange Hall

Tu-P4-1

IL-15/IL-15R α complex controls the HSV-induced inflammation in a mouse model

<u>Seonghyang Sohn</u>^{1, 2}, S M Shamsul Islam², Bunsoon Choi¹, Juyoung Choi², Eun-So Lee³

¹Department of Microbiology, Ajou University School of medicine, Suwon, Korea, Republic of (South), ²Department of Biomedical Science, Ajou University, Suwon, Korea, Republic of (South), ³Department of Dermatology, Ajou University, Suwon, Korea, Republic of (South)

Tu-P4-2

Spred-2 deficiency exacerbates lipopolysaccharide (LPS)/D-galactosamine (D-GalN) induced acute liver injury

Yang Xu, Teizo Yoshimura, Masayoshi Fujisawa, Toshiaki Ohara, Cuiming Sun,

Akihiro Matsukawa

Department of Pathology and Experimental science, Okayama University, Okayama, Japan

Tu-P4-3

A Novel E3 ligase ZNRF1 regulates Toll-Like Receptor 4 Response

Ting Yu Lai¹, Chih-Yuan Lee^{1, 2}, I-Shing Yu³, Li-Chung Hsu¹

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Tu-P4-4

Transcytosis of Interleukin (IL-)11 and apical redirection of gp130 is mediated by IL-11a-receptor

Jürgen Scheller, Niloufar Monhasery

Institute of Biochemistry and Molecular Biology II, Medical Faculty, Heinrich-Heine University, 40225 Düsseldorf, Germany, Düsseldorf, Germany

Dysfunction of Microglial STAT3 Alleviates Depressive Behavior via Neuron-Microglia Interactions

Sun-Ho Kwon¹, Jeong-Kyu Han², Moonseok Choi¹, Yong-Jin Kwon¹,

Sung Joon Kim², Eun Hee Yi¹, Jae-Cheon Shin³, Ik-Hyun Cho⁴, Byung-Hak Kim¹, Sang Jeong Kim², Sang-Kyu Ye¹

¹Department of Pharmacology, Seoul National University College of Medicine, Seoul, Korea, Republic of (South), ²Department of Physiology, Seoul National University College of Medicine, Seoul, Korea, Republic of (South), ³Pohang Center for Evaluation of Biomaterials, Pohang, Korea, Republic of (South), ⁴Department of Convergence Medical Science, College of Oriental Medicine, Kyung Hee University, Seoul, Korea, Republic of (South)

Tu-P4-6

Lung fibroblasts express miR-19a,19b,20a cluster to suppress transforming growth factor-β-associated fibroblast activation in murine pulmonary fibrosis

Kunihiko Soma^{1, 2}, Shigeyuki Shichino^{1, 2}, Shin-ichi Hashimoto^{1, 2}, Hiroshi I Suzuki³, Satoshi Ueha^{1, 2}, Kouji Matsushima^{1, 2}

¹Department of Molecular Preventive Medicine, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan, ²Core Research for Evolutional Science and Technology (CREST), Advanced Research & Development Programs for Medical Innovation, Tokyo, Japan, ³David H. Koch Institute for Integrative Cancer Research, Massachusetts Institute of Technology, MA, United States

Tu-P4-7

The IFN response in the bat *Pteropus alecto* consists of canonical and noncanonical ISGs with distinct temporal expression patterns

Pamela C De La Cruz-Rivera¹, Mohammed Kanchwala², Hanquan Liang²,

Ashwani Kumar², Linfa Wang³, Chao Xing², John W Schoggins¹

¹Department of Microbiology, UT Southwestern Medical Center, Dallas, United States, ²Department of Bioinformatics, UT Southwestern Medical Center, Dallas, United States, ³Programme in Emerging Infectious Diseases, Duke-NUS Medical School, Singapore, Singapore

Tu-P4-8

Role of TRAF7 in the Regulation of Type I IFN Antiviral Response

Rongtuan Lin, Yiliu Liu, Marie-Line Goulet

Lady Davis Institute-Jewish General Hospital, McGill University, Montreal, Canada

Tu-P4-9

Selected TLR7 agonist and IFN- α cytokine synergistically modulates gene expression of defense responses in microglia cells

Sarder Arifuzzaman¹, Amitabh Das², Kyoung Hwa Jung², Young Gyu Chai^{1, 3}

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Tu-P4-10

Effect of nitric oxide-releasing derivative of indomethacin on *Prevotella intermedia* lipopolysaccharide-induced production of proinflammatory mediators in murine macrophages

Sung-Jo Kim¹, In Soon Choi², Eun-Young Choi², So-Hui Choe², Jin-Yi Hyeon²

¹Department of Periodontology, School of Dentistry, Pusan National University, Gyeongsangnam-do, Korea, Republic of (South), ²Department of Biological Science, College of Medical and Life Sciences, Silla University, Busan, Korea, Republic of (South)

Toll-like Receptor-10 is a novel regulator of immune responses in human plasmacytoid dendritic cells

<u>Praik Deb^{1, 2}</u>, Nicholas James Hess⁴, Sukhwinder Singh^{1, 3}, Richard Tapping^{4, 5}, Patricia Fitzgerald-Bocarsly^{1, 2, 3}

¹Rutgers Biomedical and Health Sciences,, Newark, United States, ²Rutgers School of Graduate Studies, Newark, United States, ³Department of Pathology and Laboratory Medicine, New Jersey Medical School, Newark, United States, ⁴Dept. of Microbiology, University of Illinois, Urbana-Champaign, United States, ⁵College of Medicine, University of Illinois, Urbana-Champaign, United States

Tu-P4-12

Peritoneal mesothelial cell migration and myofibroblast differentiation are dependent on LPA- LPA₁

<u>Norihiko Sakai</u>, Taito Miyake, Koichi Sato, Akihiro Sagara, Shinji Kitajima, Tadashi Toyama, Yasunori Iwata, Miho Shimizu, Kengo Furuichi, Takashi Wada

Division of Nephrology, Kanazawa University, Kanazawa, Japan

Tu-P4-13

A novel terminal uridyltransferase regulates TLR4-driven IL-6 production via modulation of Regnase-1 mRNA stability

Chia-Ching Lin¹, Yi-Ru Shen², Chi-Chih Chang³, Li-Chung Hsu⁴

¹Institute of Molecular Medicine, College of Medicine, National Taiwan University, Taipei, Taiwan, ²Institute of Molecular Medicine, College of Medicine, National Taiwan University, Taipei, Taiwan, ³Institute of Molecular Medicine, College of Medicine, National Taiwan University, Taipei, Taiwan, ⁴Institute of Molecular Medicine, College of Medicine, Taiwan, Taiwan, Taipei, Taiwan, ⁴Institute of Molecular Medicine, College of Medicine, College of Medicine, Taiwan, Taipei, Taiwan, ⁴Institute of Molecular Medicine, College of Medicine, College of Medicine, Taiwan, Taipei, Taiwan, ⁴Institute of Molecular Medicine, College of Medicine, College of Medicine, National Taiwan University, Taipei, Taiwan, ⁴Institute of Molecular Medicine, College of Medicine, National Taiwan University, Taipei, Taiwan, ⁴Institute of Molecular Medicine, College of Medicine, National Taiwan University, Taipei, Taiwan

Tu-P4-14

siRNA with a unique 5-nt motif potently suppresses IFI16-mediated innate immune response to intracellular DNA

Hongyan Sui¹, Xiaojun Hu¹, Brad T. Sherman¹, H. Clifford Lane²,

Tomozumi Imamichi¹

¹Laboratory of Human Retrovirology and Immunoinformatics, Leidos Biochemical Research, Inc., Frederick National Laboratory for Cancer Research, Frederick, United States, ²National Institute of Allergy and Infectious Diseases, NIH, Bethesda, United States

Tu-P4-15

Identification of endogenous nucleic acid as a cause of inflammation and potential therapeutic target of inflammatory diseases

Hideo Negishi¹, Nobuyasu Endo¹, Yuki Nakajima¹, Tatsuaki Nishiyama²,

Junko Nishio¹, Takeshi Doi², Tadatsugu Taniguchi¹

¹Department of Molecular Immunology, Institute of Industrial Science, The University of Tokyo, Tokyo, Japan, ²Toky o?New?Drug?Research?Laboratories Kowa Company, LTD., Tokyo, Japan

Tu-P4-16

The role of Blimp-1 in the differentiation and function of regulatory B cells

Ying-Hsiu Wang^{1, 2}, Dong-Yen Tsai¹, I-Ying Lin¹, Kuo-I Lin¹

¹Genomics Research Center, Academia Sinica, Taipei, Taiwan, ²Graduate Institute of Life Sciences, National Defense Medical Center, Taipei, Taiwan

Tu-P4-<u>17</u>

Advanced glycation end product-3 (AGE-3) inhibits osteoclast differentiation via down-regulation of RANK and up-regulation of IL-10

Kenichi Tanaka, Kaoru Yamagata, Satoshi Kubo, Shingo Nakayamada, Yosuke

Okada, Yoshiya Tanaka

First Department of Internal Medicine, School of Medicine, University of Occupational and Environmental Health, Kitakyushu, Japan

Tu-P4-18

IL-9 regulates recall responses by memory B cells

<u>Shogo Takatsuka</u>^{1, 2}, Hiroyuki Yamada², Hiroshi Saruwatari², Yoshitsugu Miyazaki¹, Yuki Kinjo¹, Daisuke Kitamura²

¹National Institute of Infectious Diseases, Tokyo, Japan, ²Tokyo university of science, Chiba, Japan

Tu-P4-19

Study on the factors that may affect cytokine secretions in cultured kidney cells Bai-Chia Liu, Bi-Fong Lin

Department of Biochemical Science and Technology, College of Life Science, National Taiwan University, Taipei, Taiwan

Tu-P4-20

Characterization of the cytokines secretion by mouse mesangial cell line MES-13 and primary murine tubular epithelial cells

Yu-Ting Chen, Bi-Fong Lin

Department of Biochemical Science and Technology, College of Life Science, National Taiwan University, Taipei, Taiwan

Tu-P4-21

Characterization of IFNL4 promoters from different species

Hao Zhou, Ewa Terczyńska-Dyla, Michelle Møhlenberg, Hans Henrik Gad, Rune Hartmann

Department of Molecular Biology and Genetics, Aarhus University, Aarhus. Denmark., Aarhus, Denmark

Tu-P4-22

Activation of glycogen synthase kinase- 3β regulates cytokine production in TPA/ionomycin-activated human CD4(+) T lymphocytes

Chia-Ling Chen¹, Cheng-Chieh Tsai², Po-Chun Tseng³, Chiou-Feng Lin^{3, 4}

¹Translational Research Center, Taipei Medical University, Taipei, Taiwan, ²Department of Nursing, Chung Hwa University of Medical Technology, Tainan, Taiwan, ³Department of Microbiology and Immunology, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan, ⁴Graduate Institute of Medical Sciences, College of Medicine, Taipei Medical University, Taipei, Taiwan

Tu-P4-23

Cytokine macrophage migration inhibitory factor (MIF) facilitates cisplatininduced acute kidney injury

Cheng-Chieh Tsai¹, Chia-Ling Chen², Po-Chun Tseng³, Chiou-Feng Lin^{3, 4}

¹Department of Nursing, College of Medicine and Life Science, Chung Hwa University of Medical Technology, Tainan, Taiwan, ²Translational Research Center, Taipei Medical University, Taipei, Taiwan, ³Department of Microbiology and Immunology, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan, ⁴Graduate Institute of Medical Sciences, College of Medicine, Taipei Medical University, Taipei, Taiwan

Ebolavirus Protein VP24 Interferes with Innate Immune Responses by Inhibiting Interferon gene expression

Felix B He¹, Krister Melen^{1, 2}, Sari Maljanen¹, Rickard Lundberg¹, Miao Jiang²,

Pamela Österlund², Laura Kakkola¹, <u>Ilkka Julkunen¹</u>

¹Institute of Biomedicine/virology, University of Turku, Turku, Finland, ²Expert Microbiology Unit, National Institute of Health and Welfare, Helsinki, Finland

Tu-P4-25

The Regulation of Type I IFN Induction by The Serine Protease Hepsin

Fu Hsin¹, Shuwha Lin², <u>Helene Liu¹</u>

¹Department of Biochemistry and Molecular Biology, National Taiwan University, Taipei, Taiwan, ²Department of Clinical Laboratory Sciences and Medical Biotechnology, National Taiwan University, Taipei, Taiwan

Tu-P4-26

E74-like factor 3 (ELF3) is synergistically regulated by IL-17A and TNF and controls the production of inflammatory cytokines and matrix metalloproteinases in synovial fibroblasts

<u>Vesa-Petteri Kouri</u>¹, Juri Olkkonen¹, Nitai Peled¹, Mari Ainola¹, Kari Eklund^{1, 2, 3}, Dan Nordstrom^{1, 2}, Jami Mandelin¹

¹University of Helsinki, Helsinki, Finland, ²Helsinki University Hospital, Helsinki, Finland, ³ORTON Orthopaedic Hospital of the Invalid Foundation, Helsinki, Finland

Tu-P4-27

Cell-surface levels of IL-6R and gp130 are differentially controlled by endocytosis and recycling in dependence upon IL-6

Charlotte Margaret Joan Flynn, Tina Daunke, Birte Kespohl, Stefan Rose-John,

Christoph Garbers, Samadhi Aparicio-Siegmund

Institute of Biochemistry Kiel University, Kiel, Germany

Tu-P4-28

Involvement of poly-rC binding proteins in posttranscriptional regulation of Sortilin, the cytokine trafficking mediator

<u>Toshiki Yabe-Wada^{1, 2}</u>, Shintaro Matsuba¹, Kazuya Takeda¹, Akira Nakamura¹, Caroline C Philpott², Nobuyuki Onai¹

¹Kanazawa Medical University, Uchinada, Japan, ²National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, Bethesda, United States

Tu-P4-29

A lipoprotein LprG of *Mycobacterium tuberculosis* generates IL-10-producing tolerogenic plasmacytoid dendritic cells during differentiation

Hongmin Kim, Kee Woong Kwon, Woo Sik Kim, Sung Jae Shin

Department of Microbiology, Institute for Immunology and Immunological Diseases, Brain Korea 21 PLUS Project for Medical Science, Yonsei University College of Medicine, Seoul 120-752, South Korea, Seoul, Korea, Republic of (South)

The quantity of initial FcRγ signaling determines cytokine profile in dendritic cells Miyuki Watanabe^{1, 2}, Sho Yamasaki^{1, 2}

¹Department of Molecular Immunology, Research Institute for Microbial Diseases, Osaka University, Suita, Japan, ²Division of Molecular Immunology, Medical Institute of Bioregulation, Kyushu University, Fukuoka, Japan

Tu-P4-31

Hypoxia up-regulates IL-4/IL-13-induced arginase-1 expression in mouse macrophages

Miki Hiroi

Division of Microbiology and Immunology Departments of Oral Biology and Tissue Engineering Meikai University School of Dentistry, Sakado, Japan

Tu-P4-32

A link between *IRF5* genetic variants and onset of systemic lupus erythematosus

Dan Li, Betsy Barnes, Bharati Matta, Su Song

Northwell Health, Manhasset, United States

Tu-P4-33

Umbilical cord-derived mesenchymal stromal cells attenuate H5N1-associated acute lung injury *in vitro*

<u>Hayley Loy</u>¹, Denise lok Teng Kuok¹, Kenrie Pui Yan Hui¹, John Malcolm Nicholls², Joseph Sriyal Malik Peiris¹, Michael Chi Wai Chan¹

¹Centre of Influenza Research and School of Public Health, LKS Faculty of Medicine, The University of Hong Kong, Pokfulam, Hong Kong, ²Department of Pathology, LKS Faculty of Medicine, The University of Hong Kong, Pokfulam, Hong Kong

Tu-P4-34

The novel ubiquitin ligase complex, NQO1-PDLIM2 inhibits TLR-dependent production of selective cytokines by degrading $I \ltimes B - \zeta$

Akihiro Kimura, Masayuki Kitajima, Harumi Suzuki

Dept. of Immunology and Pathology, Research Institute National Center for Global Health and Medicine, Ichikawashi, Japan

Tu-P4-35

Functional analysis of 2 amino acids deleted transcription factor C/EBP epsilon found in neutrophil-specific granule deficiency

<u>Tadayuki Akagi</u>¹, Taizo Wada², Masahiro Muraoka², Tomoko Toma², Kenzo Kaji³, Kazunaga Agematsu⁴, H. Phillip Koeffler^{5, 6}, Akihiro Yachie², Takashi Yokota¹

¹Department of Stem Cell Biology, School of Medicine, Institute of Medical, Pharmaceutical and Health Sciences, Kanazawa University, Kanazawa, Japan, ²Department of Pediatrics, School of Medicine, Institute of Medical, Pharmaceutical and Health Sciences, Kanazawa University, Kanazawa, Japan, ³Department of Dermatology, Komatsu Municipal Hospital, Komatsu, Japan, ⁴Department of Infection and Host Defense, Shinshu University Graduate School of Medicine, Matsumoto, Japan, ⁵Division of Hematology and Oncology, Cedars-Sinai Medical Center, University of California Los Angeles School of Medicine, Los Angeles, United States, ⁶Cancer Science Institute of Singapore, National University of Singapore, Singapore, Singapore

Loss of function of Baf53a (a subunit of chromatin remodeling complex) results in cell death and Baf53b, as well as Baf53a, rescue the phenotype in mouse ES cells

Bo Zhu, Ueda Ueda, Xiaohong Song, Tadayuki Akagi, Takashi Yokota

Department of Stem Cell Biology, Graduate School of Medical Sciences, Kanazawa University, Ishikawa, Japan, Kanazawa, Japan

Tu-P4-37

The early synthesized CDK5-p35 complexes suppress interleukin-10 production through inhibition of binding partners that regulate MAPK activation in LPS-stimulated macrophages

Daun Jung, Yirang Na, Seung Hyeok Seok

Macrophage Laboratory, Department of Microbiology and Immunology, and Institute of Endemic Disease, Seoul National University College of Medicine, 103 Daehak-ro, Chongno-Gu, Korea, Republic of (South)

19:10~21:00 Session: Poster Session 6 "Cytokines in mucosal immunity"

Room: Ishikawa Ongakudō Interchange Hall

Tu-P6-1

TREM-1-dependent M1 polarization restores intestinal epithelium upon DSSinduced colitis by activating IL-22-producing innate lymphoid cells

Nien-Jung Chen, Fu-Chen Yang

Institute of Microbiology and Immunology School of Life Sciences National Yang-Ming University, Taipei, Taiwan

Tu-P6-2

Investigating the roles of IFN γ and IFN γ -stimulated GTPases during *Legionella* pneumophila replication in alveolar macrophages and monocyte-derived cells

<u>Chao Yang</u>^{1, 2}, Shivani Pasricha², Sze Ying Ong², Andrew Stephen Brown^{1, 2}, Junya Yamagishi³, Chihiro Sugimoto³, Sammy Bedoui², Ian R. van Driel¹, Elizabeth L. Hartland²

¹Department of Biochemistry and Molecular Biology, Bio21 Molecular Science and Biotechnology Institute, University of Melbourne, Vic, Melbourne, Australia, ²Department of Microbiology and Immunology, University of Melbourne at the Peter Doherty Institute for infection and immunity, Vic, Melbourne, Australia, ³Global Institution for Collaborative Research and Education, Hokkaido University,, Hokkaido, Japan

Tu-P6-3

Pulmonary macrophage transplantation therapy in *Csf2ra* gene-deficient mice, a novel clinically relevant model of children with hereditary pulmonary alveolar proteinosis

Takuji Suzuki^{1, 2}, Kenjiro Shima², Paritha Arumugam², Bruce Trapnell²

¹ Jichi Medical University, Shimotsuke-shi, Japan, ²Cincinnati Children's Hospital Medical Center, Cincinnati, United States

Role of IFNs in gastro-intestinal mucosal inflammation

<u>Constance McElrath</u>^{1, 6}, Jian-Da Lin², Vanessa Espinosa^{4, 5}, Jianya Peng^{1, 6}, Raghavendra Sridhar^{1, 6}, Orchi Dutta^{4, 6}, Hsiang-Chi Tseng^{2, 6}, Sergey Smirnov¹, Risman Heidi², Marvin Sandoval⁷, Mark Galan², Amariliz Rivera^{3, 4, 5}, Joan Durbin^{2, 4, 5}, Sergei Kotenko^{1, 4, 5}

¹Department of Microbiology, Biochemistry, and Molecular Genetics, Rutgers University, Newark, United States, ²Department of Pathology and Laboratory Medicine, Rutgers University, Newark, United States, ³Department of Pediatrics, Rutgers University, Newark, United States, ⁴Center for Immunity and Inflammation, Rutgers University, Newark, United States, ⁵University Hospital Cancer Center, New Jersey Medical School, Rutgers Biomedical and Health Sciences, Rutgers University, Newark, United States, ⁶Graduate School of Biomedical Sciences, Rutgers University, Newark, United States, 7Department of Pathology, New York University School of Medicine, New York, United States

Tu-P6-5

Type I IFN signaling induces Th17 cells capable of promoting gut-mucosal CTLs following intramuscular vaccination of an adenovirus vector

Masahisa Hemmi¹, Masashi Tachibana¹, Natsuki Fujimoto¹, Masaki Shoji¹,

Fuminori Sakurai¹, Kouji Kobiyama^{2, 3}, Ken J. Ishii^{2, 3}, Shizuo Akira^{3, 4},

Hiroyuki Mizuquchi^{1, 2, 5}

¹Graduate School of Pharmaceutical Sciences, Osaka University, Osaka, Japan, ²National Institutes of Biomedical Innovation, Health, and Nutrition, Osaka, Japan, ³Immunology Frontier Research Center, Osaka University, Osaka, Japan, ⁴The Research Institute for Microbial Diseases, Osaka University, Osaka, Japan, ⁵Global Center for Medical Engineering and Informatics, Osaka University, Osaka, Japan

Tu-P6-6

Pulmonary administration of Duox2 DNA induces interferon secretion in vivo lung against acute influenza A viral infection

Hyun Jik Kim, Yung Jin Jeon, Ara Jo, Sujin An

Seoul National University College of Medicine, Seoul, Korea, Republic of (South)

Tu-P6-7

Human Plasmacytoid Dendritic Cells bind, become activated by, and respond to Aspergillus fumigatus conidia via surface pattern recognition receptors

<u>Samuel Maldonado</u>¹, Jihong Dai¹, Sukhwinder Singh¹, Shobha Swaminathan², Evelyne Kalyoussef³, Bryan Ciccarelli⁴, Amariliz Rivera⁵, Patricia Fitzgerald-Bocarsly¹

¹Department of Pathology and Laboratory Medicine, Rutgers New Jersey Medical School, Newark, United States, ²Department of Medicine, Rutgers New Jersey Medical School, Newark, United States, ³Department of Otolaryngology, Rutgers New Jersey Medical School, Newark, United States, ⁴Department of Microbiology, Biochemistry, and Molecular Genetics, Rutgers New Jersey Medical School, Newark, United States, ⁶Department of Pediatrics, Rutgers New Jersey Medical School, Newark, United States,

Tu-P6-8

The Microbiome, Staphylococcus epidermidis in Human Nasal Mucosa can enhance IFN-lambda-related immune responses against influenza viral infection

Seong II Kang, Doo Hee Han, Yung Jin Jeon, Sujin An, Ara Jo, Hyun Jik Kim

Seoul National University College of Medicine, Seoul, Korea, Republic of (South)

Blockade of TLR3 protects mice from lethal radiation-induced gastrointestinal syndrome

Naoki Takemura^{1, 2}, Satoshi Uematsu^{1, 2}

¹Department of Mucosal Immunology, School of Medicine, Chiba University, Chiba, Japan, ²2Division of Innate Immune Regulation, International Research and Development Center for Mucosal Vaccines, Institute of Medical Science, The University of Tokyo, Tokyo, Japan

Tu-P6-10

Eosinophil and α-SMA⁺ stromal cell interactions induce a positive feedback loop for fibrosis of the small intestine after abdominal irradiation

Satoshi Uematsu

Department of Mucosal Immunology, School of Medicine, Chiba University,, Chiba, Japan

Tu-P6-11

Toll-like receptor 5-mediated induction of type I interferon is required for mucosal anti-flagellin antibody production

<u>YOU-ME KIM</u>¹, Wondae Kang¹, Areum Park¹, Ji-Won Huh¹, Da-Jung Jung¹, Heung-Kyu Lee²

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Tu-P6-12

IFN- λ enhances IgG1 antibody production after intranasal immunization by a TSLP-dependent mechanism

Peter Staeheli¹, Liang Ye¹, Daniel Schnepf¹, Jan Becker¹, Karolina Ebert²,

Valentina Bernasconi³, Hans A Gad⁴, Yakup Tanriver², Rune Hartmann⁴, Nils Lycke³

¹Institute of Virology, Medical Center University of Freiburg, Freiburg, Germany, ²Institute of Microbiology, Medical Center University of Freiburg, Freiburg, Germany, ³Mucosal Immunobiology and Vaccine Center (MIVAC), Department of Microbiology and Immunology, Institute of Biomedicine, University of Gothenburg, Gothenburg, Sweden, ⁴Department of Microbiology and Genetics, Aarhus University, Aarhus, Denmark

Tu-P6-13

Integrin-linked kinase expression in myeloid cells promotes inflammatory signaling during colitis and enhances colon tumorigenesis.

Afsar U. Ahmed^{1, 2}, Bryan R. G. Williams^{1, 2}

¹The Centre for Cancer Research, The Hudson Institute of Medical Research, Clayton, VIC 3168, Australia, Melbourne, Australia, ²The Department of Molecular and Translational Science, Monash University, Clayton, VIC 3168, Australia, Melbourne, Australia

Tu-P6-14

Mesenchymal causalities in inflammation, immunity and cancer.

George Kollias

President and Director, Biomedical Sciences Research Center 'Alexander Fleming', Professor of Physiology, Medical School, University of Athens. Member, Academy of Athens, Vari, Greece

Gut microbiota as a source of signals that trigger spontaneous ocular autoimmunity

Reiko Horai¹, Ryan Salvador¹, Kikuji Itoh², Yingyos Jittayasothorn¹,

Yoshinori Umesaki³, Katsuko Sudo⁴, Kenya Honda⁵, Rachel Caspi¹

¹Laboratory of Immunology, National Eye Institute, NIH, Bethesda, United States, ²Bio-Technical Center, Japan SLC, Inc., Hamamatsu, Japan, ³Yakult Central Institute, Kunitachi, Japan, ⁴Tokyo Medical University, Shunjuku, Japan, ⁵Keio University School of Medicine, Shunjuku, Japan

Tu-P6-16

Inhibition of IL-17F signaling promotes commensal microbiota-induced colonic Tregs to suppress intestinal inflammation

Ce Tang¹, Shigeru Kakuta², Yoichiro Iwakura¹

¹Center for Animal Disease Models, Research Institute for Biomedical Sciences, Tokyo University of Science, Noda-shi, Chiba, Japan, ²Department of Biomedical Science, Graduate School of Agricultural and Life Sciences, the University of Tokyo, Tokyo, Japan

Tu-P6-17

Type I and type III interferons display different dependency on MAPKs to mount an antiviral state in the human gut

<u>Megan L Stanifer</u>¹, Kalliopi Pervolaraki¹, Dorothee Albrecht², Lynnsey Renn³, Ronald Rabin³, Steeve Boulant^{1, 2}

¹University Hospital Heidelberg, Heidelberg, Germany, ²DKFZ, Heidelberg, Germany, ³USFDA, Bethesda, United States

Tu-P6-18

STAT2 induced Type I Interferon response promotes susceptibility to Salmonella enterica serovar Typhimurium induced inflammation in the gut

<u>Ana M Gamero</u>¹, Sarah A Tursi², Paul Wilson², Kevin P Kotredes¹, Glenn Rapsinski², Nicole Medeiros², Elisabetta Liverani³, Laurie Kilpatrick³, Cagla Tukel²

¹Temple University Department of Medical Genetics & Molecular Biochemistry, Philadelphia, United States, ²Temple University Department of Microbiology and Immunology, Philadelphia, United States, ³Temple University Lung & Inflammation Center, Philadelphia, United States

Tu-P6-19

Norovirus infection induces inflammatory responses to dietary antigens

<u>Scott B Biering</u>¹, Romain Bouziat^{2, 3}, Reinhard Hinterleitner^{2, 3}, Seungmin Hwang^{1, 3, 6}, Bana Jabri^{2, 3, 4, 5, 6}

¹Committee on Microbiology, University of Chicago, Chicago, United States, ²Department of Medicine, University of Chicago, Chicago, United States, ³Committee on Immunology, University of Chicago, Chicago, United States, ⁴University of Chicago Celiac Disease Center, Chicago, United States, ⁵Section of Gastroenterology, Hepatology, and Nutrition, Department of Pediatrics, University of Chicago, Chicago, United States, ⁶Department of Pathology, University of Chicago, Chicago, United States

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Tu-P6-20

Beta-defensins inducing by interleukin-17s in oral epithelial cell

Thatawee Khemwong, Hiroaki Kobayashi, Takeaki Sudo, Chihiro Kano, Yuichi Izumi

Department of Periodontology, Tokyo Medical and Dental University, Tokyo, Japan

Expression of DICAM, a novel cell adhesion molecule, is well correlated with inflammation of colonic epithelial cells

Hoyul Lee¹, Eun Soo Kim², Chang Joo Oh³, Byong-Keol Min⁴, Eun Jung Choi⁴

¹Leading-edge Research Center for Drug Discovery and Development for Diabetes and Metabolic Disease, Kyungpook National University Medical Center, Daegu, Korea, Republic of (South), ²Department of gastroenterology, Kyungpook National University Medical Center, Daegu, Korea, Republic of (South), ³Research Institute of Aging and Metabolism, Kyungpook National University School of Medicine, Daegu, Korea, Republic of (South), ⁴Department of Biomedical Science, Graduate School, Kyungpook National University, Daegu, Republic of Korea; BK21 Plus KNU Biomedical Convergence Program, Kyungpook National University, Daegu, Korea, Republic of (South)

Tu-P6-22

Dual functions of Rap1 are crucial for T-cell homeostasis and prevention of spontaneous colitis

Sayaka Ishihara¹, Miho Mamiyoda¹, Tsuyoshi Sato¹, Akihiko Nishikimi¹,

Makoto Saegusa², Koko Katagiri¹

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Tu-P6-23

Molecular mechanism of anti-pneumococcal immune responses by Dectin-1

Yukiko Akahori^{1, 2}, Rikio Yabe², Yoichiro Iwakura³, Shinobu Saijo²

¹International University of Health and Welfare, Narita, Japan, ²Medical Mycology Research Center, Chiba University, Chiba, Japan, ³Center for Experimental Animal Models, Institute for Biomedical Sciences, Tokyo University of Science, Noda, Japan

Tu-P6-24

CCR6 deficiency impairs IgA production and dysregulates antimicrobial peptide production, altering the intestinal flora

Ya-Lin Lin^{1, 2}, Peng-Peng Ip², Fang Liao²

¹Taiwan International Graduate Program in Molecular Medicine, National Yang-Ming University and Academia Sinica, Taipei, Taiwan, ²Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan

Tu-P6-25

Effector T cell migration from gut immune system

<u>Mizuki UEDA</u>¹, Taiki MORIYA¹, Ryoyo KUSUMOTO^{1, 2}, Yutaka KUSUMOTO¹, Michio TOMURA¹

¹Laboratory of Immunology Faculty of Pharmacy, Osaka Ohtani University, Tondabayashi, Japan, ²Research Fellow of Japan Society for the Promotion of Science, Tokyo, Japan

Tu-P6-26

STING is a negative regulator of innate immune response in *Cryptococcus neoformans* infection

Mutsuki Kobayashi, Rikio Yabe, Maki Wakatsuki, Yukiko Akahori, Shinobu Saijo

Medical Mycology Research Center, Chiba University, Chiba City, Japan

Search for an enhancer of IL-10 production in the intestinal macrophages for new therapy against inflammatory bowel disease

Nonoka Wakabayashi, Shusaku Hayashi, Makoto Kadowaki

Division of Gastrointestinal Pathophysiology, Institute of Natural Medicine, University of Toyama, Toyama, Japan

Tu-P6-28

Intestinal macrophages function polarization by monosaccharides in mice lacking mucin2.

Kseniya Achasova, Ekaterina Litvinova

The Institute of Cytology and Genetics, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia

19:10~21:00 Session : Poster Session 8 "Cytokines and inflammatory factors in host defense"

Room: Ishikawa Ongakudō Interchange Hall

Tu-P8-1

Hypoxia-inducible factor 1α or hypoxia-inducible factor 2α is not required for the development and physiological function of regulatory T cells

Ming-Zong Lai, Tzu-Sheng Hsu, Yen-Lin Lin, Wan-Chen Hsieh

Institute of Molecular Biology Academia Sinica, Taipei, Taiwan

Tu-P8-2

Pulmonary upregulation of HMGB1 signaling following fipronil and endotoxin interaction.

Arif Ahmad Pandit¹, Ravi Kumar Gandham², Ramneek Verma¹, Ram Saran Sethi¹

¹School of Animal Biotechnology, Guru Angad Dev Veterinary and Animal Science University, Ludhiana, India, Ludhiana, India, ²Division of Veterinary Biotechnology, Indian Veterinary Research Institute, Bareilly, UP, India, Bareilly, India

Tu-P8-3

Regulation of hepatic fibrogenic response by Suppressor of Cytokine Signaling 1 (SOCS1)

Rajani Kandhi, Euphrasie Kawila-Mafanda, <u>Sheela Ramanathan</u>, Subburaj Ilangumaran

Immunology Division, Department of Pediatrics, Faculty of Medicine and Health Sciences, University of Sherbrooke, Sherbrooke, Canada

Tu-P8-4

Mincle-independent anti-neuroinflammatory action of mycobacterial cord factor analogue trehalose-6, 6'-dibehenate in microglia.

Wan-Wan Lin, Mahendravarman Mohanraj, Ponarulselvam Sekar

Department of Pharmacology, College of Medicine, National Taiwan University, Taipei, Taiwan

Driving innate immune activation via crosstalk of antiviral and inflammatory signaling of interleukin-1 β and IRF3

Lauren Danielle Aarreberg^{1, 2}, Courtney Wilkins^{1, 2}, Michael Gale, Jr.^{1, 2}

¹Department of Immunology, University of Washington, Seattle, United States, ²Center for Innate Immunity & Immune Disease, University of Washington, Seattle, United States

Tu-P8-6

Regulation of the innate immune response to *Staphylococcus aureus* in the airway by type III interferons

Silvia Pires, Dane Parker

Columbia University, New York, United States

Tu-P8-7

FAS-associated factor-1 (FAF1) Modulates Phagocytic NADPH Oxidase Activation in Response to Bacterial Infection

Tae-Hwan Kim, Hyun-Cheol Lee, Jong-Soo Lee

College of Veterinary Medicine, Chungnam National University, Daejeon, Korea, Republic of (South)

Tu-P8-8

Critical role of CD8⁺ T cells in immune reconstitution inflammatory syndrome (IRIS) model by nontuberculous mycobacterium infection.

Masahiro Kitabatake¹, Mitsuru Konishi², Yoko Matsumura^{1, 3},

Noriko Ouji-Sageshima¹, Natsuko Imakita¹, Koichi Tomoda⁴, Toshihiro Ito¹

¹Department of Immunology, Nara Medical University, Nara, Japan, ²Center for Health Control, Nara Medical University, Nara, Japan, ³Department of Health and Nutrition, Faculty of Health Science, Kio University, Nara, Japan, ⁴Second Department of Internal Medicine, Nara Medical University, Nara, Japan

Tu-P8-9

Dysbiosis-induced IL-33 contributes to impaired antiviral immunity in the female genital mucosa

Ji Eun Oh, <u>Heung Kyu Lee</u>

Graduate School of Medical Science and Engineering, Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea, Republic of (South)

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Tu-P8-10

Chemotaxis of CCL4 on monocytes and neutrophils *in vitro* and recruitment of macrophages and CD8⁺ T cells in the intestinal mucosa: effects on Salmonella Typhimurium control

Rafael A Casarin Penha Filho, Adriana M Almeida, Hélio Jose Monstassier,

Angelo Berchieri Jr

School of Agricultural and Veterinary Sciences, São Paulo State University (UNESP), Jaboticabal Campus, SP, Brazil, 14884-900, Jaboticabal, Brazil

Tu-P8-11

Targeting the host cytokine response to treat virulent intracellular pathogens

Riccardo D'Elia¹, Joshua Casulli², Tracy Hussell², Simon Vautier², Mark Travis^{2, 3}

¹Defence Science and Technology Laboratory, Salisbury, United Kingdom, ²Manchester Collaborative Centre for Inflammation Research (MCCIR),, Manchester, United Kingdom, ³Wellcome Centre for Cell-Matrix Research, Manchester, United Kingdom

Skewing the population balance between lymphoid and myeloid cells by osteopontin isoforms

<u>Masashi Kanayama</u>^{1, 5}, Shengjie Xu¹, Keiko Danzaki¹, Jason R. Gibson^{2, 3}, Makoto Inoue¹, Simon G. Gregory^{2, 4}, Mari L. Shinohara^{1, 4}

¹Department of Immunology, Duke University School of Medicine, Durham, United States, ²Duke Molecular Physiology Institute, Duke University School of Medicine, Durham, United States, ³Department of Medicine, Duke University School of Medicine, Durham, United States, ⁴Department of Molecular Genetics and Microbiology, Duke University School of Medicine, Durham, United States, ⁵Current Address: Department of Biodefense Research, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan

Tu-P8-13

Anti-miR-301a; a double-edged sword in fighting Japanese encephalitis virus

Anirban Basu, Bibhabasu Hazra

National Brain Research Center, Manesar, India

Tu-P8-14

Targeting the NLRP3 inflammasome is a viable option for the treatment of pathogenic influenza virus infections

Sarah Rosli, Anita Pinar, Ashley Mansell, Michelle Tate

Hudson Institute of Medical Research, Melbourne, Australia

Tu-P8-15

Quantitative multiplex cytokine assays: issues and solutions

<u>Shaoquan Ji</u>

BioLegend, Inc., San Diego, United States

Tu-P8-16

Interferon epsilon in the regulation of mucosal innate immune responses in the female reproductive tract

Niamh E Mangan^{1, 2}, Eveline De Geus^{1, 2}, Lisa Mielke³, Jodee Gould^{1, 2},

Helen Cumming^{1, 2}, Isaac Woodhouse^{1, 2}, Linden J Gearing^{1, 2}, Antony Matthews^{1, 2},

Nicole deWeerd^{1, 2}, Gabrielle Belz³, Philip Hansbro⁴, Paul Hertzog^{1, 2}

¹Centre for Innate Immunity and Infectious Diseases, Hudson Institute of Medical Research, Clayton, Australia, ²Department of Molecular and Translational Sciences, Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne, Australia, ³Molecular Immunology Division, Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia, ⁴Hunter Medical Research Institute, School of Biomedical Sciences and Pharmacy, University of Newcastle, Newcastle, Australia

Tu-P8-17

Prostaglandin E2 released by dying cells functions as an inhibitory DAMP

Sho Hangai^{1, 2}, Hideyuki Yanai^{1, 2}, Tadatsugu Taniguchi^{1, 2}

¹Department of Molecular Immunology, Institute of Industrial Science, The University of Tokyo, Tokyo, Japan, ²Max Planck-The University of Tokyo Center for Integrative Inflammology, Tokyo, Japan

Tu-P8-18

Predictive value of tumor necrosis factor- α and interleukin-1 β on post-stroke depression

Jae-Min KIM

Departments of Psychiatry, Chonnam National University Medical School, Gwangju, Korea, Republic of (South)

PIR-B repressed IL-6 secretion from mesenchymal stem cells regulating the immunoglobulin production of plasma cells.

Atsuko Kayaba, Ari Itoh-Nakadai, Masanori Inui, Toshiyuki Takai

Department of Experimental Immunology, Institute of Development, Aging and Cancer, Tohoku University, Sendai, Japan

Tu-P8-20

Tumor Necrosis Factor alpha-producing Regulatory T Cells in Patients With Acute Hepatitis A

<u>Min Kyung Jung</u>¹, Yoon Seok Choi^{1, 2}, Su-Hyung Park³, Jun Yong Park⁴, Eui-Cheol Shin¹

¹1Laboratory of Immunology and Infectious Diseases, Graduate School of Medical Science and Engineering, KAIST, Daejeon, Korea, Republic of (South), ²Department of Internal Medicine, Chungnam National University College of Medicine, Daejeon, Korea, Republic of (South), ³Laboratory of Translational Immunology and Vaccinology, Graduate School of Medical Science and Engineering, KAIST, Daejeon, Republic of Korea, Daejeon, Korea, Republic of (South), ⁴Department of Internal Medicine, Yonsei University College of Medicine, Seoul, Korea, Republic of (South)

Tu-P8-21

Elevated Th17 and M1 cytokine pathways associated with chronic *Candida albicans* infection may promote mouse oral cancer development

Ko-Jiunn Liu^{1, 2, 3}, Wen-Chan Yang¹, Pei-Yi Chu Chu^{4, 5}

¹National Institute of Cancer Research, National Health Research Institutes, Tainan, Taiwan, ²Institute of Clinical Pharmacy and Pharmaceutical Sciences, National Cheng Kung University, Tainan, Taiwan, ³School of Medical Laboratory Science and Biotechnology, Taipei Medical University, Taipei, Taiwan, ⁴Department of Pathology, Show Chwan Memorial Hospital, Changhua City, Taiwan, ⁵School of Medicine, Fu Jen Catholic University, New Taipei City, Taiwan

Tu-P8-22

Regulatory T cells induced by B cells inhibited the maturation of dendritic cells via cytotoxic T-lymphocyte-associated protein 4 pathwayRegulatory T cells induced by B cells inhibited the maturation of dendritic cells via cytotoxic T-lymphocyte-associated protein 4 pathway

Yi-Lien Chen¹, Bor-Luen Chiang^{1, 2}

¹Graduate Institute of Clinical Medicine, School of Medicine, National Taiwan University, Taipei, Taiwan, ²Department of Medical Research, National Taiwan University Hospital, Taipei, Taiwan

Tu-P8-23

Acceleration of CD25+Foxp3+ regulatory T cell development by amodiaquine through activation of nuclear receptor 4A

Hee Yeon Won, Eun Sook Hwang

Ewha Womans University, Seoul, Korea, Republic of (South)

Tu-P8-24

CRIF1 controls autoimmune arthritis via regulation of Th17 cells

<u>Jin-Sil Park</u>¹, Si-Young Choi¹, Sung-Min Kim¹, Sun-Hee Hwang¹, Mi-La Cho¹, Sung-Hwan Park^{1, 2}

¹1The Rheumatism Research Center, Catholic Research Institute of Medical Science, The Catholic University of Korea, Seocho-gu, Korea, Republic of (South), ²2Divison of Rheumatology, Department of Internal Medicine, The Catholic University of Korea, Seocho-gu, Korea, Republic of (South)

IL-21 augments systemic anaphylaxis through the duodenum-migrated neutrophils that express eotaxin receptor.

Yuji Takeda¹, Tomoyuki Kato², Nobuhito Nemoto^{1, 3}, Akemi Araki¹,

Md. Yeashin Gazi¹, Hidetoshi Nara¹, Hironobu Asao¹

¹Department of Immunology, Yamagata University Faculty of Medicine, Yamagata, Japan, ²Department of Urology, Yamagata University Faculty of Medicine., Yamagata, Japan, ³Department of Orthopedics, Yamagata University Faculty of Medicine., Yamagata, Japan

Tu-P8-26

The role of Th17 cells and macrophages in intestinal nematode infection.

Masaya Takamoto¹, Mariko Yamanoi², Hisanori Matoba², Jun Nakayama²

¹Department of Infection and Host Defense, Shinshu University School of Medicine, Matsumoto, Japan, ²Department of Molecular Pathology, Shinshu University School of Medicine, Matsumoto, Japan

19:10~21:00 Session : Poster Session 10 "Cytokines in autoimmune diseases"

Room: Ishikawa Ongakudō Interchange Hall

Tu-P10-1

TCR analysis of infiltrated CD4⁺ T cells in the salivary glands of Sjögren's syndrome mice model

<u>Mana lizuka</u>¹, Satoru Takahashi^{2, 3}, Isao Matsumoto⁴, Takayuki Sumida⁴, Akihiko Yoshimura¹

¹Department of Microbiology and Immunology, Keio University School of Medicine, Shinjuku-ku, Japan, ²Department of Anatomy and Embryology, Faculty of Medicine, University of Tsukuba, Tsukuba, Japan, ³Laboratory Animal Resource Center, University of Tsukuba, Tsukuba, Japan, ⁴Department of Internal Medicine, Faculty of Medicine, University of Tsukuba, Tsukuba, Japan

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Tu-P10-2

Secretory leukocyte peptidase inhibitor (SLPI) is highly expressed in long-lived plasma cells

Ari Itoh-Nakadai, Atsuko Kayaba, Toshiyuki Takai

Department of Experimental Immunology, Institute of Development, Aging and Cancer, Tohoku University, Miyagi, Japan

Tu-P10-3

Helminth products prevent autoimmunity by targeting IL-1

Shauna Quinn, Kingston HG Mills

Immune Regulation Research Group, Trinity Biomedical Sciences Institute, Trinity College Dublin,, Dublin, Ireland

Tu-P10-4

Expression of Ly6C/6G defines a novel subset of medullary thymic epithelial cells

<u>Junko Morimoto</u>¹, Nishikawa Yumiko², Kazuyoshi Hosomichi³, Hitoshi Nishijima¹, Mitsuru Matsumoto¹

¹Division of Molecular Immunology, Institute for Enzyme Research, Tokushima University, Tokushima, Japan, ²Division of Molecular Medicine, Institute for Genome Research, Tokushima University, Tokushima, Japan, ³Department of Bioinformatics and Genomics, Graduate School of Medical Sciences, Kanazawa University, Ishikawa, Japan

Tu-P10-5

Co-expression of receptors for TNF- α is altered on T-regulatory cells in rheumatoid arthritis

Alina Alshevskaya¹, Julia Lopatnikova¹, Irina Belomestnova², Oksana Chumasova¹, Nadezhda Shkaruba¹, Aleksey Sizikov¹, Sergey Sennikov¹

¹Federal State Budgetary Scientific Institution "Research Institute of Fundamental and Clinical Immunology", Novosibirsk, Russia, ²Novosibirsk State Medical University, Novosibirsk, Russia

Tu-P10-6

Delay and lower affinity antibody responses to seasonal trivalent influenza vaccination in diabetes mellitus related to reduced IFN- α gene expression and anti-diabetic treatment

Wipawee Saenwongsa^{1, 2}, Arnone Nithichanon¹, Malinee Chittaganpitch³,

Kampaew Buayai³, Chidchamai Kewcharoenwong¹, Boonyarat Thumrongwilainet⁴,

Sarayuth Uttamangkapong², Manabu Ato⁵, Ganjana Lertmemongkolchai¹

¹Centre for Research and Development of Medical Diagnostic Laboratories, Faculty of Associated Medical Science, Khon Kaen University, Khon Kaen, Thailand, ²Disease Prevention and Control Region 10th, Ubonratchathani, Ministry of Public Health, Thailand, Ubonratchathani, Thailand, ³National Influenza Centre, Department of Medical Science, Ministry of Public Health, Thailand, Bangkok, Thailand, ⁴Yanglum Health Promotion Hospital, Ubonratchathani, Thailand, Ubonratchathani, Thailand, ⁵National Institute of Infectious Diseases, Tokyo, Japan., Tokyo, Japan

Tu-P10-7

Rituximab-treatment reduces CD8⁺ T cell expansion after seasonal influenza vaccination

<u>Theresa Frenz</u>¹, Torsten Witte², Katharina Borst¹, Lea A. Vaas³, Murielle Verboom⁴, Michael Hallensleben⁴, Mario Köster⁵, Carlos A. Guzm *á* n⁶, Gerd Sutter⁷, Reinhold E. Schmidt², Ulrich Kalinke¹

¹Institute for Experimental Infection Research, TWINCORE, Centre for Experimental and Clinical Infection Research, Hannover, Germany, ²Clinic for Immunology and Rheumatology, Hannover Medical School, Hannover, Germany, ³Fraunhofer-IME SP, Hamburg, Germany, ⁴Institute for Transfusion Medicine, Hannover Medical School, Hannover, Germany, ⁵Research Group Model Systems for Infection and Immunity, Helmholtz Centre for Infection Research, Brunswick, Germany, ⁶Department of Vaccinology and Applied Microbiology, Helmholtz Centre for Infection Research, Brunswick, Germany, ⁷Institute for Infectious Diseases and Zoonoses, Ludwig-Maximilians University, Munich, Germany

Tu-P10-8

Microglia in the CNS exhibit distinct phenotypes in the transgenic murine models of interleukin-6- versus interferon- α -mediated cytokinopathy

lain L Campbell¹, Phillip K West¹, Oleg Butovsky²

¹University of Sydney, Sydney, Australia, ²Harvard Medical School, Harvard, United States

Tu-P10-9

CNS-Derived APRIL Triggers An IL-10-Mediated Anti-Inflammatory Response From Astrocytes In Multiple Sclerosis

laurie baert¹, natalia popa², jose boucraut², nathalie sturm³, jean boutonnat³,

olivier casez³, romain vives⁴, hugues lortat-jacob⁴, hans lassmann⁵, bertrand huard¹

¹Institute for Advanced Biosciences, La Tronche, France, ²University Mediterranee, Marseille, France, ³University Hospital, Grenoble, France, ⁴Institute of Structural Biology, Grenoble, France, ⁵Center for Brain Research, Vienna, Austria

Tu-P10-10

Identification of new myeloid-derived fibrosis-inducing cells accounting for cardio-renal syndrome

<u>Akihiro Sagara</u>¹, Norihiko Sakai¹, Yasunori Iwata¹, Kengo Furuichi¹, Yasuhiko Yamamoto², Takashi Wada^{1, 3}

¹Division of Nephrology, Kanazawa University Hospital, Kanazawa, Japan, ²Department of Biochemistry and Molecular Vascular Biology, Kanazawa University Graduate School of Medical Sciences, Kanazawa, Japan, ³Department of Nephrology and Laboratory Medicine, Kanazawa University, Kanazawa, Japan

Tu-P10-11

Corroboration of osteoarthritis in diabetic mice model

Navneet Kumar Dubey^{1, 2}, Win-Ping Deng^{2, 3}, Sung-Hsun Yu², Wei-Hong Chen²

¹Graduate Institute of Biomedical Materials and Tissue Engineering, College of Biomedical Engineering, Taipei Medical University, Taiwan, Taipei, Taiwan, ²Stem Cell Research Center, Taipei Medical University, Taiwan, Taipei, Taiwan, ³College of Oral Medicine, Taipei Medical University, Taipei, Taiwan

Tu-P10-12

A novel peptide inhibitor targeting interferon regulatory factor 5 (IRF5) ameliorates lupus disease severity in NZB/W F1 mice

Su Song¹, Saurav De^{1, 2}, Dan Li¹, Betsy Barnes^{1, 2}

¹The Feinstein Institute for Medical Research, Northwell Health, Manhasset, United States, ²2Rutgers Biomedical and Health Sciences, New Jersey Medical School-Cancer Center, Newark, United States

Tu-P10-13

Collagen-induced arthritis, an animal model of rheumatoid arthritis, is ameliorated by injection of a substance X

Tomonori KAIFU¹, Soo-Hyun Chung², Yoichiro Iwakura²

¹Department of Immunology, Tohoku Medical and Pharmaceutical University, Miyagi, Japan, ²Center for Animal Disease Models, Research Institution for Biological Sciences, Tokyo University of Science, Chiba, Japan

Tu-P10-14

Inflammatory and anti - inflammatory profile of vitamin D receptor-deficient BV-2 microglial cells

<u>Yevgeny Aster Tubola Dulla</u>^{1, 2}, Yuki Kurauchi¹, Akinori Hisatsune^{1, 2}, Takahiro Seki¹, Hiroshi Katsuki¹

¹Department of Chemico-pharmacological Sciences, Graduate School of Pharmaceutical Sciences, Kumamoto University, Kumamoto City, Japan, ²HIGO Program, Program for Leading Graduate Schools, Kumamoto University, Kumamoto City, Japan

Tu-P10-15

Blimp - 1 deficiency exacerbates experimental autoimmune encephalomyelitis in mice by impairing the IL-10 production of Treg cells

Ming-Hong Lin¹, Huey-Kang Sytwu^{2, 3}

¹Kaohsiung Medical University, College of Medicine, Institute of Medicine, Department of Microbiology and Immunology, Kaohsiung City, Taiwan, ²National Defense Medical Center, Department and Graduate Institute of Microbiology and Immunology, Taipei City, Taiwan, ³National Defense Medical Center, Graduate Institute of Life Sciences, Taipei City, Taiwan
Tu-P10-16

Human mesenchymal stem/stromal cells express CCL2 (MCP-1) on ischemic hippocampal homogenate exposure

Hirokazu Ohtaki¹, Jun Watanabe², Kazumichi Yagura¹, Kazuyuki Miyamoto³,

Yoichiro Iwakura⁴, Kenji Dohi³, Kazuho Honda¹

¹Department of Anatomy, Showa University School of Medicine, Tokyo, Japan, ²Center for Biotechnology, Showa University, Tokyo, Japan, ³Department of Emergency and Critical Care Medicine, Showa University School of Medicine, Tokyo, Japan, ⁴4. Division of Experimental Animal Immunology, Center for Animal Disease Models, Research Institute for Biomedical Sciences, Tokyo University of Science, Chiba, Japan

Tu-P10-17

Expression patterns and distributions of chemokines and their receptors after spinal cord injury (SCI) in mice

Kazumichi Yagura^{1, 2}, <u>Hirokazu Ohtaki</u>¹, Tomomi Tsumuraya², Atsushi Sato²,

Jun Watanabe³, Yutaka Hiraizumi⁴, Kazuho Honda¹

¹Department of Anatomy, Showa University School of Medicine, Tokyo, Japan, ²Department of Orthopedic Surgery, Showa University Fujigaoka Hospital, Yokohama, Japan, ³Center for Biotechnology, Showa University School of Medicine, Tokyo, Japan, ⁴Department of Orthopedic Surgery, Showa University School of Medicine, Tokyo, Japan

19:10~21:00 Session: Poster Session 12 "Helper T cell differentiation"

Room: Ishikawa Ongakudō Interchange Hall

Tu-P12-1

TET2 and TET3 regulate helper T cell differentiation in the periphery.

Hiroko Nakatsukasa, Akihiko Yoshimura

Keio University School of Medicine, Tokyo, Japan

Tu-P12-2

Regulation of Foxp3 stability through modulation of TET expression and activity by hypoxia and vitamin C.

Kazue Someya, Akihiko Yoshimura

Department of Microbiology and Immunology, Keio University School of Medicine, Tokyo, Japan

Tu-P12-3

Vitamin C stabilizes Foxp3 expression in induced Treg (iTreg) cells and ameliorates acute graft versus host disease in mice

Hidenori Kasahara, Akihiko Yoshimura

Division of Hematology, Department of Medicine Keio University School of Medicine, Tokyo, Japan

Tu-P12-4

The role of SOCS1 in regulatory T cells to maintain functional stability under inflammatory conditions

Reiko Takahashi^{1, 2}, Tomoyuki Yamaguchi¹, Hiroko Nakatsukasa²,

Akihiko Yoshimura²

¹Department of Immunology, Research Institute, Nozaki Tokushukai, Daitou, Japan, ²Department of Microbiology and Immunology, Keio University School of Medicine, Shinjuku, Japan

Tu-P12-5

PI3K-Akt pathway enhances Tr1 differentiation induced by IL-27

Shigenori Nagai¹, Nadya Niken Adiba¹, Hiroyuki Tezuka², Toshiaki Ohteki³, Satoshi Matsuda⁴, Miyuki Azuma¹

¹Department of Molecular Immunology, Tokyo Medical and Dental University, Tokyo, Japan, ²Life Science Tokyo Advanced Research Center, School of Pharmacy and Pharmaceutical Sciences, Hoshi University, Tokyo, Japan, ³Department of Biodefense, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan, ⁴Department of Cell Signaling, Institute of Biomedical Science, Kansai Medical University, Osaka, Japan

Tu-P12-6

CXCR5 transduction endows T follicular regulatory cell-like features in Treg cells

BYUNG-SEOK KIM¹, YOUNG UK KIM², YEONSEOK CHUNG¹

¹Laboratory of Immune Regulation, Research Institute of Pharmaceutical Science, College of Pharmacy, Seoul National University, SEOUL, Korea, Republic of (South), ²University of Texas Health Science Center at Houston, HOUSTON, United States

Tu-P12-7

Follicular regulatory helper T cells control the response of regulatory B cells to a high-cholesterol diet.

Karim J. Brandt¹, Fabienne Burger¹, Rodrigo Fraga-Silva², François Mach¹

¹Division of Cardiology, Foundation for Medical Researches, Department of Internal Medicine, University of Geneva, Geneva, Switzerland, ²Institute of Bioengineering, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, Lausanne, Switzerland

Tu-P12-8

Virus-like particle (VLP) mediated Tfh differentiation and antibody responses

<u>YOUN SOO CHOI^{1, 2, 4}</u>, Yun-Hui Jeon¹, Yoo-Rha Kang¹, Vladimir Temchura³, Klaus Uberla³, Shane Crotty⁴

¹Department of Biomedical Sciences, Seoul National University College of Medicine, Seoul, Korea, Republic of (South), ²Department of Medicine, Seoul National University College of Medicine, Seoul, Korea, Republic of (South), ³Institute of Virology, University of Erlangen, Erlangen, Germany, ⁴4Division of Vaccine Discovery, La Jolla Institute for Allergy and Immunology, La Jolla, United States

Tu-P12-9

DUSP6 regulates follicular helper T cell differentiation and T cell metabolism via distinct pathways

Ming-Yu Chen, Wei-Chan Hsu, Yu-Wen Su

Immunology Research Center, National Health Research Institutes, Zhunan, Miaoli, Taiwan

Tu-P12-10

IFN-γ producing TH cells and IL-6 signal dependent anti-viral IgA response in lung

Kosuke Miyauchi¹, Masato Kubo^{1, 2}

¹RIKEN Center for Integrative Medical Sciences (IMS), RIKEN Yokohama Institute, Yokohama, Japan, ²Division of Molecular Pathology, Research Institute for Biomedical Science, Tokyo University of Science, Noda, Japan

Tu-P12-11

Innovative prime-boost vaccine method strongly induces both systemic and mucosal immunity

Kosuke Fujimoto^{1, 2}, Naoki Takemura^{1, 2}, Satoshi Uematsu^{1, 2}

¹Department of Mucosal Immunology, School of Medicine, Chiba University, Chiba, Japan, ²Division of Innate Immune Regulation, International Research and Development Center for Mucosal Vaccines, Institute of Medical Science, Tokyo University, Tokyo, Japan

Tu-P12-12

Analysis of signaling pathways underlying the immunoenhancing effects of a new RNA-based adjuvant

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Tu-P12-13

Analysis of multifunctionality and metabolism of peripheral blood CD8⁺ T cells in gastric cancer patients

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Tu-P12-14

Amphiregulin and Inducible Nitric Oxide Synthase Non-redundantly Regulate Butyrate-Induced Enhanced Immunomodulation of Adipose-Derived Stem Cells

Wan-Tseng Hsu¹, <u>Tien-Hsuan Chen²</u>, Bor-Luen Chiang^{2, 3}

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Tu-P12-15

IL-17A contributes to the decrease of IFN- γ /IL-4 ratio and the persistence of Entamoeba histolytica during intestinal amebiasis

<u>Shinjiro Hamano</u>^{1, 2, 9}, Sharmina Deloer^{1, 2, 9}, Risa Nakamura^{1, 2, 9}, Mihoko Kikuchi^{3, 9}, Taeko Moriyasu^{1, 2, 9}, Yombo Dan Justin Kalenda^{1, 4, 9}, Eman Sayed Mohammed^{1, 5, 9}, Masachika Senba^{6, 9}, Yoichiro Iwakura⁷, Hiroki Yoshida⁸

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	Tu-P12-16Caryophyllene oxide attenuates local and systemic T cell-mediated immune responses in ovalbumin-sensitized BALB/c mouse modelsYin Hua Cheng, Ying Chi Lin, Chun Wei Tung, Chia Chi WangKaohsiung Medical University, Kaohsiung, Taiwan			
	Tu-P12-17 TCTP-mediated translational control plays a critical role in T cell proliferation and differentiation <u>Hsin-Fang Yang-Yen</u> ¹ , Kuang-Hung Lin ¹ , Yun-Jung Chiang ² , Po-Tsang Lee ¹ , Jeffrey Jong-Young Yen ² , Kuan-Ming Huang ¹ , Li-Ying Chen ² , Nan-Shih Liao1, Fang Liao ² ¹ Institute of Molecular Biology, Academia Sinica, Taipei, Taiwan, ² Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan			
	Tu-P12-18 Altered blood cytokines and CD4 T cells in patients with obstructive sleep apnea Elias Anthony Said Department of Microbiology and Immunology, College of Medicine and Health Sciences, Sultan Qaboos University, Muscat, Oman			
19:10~21:00	Session : Poster Session 14 "Cytokines in cancer development and antitumor immune therapy"			
	Tu-P14-1 Identification of driver proteins for accelerating immune system recovery Tania Dubovik, Elina Starosvetsky, Shai Shen-Orr, Mayan Levy, Karen Regev Berman Rappaport Institute of Medical Research, Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel			
	Tu-P14-2 Context-dependent diverse roles of CCR5-mediated signals in chronic myeloid leukemia (CML) pathogenesis Tomohisa Baba, Naofumi Mukaida, Yamato Tanabe Division of Molecular Bioreguration, Cancer Research Institute, Kanazawa University, Kanazawa-shi, Japan			
	Tu-P14-3 Lentivirus mediated RNA interference of EMMPRIN (CD147) gene inhibits the proliferation, matrigel invasion and tumor formation of breast cancer cells Xiaoqin Yang, Jing Yang Department of Breast Surgery, West China Hospital, Sichuan University. China, Chengdu, China			

Interleukin-2 inhibits the differentiation of follicular cytotoxic CD8+ T cells during chronic viral infection

Yaping Chen^{1, 2}, Di Yu^{3, 4}, Yew Ann Leong¹, Yunbo Wei⁴, Hongsheng Ong³, Hao Wang³

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Tu-P14-5

Characterization of a novel subset of tissue-resident NKp46pos Vd1 intestinal intraepithelial lymphocytes playing a key role in gut immune homeostasis and in the physiopathology of colon-cancer.

Domenico Mavilio^{1, 6}, Joanna Mikulak^{1, 2}, Ferdinando Oriolo¹, Alessandra Roberto¹,

Elena Bruni¹, Paolo Tentorio¹, Federico Colombo³, Michele Carvello⁴,

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Tu-P14-6

NOD1 triggers epithelial intrinsic processing of pro-interleukin-18 to protect the gastric mucosa from pre-cancerous changes induced by chronic *Helicobacter pylori* infection

Le Son Tran¹, Hassan Chaudhry¹, Kimberley D'costa¹, Amanda De Paoli¹,

Julia Como¹, Jennifer Dowling¹, Jonathan Ferrand¹, Ashley Mansell¹,

Ben A. Croker², Ueli Nachbur², Seth L. Masters³, Richard L. Ferrero¹

¹Hudson Institute of Medical Research, Monash University, Melbourne, Australia, ²Boston Children's Hospital, Harvard Medical School, Boston, MA, United States, ³The Walter and Eliza Hall Institute, Melbourne, Australia

Tu-P14-7

MicroRNAs as modulators of cytokine responses

Iris Behrmann¹, Florence Servais¹, Mélanie Kirchmeyer¹, Petr Nazarov²,

Matthias Glanemann³, Frank Lammert⁴, Claude Haan¹, Stephanie Kreis¹

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Tu-P14-8

Adult T cell leukemia (ATL) cell-produced brain derived neurotrophic factor (BDNF) induces regulatory T cells and attenuates immune responses.

Yasuhiro Yoshida¹, Yuan Song¹, Duo Wang¹, Tsukasa Nakanishi^{1, 2}, Junichi Tsukada²

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Downregulation of type I interferon receptor within tumors establishes a localized immune privileged niche and attenuates anti-cancer immune therapies

Serge Y. Fuchs

University of Pennsylvania, Philadelphia, United States

Tu-P14-10

A novel endoplasmic reticulum dependent IFN-driven signal transduction pathway is critical for the suppression of tumor growth

Dhan V Kalvakolanu

Greenebaum comprehensive cancer center, Department of Microbiology & Immunology, University of Maryland School of Medicine, Baltimore, United States

Tu-P14-11

Treatment with heterodimeric IL-15 promotes effector T cell infiltration into several tumor types

<u>Cristina Bergamaschi</u>¹, Konstantinos Dimas², Bethany Nagy^{1, 2}, Shawn M. Jensen³, Bernard A. Fox³, Barbara K. Felber¹, George N. Pavlakis²

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Tu-P14-12

Exosomal NAP1 derived from oral cancer cells enhances the cytotoxicities of NK cells

Wantao Chen^{1, 2}, Yingnan Wang^{1, 2}, Jianjun Zhang^{1, 2}, Xing Qin^{1, 2}

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Tu-P14-14

Targeting the IL-7R pathway in leukemia

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Tu-P14-15

In-vitro production of VEGF from bone marrow separated CD38+ and CD38cells in multiple myeloma patients

Vladimir Jurisic¹, Katarina Mirjacic-Martinovic², Ana Radovanovic²,

Tatjana Srdic-Rajic², Olivera Markovic³, Milica Radojkovic⁴, Gordana Konjevic²

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Loss of p53 unleashes STAT2 to acquire oncogenic activity to promote migration and invasion of colon tumor cells

<u>Ana Gamero</u>, Kevin P Kotredes, Sruthi Gohimukkula, Aliza Abezis, Alexandra Afanassiev

Temple University Department of Medical Genetics & Molecular Biochemistry, Philadelphia, United States

Tu-P14-17

Targeting the BAFF receptor TACI in Chronic Lymphocyte Leukemia

Beatriz Garcillan¹, William Figgett¹, Saulep-Easton Damien², Carlo Croce³, Constantine Tam⁴, Fabienne Mackay¹

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Tu-P14-18

5-fluorouracil-induced neutrophilic chemokine expression in tumor cells is associated with accelerated lung metastasis of breast cancer

Soichiro Sasaki, Tomohisa Baba, Naofumi Mukaida

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Tu-P14-19

NK cells control tumor-promoting function of neutrophils

Keisuke Ogura¹, Marimo Sato-Matsushita², Takashi Hori³, Yoichiro Iwakura⁴,

Hideaki Tahara², Ikuo Saiki¹, Yoshihiro Hayakawa¹

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Tu-P14-20

Low-dose HMGN1 synergistically enhances anti-tumor immunity in CD4 depleting antibody-treated mice

<u>Chang-Yu Chen</u>, Satoshi Ueha, Shoji Yokochi, Yoshiro Ishiwata, Haru Ogiwara, Shungo Deshimaru, Kouji Matsushima

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Tu-P14-21

The role of tumor cell-derived granulocyte-macrophage colony-stimulating factor (GM-CSF) in the progression of 4T1 murine breast cancer

<u>Teizo Yoshimura</u>, Kaoru Nakamura, Chunning Li, Miwa Sato, Akihiro Matsukawa, Masayoshi Fujisawa

Department of Pathology and Experimental Medicine, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, Okayama, Japan

The characteristics of cancer stroma in the development of scirrhous gastric cancer.

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Tu-P14-23

Prostate cancer progression mechanism via CCL5 within microenvironment of prostate cancer bone metastasis

Satoko Urata, Kouji Izumi, Atsushi Mizokami

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Tu-P14-24

Plasmacytoid dendritic cells involve the effect of endocrine disruptor Nonylphenol on endometriosis in murine models

Pooja Sharma¹, Yu Chang^{1, 2}, Eing-Mei Tsai^{1, 3}, Jau-Ling Suen¹

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Tu-P14-25

The effect of AGP on tumor proliferation via macrophage activation

Yukio Fujiwara, Chang Pan, Yoshihiro Komohara, Motohiro Takeya

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Tu-P14-26

Interleukin 1 receptor antagonist (IL-1RA) expression is progressively lost in oral dysplasia and oral squamous cell carcinoma but the phenotypic consequences are not clear

Sven Niklander^{1, 2}, Hannah Crane¹, Dan Lambert¹, Keith Hunter¹

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Tu-P14-27

A critical role of IL-27 in controlling tumor-associated regulatory T cells

Yeonseok Chung^{1, 2}, Young Jun Park^{1, 2}

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Tu-P14-28

gamma-Aminobutyric acid alleviates progression of renal inflammation and injury in the *Vhlh* gene-knockout mice

Hsun-Yi Huang¹, Tien Hsu², Bi-Fong Lin¹

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Robust synergy in the anti-tumor effects of a systemically administered low dose of the alarmin HMGN1 and anti-PD-L1 antibodies

Shoji Yokochi, <u>Yoshiro Ishiwar</u>a, Chang-Yu Chen, Satoshi Ueha, Satoru Ito, Kouji Matsushima

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Tu-P14-30

A pivotal region for FROUNT-mediated chemotactic signaling that is shared by inflammatory chemokine receptors CCR2 and CCR5

<u>Etsuko Toda</u>¹, Yuya Terashima¹, Sosuke Yoshinaga², Hiroaki Terasawa², Kouji Matsushima¹

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Tu-P14-31

FROUNT is a novel target to control chemotactic response of tumor-associated macrophage

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Tu-P14-32

Analysis of overlapping CD8⁺ T cell clonotypes between organs reveals changes in the T cell receptor repertoire after anti-CD4 antibody cancer immunotherapy

Hiroyasu Aoki¹, Satoshi Ueha¹, Shigeyuki Shichino¹, Haru Ogiwara¹,

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Tu-P14-33

Aspirin ameliorates inflammatory microenvironment by breaking the crosstalk between macrophages and breast cancer cells

Chia-Chien Hsieh, Chih-Hsuan Wang

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Tu-P14-34

Inhibition of Nr4a receptors breaks Treg-mediated suppression of anti-tumor immunity

Sana Hibino, Akihiko Yoshimura

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Epithelial-mesenchymal transition retards IFN- γ signaling in epithelial cancers

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Tu-P14-36

Induction of chemokines and chemokine receptor of glioblastoma infected with HCMV

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Tu-P14-37

Antitumor effect of trsan-scirpusin A in colorectal cancer cells

Eun Hye Hong, Jea-Hee Ahn, Jae-Won Jo, Hyun-Jeong Ko

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Tu-P14-38

TGF β 3-mediated induction of Periostin facilitates head and neck cancer growth and metastasis

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Tu-P14-39

Characterizing the role of IRF8 in Chronic Myelogenous Leukemia Rho-Gef domain variants

Amy Michelle Pitler, Tinghui Hu, Bryan Ciccarelli, Ian P Whitehead

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Tu-P14-40

Rb inactivation enhances tumor progression by elevating CCL2 expression.

Fengkai Li¹, Shunsuke Kitajima^{1, 2}, Naofumi Mukaida³, Chiaki Takahashi¹

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Tu-P14-41

Ganoderma formosanum polysaccharides enhance antitumor immune responses and downregulate myeloid-derived suppressor cells in mice bearing CT26 colon adenocacinoma cells

Jhe-Yu Yang, Chun-Jen Chen

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Niclosamide is a poptential therapeutics for familial adenomatosis polyposis by disrupting Axin-GSK3 interaction

Sung Yong Ahn^{1, 2}, Nam Hee Kim¹, Kyungro Lee^{3, 4}, Yong Hoon Cha¹, Ji Hye Yang¹, So Young Cha¹, Eunae Sandra Cho¹, Yoonmi Lee¹, Hyun Soo Cho⁴, Yoon Jeon⁴, Young Su Yuk¹, Kyoung Tai No^{3, 4}, Hyun Sil Kim¹, Ho Lee⁵, Jiwon Choi³,

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Tu-P14-43

Glial galectin-9 plays a novel role in hypoxic tumor environment

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Abstract Supplements

Tu-S2-5

An inflammatory cellular cascade of autoimmune Th17 cells, GM-CSF-producing synovial ILCs and stromal cells in autoimmune arthritis

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Despite the key rolesimportance of Th17 cells in autoimmune diseases, it remains unclear how they control tissue-residentother inflammatory cells in autoimmune tissue damage. Using a mouse model (SKG mice) of spontaneous Th17 cell-mediated autoimmune arthritis, we showed that arthritogenic IL-17-producing Th17 cells stimulated fibroblast-like synoviocytes (FLS) via IL-17 to secrete GM-CSF and also expanded synovial resident innate lymphoid cells (ILCs) in inflamed joints. Activated synovial ILCs, which expressed CD25, IL-33Ra, and TLR9, produced abundant GM-CSF upon stimulation by IL-2, IL-33, or CpG DNA. Loss of GM-CSF production by either ILCs or radio-resistant stromal cells such as FLS prevented Th17 cell-mediated arthritis. In contrast, GM-CSF production by Th17 cells was not mandatory. Together with the presence of GM-CSF-producing ILCs in inflamed joints of rheumatoid arthritis patients, these results indicate that a cellular cascade of autoimmune IL-17-producing Th17, ILCs and non-lymphoid stromal cells, via IL-17 and GM-CSF, mediates chronic joint inflammation and can be a target for therapeutic intervention.

We-S3-2

Type I interferons in pregnancy

Akiko Iwasaki

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Zika virus (ZIKV) infection during pregnancy is associated with adverse fetal outcomes including microcephaly, growth restriction, and fetal demise. While ZIKV is primarily transmitted by the mosquito, Aedes Aegypti, it can also be sexually transmitted. Type I interferons (IFNs) are essential for host resistance against ZIKV, and most mouse models of ZIKV infection require attenuation of the IFN- α/β receptor (IFNAR) signaling pathway. Severe fetal growth restriction with placental damage or fetal resorption have been demonstrated after infection of type I IFN receptor knockout (Ifnar1-/-) females mice crossed to wild-type males. Within this context, all fetuses have functional type I IFN signaling, as they are Ifnar1 heterozygotes (Ifnar1+/-). In order to investigate the role of IFNAR in controlling ZIKV infection and disease in the developing fetus, we challenged Ifnar1-/- dams mated with Ifnar1+/- sires, resulting in pregnant dams that carry a mixture of fetuses that either expressed IFNAR (Ifnar1+/-) or did not (Ifnar1-/-) within the same uterus. Unexpectedly, we found that only Ifnar1+/- fetuses were resorbed after ZIKV infection during early pregnancy, whereas their Ifnar1-/- littermates continue to develop normally. Analyses of the fetus and placenta revealed that type I IFNs inhibit proper development of the placental labyrinth. Our results implicate type I IFNs as a possible mediator of pregnancy complications, including spontaneous abortions and growth restrictions in the context of viral infections.



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LZ Test 'Eiken' PRODUCT LINE UP

「LZテスト'栄研'」は、栄研化学がご提供する自動分析装置用ラテックス試薬です。 高感度かつワイドレンジを実現し、セル汚染や試薬間コンタミも回避しています。 さらに、特異性が高く、試薬安定性にも優れていますので、精度の高い検査が可能です。

項目	製品名	測定レンジ	特徵	
CRP	届出番号:09A2X10001000020 C反応性蛋白キット LZテスト '栄研' CRP-HG	0.01~30mg/dL	2種類のラテックス粒子と 2種類の抗体をブレンドした試薬です。	
SAA	届出番号:09A2X10001000022 アミロイドA蛋白キット LZテスト '栄研' SAA	5∼500µg/mL	測定レンジがよりワイドになりました。 プロゾーンにより強い試薬となりました。	
RF	認証番号:219AAAMX00204000 リウマチ因子キット LZテスト '栄研' RF	5.0~500.0 IU/mL	測定レンジが広く、日常検査に適した 試薬です。	
MMP-3	認証番号:223AAAMX00051000 マトリックスメタロプロテイナーゼ-3キット LZテスト '栄研' MMP-3	10.0~1,200.0 ng/mL	試薬安定性が良好で、精度良い測定が 可能です。	
KL-6	認証番号:227AAEZX00107000 シアル化糖鎖抗原KL-6キット LZテスト '栄研' KL-6	50~6000 U/mL	幅広い測定レンジにおける精度良い 測定が可能です。	
ASO	承認番号:20400AMZ00931000 抗ストレプトリジンOキット LZテスト '栄研' ASO	10~1,000 IU/mL	多点液状標準により幅広い測定レンジを 確保しています。	
FER	届出番号:09A2X10001000021 フェリチンキット LZテスト '栄研' FER	5~1,000 ng/mL	高感度測定系で、かつプロゾーンにも 強い設計です。	
Cys-C	認証番号:218AAAMX00187000 シスタチンCキット LZテスト '栄研' シスタチンC	0.1~8.1mg/L	高感度で測定レンジも広く、日常検査に 適した試薬です。	
β2 - m	承認番号:20500AMZ00522000 ベータ2-マイクログロブリンキット LZテスト '栄研' β2-M	血清及び血漿:0.25~60 mg/L 尿:0.05~12 mg/L	無希釈で測定でき、広い測定レンジを 有しています。	
<i>α</i> 1-Μ	承認番号:21800AMX10400000 アルファ1-マイクログロブリンキット LΖテスト '栄研' α 1 -Μ	血清及び血漿:1.2~180 mg/L 尿:0.4~60 mg/L	測定レンジが広く、試薬安定性も 良好です。	
PSA	承認番号:22200AMX00366000 前立腺特異抗原キット LZテスト '栄研' PSA	0.5∼50 ng/mL	前立腺がんの一次スクリーニング検査に 有用です。	
PG	承認番号:21400AMZ00659000 ペプシノーゲンキット LZテスト '栄研' ペプシノゲン I	2~200 ng/mL	- 各種自動分析装置への適用が可能です。	
	承認番号:21400AMZ00660000 ペプシノーゲンキット LZテスト '栄研' ペプシノゲンⅡ	1~100 ng/mL		
HP抗体	承認番号:22600AMX00109000 ヘリコバクタービロリ抗体キット LZテスト '栄研' H.ピロリ抗体	3.0~100.0U/mL	国内株を使用しており、感度・特異度に 優れた測定系です。	
U-ALB	認証番号:223AAAMX00125000 アルブミンキット LZテスト '栄研' U-ALB	5.0~800.0 mg/L	ヒトアルブミンに対して、特異性が高く、 精度良い測定が可能です。	
コントロール血清	ー _{般品} イムノピアリ®1/イムノピアリ®2		液状免疫コントロール血清免疫関連 13項目の参考値を表示しています。	

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Figure 1: Human GM-CSF biological activity varies between vendors. Miltenyi Biotec's Human GM-CSF, premium grade (black bar) shows higher specific activity than another commercially available product (gray bar) when performing a calibrated proliferation assay using TF-1 cells (NIBSC 88/646).

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Figure 2: Efficient cytokine usage with specific unit-dosing. Gray arrows indicate concentration of cytokine input to reach maximum cellular response. Identical activity can be reached with cytokine concentrations of 100 IU/mL and 1000 IU/mL. Black and white arrows indicate insufficient cytokine input.



その効果、 コーバル。

【禁忌】(次の患者には投与しないこと)

(1)本剤の成分に対し過敏症の既往歴のある患者

- (2)重症ケトーシス、糖尿病性昏睡又は前昏睡の患者(輸液及 びインスリンによる速やかな高血糖の是正が必須となるの
- で本剤の投与は適さない。〕 (3)重症感染症、手術前後、重篤な外傷のある患者(インスリン 注射による血糖管理が望まれるので本剤の投与は適さない。〕

【効能・効果】

2型糖尿病

- <効能・効果に関連する使用上の注意>
- (1)本剤は2型糖尿病と診断された患者に対してのみ使用し、1型糖尿病の患者には
- 投与をしないこと。 (2)高度腎機能障害患者又は透析中の末期腎不全患者では本剤の効果が期待できないため、投与しないこと。(「重要な基本的注意(10)」、添付文書の「薬物動態」の項 参照)
- (3)中等度腎機能障害患者では本剤の効果が十分に得られない可能性があるので投 与の必要性を慎重に判断すること。(「重要な基本的注意(10)」、添付文書の「薬物 動態」、「臨床成績」の項参照)

【用法・用量】=

通常、成人にはカナグリフロジンとして100mgを1日1回朝食前又は朝食後に経口投与する。

【使用上の注意】

慎重投与(次の患者には慎重に投与すること)

1.慎重投与(次の患者には慎重に投与すること)
(1)心不全(NYHA心機能分類)いのある患者(使用経験がなく安全性が確立していない。)
(2)他の糖尿病用薬(特に、インスリン製剤、スルホニルウレア剤又は速効型インスリン分泌 促進薬)を投与中の患者(併用により低血糖を起こすおそれがある。(「重要な基本的注意」、「相互作用」、「重大な副作用」の項参照))(3)次に掲げる患者又は状態(低血糖を起こすおそれがある。))脳下垂体機能不全又は副骨機能不全2)栄養不良状態(創餓状態、不規則な食 事摂取、食事摂取全の不足又は衰弱状態(3)激しい筋肉運動4)過度のアリーール摂取者 (4)脱水を起こしやすい患者(血糖コントロールが極めて不良の患者、高齢者、利尿剤併用患 者等)(本剤の利尿作用により脱水を起こすおそれがある。(「重要な基本的注意」、相互作 用」、「重大な副作用」、添付文書の「高齢者への投与」の項参照))(5)中等度腎機能障害患者 (「重要な基本的注意(2)及び(10)」、添付文書の「薬物動態」の項参照)(6)尿路感染、性器感 染のある患者(症状を悪化させるおそれがある。(「重要な基本的注意」の項参照))

(1) 生気は、単本の力になどがある。(「重要な基本的注意」の項参照)) 2. 重要な基本的注意 (1)本剤の使用にあたっては、患者に対し低血糖症状及びその対処方法について十分説明 すること。特に、インスリン製剤、スルホニルウレア剤又は速効型インスリン分泌促進薬ど 併用する場合、低血糖のリスクが増加するおそれがある。インスリン製剤、スルホニルウレ ア剤又は速効型インスリン分泌促進薬による低血糖のリスクを軽減するため、これらの薬 剤と併用する場合には、これらの薬剤の減量を検討すること。(「慎重投与」、「相互作用」、「電 大ね副作用」の項参照)(2)本剤の利尿作用により多尿・頻尿がみられることがある。また、体 液量が減少することがあるので、適度な水分補給を行うよう指導し、観察を十分行うこと。 防水、血圧低下等の異常が認められた場合は、休薬や補液等の適切な処置を行うこと。特に 体液量減少を起こしやすい患者(高齢者、腎機能障害患者、利尿薬併用患者等)においては、 脱水や糖尿病性ケトアシドーシス、高浸透圧高血糖症候群、脳梗塞を含む血栓:塞栓症等の発 現に注意すること。(「慎重投与」、「相互作用」、「重大な副作用」、添付文書の「その他の副作 用」、「高齢者への投与」の項参照)(3)尿路感染を起こし、腎盂腎炎、敗血症等の重篤な感染 症に至ることがある。また、腟力ンジダ症等の性器感染を起こし、腎盂腎炎、敗血症等の重篤な感染 症にをることがある。また、腟力ンジダ症等の性器感染の症状及びその対処方法

について患者に説明すること。(「慎重投与」、「重大な副作用」、添付文書の「その他の副作用」 の項参照)(4)糖尿病の診断が確立した患者に対してのみ適用を考慮すること。糖尿病以外 にも耐糖能異常、尿糖陽性等、糖尿病類似の症状(管性糖尿、甲状腺機能異常等)を有する疾 患があることに留意すること。(5)本剤の適用はあらかじめ糖尿病治療の基本である食事療 法、運動療法を十分に行ったうえで効果が不十分な場合に限り考慮すること。(6)本剤投与 中は、血糖を定期的に検査し、薬剤の効果を確かめ、本剤を3ヵ月投与しても効果が不十分 な場合には他の治療法への変更を考慮すること。(7)投与の継続中に、投与の必要がなくな る場合があるので、食事摂取量、血糖値、感染症の有無等に留意の上、常に投与継続の可否、 薬剤の選択等に注意すること。(8)高度肝機能障害を有する患者について、使用経験がなく 安全性は確立していない。(9)本剤とインスリン製剤又はGLP-1受容体作動薬との併用にお ける有効性及び安全性は検討されていない。(10)本剤投与により、血清クレアチニンの上 昇又はeGFRの低下がみられることがあるので、腎機能を定期的に検査すること。腎機能障 害患者においては経過を十分に観察し、継続的にeGFRが45mL/min/1.73m²未満に低下 した場合は投与の中止を検討すること。(「慎重投与」、添付文書の「その他の副作用」の項参 照)(11)本剤の作用機序である尿中グルコース排泄促進作用により、血糖コントロールが良 好であっても脂肪酸代謝が亢進し、ケトーシスがあらわれ、ケトアシドーシスに至ることがあ る。著しい血糖の上昇を伴わない場合があるため、以下の点に留意すること。(「重大な副作 用」、添付文書の「その他の副作用」の項参照) について患者に説明すること。(「慎重投与」、「重大な副作用」、添付文書の「その他の副作用」 用」、添付文書の「その他の副作用」の項参照)

1) 悪心・嘔吐、食欲滅退、腹痛、過度な口渇、倦怠感、呼吸困難、意識障害等の症状が認められ た場合には、血中又は尿中ケトン体測定を含む検査を実施すること。異常が認められた場合に は投与を中止し、適切な処置を行うこと。 2)特に、インスリン分泌能の低下、インスリン製剤の減量や中止、過度な糖質摂取制限、食事

摂取不良、感染症、脱水を伴う場合にはケトアシドーシスを発現しやすいので、観察を十分に 行うこと

3) 患者に対し、ケトアシドーシスの症状(悪心・嘔吐、食欲減退、腹痛、過度な口渇、倦怠感、呼 3)に有に対し、アドノンドニシスの症状に悪い。酸素、感情、過度な山海、危寒感、 吸困難、意識障害等)について説明するとともに、これらの症状が認められた場合には直ちに 医療機関を受診するよう指導すること。(12)排尿困難、無尿、乏尿あるいは尿閉の症状を呈 する患者においては、その治療を優先するとともに他剤での治療を考慮すること。(13)本 剤投与による体重減少が報告されているため、過度の体重減少に注意すること。(14)低血 糖症状を起こすことがあるので、高所作業、自動車の運転等に従事している患者に投与する ときは注意すること。(「重大な副作用」の項参照)

3. 相互作用

本剤は、主としてUGT1A9及びUGT2B4により代謝され、未変化体の尿中排泄率は1%未満 であった。本剤はP-糖蛋白質、多剤耐性関連蛋白質2及び乳がん耐性蛋白質の基質であり、 - 糖蛋白質及び多剤耐性関連蛋白質2に対して弱い阻害作用を有する。(添付文書の「薬物 動態」の項参照)

併用注意(併用に注意すること)

(H和に急(H和に注意9るとこ) 糖尿病用薬(スルホニルウレア剤、速効型インスリン分泌促進薬、α-グルコシダーゼ阻害薬、 ビグアナイド系薬剤、チアゾリジン系薬剤、DPP-4阻害薬、GLP-1受容体作動薬、インスリ ン製剤等) 血糖降下作用を増強する薬剤(β-遮断剤、サリチル酸剤、モノアミン酸化酵素 阻害剤等) 血糖降下作用を減弱する薬剤(アドレナリン、副腎皮質ホルモン、甲状腺ホルモ ン等) ジゴキシン リファンビシン、フェニトイン、フェノバルビタール、リトナビル等利尿 作用を有する薬剤(ループ利尿薬、サイアザイド系利尿薬等)

4. 副作用

国内第川相用量設定試験及び第川相試験において、1629例中474例(29.1%)953件の副作 用(臨床検査値の異常も含む)が認められた。主な副作用は、無症候性低血糖、低血糖症、頻尿、 血中ケトン体増加、 便秘等であった。(承認時)

(1)重大な副作用 1)低血糖:他の糖尿病用薬との併用で低血糖があらわれることがある。また、海外の臨床試 (1) 低血糖:他の糖尿病用薬との併用で低血糖があらわれることがある。また、海外の臨床試験において、インスリン製剤との併用で低血糖が報告されている。特に、インスリン製剤、スルホニルウレア剤又は達効型インスリン分泌促進薬と併用する場合、低血糖のリスクが増加するおそれがあることから、これらの薬剤の減量を検討すること。また、他の糖尿病用薬を併用しない場合でも低血糖が報告されている。低血糖症状が認められた場合には、糖質を含む食品を摂取するなど適切な処置を行うこと。(「慎重投与」、「重要な基本的注意(1)」、「相互作用」、添付文書の「臨床成績」の頂参照)
2) 脱水(0.1%):脱水があらわれることがあるので、適度な水分補給を行うよう指導し、観察を十分に行うこと。□渇 多尿、頻尿、血圧低下等の症状があらわれ脱水が疑われる場合には、休薬や補液等の適切な処置を行うこと。脱水に引き続き脳梗塞を含む血栓・塞栓症等を発現した例が報告されているので、十分注意すること。(「慎重投与」、「重要な基本的注意」、「相互作用」、添付文書の「高齢者への投与」の項参照)
3) ケトアシドーシス(頻度不明):ケトアシドーシス(結尿病性ケトアシドーシスを含む)があらわれることがあるので、観察を十分に行い、異常が認められた場合には投与を中止し、適切な処置を行うこと。(「重要な基本的注意」の項参照)
4) 腎盂腎炎(0.1%)、敗血症:腎盂腎炎があらわれ、敗血症(敗血症性ショックを含む)に至ることがあるので、観察を十分に行い、異常が認められた場合には投与を中止し、適切な処置を行うこと。(「重要な基本的注意(3)」の項参照)

行うこと。(「重要な基本的注意(3)」の項参照)

● その他の使用上の注意等については、添付文書をご参照ください。 ● 使用上の注意の改訂に十分ご留意ください。

SGLT2阻害剤—2型糖尿病治療剤— 薬価基準収載



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2016年4月作成



暗室不要のオールインワン蛍光顕微鏡



^{様々な先進機能・ハードが}大型XY電動ステージ 高感度モノクロ/カラー冷却CCD

🛛 暗室不要

筐体内にブラックスペースを内蔵。フル 電動制御で、どこでもコントラストの高い 蛍光観察が可能。

高い観察性能

高感度モノクロ冷却CCD搭載。弱い 蛍光でも標本へのダメージを抑え、明るく 観察できます。近赤外波長にも感度を 持ち、in vivoイメージングにも対応。

大型電動ステージ搭載

瞬時に視野合わせを行う「ステージビュー 機能」で、あらゆる標本をスピーディに観察。 スライドやディッシュの観察はもちろん、 ウェルプレートの全面観察にも対応。

褪色を防ぐ最新技術

最新機能「褪色軽減モード」搭載。 標本への励起光の照射時間を大幅に短縮 し、褪色と標本へのダメージを劇的に低減。



面積率:10629.5/63864.6µm² 16.6% 個数比率:358/1911個 18.7%

ウス脳神経

高度な解析機能

隣接した細胞も正確に分離してカウント る「ハイブリッドセルカウント」や、数百もの データを同条件で一括測定する「マクロ セルカウント」、立体的な局在の解析が おこなえる「リアルタイム3D解析」など、様々 な解析機能が拡張可能。

スマホからの応募はこちら



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あなたのラボにもセルソーター

- 自動設定、17分以下でソーティング準備完了
- 最大9カラーでソーティング
- コンパクトなセルソーター



起動からソーティングまで自動セットアップ

迅速な結果

17 分以下でシステムの準備が完了し、サンプル測定が可能

- 1. システムの電源をオン
- 2. レーザーとストリームの調整
- 3. 流路系のスタートアップ
- 4. ストリームの最適化
- 5. ビーズを使用した日々の精度管理
- 6. 一貫した結果を得るための測定条件と コンペンセーションの設定

*研究用です。治療・診断には利用できません。 *本紙に記載された仕様は予告なく変更される場合があります。

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