

**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.



h/c
human health care

Table of Contents

General Information	3
Venue – Floor Map + Wi-Fi Access Code	3-4
Committees	5
ICIS2017 Organizing Committee	5
ICIS2017 International Scientific Advisory Board Members	5
Program Committee	5
Supporting Organizations	5
ICIS2017 Congress Secretariat	5
Greetings from the Organizing Committee	6
Invited speakers	7-8
Award Winners	9-11
Acknowledgement	11-12
Speakers' and Poster Instructions	12
Speakers' Instruction	12
Poster Instruction	12
Social Events	13
Welcome Reception	13
Conference Banquet	13
Food and Drink	13
Meeting App with Interactive Program & Abstracts	13
Program at a glance	14-15
Program	16-53
Sunday, 29 October 2017	
Session: Opening Keynote Lectures 1-3	16
Monday, 30 October 2017	
Session: Keynote Lecture 4	17
Session: Symposium 1, Philip Marcus Memorial Symposium ~ "Innate immunity and cytokines"	17-18
Session: Lunch-time Lecture 1, Sponsored by: ONO PHARMACEUTICAL CO., LTD.	18
Session: Lunch-time Lecture 2, Sponsored by: Pfizer Japan Inc.	18
Session: Lunch-time Lecture 3, Sponsored by: Maruho Co., Ltd. / Novartis International AG	18-19
Session: Workshop 1, "Innate immunity and infection"	19-20
Session: Workshop 3, "Cytokines in skin inflammatory diseases"	21
Session: Workshop 5, "Genetic disorders in cytokines and inflammation"	22-23
Session: Workshop 2, "Allergic disease"	23-24
Session: Workshop 4, "Regulation of cytokine production"	24-26
Session: Workshop 6, "Cytokines in mucosal immunity"	26-27
Session: Evening Symposium "Cytokines/IFNs in infection" incorporation with Hokkaido University and JSICR	27-28
Session: Sponsored Evening Symposium 1, Sponsored by Kyowa Hakko Kirin Co., Ltd.	28
Session: Asian - Middle East - Pacific Cytokine Network	28-29

Tuesday, 31 October 2017

Session: Keynote Lecture 5	30
Session: Symposium 2, "Autoimmunity, chronic inflammation and cytokines"	30-31
Session: Lunch-time Lecture 4, Sponsored by: Illumina K. K.	31
Session: Lunch-time Lecture 5, Sponsored by: ROHTO Pharmaceutical Co., Ltd.	31
Session: MNCB Sponsored Lunch-time Lecture	31
Session: Workshop 7, "Signal transduction and metabolic regulation".....	31-33
Session: Workshop 9, "Anti-cytokine therapy for inflammatory human diseases".....	33-34
Session: Workshop 11, "Emerging cytokines".....	34-35
Session: Workshop 8, "Cytokines and inflammatory factors in host defense"	35-37
Session: Workshop 10, "Cytokines in autoimmune diseases"	37-39
Session: Workshop 12, "Helper T cell differentiation"	39-40
Session: Evening Symposium "Chemokines ---- Cell trafficking and beyond"	40-41
Session: Sponsored Evening Symposium 2, A Paradigm Shift in Rheumatoid Arthritis -The Importance of Cytokine Blocking Treatment, Sponsored by Chugai Pharmaceutical Co., Ltd.	41
Session: Milstein Young Investigator Awards; Christina Fleischmann Award & Sidney & Joan Pestka Graduate & Post Graduate Awards	41-43

Wednesday, 1 November 2017

Session: Keynote Lecture 6	44
Session: Symposium 3, "Environment, chronic inflammation and cytokines".....	44-45
Session: Lunch-time Lecture 7, Sponsored by: Meso Scale Japan K.K.....	45
Session: Lunch-time Lecture 8, Sponsored by: Alcon Pharma K.K.	45
Session: ICIS-BioLegend William E. Paul Award Lecture	45-46
Session: Workshop 13, "Development and function of Macrophage and DC"	46-47
Session: Workshop 14, "Cytokines in cancer development and antitumor immune therapy"	47-49
Session: Workshop 15, "Innate cells including ILC, NK, mast cell and $\gamma\delta$ T cells"	49-50
Session: ICIS Award Lectures, Honorary Life Time Membership Award Lecture, 1st Place Milstein YI Award Presentation, Distinguished Service Award Presentation and ICIS President Lecture	51

Thursday, 2 November 2017

Session: Keynote Lecture 7	52
Session: Symposium 4, "Tumor immunity, macrophages and cytokines"	52-53

Poster sessions **54-117**

Monday, 30 October 2017

Session: Poster Session 1 "Innate immunity and infection"	54-62
Session: Poster Session 3 "Cytokines in skin inflammatory diseases"	62-64
Session: Poster Session 5 "Genetic disorders in cytokines and inflammation"	64-67
Session: Poster Session 7 "Signal transduction and metabolic regulation".....	67-72
Session: Poster Session 9 "Anti-cytokine therapy for inflammatory human diseases".....	72-75
Session: Poster Session 11 "Emerging cytokines"	75-78
Session: Poster Session 13 "Development and function of Macrophage and DC"	78-83
Session: Poster Session 15 "Innate cells including ILC, NK, mast cell and $\gamma\delta$ T cells"	83-85

Tuesday, 31 October 2017

Session: Poster Session 2 "Allergic disease"	86-89
Session: Poster Session 4 "Regulation of cytokine production"	89-95
Session: Poster Session 6 "Cytokines in mucosal immunity"	95-100
Session: Poster Session 8 "Cytokines and inflammatory factors in host defense"	100-104
Session: Poster Session 10 "Cytokines in autoimmune diseases".....	104-107
Session: Poster Session 12 "Helper T cell differentiation"	107-110
Session: Poster Session 14 "Cytokines in cancer development and antitumor immune therapy"	110-117

Abstract Supplements **118**

Advertising **119-**

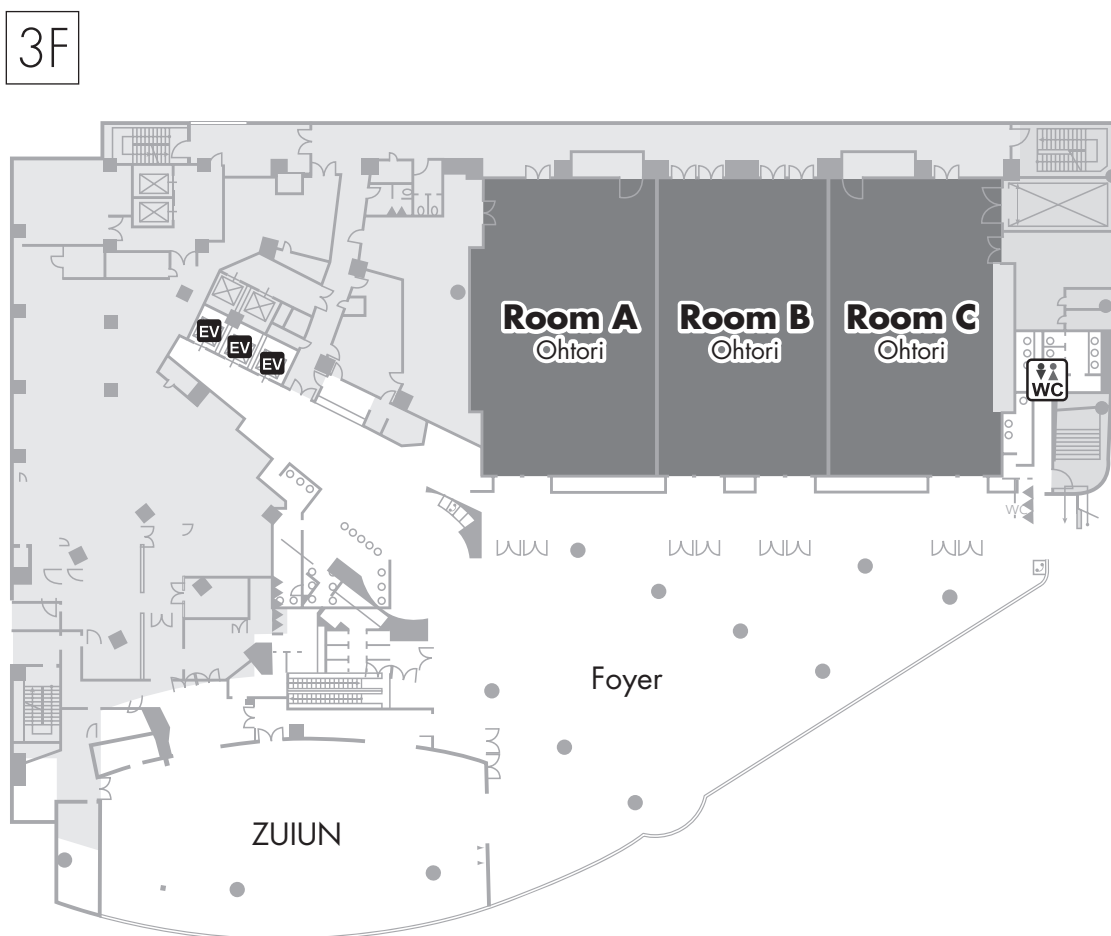
General Information

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

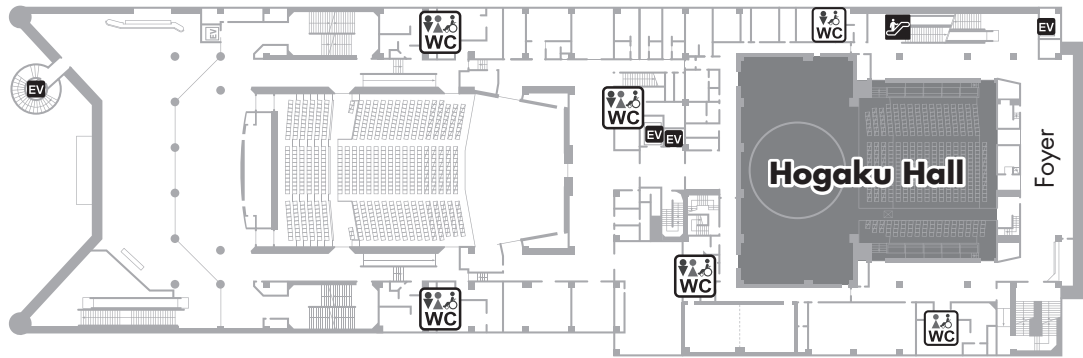


Ishikawa Ongakudo

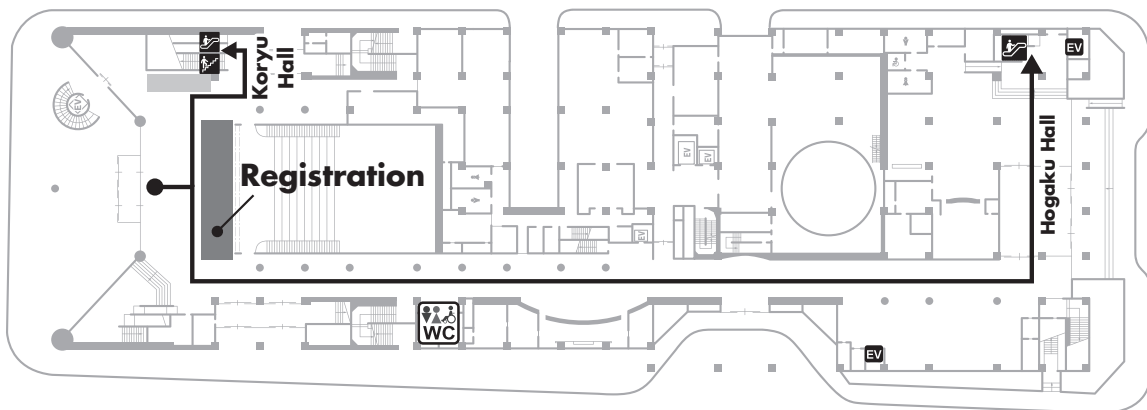
Wi-Fi Network: Cytokines2017 / Access Code: kanazawa

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

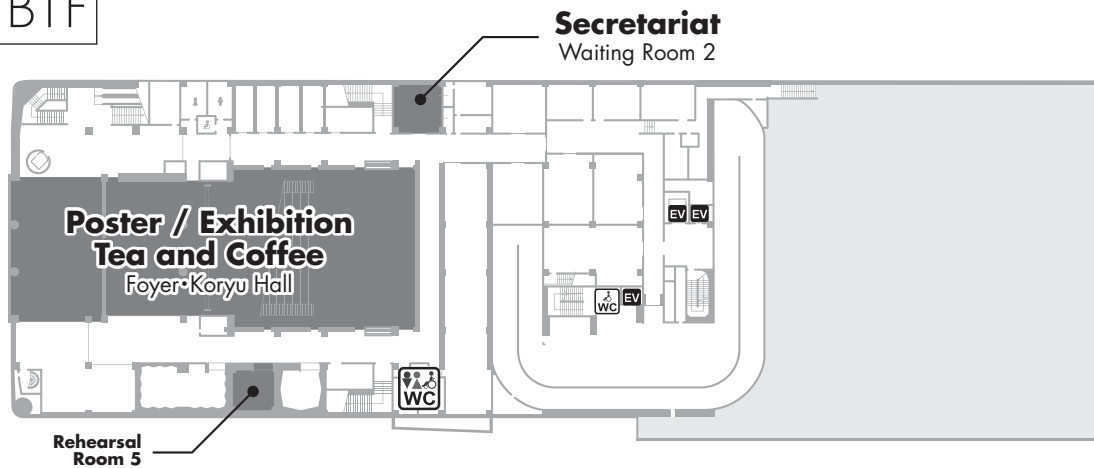
2F



1F



B1F



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Koh-Hei Sonoda (Kyushu University)	Hiroki Yoshida (Saga University)

Supporting Organizations

Japanese Dermatological Association	The Japanese Biochemical Society
Japanese Society for Immunology	The Japanese Cancer Association
The Japan College of Rheumatology	The Japanese Pharmacological Society
The Japan Society for Clinical Immunology	The Japanese Society of Inflammation and Regeneration
The Japanese Association of Cancer Immunology	The Molecular Biology Society of Japan

* Listed in alphabetical order

ICIS2017 Congress Secretariat

c/o iCON LLC : 1-1-1 Ebisu-minami, Shibuya-ku, Tokyo 150-0022, Japan Tel: +81 3 6871 9421 E-mail: info@icis2017japan.com

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

Ecole Polytechnique Fédérale de Lausanne (EPFL),
Switzerland

Shizuo Akira

Osaka University, Japan

Masayuki Amagai

Keio University School of Medicine, Japan

Tomohisa Baba

Kanazawa University, Japan

Glen N. Barber

University of Miami Miller School of Medicine, United
States

Anne-Sophie Bergot

University of Queensland, Australia

Gordon D Brown

University of Aberdeen, United Kingdom

Doreen Cantrell

University of Dundee, United Kingdom

Rachel R. Caspi

National Eye Institute, NIH, United States

Kazuaki Chayama

Hiroshima University, Japan

Ann Chen

National Defense Medical Center, Taiwan

Chen Dong

School of Medicine, Tsinghua University, China

Marc Feldmann

Kennedy Institute of Rheumatology, United Kingdom

Richard Flavell

Yale University School of Medicine, United States

Takashi Fujita

Kyoto University, Japan

Cem Gabay

University Hospitals of Geneva, Switzerland

Frederic Geissmann

Memorial Sloan Kettering Cancer Center, United States

Florent Ginhoux

Agency for Science, Technology and Research
(A*STAR), Singapore

Gerald Gleich

School of Medicine University of Utah, United States

John A. Hamilton

University of Melbourne, Australia

Shinichi Hashimoto

Kanazawa University, Japan

Kenya Honda

Keio University School of Medicine, Japan

Shie-Liang Edmond Hsieh

National Yang-Ming University School of Medicine,
Taiwan

Christopher Hunter

University of Pennsylvania, United States

Masaru Ishii

Osaka University Graduate School of Medicine, Japan

Toshihiro Ito

Nara Medical University, Japan

Yoichiro Iwakura

Tokyo University of Science, Japan

Akiko Iwasaki

Yale University School of Medicine and Howard Hughes
Medical Institute, United States

Carl H. June

University of Pennsylvania, Perelman School of Medicine,
United States

Kenji Kabashima

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

Dhan V. Kalvakolanu

University of Maryland School of Medicine, United States

Yutaka Kawakami

Keio University School of Medicine., Japan

Khalid S. A. Khabar

King Faisal Specialist Hospital and Research Centre,
Saudi Arabia

Motoko Kimura

Chiba University, Japan

Tadamitsu Kishimoto

Osaka University, Japan

Hiroshi Kiyono

The University of Tokyo, Japan

Christopher A. Klebanoff

Memorial Sloan Kettering Cancer Center, United States

Manfred Kopf

ETH Zürich, Switzerland

James G. Krueger

The Rockefeller University, United States

Masato Kubo

Tokyo University of Science, Japan

Vijay K. Kuchroo

Harvard Medical School and Brigham and Women's
Hospital, United States

Atsushi Kumanogo

Graduate School of Medicine, Osaka University, Japan

Kristin M. Leiferman

University of Utah Health Care, United States

Warren Leonard

NIH, United States

Xiaoxia Li

Cleveland Clinic Lerner Research Institute, United States

Dan Littman

New York University School of Medicine, United States

Ekaterina Litvinova
Siberian Branch of the Russian Academy of Sciences,
Russia

Richard M. Locksley
University of California at San Francisco, United States

Diane Mathis
Harvard Medical School, United States

Kouji Matsushima
The University of Tokyo, Japan

Nagahiro Minato
Kyoto University, Japan

Laurel Monticelli
Weill Cornell Medical College, Cornell University, United
States

Kazuyo Moro
RIKEN IMS, Japan

Masaaki Murakami
Hokkaido University, Japan

Hiroshi Nakajima
Graduate School of Medicine, Chiba University, Japan

Toshinori Nakayama
Chiba University, Japan

Gabriel Nunez
University of Michigan, United States

Luke A.J. O'Neill
Trinity College Dublin, United Kingdom

Toshiaki Ohteki
National University Corporation Tokyo Medical and
Dental University, Japan

Keiko Ozato
National Institute of Child Health and Human
Development (NICHD), United States

Chung-Gyu Park
Seoul National University College of Medicine, Korea,
Republic of (South)

Fiona M Powrie
University of Oxford, United Kingdom

Nancy Reich
Stony Brook University, United States

Shinobu Saijo
Chiba University, Japan

Shimon Sakaguchi
Osaka University, Japan

Shinichiro Sawa
Hokkaido University, Japan

Georg Schett
University Hospital Erlangen, Germany

Ganes C. Sen
Cleveland Clinic, United States

Tsukasa Seya
Hokkaido University Graduate School of Medicine, Japan

Alan Sher

NIH / NIAID, United States

Kazuko Shibuya
University of Tsukuba, Japan

Reiko Shinkura
Nara Institute of Science and Technology, Japan

Koh-Hei Sonoda
Graduate School of Medical Sciences Kyushu
University, Japan

Jens V. Stein
University of Bern, Switzerland

Satoshi Takaki
National Center for Global Health and Medicine, Japan

Akinori Takaoka
Hokkaido University, Japan

Hiroshi Takayanagi
The University of Tokyo, Japan

Kiyoshi Takeda
Osaka University Graduate School of Medicine, Japan

Osamu Takeuchi
Kyoto University, Japan

Tsutomu Takeuchi
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Yoshiya Tanaka
University of Occupational and Environmental Health,
Japan

Tadatsugu Taniguchi
The University of Tokyo / Max Planck-The University of
Tokyo Center for Integrative Inflammolgy, Japan

Michio Tomura
Osaka Ohtani University, Japan

Noriko M Tsuji
Biomedical Research Institute (AIST), Japan

David Vöhringer
Department of Infection Biology, University Hospital
Erlangen, Germany

Yingjie Wu
Dalian Medical University, China

Sho Yamasaki
Kyushu University, Japan

Koji Yasutomo
Tokushima University, Japan

Mitsutoshi Yoneyama
Chiba University, Japan

Hiroki Yoshida
Saga University, Japan

Akihiko Yoshimura
Keio University School of Medicine, Japan

Howard A. Young
National Cancer Institute at Frederick, United States

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*

- 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*

- 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*

- 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)

Iain 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 Lerner (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 Olnagier (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)

Nikaia 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
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Rikio Yabe

Acknowledgement

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AbbVie GK

Abcam plc.

Alcon Pharma K.K.

Asahi Kasei Pharma Corporation

Astellas Pharma Inc.

Beckman Coulter, Inc. *

BioLegend, Inc.

Bio-rad Corporation*

Celgene K.K.

The Cell Research Foundation

Chugai Pharmaceutical Co., Ltd.

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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

- Presentation date and time, Set up and Tear down

Odd numbers:

P1, P3, P5, P7, P9, P11, P13, P15

Monday, October 30th

Set up : 09:00-15:00

Presentation : 19:10-21:10

Tear down : 21:10-21:30

Even numbers:

P2, P4, P6, P8, P10, P12, P14

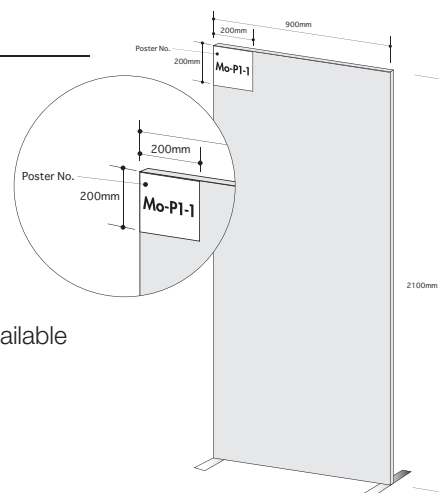
Tuesday, October 31st

Set up : 09:00-15:00

Presentation : 19:10-21:10

Tear down : 21:10-21:30

- In order to enable discussion with other participants you are requested to be available at your poster during presentation time above.
- Poster boards, push pins and poster numbers are prepared by secretariat.
- Size of poster boards: H210cm x W90cm
- Recommended size of your poster is H118.9cm x W84.1cm “A0 format”.



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	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	
Sunday, 29 October 2017	ANA CROWNE PLAZA KANAZAWA	Ohtori											
		Zuiun											
	Ishikawa Ongakudo	Entrance Hall											
Monday, 30 October 2017	ANA CROWNE PLAZA KANAZAWA	A [Ohtori 1/3]											
		B [Ohtori 1/3]											
		C [Ohtori 1/3]											
	Ishikawa Ongakudo	Hogaku Hall			Keynote Lecture 4				Symposium 1				
		Interchange Hall									Poster Set up		
		Entrance Hall											
Tuesday, 31 October 2017	ANA CROWNE PLAZA KANAZAWA	A [Ohtori 1/3]											
		B [Ohtori 1/3]											
		C [Ohtori 1/3]											
	Ishikawa Ongakudo	Hogaku Hall			Keynote Lecture 5				Symposium 2				
		Interchange Hall									Poster Set up		
		Entrance Hall											
Wednesday, 1 November 2017	ANA CROWNE PLAZA KANAZAWA	A [Ohtori 1/3]											
		B [Ohtori 1/3]											
		C [Ohtori 1/3]											
	Ishikawa Ongakudo	Hogaku Hall			Keynote Lecture 6				Symposium 3				
		Entrance Hall										Registration	
Thursday, 2 November 2017	Ishikawa Ongakudo	Hogaku Hall			Keynote Lecture 7			Symposium 4					
		Entrance Hall					Registration						

13:00 13:30 14:00 14:30 15:00 15:30 16:00 16:30 17:00 17:30 18:00 18:30 19:00 19:30 20:00 20:30 21:00

Opening Keynote Lecture											
Opening Remarks						Welcome reception					
Registration											
Lunch -tme Lecture 1		Workshop 1			Workshop 2			Evening Symposium			
Lunch -tme Lecture 2		Workshop 3			Workshop 4			Sponsored Evening Symposium 1			
Lunch -tme Lecture 3		Workshop 5			Workshop 6			Evening Symposium			
Registration										Poster Session	
Registration											
Lunch -tme Lecture 4		Workshop 7			Workshop 8			Evening Symposium			
Lunch -tme Lecture 5		Workshop 9			Workshop 10			Sponsored Evening Symposium 2			
Lunch -tme Lecture 6		Workshop 11			Workshop 12			Evening Symposium			
Registration										Poster Session	
Registration											
Lunch -tme Lecture 7		Workshop 13			ICIS Award Lectures, Honorary Life Time Membership Award Lecture, 1st Place Millstein YI Award Presentation, Distinguished Service Award Presentation and ICIS President Lecture				Banquet		
Lunch -tme Lecture 8		Workshop 14									
		Workshop 15									
ICIS-BioLegend William E. Paul Award Lecture						ICIS Members Business Meeting					
Registration											
JSICR General Assembly 12:30~ MMBC General Assembly 12:45~											

Program

Sunday, 29 October 2017

15 : 55~16 : 00 **Opening Remarks** **ANA Crowne Plaza "Ohtori"**

16 : 00~18 : 00 **Session : Opening Keynote Lectures 1-3**

Room: ANA Crowne Plaza "Ohtori"

Chair/s: Kouji Matsushima, Akihiko Yoshimura, Tadatsugu Taniguchi

16 : 00~

Su-K-1

From the discovery of IL-6 to the development of anti-IL-6R anti body.

Tadamitsu Kishimoto

Laboratory of Immune Regulation, Immunology Frontier Research Center, Osaka University, Osaka, Japan

16 : 40~

Su-K-2

Anti-microbial action of inflammasomes at the mucosa

Richard A Flavell

Yale University and Howard Hughes Medical Institute, New Haven, CT, United States

17 : 20~

Su-K-3

STAT3 is a master regulator of epithelial identity in KRAS driven tumorigenesis

Nancy C Reich, Alkiviadis Pierrajeas, Stephen D'Amico, Oleski Petrenko

Department of Molecular Genetics and Microbiology, Stony Brook University, Stony Brook, NY, United States

18 : 00~20 : 00 **Welcome Reception** **ANA Crowne Plaza "Zuiun"**

Program

Monday, 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

Luke A.J. O'Neill

Trinity College Dublin, Dublin, United Kingdom

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.

Glen N. Barber

Department of Cell Biology, University of Miami Miller School of Medicine, Miami, United States

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 Ohto¹, Shota Shimizu^{1,2},
Hideo Onizawa¹, Nobumasa Soda^{1,2}, Sumin Lee^{1,2}, Yuki Shimada^{1,2},
Masahide Funabiki¹, Masamichi Takami³, Hiroki Kato^{1,2}, Takashi Fujita^{1,2}

¹Laboratory of Molecular Genetics, Institute for Frontier Life and Medical Sciences, Kyoto University, Kyoto, Japan,
²Laboratory of Molecular Cell Biology, Graduate School of Biostudies, Kyoto University, Kyoto, Japan, ³Department
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 : 40~13 : 30

**Session : Lunch-time Lecture 1,
Sponsored by: ONO PHARMACEUTICAL CO., LTD.**

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 : 40~13 : 30

Session : Lunch-time Lecture 2, Sponsored by: Pfizer Japan Inc.

Room: ANA Crowne Plaza "Ohtori" Room B

Chair/s: Yoshiya Tanaka

12 : 40~

Mo-L2-1

Phase-orientated disease control by cytokines- lessons from rheumatoid arthritis

Georg Schett

University of Erlangen, Nuremberg, Germany

12 : 40~13 : 30

**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. Krueger

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, *Trichophyton mentagrophytes* negatively regulates host immune responses via Siglec receptors.

Yasunobu Miyake¹, Eri Suematsu¹, Shinobu Saijo², Sho Yamasaki^{2,3,4},
Hiroki Yoshida¹

¹Saga University, Faculty of Medicine, Saga, Japan, ²Chiba University, Medical Mycology Research Center, Chiba, Japan, ³Osaka University, Research Institute for Microbial Diseases, Osaka, Japan, ⁴Kyushu 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 Iizasa¹, Takayuki Uematsu², Yasushi Chuma³, Hideyasu Kiyohara³,
Mio Kutobta⁴, Masayuki Umemura⁵, Goro Matsuzaki⁵, Sho Yamasaki⁶,
Hiromitsu Hara¹

¹Department of Immunology, Division of Infection and Immunity, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, Japan, ²Research and Development Department, Japan BCG Laboratory, Tokyo, Japan, ³Division of Biomedical Laboratory, Department of Biomedical Research Kitasato University Medical Center, Saitama, Japan, ⁴Department of Biomolecular Sciences, Faculty of Medicine, Saga University, Saga, Japan, ⁵Tropical Biosphere Research Center University of the Ryukyus, Naha, Japan, ⁶Department 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 Hajake^{1,2}, Dacquin Muhandwa Kasumba^{1,2}, Haruka Oda^{1,2}, Keita Matsuno³,
Masatoshi Okamoto⁴, Yoshihiro Sakoda^{3,4}, Hiroki Kato^{1,2}, Takashi Fujita^{1,2}

¹Laboratory of Molecular Genetics, Institute for Frontier Life and Medical Sciences, Kyoto University, Kyoto, Japan, ²Laboratory of Molecular and Cellular Immunology, Graduate School of Biostudies, Kyoto University, Kyoto, Japan, ³Global Station for Zoonosis Control, Global Institution for Collaborative Research and Education (GI-CoRE), Hokkaido University, Sapporo, Japan, ⁴Laboratory of Microbiology, Department of Disease Control, Faculty of Veterinary Medicine, Hokkaido University, Sapporo, Japan

14 : 20~

Mo-WS1-5

cGAS-STING signaling is required for host defense from WNV neuropathology

Kathryn McGuckin Wuertz^{1,2,4,5}, Emily A. Hemann^{2,5}, Courtney Wilkins^{2,5},
Jessica Snyder³, Piper M. Treuting³, Michael Gale Jr.^{1,2,5}

¹University of Washington, Department of Global Health, Seattle, WA, United States, ²University of Washington, Department of Immunology, Seattle, WA, United States, ³University of Washington, Department of Comparative Medicine, Seattle, WA, United States, ⁴Department of Defense; United States Army Medical Department, San Antonio, TX, United States, ⁵Center 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 Aguirre¹, Priya Luthra⁶, Maria Teresa Sanchez^{1,2}, Ana Maria Maestre¹,
Tongtong Zhu^{1,3}, Jessica Pintado Silva^{1,3}, Laurece Webb^{1,3},
Dabeiba Bernal-Rubio¹, Alexander Solovyov⁵, Benjamin Greenbaum⁵,
Viviana Simon^{1,2,4}, Christopher Basler⁶, Lubbertus Mulder^{1,2},
Adolfo Garcia-Sastre^{1,2,4}, Ana Fernandez-Sesma^{1,3,4}

¹Department of Microbiology, Icahn School of Medicine at Mount Sinai, New York, United States, ²Global Health and Emerging Pathogens Institute, Icahn School of Medicine at Mount Sinai, New York, United States, ³Graduate School of Biological Sciences, Icahn School of Medicine at Mount Sinai, New York, United States, ⁴Department of Medicine, division of Infectious Diseases, Icahn School of Medicine at Mount Sinai, New York, United States, ⁵Tisch Cancer Institute, Division of Hematology and Medical Oncology, Department of Medicine, Department of Pathology, New York, United States, ⁶Center 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. Deeg¹, Ebrahim Hassan^{1,2,3,4}, Pascal Mutz¹, Lara Rheinemann¹,
Veronika Götz¹, Linda Magar¹, Mirjam Schilling¹, Carsten Kalfass¹,
Cindy Nürnberger^{1,2}, Sébastien Soubies¹, Georg Kochs¹, Otto Haller¹,
Martin Schwemmle¹, Peter Staeheli¹

¹Institute of Virology, Medical Center University of Freiburg, Freiburg, Germany, Freiburg, Germany, ²Spemann Graduate School of Biology and Medicine (SGBM), University of Freiburg, Freiburg, Germany, ³Microbiology Department, Faculty of Science, Ain Shams University, Cairo, Egypt, Cairo, Egypt, ⁴These authors contributed equally to this work, Freiburg, Germany

14 : 50~

Mo-WS1-8

Targeting of viral replication complexes by LC3-guided interferon-inducible GTPases

Seungmin (Sam) Hwang^{1,2,3}, Scott B. Biering², Jayoung Choi¹, Hailey M. Brown³

¹The University of Chicago, Department of Pathology, Chicago, United States,
²The University of Chicago, Committee on Microbiology, Chicago, United States,
³The 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}

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

Kristin M Leiferman

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

Masayuki Amagai^{1,2}, Hisato Iriki¹, Hayato Takahashi¹

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 Chikuma¹, Hayato Takahashi², Masayuki Amagai², Akihiko Yoshimura¹

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 Ansel²

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 Lovato¹, Susanne Knoth Clausen¹, Daniel Rodriguez Greve²

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 Andersen¹, Louise Kragh Dalskov¹, Hans Henrik Gad¹,
Trine Hyrup Mogensen², Rune Hartmann¹

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-Goutières Syndrome Causes Cell Death from RNase L Activation

Robert H Silverman¹, Shuvojit Banerjee¹, Yize Li², Manisha Talukdar³,
Stephen A Goldstein², Beihua Dong¹, Frank Sicheri³, Susan R Weiss²

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

γ c 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

Kate Lawlor^{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}

¹*Walter and Eliza Hall Institute of Medical Research, Parkville, Australia,* ²*Department of Medical Biology, The University of Melbourne, Parkville, Australia,* ³*III. Medical Department for Hematology and Oncology, Klinikum rechts der Isar, Technische Universität München, München, Germany,* ⁴*Institute for Molecular Bioscience and Centre for Inflammation and Disease Research, The University of Queensland, St Lucia, Australia,* ⁵*Department 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

Shota Shimizu^{1,2}, Yuki Shimada^{1,2}, 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

15 : 00~

Mo-WS5-7

Virus-induced IFN- λ 4 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

Satoko Tahara-Hanaoka^{1,3}, Haruka Miki^{1,2}, Kaori Hitomi¹, Mariana Silva Almeida¹, Kanako Iwata¹, Kazumasa Kanemaru¹, Shiro Shibayama⁴, Masato Kubo^{5,6}, Takayuki Sumida², Akira Shibuya^{1,3}

¹Department of Immunology, Tsukuba-city, Japan, ²Department of Internal Medicine, Tsukuba-city, Japan, ³and Life Science Center of Tsukuba Advanced Research Alliance (TARA), Faculty of Medicine, University of Tsukuba, Tsukuba-city, Japan, ⁴Research Center of Immunology, Tsukuba Institute, Ono Pharmaceutical Co., Ltd., Tsukuba-city, Japan, ⁵Division of Molecular Pathology, Research Institute for Biomedical Science, Tokyo University of Science, Noda-city, Japan, ⁶Laboratory for Cytokine Regulation, RIKEN Center for Integrative Medical Sciences (IMS), Yokohama-city, Japan

15 : 50~

Mo-WS2-3

IL-22 induces Reg3 γ production from lung epithelial cells and inhibits allergic airway inflammation in house dust mite-induced asthma models

Takashi Ito¹, Koichi Hirose¹, Yoshiyuki Goto², Hiroshi Kiyono³, Hiroshi Nakajima¹

¹Department of Allergy and Clinical Immunology, Graduate School of Medicine, Chiba University, Chiba, Japan., Chiba City, Japan, ²Department of Molecular Immunology, Medical Mycology Research Center, Chiba University, Chiba City, Japan, ³Division 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

Makoto Kuwahara^{1,2}, Tatsuya Sawasaki³, Masakatsu Yamashita^{1,2}

¹Department of Immunology, Graduate School of Medicine, Ehime University, Toon, Japan, ²Division of Immune Regulation, Department of Proteo-Innovation, Proteo-Science Center, Ehime University, Toon, Japan, ³Division 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

Angel F Lopez¹, Denis Tvovrogov¹, Winne Kan¹, Tim Hercus¹, Sophie Broughton², Urmi Dhagat², Tracy Nero², Karen S CheungTungShin², Jeff Babon³, Jarrod Sandow³, David Ross⁴, Tim Hughes⁴, Michael Parker²

¹The Centre for Cancer Biology, SA Pathology and the University of South Australia, Adelaide, Australia, ²ACRF Rational Drug Discovery Centre, St. Vincent's Institute of Medical Research, and Bio21 Institute, University of Melbourne, Melbourne, Australia, ³The Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia, ⁴SAHMRI 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 Adachi¹, Koubun Yasuda¹, Taichiro Muto², Satoshi Serada³, Tomohiro Yoshimoto¹, Tetsuji Naka³, Kenji Nakanishi¹

¹Department of Immunology Hyogo College of Medicine, Nishinomiya, Japan, ²Department of Pediatrics Aichi Medical University, Nagakute, Japan, ³The center for immune intractable disease, Kochi Medical School, nangokushi, Japan

16 : 40~

Mo-WS2-8

Roles of T-bet in ILC2-mediated eosinophilic airway inflammation

Hiroshi Nakajima, 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. Young¹, Heekyong R. Bae¹, Deborah L. Hodge¹, Guo-Xiang Yang², Patrick S.C. Leung², Sathi Babu Chodiseti³, Megan Karwan⁴, Julio C. Valencia¹, Michael Sanford¹, John Fenimore¹, Seohyun Kim¹, Ziaur S.M. Rahman³, Koichi Tsuneyama⁵, M. Eric Gershwin²

¹Cancer and Inflammation Program, National Cancer Institute at Frederick and Leidos, Frederick, United States, ²Division of Rheumatology, Allergy and Clinical Immunology, University of California Davis School of Medicine, Davis, United States, ³Department of Microbiology and Immunology, Pennsylvania State University College of Medicine, Hershey, United States, ⁴Laboratory of Animal Science, National Cancer Institute at Frederick, Frederick, United States, ⁵Department of Pathology and Laboratory Medicine, Institute of Biomedical Sciences, Tokushima University Graduate School, Tokushima, Japan

16 : 00~

Mo-WS4-3

The importance of cGAMP horizontal transfer in DNA damage-driven inflammation

Genevieve Pepin^{1,2}, Michael Paul Gantier^{1,2}

¹Centre for Innate Immunity and Infectious Diseases, Hudson Institute of Medical Research., Clayton, Australia, ²Department of Molecular and Translational Science, Monash University., Clayton, Australia

16 : 08~

Mo-WS4-4

Malonylation as a novel inflammatory signal in macrophages

Silvia Galván-Peña^{1,2}, Steve DeHaro³, George Royal³, Alan Nadin⁴, Luke A.J O'Neill^{1,2}

¹School of Biochemistry and Immunology, Trinity College Dublin, Dublin, Ireland, ²Immunology Catalyst, GlaxoSmithKline, Stevenage, United Kingdom, ³R&D Target Sciences, GlaxoSmithKline, Stevenage, United Kingdom, ⁴NCE Molecular Tools Group, GlaxoSmithKline, Stevenage, United Kingdom

16 : 16~

Mo-WS4-5

The protein kinase R1OK3 suppressed MDA5-dependent innate immune response

Ken Takashima^{1,2}, Hiroyuki Oshiumi³, Hiromi Takaki¹, Misako Matsumoto¹, Tsukasa Seya¹

¹Department of Vaccine Immunology, Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ²Department of Immunology, Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ³Department of Immunology, Graduate School of Medicine, Kumamoto University, Kumamoto, Japan

16 : 24~

Mo-WS4-6

Functional diversity of zinc-finger antiviral protein isoforms during viral infection

Johannes Schwerk, Frank Soveg, Kerri Thomas, Lauren Aarreberg, Alison Kell, Justin Roby, Michael Gale Jr., Ram 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 $\gamma\delta$ T cells

Anthony J St. Leger¹, Jigar V Desai¹, Rebecca A Drummond¹, Abirami Kugadas²,
Fatimah Almaghrabi¹, Phyllis B Silver¹, Kumarkrishna Raychaudhuri¹,
Mihaela Gadjeva², Yoichiro Iwakura³, Michail S Lionakis¹, Rachel R Caspi¹

¹National Institutes of Health, Bethesda, MD, United States, ²Harvard University, Boston, MA, United States,

³Tokyo 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

Yoshinari Nakatsuka^{1,2}, Takashi Mino¹, Masanori Yoshinaga¹, Takuya Uehata¹,
Atsuyasu Sato², Tomohiro Handa², Kazuo Chin³, Toyohiro Hirai²,
Osamu Takeuchi¹

¹Laboratory of Infection and Prevention, Department of Virus Research, Institute for Frontier Life and Medical Sciences, Kyoto University, Kyoto, Japan, ²Department of Respiratory Medicine, Graduate School of Medicine,

Kyoto University, Kyoto, Japan, ³Department 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 Weng¹, Hao-Sen Chiang^{1,2}

¹Department of Life Science, National Taiwan University, Taipei, Taiwan,

²Genome 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 Stanifer¹, Dorothee Albrecht², Sina Bartfeld⁴, Jonathan Kagan³,
Takashi Kanaya⁵, Steeve Boulant^{1,2}

¹University Hospital Heidelberg, Heidelberg, Germany, ²DKFZ, Heidelberg, Germany, ³Boston Children's Hospital, Boston, United States, ⁴University of Wurzburg, Wurzburg, Germany, ⁵RIKEN, Yokohama, Japan

16 : 37~

Mo-WS6-6

Myd88 deficiency results in dysbiosis favoring generation of spontaneous lymphomas and carcinogen-induced colonic tumors

Rosalba Salcedo¹, John McCulloch¹, Jonathan Badger¹, Colm Ohiuin¹,
Kathryn Jones¹, Amiran Dzutsev¹, Ernesto Perez Chanona¹, Loretta Smith¹,
Megan Karwan², Ren-Ming Dai², Soumen Roy¹, Asra Khan¹, Wuxing Yuan¹,
Giorgio Trinchieri¹

¹Cancer and Inflammation Program, National Cancer Institute, Bethesda, United States,
²Leidos 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

Akinori Takaoka

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-Stranded RNA in Lactic Acid Bacteria Prime Protective Immunity via Interferon-beta

Noriko M Tsuji

Advanced Industrial Science and Technology, Biomedical Research Institute, Tsukuba, Japan

18 : 12~

Mo-ES1-4

Chromatin binding factor BRD4 directs development of hematopoietic stem cells and regulates inflammatory responses in macrophages through super-enhancers

Keiko Ozato¹, Wenjing Yang², Ryoji Yagi³, Anne Gegonne⁴, Akira Nishiyama⁵, Jun Zhu², Jingfang Zhu³, Dinah Singer⁴, Anup Dey¹

¹NICHD, NHLBI, ³NIAID, ⁴NCI, National Institutes of Health ⁵. Yokohama City University, Bethesda, United States, ²NHLBI, National Institutes of Health, Bethesda, United States, ³NIAID, National Institutes of Health, Bethesda, United States, ⁴NCI, National Institutes of Health, Bethesda, United States, ⁵Yokohama 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- κ B p65 for interleukin 6 production via TCF4-mediated signaling in macrophage

Chung-Gyu Park¹, Soung-Hoo Jeon²

¹Department of Microbiology and Immunology, Seoul National University College of Medicine, Seoul, Korea, Republic of (South), ²Xenotransplantation 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

Ekaterina Litvinova, 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}, Yingjie Wu^{1,2}

¹Institute of Genome Engineered Animal Models for Human Diseases Dalian Medical University, Dalian, China,
²Institute 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, Ranjery 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, Univeristy 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 activities 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 Sakaguchi¹, Keiji Hirota²

¹Osaka University, Immunology Frontier Research Center, Osaka, Japan,

²Kyoto 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-L4-1

Single-cell gene expression in tissues, tumors, and cell lines

Shinichi Hashimoto

Graduate 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 : MNCB Sponsored Lunch-time Lecture

Room: ANA Crowne Plaza "Ohtori" Room C

Chair/s: Toshiaki Ohteki

12 : 40~

Tu-L6-1

Development and functions of resident macrophages

Frederick Geissmann

Memorial 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-WS7-2

Induction of regulatory T cells from Th1 cells through metabolic reprogramming

Mitsuhiro Kanamori, Akihiko Yoshimura

Department 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

Harry James Hurley^{1,2}, Zachary Rothkopf², 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 Lerner, 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 Khan¹, Mehdi Yeganeh¹, Rajani Kandhi¹, Diwakar Bobbala¹, Akihiko Yoshimura², Gerardo Ferbeyre³, Sheela Ramanathan¹, Subburaj Ilangumaran¹

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

Yohei Mikami¹, Fred Davis¹, Shigeru Iwata¹, Hong-Wei Sun¹, Brooks R Stephen¹, Shih Han-Yu¹, Takeshi Kawabe², Kan Jiang¹, Dragana Jankovic², Alan Sher², Yuka Kanno¹, John J O'Shea¹

¹Lymphocyte Cell Biology Section, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, United States, ²Immunobiology 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, Thomas Michiels

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 Rheumatoid Arthritis (RA) patients.

François Santinon¹, Maxime Batignes¹, Benoit Salomon², Jorg Tost⁴, Florence Busato⁴, Patrice Decker¹, Marie-Christophe Boissier^{1,3}, Luca Semerano^{1,3}, Natacha Bessis¹

¹INSERM UMR 1125, Sorbonne Paris Cité, University Paris 13, 75011 Paris, France, ²Sorbonne Universities, UPMC University Paris 06, INSERM, CNRS, Centre d'Immunologie et des Maladies Infectieuses (CIMI-Paris), Paris, France, ³Assistance Publique-Hôpitaux de Paris (AP-HP), Avicenne Hospital, Rheumatology Dept, Bobigny, France, ⁴Laboratory 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}

¹Department of Internal Medicine, Gathay General Hospital, Taipei, Taiwan, ²Graduate Institute of Clinical Medicine, College of Medicine, National Taiwan University, Taipei, Taiwan, ³Department of Internal Medicine, Taipei Medical University Shuang Ho Hospita, Taipei, Taiwan, ⁴Graduate Institute of Clinical Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan, ⁵Department of Internal Medicine, National Taiwan University Hospital, Taipei, Taiwan, ⁶Graduate 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

Theresa L. Wampler Muskardin¹, Wei Fan⁵, Zhongbo Jin⁴, Mark A. Jensen²,
Jessica M. Dorschner³, Yogita Ghodke-Puranik³, Danielle Vsetecka³,
Timothy B. Niewold²

¹NYU Langone Medical Center, Department of Medicine, Division of Rheumatology, New York, United States, ²NYU Langone Medical Center, Department of Medicine, Colton Center for Autoimmunity, New York, United States, ³Mayo Clinic, Department of Medicine, Division of Rheumatology, Rochester, United States, ⁴University of Florida School of Medicine, Department of Pathology, Immunology, and Laboratory Medicine, Gainesville, United States, ⁵Shanghai Jiao Tong University, School of Medicine, Ren Ji Hospital, Department of Rheumatology, Shanghai, China

14 : 40~

Tu-WS9-5

Anti-CX3CL1 monoclonal antibody therapy suppresses the development of bleomycin-induced and growth factors-induced skin fibrosis in mice

Vu Huy Luong¹, Takenao Chino¹, Noritaka Oyama¹, Takashi Obara²,
Yoshikazu Kuboi³, Naoto Ishii³, Akihito Machinaga³, Hideaki Ogasawara³,
Wataru Ikeda³, Toshio Imai³, Minoru Hasegawa¹

¹Department of Dermatology, Fukui University, Fukui, Japan, ²Eisai Co.,Ltd., Tokyo, Japan, ³KAN Research Institute. Inc., Hyogo, Japan

14 : 55~

Tu-WS9-6

A new GM-CSF-dependent pathway in inflammation

John A. Hamilton

University 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 Yoshida¹, Tomoko Sasaguri², Asako Ishikawa², Yuzo Murata³,
Toshiharu Yasaka⁴, Naomi Hirakawa², Hiromitsu Hara⁴

¹Dept. Biomol. Sciences, Faculty of Medicine, Saga University, Saga, Japan, ²Dept. Anesthesiol. Critical Care Med., Faculty of Medicine, Saga University, Saga, Japan, ³Dept. Anatomy Physiol., Faculty of Medicine, Saga University, Saga, Japan, ⁴Dept. Immunol., Kagoshima 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 Miyazaki¹, Shingo Nakayamada¹, Satoshi Kubo¹, Kazuhisa Nakano¹,
Kei Sakata^{1,2}, Shigeru Iwata¹, Ippei Miyagawa¹, Yoshiya Tanaka¹

¹The First Department of Internal Medicine, School of Medicine, University of Occupational & Environmental Health, Japan, Kitakyusyu, Japan, ²Mitsubishi Tanabe Pharma, Yokohama, Japan

14 : 40~

Tu-WS11-4

Interleukin-27 inhibits the generation of memory CD4+ T cells during malaria infection.

Daisuke Kimura¹, Sayuri Nakamae¹, Odsuren Sukhbaatar¹, Mana Miyakoda¹,
Masoud Akbari¹, Kazumi Kimura¹, Hiromitsu Hara², Hiroki Yoshida³, Katsuyuki Yui¹

¹Division of Immunology, Department of Molecular Microbiology and Immunology, Graduate School of Biomedical Sciences, Nagasaki University, Nagasaki, Japan, ²Department of Immunology, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, Japan, ³Department of Biomolecular Sciences, Faculty of Medicine, Saga University, Saga, Japan

14 : 50~

Tu-WS11-5

Structure of an engineered IFN- λ /IFN- λ R1/IL-10R β complex provides insight into the functional dichotomy of type III versus type I IFNs

Juan Luis Mendoza¹, William M Schneider², Hans-Heinrich Hoffman²,
Koen Vercauteren², Kevin M Jude¹, Anming Xiong³, Ignacio Moraga¹,
Tim M Horton¹, Jeffrey S Glenn³, Ype P de Jong^{2,4}, K Christopher Garcia¹

¹Howard 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, ²Laboratory of Virology and Infectious Disease, The Rockefeller University, New York, NY 10065, USA, New York, United States, ³Department 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, ⁴Center 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-WS11-6

IL-33 potentiates the inflammatory response to Toxoplasma gondii

Joseph Thomas Clark, Jeongho Park, Christoph Konradt, Maxime Jacquet,
Christopher Hunter

Department 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 Andersen³, Cristina Alcon-Giner⁴,
Charlotte Leclaire⁴, Shabhonam Caim⁴, Hannah Wessel¹, Allison Bancroft²,
Alberto Bravo-Blas¹, Verena Kästele¹, Daniel Peterson^{3,5}, Richard Grecnis²,
Xuhang Li³, Allan Mowat¹, Lindsay Hall⁴, Mark Travis², Simon Milling¹

¹University of Glasgow, Glasgow, United Kingdom, ²University of Manchester, Manchester, United Kingdom,

³Johns Hopkins Medicine, Baltimore, United States, ⁴Quadrate Institute Bioscience, Norwich, United Kingdom,

⁵Eli Lilly Research Laboratories, Indianapolis, United States

15 : 50~

Tu-WS8-3

Osteoblasts mediate immunosuppression during sepsis by regulating lymphopoiesis

Asuka Terashima¹, Kazuo Okamoto¹, Tomoki Nakashima², Koichi Ikuta³,
Hiroshi Takayanagi⁴

¹Department of Osteoimmunology, 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, ³Laboratory of Biological Protection, Department of Biological Responses, Institute for Virus Research, Kyoto University, Kyoto, Japan, ⁴Department 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 Raychaudhuri², Reiko Horai², Mary J Mattapallil²,
Phyllis B Silver², Yingyos Jittayasothorn², Chi-Chao Chan², Jun Chen¹,
Rachel Caspi²

¹State Key Lab. Ophthalmol., Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, China,

²Lab 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

Jun Abe¹, Philipp Germann^{2,3}, Jorge Ripoll^{4,5}, James Sharpe^{2,3,6}, Jens V Stein¹

¹Theodor Kocher Institute, University of Bern, Bern, Switzerland, ²EMBL/CRG Systems Biology Research Unit, Centre for Genomic Regulation (CRG), The Barcelona Institute of Science and Technology, Barcelona, Spain,

³Universitat Pompeu Fabra (UPF), Barcelona, Spain, ⁴Department of Bioengineering and Aerospace Engineering, Universidad Carlos III of Madrid, Madrid, Spain, ⁵Experimental Medicine and Surgery Unit, Instituto de Investigación Sanitaria del Hospital Gregorio Marañón, Madrid, Spain, ⁶Institució 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 lymphoid 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

Ann Chen¹, Shuk-Man Ka², Feng-Cheng Liu³, Kuo-Feng Hua⁴, Shozo Izui⁵

¹Department of Pathology, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan, ²Graduate Institute of Aerospace and Undersea Medicine, Academy of Medicine, National Defense Medical Center, Taipei, Taiwan, ³Department of Rheumatology/Immunology and Allergy, Department of Medicine, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan, ⁴Department of Biotechnology and Animal Science, National Ilan University, Ilan, Taiwan, ⁵Department 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}

¹Institute of Clinical Medicine, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ²Research Center of Clinical Medicine, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ³Department of Biochemistry and Molecular Biology, College of Medicine, National Cheng Kung University, Tainan, Taiwan, ⁴Research 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 Kato¹, Shota Shimizu¹, Nobumasa Soda¹, SuMin Lee¹, Francine Lianne Emralino¹, Ahmed Abu Tayeh¹, Taisuke Ohto¹, Masahide Funabiki¹, Takashi Fujita¹

¹Institute for Frontier Life and Medical Sciences, Kyoto University, Kyoto, Japan, ²Department 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 Chhatbar¹, Claudia N. Detje¹, Elena Grabski¹, Katharina Borst¹,
Julia Spanier¹, Luca Ghita¹, David A. Elliott², Marta Joana Costa Jordao^{3,4},
Nora Mueller⁵, Chittappen K. Prajeeth⁶, Viktoria Gudi⁶, Michael A. Klein⁵,
Marco Prinz^{3,7}, Frank Bradke², Martin Stangel^{6,8}, Ulrich Kalinke¹

¹Institute 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, ²Axonal Growth and Regeneration Group, German Center for Neurodegenerative Disease Research (DZNE), Bonn, Germany, ³Institute of Neuropathology, Freiburg University Medical Centre, Freiburg, Germany, ⁴Faculty of Biology, University of Freiburg, Freiburg, Germany, ⁵Institute for Virology and Immunobiology, University of Wuerzburg, Wuerzburg, Germany, ⁶Clinical Neuroimmunology and Neurochemistry, Department of Neurology, Hannover Medical School, Hannover, Germany, ⁷BIOSS Centre for Biological Signaling Studies, University of Freiburg, Freiburg, Germany, ⁸Center 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 Kamimura¹, Andrea Stofkova^{1,2}, Takuto Ohki¹, Yasunobu Arima¹,
Masaaki Murakami¹

¹Molecular Neuroimmunology, Institute for Genetic Medicine, Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ²Normal, 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

Takuto Ohki¹, Daisuke Kamimura^{1,2}, Masaya Harada², Fuminori Kawano³,
Ikuma Nakagawa¹, Tadafumi Kawamoto⁴, Yoshinobu Ohira³, Yasunobu Arima^{1,2},
Masaaki Murakami^{1,2}

¹Molecular Neuroimmunology, Institute for Genetic Medicine, Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ²Developmental Immunology, Graduate School of Frontier Biosciences, Graduate School of Medicine, and WPI Immunology Frontier Research Center, Osaka University, Osaka, Japan, ³Health and Sports Sciences, Graduate School of Medicine, and Graduate School of Frontier Biosciences, Osaka University, Osaka, Japan, ⁴Radioisotope 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 Arima¹, Takuto Ohki¹, Naoki Nishikawa¹, Kotaro Higuchi¹,
Junko Nio-Kobayashi², Stofkova Andrea¹, Toshihiko Iwanaga², Marco Prinz³,
Daisuke Kamimura¹, Masaaki Murakami¹

¹Division of Molecular Neuroimmunology, Institute for Genetic Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ²Department of Anatomy, Graduate School of Medicine, Hokkaido University, Sapporo, Japan, ³Institute of Neuropathology, Faculty of Medicine, University of Freiburg, and BIOS 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_H1 in flu specific humoral immunity

Masato Kubo

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 Lu², Di Yu^{1,3}

¹China-Australia Centre for Personalised Immunology, Renji Hospital Affiliated to Shanghai Jiaotong University Medical School, Shanghai, China, ²Department of Pathology and Center of Infection and Immunology, The University of Hong Kong, Hong Kong, China, ³Department 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

Hidehiro Yamane¹, Anastassia A. Tselikova¹, Sundar Ganesan², Juraj Kabat²,
Ke Weng¹, Pamela L. Schwartzberg³, William E. Paul¹

¹Cytokine Biology Unit, Laboratory of Immunology, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, United States, ²Biological Imaging Section, Research Technology Branch, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, United States, ³Cell 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

AJITHKUMAR VASANTHAKUMAR, RENEE GLOURY, YANG LIAO, WEI SHI, AXEL KALLIES

Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia

16 : 20~

Tu-WS12-5

T-bet⁺ memory-phenotype CD4⁺ T cells are spontaneously generated via tonic IL-12 in steady state and exert cytokine-dependent, innate-like effector function

Takeshi Kawabe^{1,2}, Dragana Jankovic², Shuko Kawabe¹, Yuefeng Huang¹,
Ping-Hsien Lee¹, Hidehiro Yamane¹, Jinfang Zhu³, Alan Sher²,
Ronald N. Germain^{1,4}, William E. Paul¹

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 Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States*, ³*Molecular and Cellular Immunoregulation Unit, Laboratory of Immunology, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States*, ⁴*Lymphocyte Biology Section, Laboratory of Systems Biology, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States*

16 : 33~

Tu-WS12-6

Myosin light chain 9 and 12 are functional ligands for CD69 that regulate airway inflammation

Motoko Y. Kimura, Koji Hayashizaki, Toshinori Nakayama

Department 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.

John A. Hamilton

University of Melbourne, Department of Medicine at Royal Melbourne Hospital, Parkville, Australia

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 Hansen¹, S D Anderson¹, M B Iversen¹, A Thielke², G Buchan², F J Schopfe²,
David OLAGNIE¹, Christian Kanstrup Holm¹

¹Aarhus University Department of Biomedicine, Aarhus C, Denmark,

²University 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

Tatsuma Ban¹, Go Sato¹, Akira Nishiyama¹, Satoko Matsunaga¹, Ayuko Kimura²,
Yayoi Kimura², Hideyuki Yanai³, Yoshiko Matsumoto⁴, Hiroe Hihara⁴,
Tadashi Yamamoto⁵, Hisashi Hirano², Akihide Ryo¹, Kappei Tsukahara⁴,
Kentaro Yoshimatsu⁴, Tadatsugu Taniguchi³, Tomohiko Tamura^{1,2}

¹Yokohama City University Graduate School of Medicine, Yokohama, Japan, ²Advanced Medical Research Center, Yokohama City University, Yokohama, Japan, ³Institute of Industrial Science, The University of Tokyo, Tokyo, Japan, ⁴Eisai Co., Ltd., Tsukuba, Japan, ⁵Okinawa 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

Kiyoshi Hirahara¹, Naoko Mato^{1,2}, Tomomi Ichikawa¹, Jin Kumagai¹,
Masayuki Nakayama², Hideaki Yamasawa², Masashi Bando², Koichi Hagiwara²,
Yukihiko Sugiyama^{2,3}, Toshinori Nakayama¹

¹Department of Immunology, Graduate School of Medicine, Chiba University, Chiba, Japan, ²Division of Pulmonary Medicine, Department of Internal Medicine, Jichi Medical University, Tochigi, Japan, ³Department 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 Carpenter¹, Sergio Covarrubias¹, Sol Katzman¹, Ran Song²,
Edward Wakeland²

¹Department of Molecular, Cell and Developmental Biology, University of California Santa Cruz., Santa Cruz, United States, ²Department 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}

¹Centre for Innate Immunity and Infectious Diseases, Hudson Institute of Medical Research, Clayton, Australia,

²Department 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

Wednesday, 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 Ongakudō Hogaku Hall

Chair/s: Akiko Iwasaki, Hiroshi Kiyono

09 : 30~

We-S3-1

Modulation of the immune system by the gut microbiota

Kenya Honda^{1,2}, Takeshi Tanoue^{1,2}, Koji Atarashi^{1,2}, Seiko Narushima²

¹Keio University School of Medicine, Tokyo, Japan, ²RIKEN 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, Department 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, 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: Akihiko Yoshimura

12 : 40~

We-L8-2

The 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 inflammatory 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
Shaoquan Ji

12 : 50~

We-L9-1

Learning cytokine function from the host-pathogen encounter

Alan Sher

NIH / NIAID, Bethesda, 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

Jeong-Hwan Yoon^{1,2}, Eunjin Bae^{1,2}, Katsuko Sudo³, Seok Hee Park⁴,
Michael Weinstein⁵, Sungmi Park⁶, Jae-Han Jeon^{1,6}, Susumu Nakae⁷,
In-Kyu Lee^{1,6}, Ji Hyeon Ju⁸, Isao Matsumoto⁹, Takayuki Sumida⁹,
Masahiko Kuroda², Keiji Miyazawa¹⁰, Mitsuyasu Kato¹¹, Mizuko Mamura^{1,2,12}

¹Biomedical Research Institute, Department of Internal Medicine, Kyungpook National University Hospital, Daegu, Korea, Republic of (South), ²Department of Molecular Pathology, Tokyo Medical University, Tokyo, Japan, ³Animal Research Center, Tokyo Medical University, Tokyo, Japan, ⁴Department of Biological Sciences, Sungkyunkwan University, Suwon, Korea, Republic of (South), ⁵Department of Molecular Genetics, The Ohio University, Columbus, OH, Columbus, United States, ⁶Leading-edge Research Center for Drug Discovery and Development for Diabetes and Metabolic Disease, Kyungpook National University Medical Center, Daegu, Korea, Republic of (South), ⁷Laboratory of Systems Biology, Center for Experimental Medicine and Systems Biology, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan, ⁸Department of Rheumatology, Catholic University of Korea, Seoul St. Mary Hospital, Seoul, Korea, Republic of (South), ⁹Department of Internal Medicine, University of Tsukuba, Tsukuba, Japan, ¹⁰Departments of Biochemistry, University of Yamanashi, Yamanashi, Japan, ¹¹Department of Experimental Pathology, Graduate School of Comprehensive Human Sciences and Faculty of Medicine, University of Tsukuba, Tsukuba, Japan, ¹²Physician, 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 See¹, Charles-Antoine Dutertre^{1,2}, Jinmiao Chen¹, Patrick Günther³,
Naomi McGovern¹, Sergio Erdal Irac², Merry Gunawan⁴, Marc Beyer⁵,
Kristian Händler³, Kaibo Duan¹, Joachim L. Schultze^{3,5}, Evan W. Newell¹,
Florent Ginhoux¹

¹Singapore Immunology Network (SIgN), Singapore, Singapore, ²Program in Emerging Infectious Disease, Duke-NUS Medical School, Singapore, Singapore, ³Genomics and Immunoregulation, Life and Medical Sciences (LIMES) Institute, University of Bonn, Bonn, Germany, ⁴Institute of Cellular Medicine, Newcastle University, Newcastle, United Kingdom, ⁵Platform 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

SIRP α ⁺ dendritic cells regulate homeostasis of fibroblastic reticular cells via TNF receptor ligands in the adult spleen

Yasuyuki Saito¹, Satomi Komori¹, Datu Respatika¹, Ken Washio¹, Takenori Kotani¹,
Yoji Murata¹, Hiroshi Ohnishi², Katsuyuki Yui³, Koji Yasutomo⁴, Takashi Matozaki¹

¹Division of Molecular and Cellular Signaling, Department of Biochemistry and Molecular Biology, Kobe University Graduate School of Medicine, Kobe, Japan, ²Department of Laboratory Sciences, Gunma University Graduate School of Health Sciences, Maebashi, Japan, ³Division of Immunology, Department of Molecular Microbiology and Immunology, Graduate School of Biomedical Sciences, Nagasaki University, Nagasaki, Japan, ⁴Department 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 *Mycobacterium tuberculosis* infection

Chidchamai Kewcharoenwong^{1,2}, Wipawee Saenwongsa^{2,3}, Sam Willcocks⁴,
Gregory Bancroft⁴, Helen Fletcher⁴, Ganjana Lertmemongkolchai^{1,2}

¹Mekong Health Science Research Institute, Khon Kaen, Thailand, ²Faculty of Associated Medical Sciences, Khon Kaen University, Khon Kaen, Thailand, ³Disease Prevention and Control Region 10th, Ministry of Public Health, Ubonratchathani, Thailand, ⁴Faculty 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

Liang Xu¹, Mayumi Nagashimada¹, Guanliang Chen¹, Naofumi Mukaida²,
Shuichi Kaneko¹, Tsuguhito Ota^{1,3}

¹Brain/Liver Interface Medicine Research Center, Kanazawa University, Kanazawa, Japan, ²Division of Molecular Bioregulation, Cancer Research Institute, Kanazawa University, Kanazawa, Japan, ³Division 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 Kimura¹, Asuka Inoue¹, Sho Hangai^{1,2}, Shinobu Saijo³, Hideo Negishi¹,
Junko Nishio¹, Sho Yamasaki⁴, Yoichiro Iwakura⁵, 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 Inflammation, Tokyo, Japan, ³Department of Molecular Immunology, Medical Mycology Research Center, Chiba University, Chiba, Japan, ⁴Division of Molecular Immunology, Medical Institute of Bioregulation, Kyushu University, Fukuoka, Japan, ⁵Center 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 insulating 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

Hideyuki Yanai, Tadatsugu Taniguchi

Institute for Industrial Science, The University of Tokyo, Tokyo, Japan

14 : 10~

We-WS14-3

CD163 is involved in the protumour activation of macrophages in human and murine sarcoma.

Yoshihiro Komohara, Yukio Fujiwara, Hasita Horlad, Yoichi Saito, Koji Ohnishi, Motohiro Takeya

Kumamoto 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 Najj

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 Baba², Kazuyoshi Takeda³, Soichiro Sasaki², Yasunari Nakamoto¹, Naofumi Mukaida², Tatsushi Naito¹

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

Marija Mojic¹, Kiyomi Shitaoka², Hiroyuki Kishi², Atsushi Muraguchi², Hideaki Tahara³, Yoshihiro Hayakawa¹

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

Taisuke Kondo¹, Rimpei Morita^{1,2}, Akihiko Yoshimura¹

¹Keio University School of Medicine, Tokyo, Japan, ²IUHW 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

Kazuyo Moro

RIKEN IMS, Yokohama, Japan

13 : 49~

We-WS15-2

Excessive Reactive Oxygen Species (ROS) blocks IL-17A⁺ $\gamma\delta$ T cells and subsequent innate immunity required for efficient clearance of *Streptococcus pneumoniae* (Spn).

Desiree A. Anthony¹, Selcuk Yatmaz¹, Catherine Satzke², Huei Jiunn Seow¹,

Eunice To^{1,3}, Hao Want¹, Selemidis Stavros^{1,3}, Gary Anderson⁴, Steven Bozinovski¹

¹RMIT University, Melbourne, Australia, ²Murdoch Childrens Research Institute, Melbourne, Australia,

³Monash University, Melbourne, Australia, ⁴Melbourne University, Melbourne, Australia

13 : 58~

We-WS15-3

The role of NK cell-derived interferon- γ in anti-viral immune responses

Katharina Borst¹, Patrick Blank¹, Sven Flindt², Martin König²,

Pia-Katharina Tegtmeyer¹, Chintan Chhatbar¹, Jennifer Skerra¹, Zoe Waibler³,

Veronika Sexl⁴, Theresa Frenz¹, Ulrich Kalinke¹

¹TWINCORE – Centre for Experimental and Clinical Infection Research, Institute for Experimental Infection Research, Hannover, Germany, ²Paul-Ehrlich-Institut, Division of Immunology, Langen, Germany, ³Paul-Ehrlich-Institut, Junior Research Group Novel Vaccination Strategies and Early Immune Responses, Langen, Germany,

⁴University 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}, Swie 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 tissue

Satoshi Koga¹, Katsuto Hozumi², Shigeo Koyasu³, 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 Miyata¹, Yumiko Tanaka¹, Mai Yamagishi^{1,2},
Nobutake Suzuki¹, Rie Baba³, Hiroki Kabata³, Koichi Fukunaga³,
Tomoko Betsuyaku³, Osamu Ohara², Kazuyo Moro², Sotaro Uemura¹

¹Department of Biological Sciences, Graduate School of Science, The University of Tokyo, Tokyo, Japan,

²RIKEN Center for Integrative Medical Sciences, Yokohama, Japan,

³Division of Pulmonary Medicine, Department of Medicine, Keio University, School of Medicine, Tokyo, Japan

14 : 34~

We-WS15-7

Regulation of lipid metabolite-mediated IL-4 production in group 2 innate lymphoid cells

Yasutaka Motomura¹, Shigeo Koyasu², Kazuyo Moro^{1,3}

¹RIKEN Center for Integrative Medical Sciences, Laboratory for Innate Immune Systems, Yokohama, Japan,

²RIKEN Center for Integrative Medical Sciences, Laboratory for Immune Cell Systems, Yokohama, Japan,

³Department 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 lung metastases

Juming Yan^{1,3}, Stacey Allen¹, Dipti Vijayan^{2,3}, Kazuyoshi Takeda⁴, Daniel Cua⁵,
Mark Smyth^{2,3}, Michele Teng^{1,3}

¹Cancer Immunoregulation and Immunotherapy Laboratory, QIMR Berghofer Medical Research Institute, Brisbane, Australia, ²Immunology in Cancer and Infection Laboratory, QIMR Berghofer Medical Research Institute, Brisbane, Australia, ³School of Medicine, University of Queensland, Brisbane, Australia, ⁴Division of Cell Biology, Biomedical Research Center, Graduate School of Medicine, Juntendo University, Tokyo, Japan, ⁵Merck Research Laboratories, 901 California Avenue, Palo Alto, United States

15 : 30~17 : 10 **Session : ICIS Award Lectures, Honorary Life Time Membership Award Lecture, 1st Place Milstein YI Award Presentation, Distinguished Service Award Presentation and ICIS President Lecture**

Room: Ishikawa Ongakudō Hogaku Hall

Chair/s: Bryan Williams, Nancy Reich, Tadatsugu Taniguchi

15 : 30~

We-Awards-1

Honorary Lifetime Membership Award Lecture - Title TBD

Ganes C. Sen

Cleveland Clinic, Cleveland, United States

16 : 05~

We-Awards-2

1st Place Milstein YI Award: Defining group 2 innate lymphoid cell tissue niches

Ari B Molofsky

Dept. of Laboratory Medicine, UCSF, San Francisco, United States

16 : 25~

We-Awards-3

Distinguished Services Award Acceptance

Eleanor N Fish

University Health Network & University of Toronto, 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 Inflammation, Tokyo, Japan

17 : 10~17 : 45 **ICIS Members Business Meeting** **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-K7-1

Can we get closer to a cure for Rheumatoid Arthritis?

Marc Feldmann

Kennedy 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 Center, New York, United States

10 : 00~

Th-S4-2

Macrophage, Monocyte and Dendritic Cell Biology: From Development to Functions

Florent Ginhoux

*Singapore Immunology Network (SigN), Agency for Science, Technology and Research (A*STAR), Singapore, Singapore*

10 : 30~

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

Veronica Obregon-Perko^{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

Pia-Katharina Tegtmeyer¹, 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

Kazuko Uno¹, Yuki Shimada², Masaharu Tsubokura², Yuki Shimada²,
Hitoshi Fujimiya³, Tomoyoshi Oikawa²

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

Mo-P1-6

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.

Thomas Whitehead¹, 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).

Mark S Fife¹, 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 (GRAS), 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.

Shintaro Yamada^{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)

Mo-P1-13

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

Kazuhiisa 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

Shelly Robertson¹, 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

Takuma Shibata^{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

Mo-P1-20

MxB is an interferon-induced restriction factor of human herpesviruses

Michel Cramer¹, 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 Pappasavvas¹, 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)

Mo-P1-26

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 triclin

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.

Takehiko Shibata¹, 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

Mo-P1-33

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

Vijay Kumar^{1,2}, Sanjay Chibber²

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

Kouyuki Hirayasu¹, 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

Mo-P1-39

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

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

Sang-Myeong Lee¹, Nadeem Shabir³, Amina Khatun², Salik Nazki², Suna Gu¹,
Myeon-Sik Yang², Bumseok Kim², Won-Il Kim²

¹*Division of Biotechnology, College of Environmental & Biosource Science Chonbuk National University, Iksan-si,, Korea, Republic of (South)*, ²*College of Veterinary Medicine, Iksan-si., Korea, Republic of (South)*, ³*Division 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 Cramer, 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

Hung Sing Li¹, Kenrie Pui Yan Hui¹, Denise Lok Teng Kuok¹, Man Chun Cheung¹,
John Malcolm Nicholls², Michael Chi Wai Chan¹

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

Mo-P1-45

NLRP3 mediates NF- κ B 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

Mo-P1-46

Mycobacterium tuberculosis Rv0351 exhibits vaccine potential against the highly-virulent 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

¹*School of Life Science and Technology, Tokyo Institute of Technology, Tokyo, Japan,*

²*Graduate 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}

¹*Graduate Institute of Immunology, and College of Medicine, National Taiwan University, Taipei, Taiwan,*

²*Graduate Institute of Clinical Medicine College of Medicine, National Taiwan University, Taipei, Taiwan,*

³*Department 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}

¹*Institute of Immunology, School of Medicine, Zhejiang University, Hangzhou, China,* ²*National Key Laboratory of Medical Immunology & Institute of Immunology, Second Military Medical University, Shanghai, China,* ³*National Key Laboratory of Medical Molecular Biology & Department of Immunology, Institute of Basic Medical Sciences, Peking Union Medical College, Chinese Academy of Medical Sciences, Beijing, China*

Mo-P1-52

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

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

¹Department of Clinical and Experimental Medicine, Linköping University, Linköping, Sweden, ²Department of Veterinary Physiology, Graduate School of Agricultural and Life Sciences, The University of Tokyo, Tokyo, Japan, ³Department of Biomedical Science, Graduate School of Agricultural and Life Sciences, The University of Tokyo, Tokyo, Japan, ⁴Institut Curie/CNRS UMR144, Paris, France, ⁵Institute of Experimental and Clinical Pharmacology and Toxicology, University of Lübeck, Lübeck, Germany, ⁶Institute for Molecular Medicine, University Medical Center of the Johannes Gutenberg University Mainz, Mainz, Germany, ⁷Faculty of Biology, Medicine and Health, University of Manchester, Manchester, United Kingdom

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

Yoko Yoshihisa¹, Maho Nakagawa², Mati Ur Rehman³, Teruhiko Makino¹, Hisashi Mori⁴, Tadamichi Shimizu¹

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Mo-P3-2

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

Takashi Matsushita¹, Doanh Le Huu^{1,2}, Yasuhito Hamaguchi¹, Minoru Hasegawa³, Kazuhito Naka⁴, Atsushi Hirao⁵, Masamichi Muramatsu⁶, Kazuhiko Takehara¹, Manabu Fujimoto⁷

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²Department of Dermatology and Venereology, Hanoi Medical University, Hanoi, Vietnam,

³Department of Dermatology, University of Fukui, Fukui, Japan,

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

Kyoko Shimizu, 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 cell-mediated 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

Ryoyo Ikebuchi^{1,2}, Maika Fujimoto¹, Taiki Moriya¹, Hiromi Okuyama¹, 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

Mo-P3-8

Chicken egg yolks ameliorate ear edema in imiquimod-induced psoriasis mouse model by inhibiting of IL-17 production

Yoshihiro Okamoto, Ayaka Kimura, Chihiro Odagawa, Maho Yoshimura

Laboratory of Immunology and Microbiology, Faculty of Pharmacy, Chiba Institute of Science, Choshi, Japan

Mo-P3-9

Clec10a suppresses house dust mite-induced dermatitis

Kazumasa Kanemaru¹, Emiko Noguchi², Kaori Denda-Nagai⁴, Tatsuro Irimura⁴,
Satoko Tahara-Hanaoka^{1, 3}, Akira Shibuya^{1, 3}

¹Department of Immunology, Faculty of Medicine, University of Tsukuba, Tsukuba, Ibaraki, Japan, ²Department of Medical Genetics, Faculty of Medicine, University of Tsukuba, Tsukuba, Ibaraki, Japan, ³Life Science Center of Tsukuba Advanced Research Alliance (TARA), University of Tsukuba, Tsukuba, Ibaraki, Japan, ⁴Division of Glycobiologics, Intractable Disease Research Center, Juntendo University School of Medicine, Hongo, Bunkyo-ku, Tokyo, Japan

Mo-P3-10

TYK2-mediated basal STAT3 activity and IL-17-induced mRNA stabilization coordinately dictate the expression level of I κ B- ζ in keratinocytes

Ryuta Muromoto, Keisuke Tawa, Yui Ohgakiuchi, Tadashi Matsuda

Department of Immunology, Faculty of Pharmaceutical Sciences, Hokkaido University, Sapporo, Japan

Mo-P3-11

A variety of Th17 subsets derived from pathogenic CD31-CCR6+ naïve type CD4 T cells in psoriasis.

Sanju Iwamoto¹, Shin-ichi Hashimoto²

¹Division of Physiology and Pathology, Department of Pharmacology, Toxicology and Therapeutics, Showa University of Pharmacy, Tokyo, Japan, ²Department of Institute of Medical Pharmaceutical and Health Science, Graduate School of Medical Science, Kanazawa University, Kanazawa, Japan

19 : 10~21 : 00

Session : Poster Session 5 "Genetic disorders in cytokines and inflammation"

Room: Ishikawa Ongakudō Interchange Hall

Mo-P5-1

IL-1 β and caspase-11 independently contribute to production of pathogen-specific IgM by B1 B cells

Jinyong Wang, Louis Lanier, Kelly Deobald, Manoranjan Sahoo, Fabio Re

Department of Immunology and Microbiology, Rosalind Franklin University of Medicine and Science, North Chicago, IL 60064, USA, North Chicago, United States

Mo-P5-2

IFN- λ 4 attenuates antiviral responses by enhancing negative regulation of IFN signaling

Olusegun O Onabajo¹, 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

¹Gastrointestinal 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

Taizo Wada, 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 collagen-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

Alexander Poltorak¹, 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

¹Centre de recherche du CHUM (CRCHUM), Montreal, Canada,

²Faculty of Medicine, Université de Montréal, Montréal, Canada

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-P5-15

Mice deficient of interleukin-15 develop Sjogren's syndrome-like phenotype

Nan-Shih Liao¹, Gilbert Aaron Lee², Ruoyu Ma¹

¹*Institute of Molecular Biology, Academia Sinica, Taipei, Taiwan,*

²*Department of Medical Research, Taipei Medical University Hospital, Taipei, Taiwan*

Mo-P5-16

Dysregulated interleukin-1 activity results in male infertility.

Kaito Masaki¹, Shunta Sakanishi², Shigeru Kyuwa², Shigeru Kakuta², Seiji Takashima¹

¹*Graduate school of Science and Technology, Shinshu University, 3-15-1 Tokida, Ueda, Nagano 38, Japan,*

²*Graduate School of Agricultural and Life Sciences, The University of Tokyo, 1-1-1 Yayoi, Bunkyo, Tokyo, 11, Japan*

Mo-P5-17

Mutations of the Interleukin-11 receptor which cause craniosynostosis in human patients influence receptor trafficking and maturation

Maria Agthe, Juliane Lokau, Samadhi Aparicio-Siegmund, Julian Bruegge,
Joachim Groetzinger, Stefan Rose-John, Christoph Garbers

Institute of Biochemistry, University of Kiel, Kiel, Germany

19 : 10~21 : 00

Session : Poster Session 7 "Signal transduction and metabolic regulation"

Room: Ishikawa Ongakudō Interchange Hall

Mo-P7-1

STAT3-dependent negative regulation of IFN response by phospholipid scramblase 2

Chien-Kuo Lee, Ming-Hsun Tsai

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

Mo-P7-2

Suppression of JAK-STAT pathway ameliorated manifestations of primary Sjögren's syndrome: Downregulation of interferon-stimulated factors, BAFF and IP10 in salivary gland epithelial cells.

Jaeseon Lee¹, Jennifer Lee², Seung-ki Kwok^{1,2}, SeungYe Baek¹, Se Gwang Jang¹,
Seung-min Hong¹, Sun Shim Choi³, Mi-La Cho¹, Sung-Hwan Park^{1,2}

¹*Rheumatism Research Center, Institute of Biomedical Industry, The Catholic University, Seoul, Korea, Republic of (South),* ²*Division of Rheumatology, Department of Internal Medicine, College of Medicine, The Catholic University, Seoul St. Mary's Hospital, Seoul, Korea, Republic of (South),* ³*Division of Biomedical Convergence, College of Biomedical Science, and Institute of Bioscience & Biotechnology, Kangwon National University, Chuncheon, Korea, Republic of (South)*

Mo-P7-3

IFN- γ priming utilizes Warburg metabolism to increase human macrophage function and subsequently enhance polyfunctional cytokine production from T cells in response to Mycobacterium tuberculosis.

Sharee Ann Basdeo, James Phelan, Donal Cox, Padraic Dunne, Joseph Keane

Trinity Translational Medicine Institute, St James's Hospital, Trinity College, The University of Dublin, Dublin, Ireland

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

Paul J Baker^{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, ³Biomedical 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

¹Department of Immunology Graduate School of Medicine Osaka City University, Osaka, Japan,

²Department of Dermatology Graduate School of Medicine Osaka City University, Osaka, Japan

Mo-P7-12

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

Piotr Topolewski, Michal Komorowski

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

Mo-P7-13

Sensing and remembering IFNs concentrations.

Karolina Ewa Zakrzewska, Tomasz Jetka, Karol Nienaltowski, Katrzyna Szymańska,
Katarzyna Andryka, Piotr Topolewski, Edyta Głow, 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

Allah Nawaz¹, Tomonobu Kado¹, Takashi Nakagawa², Kumiko Saeki³, Isao Usui¹,
Shiho Fujisaka¹, Kazuyuki Tobe¹

¹First Department of Internal Medicine, University of Toyama, Toyama shi, Japan, ²Department of Nutrition and Metabolism, Toyama, Japan, ³Department of Disease Control, Research Institute, National Center for Global Health and Medicine, Tokyo, Japan

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

Mo-P7-17

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

Ilkka Julkunen¹, 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, ³Department of Virology, University of Helsinki, Helsinki, Finland

Mo-P7-18

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

Seiichi Sato, 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.

Iurii Stafeev^{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

Jeffrey JY Yen¹, 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

Hiroyasu Ito¹, 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 induce 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 TNF-alpha 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

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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

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Mo-P9-4

Creating a super-cytokine: a structural perspective on the super-agonists of interleukin-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}

¹Department 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

Akimichi Inaba¹, Rebecca 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

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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}

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Mo-P9-10

NUE7770: A selective inhibitor of the first BET bromodomain with strong anti-inflammatory 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

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Mo-P9-12

Macrophage migration inhibitory factor is involved in dengue NS 1-induced glyocalyx 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

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Mo-P9-14

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

YEN-CHUNG LAI¹, TRAI-MING YEH²

¹*The Institute of Basic Medical Sciences, College of Medicine, National Cheng Kung University, Tainan, Taiwan*,
²*Department 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},
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Mo-P9-17

Development of TNF- α Vaccine for Inflammatory Diseases

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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

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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-36 α 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-36 γ : 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 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 forward and feedback signaling between IL27 and IFN γ in solid tumor cells

Claude Haan¹, Catherine Rolvering¹, Andreas D Zimmer¹, Aurélien Ginolhac²,
Ines Kozar¹, Petr N Nazarov³, Iris Behrmann¹

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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*

Marvin Jose Sandoval¹, Hsiang-Chi Tseng^{2, 3}, Heidi Risman², Russell K. Durbin⁴,
Sergei V Kottenko^{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, ⁶University Hospital Cancer Center, Rutgers-New Jersey Medical School, Newark, United States

Mo-P11-15

IFN-λ3 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 Mitsu¹, Toshinari Takamura¹, Shuichi Kaneko¹

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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

mika mizoguchi^{1,2}, 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

Nikaia 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

Mo-P13-3

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

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

¹Department of Immunology, 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

Guanliang Chen¹, 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 Flt3-ligand producing cells by generating Flt3-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

Cuiming Sun, 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

Mo-P13-9

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 Matsushima¹

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 Yng-Ming University, Taipei, Taiwan, ²Academia 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}

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Mo-P13-15

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

Kuo-I Lin, Yi-An Ko

Genomics Research Center, Academia Sinica, Taipei, Taiwan

Mo-P13-16

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

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

Mo-P13-20

Change in intestinal macrophages subset expressing $\alpha 7nACh$ 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

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Mo-P13-22

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 osteoclastogenesis by gap junctional protein in vitro and in vivo.

Seiji Shimomura¹, 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 LPS-induced 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

Atsushi Yonejima, Eishiro Mizukoshi, Noriho Iida, 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

yuko ishida¹, 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-P13-29

JAK/STAT guarantees robust differentiation of neural stem cells by shutting off biological noises in the developing fly brain

Makoto Sato¹, Tetsuo Yasugi¹, Yoshitaro Tanaka², Masaharu Nagayama²,
Shin-Ichiro Ei²

¹Kanazawa University, Kanazawa, Japan, ²Hokkaido University, Sapporo, Japan

Mo-P13-30

Structural characterization of the chemokine receptor-binding protein, R1-15

Hiroko Takasaki¹, Sosuke Yoshinaga¹, Soichiro Ezaki¹, Mitsuhiro Takeda¹,
Yuya Terashima², Etsuko Toda², Kouji Matsushima², Hiroaki Terasawa¹

¹Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan,

²Graduate School of Medicine, The University of Tokyo, Tokyo, Japan

Mo-P13-31

CD206 positive intestinal macrophages contribute to the colonic epithelial wound healing

Shusaku Hayashi¹, Mizuki Sendo¹, Ai Hertati¹, Kazuyuki Tobe², Makoto Kadowaki¹

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²First Department of Internal Medicine, Graduate School of Medicine and Pharmaceutical Sciences for Research, University of Toyama, Toyama, Japan

Mo-P13-32

Phenotypic conversion of the colon CD169⁺ macrophages by c-Maf.

Kenta Kikuchi, Masato Tanaka, Kenichi Asano

Laboratory of Immune Regulation, The School of Life Sciences, Tokyo University of Pharmacy and Life Sciences, Tokyo, Japan

Mo-P13-33

IL-6 contributes to the interaction between enteric nervous system and mucosal immune system.

Hanako Ogata, Makoto Kadowaki, Takeshi Yamamoto

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

19 : 10~21 : 00

Session : Poster Session 15 "Innate cells including ILC, NK, mast cell and $\gamma\delta$ T cells"

Room: Ishikawa Ongakudō Interchange Hall

Mo-P15-2

Restoration of NK cell function against multiple myeloma cells by an adjunctive effect of activated invariant natural killer T (NKT) cells

Tomonori Iyoda¹, Satoru Yamasaki¹, Michihiro Hidaka², Fumio Kawano², Yu Abe³,
Kenshi Suzuki³, Norimitsu Kadowaki⁴, Kanako Shimizu¹, Shin-ichiro Fujii¹

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⁴Kagawa University, Department of Internal Medicine, Kitagun, 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

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Mo-P15-4

Expanded Natural Killer (NK) Cells: Immunotherapeutics against Aspergillosis

Win Mar Soe^{1,3}, 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, 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

Kyeong-Hee Kim¹, 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}

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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

Interleukin-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

Taiyo Morikawa^{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 National University Medical School, Daegu, Korea, Republic of (South), ²Department of Dermatology, Kyungpook National 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

¹Boram 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

¹Systemex 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, Sagami National Hospital, Sagami, 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

¹Graduate Institute of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan, ²Department of Marine Environment and Engineering, National Sun Yat-sen University, Kaohsiung, Taiwan, ³National Institute of Environmental Health Sciences, National Health Research Institutes, Miaoli, Taiwan

Tu-P2-12

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

Hidemitsu Tsutsui¹, 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.

Mayumi Saeki¹, 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, Sagami 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

Jaechan Leem^{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 Environmental & 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

Tomoe Nishimura¹, 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

Seonghyang Sohn^{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

¹Institute of Molecular Medicine College of Medicine, National Taiwan University, Taipei, Taiwan, ²Department of Surgery, National Taiwan University Hospital, Taipei, Taiwan, ³Laboratory Animal Center, College of Medicine, National Taiwan University, Taipei, Taiwan

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

Tu-P4-5

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

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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}

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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 non-canonical 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)

Tu-P4-11

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

Praik Deb^{1,2}, 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

Norihiko Sakai, 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 uridytransferase 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, 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, ²o?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-P4-17

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

Shogo Takatsuka^{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

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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-3 β 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 cisplatin-induced 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

Tu-P4-24

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, Ilkka Julkunen¹

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Tu-P4-25

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

Fu Hsin¹, Shuwaha Lin², Helene Liu¹

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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

Vesa-Petteri Kouri¹, Juri Olkkonen¹, Nitai Peled¹, Mari Ainola¹, Kari Eklund^{1,2,3}, Dan Nordstrom^{1,2}, Jami Mandelin¹

¹*University of Helsinki, Helsinki, Finland,* ²*Helsinki University Hospital, Helsinki, Finland,* ³*ORTON 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

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

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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)

Tu-P4-30

The quantity of initial FcR γ signaling determines cytokine profile in dendritic cells

Miyuki Watanabe^{1,2}, Sho Yamasaki^{1,2}

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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*

Hayley Loy¹, 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 κ B- ζ

Akihiro Kimura, Masayuki Kitajima, Harumi Suzuki

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

Tu-P4-35

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

Tadayuki Akagi¹, 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

Tu-P4-36

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 DSS-induced 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

Chao Yang^{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

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Tu-P6-3

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

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Tu-P6-4

Role of IFNs in gastro-intestinal mucosal inflammation

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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},
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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 Mizuguchi^{1,2,5}

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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

Samuel Maldonado¹, Jihong Dai¹, Sukhwinder Singh¹, Shobha Swaminathan²,
Evelyne Kalyoussef³, Bryan Ciccarelli⁴, Amariliz Rivera⁵, Patricia Fitzgerald-Bocarsly¹

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Tu-P6-8

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

Seong Il 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)

Tu-P6-9

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

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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

YOU-ME KIM¹, 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

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Tu-P6-13

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

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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

Tu-P6-15

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

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Tu-P6-16

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

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Tu-P6-17

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

Megan L Stanifer¹, 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

Ana M Gamero¹, Sarah A Tursi², Paul Wilson², Kevin P Kotredes¹, Glenn Rapsinski²,
Nicole Medeiros², Elisabetta Liverani³, Laurie Kilpatrick³, Cagla Tukul²

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

Scott B Biering¹, Romain Bouziat^{2,3}, Reinhard Hinterleitner^{2,3},
Seungmin Hwang^{1,3,6}, Bana Jabri^{2,3,4,5,6}

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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

Tu-P6-21

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

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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

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Tu-P6-25

Effector T cell migration from gut immune system

Mizuki UEDA¹, Taiki MORIYA¹, Ryoyo KUSUMOTO^{1,2}, Yutaka KUSUMOTO¹, Michio TOMURA¹

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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

Tu-P6-27

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 1 α or hypoxia-inducible factor 2 α 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

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Tu-P8-3

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

Rajani Kandhi, Euphrasie Kawila-Mafanda, Sheela Ramanathan,
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, Mahendrarvarman Mohanraj, Ponarulselvam Sekar

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

Tu-P8-5

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}

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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 O uji-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, Heung Kyu Lee

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

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

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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

Tu-P8-12

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

Masashi Kanayama^{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

Shaoquan Ji

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}

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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)

Tu-P8-19

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

Min Kyung Jung¹, Yoon Seok Choi^{1,2}, Su-Hyung Park³, Jun Yong Park⁴,
Eui-Cheol Shin¹

¹Laboratory 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}

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Tu-P8-22

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

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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

Jin-Sil Park¹, Si-Young Choi¹, Sung-Min Kim¹, Sun-Hee Hwang¹, Mi-La Cho¹,
Sung-Hwan Park^{1,2}

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Tu-P8-25

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.

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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

Mana Iizuka¹, Satoru Takahashi^{2,3}, Isao Matsumoto⁴, Takayuki Sumida⁴,
Akihiko Yoshimura¹

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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

Junko Morimoto¹, Nishikawa Yumiko², Kazuyoshi Hosomichi³, Hitoshi Nishijima¹,
Mitsuru Matsumoto¹

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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

Theresa Frenz¹, Torsten Witte², Katharina Borst¹, Lea A. Vaas³, Murielle Verboom⁴,
Michael Hallensleben⁴, Mario Köster⁵, Carlos A. Guzmán⁶, Gerd Sutter⁷,
Reinhold E. Schmidt², Ulrich Kalinke¹

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Tu-P10-8

Microglia in the CNS exhibit distinct phenotypes in the transgenic murine models of interleukin-6- versus interferon- α -mediated cytokinopathy

Iain 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

Akihiro Sagara¹, 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

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¹Graduate Institute of Biomedical Materials and Tissue Engineering, College of Biomedical Engineering, Taipei Medical University, Taipei, Taiwan, ²Stem Cell Research Center, Taipei Medical University, 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

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¹The Feinstein Institute for Medical Research, Northwell Health, Manhasset, United States, ²Rutgers 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

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Tu-P10-14

Inflammatory and anti - inflammatory profile of vitamin D receptor-deficient BV-2 microglial cells

Yevgeny Aster Tubola Dulla^{1,2}, Yuki Kurauchi¹, Akinori Hisatsune^{1,2}, Takahiro Seki¹, Hiroshi Katsuki¹

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Tu-P10-15

Blimp - 1 deficiency exacerbates experimental autoimmune encephalomyelitis in mice by impairing the IL-10 production of Treg cells

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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

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Tu-P10-17

Expression patterns and distributions of chemokines and their receptors after spinal cord injury (SCI) in mice

Kazumichi Yagura^{1,2}, Hirokazu Ohtaki¹, 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

YOUN SOO CHOI^{1,2,4}, 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, ⁴Division 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

Annett Ziegler¹, Claudia Soldner¹, Julia Spanier¹, Stefan Lienenklaus²,
Thomas Kramps^{3,4}, Edith Jasny³, Regina Heidenreich³, Karl-Josef Kallen^{3,5},
Mariola Forin-Mleczek³, Ulrich Kalinke¹

¹TWINCORE, Centre for Experimental and Clinical Infection Research GmbH Experimental Infection Research, Hannover, Germany, ²Hannover Medical School Institute for Laboratory Animal Science and Central Animal Facility, Hannover, Germany, ³CureVac AG, Tübingen, Germany, ⁴Boehringer Ingelheim Pharma GmbH & Co. KG, Ingelheim, Germany, ⁵TheRNA immunotherapies NV, Niel, Belgium

Tu-P12-13

Analysis of multifunctionality and metabolism of peripheral blood CD8⁺ T cells in gastric cancer patients

Yuji Kimura¹, Shingo Eikawa², Toshiyoshi Fujiwara¹, Heiichiro Udono²

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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, Tien-Hsuan Chen², Bor-Luen Chiang^{2,3}

¹Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan, ²Department of Medical Research, National Taiwan University Hospital, Taipei, Taiwan, ³Graduate Institute of Clinical Medicine, National Taiwan University, Taipei, Taiwan

Tu-P12-15

IL-17A contributes to the decrease of IFN- γ /IL-4 ratio and the persistence of *Entamoeba histolytica* during intestinal amebiasis

Shinjiro Hamano^{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-P12-16

Caryophyllene oxide attenuates local and systemic T cell-mediated immune responses in ovalbumin-sensitized BALB/c mouse models

Yin Hua Cheng, Ying Chi Lin, Chun Wei Tung, Chia Chi Wang

Kaohsiung Medical University, Kaohsiung, Taiwan

Tu-P12-17

TCTP-mediated translational control plays a critical role in T cell proliferation and differentiation

Hsin-Fang Yang-Yen¹, Kuang-Hung Lin¹, Yun-Jung Chiang², Po-Tsang Lee¹, Jeffrey Jong-Young Yen², Kuan-Ming Huang¹, Li-Ying Chen², Nan-Shih Liao¹, Fang Liao²

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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"

Room: Ishikawa Ongakudō Interchange Hall

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 Bioregulation, 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

Tu-P14-4

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

¹School of Biomedical Sciences, Monash University, Melbourne, Australia, ²Melbourne Centre for Nanofabrication, Melbourne, Australia, ³John Curtin School of Medical Research, The Australian National University, Canberra, Australia, ⁴Shandong Analysis and Test Center, Shandong Academy of science, Shandong, China

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, Antonino Spinelli⁴, Bruno Silva-Santos⁵

¹Unit of Clinical and Experimental Immunology, Humanitas Clinical and Research Center, Rozzano, Milan, Italy, ²Institute of Genetic and Biomedical Research (IRGB), CNR, Milan, Italy, ³Flow Cytometry and Cell Sorting Unit, Humanitas Clinical and Research Center, Rozzano, Milan, Italy, ⁴Colon and Rectal Surgery Unit, Humanitas Clinical and Research Center, Rozzano Milan, Italy, ⁵Institute of Molecular Medicine, Faculty of Medicine, University of Lisbon, Lisbon, Portugal, ⁶Department of Medical Biotechnologies and Translational Medicine (BioMeTra), University of Milan, Milan, Italy

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

¹University of Luxembourg, Life Sciences Research Unit, Belvaux, Luxembourg, ²Genomics Research Laboratory, Luxembourg Institute of Health, Luxembourg, Luxembourg, ³Department of Surgery, Saarland University Medical Center, Homburg, Germany, ⁴Department of Medicine II, Saarland University Medical Center, Homburg, Germany

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

¹Department of Immunology and Parasitology, School of Medicine, University of Occupational and Environmental Health, Japan, Kitakyushu, Japan, ²Department of Hematology, University of Occupational and Environmental Health, Kitakyushu, Japan, Kitakyushu, Japan

Tu-P14-9

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

Cristina Bergamaschi¹, Konstantinos Dimas², Bethany Nagy^{1,2}, Shawn M. Jensen³, Bernard A. Fox³, Barbara K. Felber¹, George N. Pavlakis²

¹Human Retrovirus Pathogenesis Section, Vaccine Branch, Center for Cancer Research, National Cancer Institute at Frederick, Frederick, United States, ²Human Retrovirus Section, Vaccine Branch, Center for Cancer Research, National Cancer Institute at Frederick, Frederick, United States, ³Robert W Franz Cancer Research Center, Earle A Chiles Research Institute, Providence Cancer Center, Providence Portland Medical Center, Providence, United States

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}

¹Department of Oral and Maxillofacial-Head and Neck Oncology and Faculty of Oral and Maxillofacial Surgery, Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, China, ²Shanghai Key Laboratory of Stomatology and Shanghai Research Institute of Stomatology, Shanghai, China

Tu-P14-14

Targeting the IL-7R pathway in leukemia

Scott Durum¹, Julie Hixon¹, Emilee Senkevitch¹, Sarah Cramer¹, Joao Barata², Scott Walsh¹, Wenqing Li¹

¹National Cancer Institute, National Institutes of Health, Frederick MD, United States, ²University of Lisbon, Lisbon, Portugal

Tu-P14-15

In-vitro production of VEGF from bone marrow separated CD38+ and CD38- cells in multiple myeloma patients

Vladimir Jurisic¹, Katarina Mirjagic-Martinovic², Ana Radovanovic², Tatjana Srdic-Rajic², Olivera Markovic³, Milica Radojkovic⁴, Gordana Konjevic²

¹University of Kragujevac, Faculty of Medical Sciences, Kragujevac, Serbia, ²Institute of Oncology and Radiology, Belgrade, Serbia, Belgrade, Serbia, ³Clinical Hospital Center "Bezanijska kosa", Belgrade, Serbia, Belgrade, Serbia, ⁴Department of Haematology, Clinical Hospital Centre Dragisa Misovic, Belgrade, Serbia, Belgrade, Serbia

Tu-P14-16

Loss of p53 unleashes STAT2 to acquire oncogenic activity to promote migration and invasion of colon tumor cells

Ana Gamero, 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

¹Department of Microbiology & Immunology School of Biomedical Sciences University of Melbourne, Parkville, Australia, ²Department of Immunology Monash University, Prahran, Australia, ³Department of Molecular Virology, Immunology and Medical Genetics The Ohio State University, Columbus, United States, ⁴Department of Haematology Peter MacCallum Cancer Centre Victorian Co-operative Cancer Centre, Parkville, Australia

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

Div. Molec. Bioregulation, Cancer Res. Inst., Kanazawa Univ., Kanazawa, Ishikawa, Japan

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

¹Division of Pathogenic Biochemistry, Department of Bioscience, Institute of Natural Medicine, University of Toyama, Toyama, Japan, ²Department of Surgery and Bioengineering, Institute of Medical Science, University of Tokyo, Tokyo, Japan, ³Department of Diagnostic Pathology, Toyama University Hospital, Toyama, Japan, ⁴Center for Animal Disease Models, Research Institute for Biomedical Sciences, Tokyo University of Science, Chiba, Japan

Tu-P14-20

Low-dose HMGN1 synergistically enhances anti-tumor immunity in CD4 depleting antibody-treated mice

Chang-Yu Chen, Satoshi Ueha, Shoji Yokochi, Yoshiro Ishiwata, Haru Ogiwara, Shungo Deshimaru, Kouji Matsushima

Department of Molecular Preventive Medicine, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan

Tu-P14-21

The role of tumor cell-derived granulocyte-macrophage colony-stimulating factor (GM-CSF) in the progression of 4T1 murine breast cancer

Teizo Yoshimura, Kaoru Nakamura, Chunling 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

Tu-P14-22

The characteristics of cancer stroma in the development of scirrhus gastric cancer.

Kazuo YASUMOTO¹, Atsuhiko KAWASHIMA²

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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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²Department of Obstetrics and Gynecology, E-Da Hospital, Kaohsiung, Taiwan,

³Department of Obstetrics and Gynecology, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan

Tu-P14-25

The effect of AGP on tumor proliferation via macrophage activation

Yukio Fujiwara, Chang Pan, Yoshihiro Komohara, Motohiro Takeya

Department of Cell Pathology, Graduate School of Medical Sciences, Kumamoto University, Kumamoto, Japan

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

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²Department of Oral Pathology and Oral Surgery, Dentistry Faculty, Universidad Andres Bello, Viña del Mar, Chile

Tu-P14-27

A critical role of IL-27 in controlling tumor-associated regulatory T cells

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²BK21 Plus program, Seoul, Korea, Republic of (South)

Tu-P14-28

gamma-Aminobutyric acid alleviates progression of renal inflammation and injury in the *Vhlh* gene-knockout mice

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²Department of Biochemical Sciences and Engineering, National Central University, Taoyuan, Taiwan

Tu-P14-29

Robust synergy in the anti-tumor effects of a systemically administered low dose of the alarmin HMGN1 and anti-PD-L1 antibodies

Shoji Yokochi, Yoshiro Ishiwara, Chang-Yu Chen, Satoshi Ueha, Satoru Ito, Kouji Matsushima

Department of Molecular Preventive Medicine, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan

Tu-P14-30

A pivotal region for FROUNT-mediated chemotactic signaling that is shared by inflammatory chemokine receptors CCR2 and CCR5

Etsuko Toda¹, 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, Shinichi Hashimoto^{1,2}, Kazuhiro Kakimi³, Satoru Ito⁴, Kouji Matsushima¹

¹Department of Molecular Preventive Medicine, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan, ²Department of Laboratory Medicine, Kanazawa University, Ishikawa, Japan, ³Department of Immunotherapeutics, The University of Tokyo Hospital, Tokyo, Japan, ⁴IDAC Theranostics, Inc., Tokyo, Japan

Tu-P14-33

Aspirin ameliorates inflammatory microenvironment by breaking the crosstalk between macrophages and breast cancer cells

Chia-Chien Hsieh, Chih-Hsuan Wang

Nutritional Science and Education, Department of Human Development and Family Studies, National Taiwan Normal University, Taipei, Taiwan

Tu-P14-34

Inhibition of Nr4a receptors breaks Treg-mediated suppression of anti-tumor immunity

Sana Hibino, Akihiko Yoshimura

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Tu-P14-35

Epithelial-mesenchymal transition retards IFN- γ signaling in epithelial cancers

Po-Chun Tseng¹, Chia-Ling Chen², Cheng-Chieh Tsai³, Chiou-Feng Lin^{1,4}

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Tu-P14-36

Induction of chemokines and chemokine receptor of glioblastoma infected with HCMV

Masaya Takemoto¹, Hidetaka Sadanari¹, Tohru Daikoku¹, Naofumi Mukaida²,
Tsugiya Murayama¹

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

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

kangwon university, Chuncheon-si, Korea, Republic of (South)

Tu-P14-38

TGF β 3-mediated induction of Periostin facilitates head and neck cancer growth and metastasis

Xing Qin¹, Ming Yan¹, Jianjun Zhang¹, Wantao Chen^{1,2}

¹Department of Oral and Maxillofacial-Head & Neck Oncology and Faculty of Oral and Maxillofacial Surgery, Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine, 639, Zhizaoju Road, Shanghai 200011, China, Shanghai, China, China, ²Shanghai Key Laboratory of Stomatology and Shanghai Research Institute of Stomatology, Shanghai, 200011, PR China., Shanghai, China, China

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

Department of Microbiology & Molecular Genetics, Rutgers University New Jersey Medical School, Newark, NJ, United States

Tu-P14-40

Rb inactivation enhances tumor progression by elevating CCL2 expression.

Fengkai Li¹, Shunsuke Kitajima^{1,2}, Naofumi Mukaida³, Chiaki Takahashi¹

¹Division of Oncology and Molecular Biology, Cancer Research Institute, Kanazawa University, Kanazawa, Japan, ²Department of Medical Oncology, Dana-Farber Cancer Institute, Boston, United States, ³Division of Molecular Bioregulation, Cancer Research Institute, Kanazawa University, Kanazawa, Japan

Tu-P14-41

Ganoderma formosanum polysaccharides enhance antitumor immune responses and downregulate myeloid-derived suppressor cells in mice bearing CT26 colon adenocarcinoma cells

Jhe-Yu Yang, Chun-Jen Chen

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

Tu-P14-42

Niclosamide is a potential therapeutics for familial adenomatosis polyposis by disrupting Axin-GSK3 interaction

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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 roles importance of Th17 cells in autoimmune diseases, it remains unclear how they control tissue-resident other 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.

第46回

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2017年 登録期間

演題登録 (オンライン登録のみ) 予定

6月9日金 ~ 7月14日金

事前参加登録 (オンライン登録のみ) 予定

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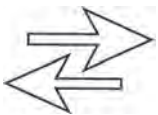
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CRP	届出番号：09A2X10001000020 C反応性蛋白キット LZテスト‘栄研’ CRP-HG	0.01～30mg/dL	2種類のラテックス粒子と 2種類の抗体をブレンドした試薬です。
SAA	届出番号：09A2X10001000022 アミロイドA蛋白キット LZテスト‘栄研’ SAA	5～500μg/mL	測定レンジがよりワイドになりました。 プロゾーンにより強い試薬となりました。
RF	認証番号：219AAAMX00204000 リウマチ因子キット LZテスト‘栄研’ RF	5.0～500.0IU/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：223AAAMX000051000 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	10.0～1,200.0ng/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：227AAEZ00107000 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。
β_2 -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’ β_2-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。
α_1 -M	承認番号：21800AMX10400000 アルファ1-マイクログロブリンキット LZテスト‘栄研’ α_1-M	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。
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HP抗体	承認番号：22600AMX00109000 ヘリコバクターピロリ抗体キット LZテスト‘栄研’ H.ピロリ抗体	3.0～100.0 U/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。
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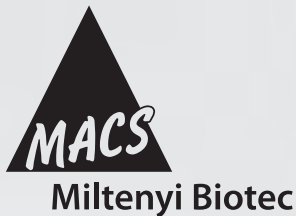
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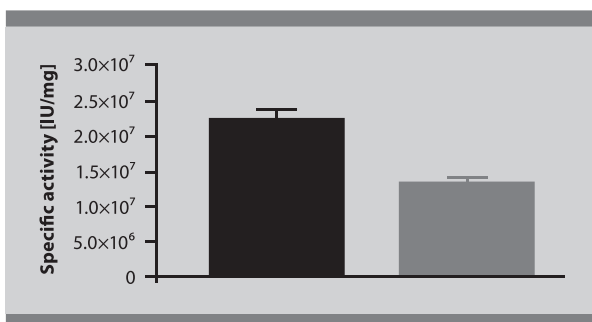


Figure 1: Human GM-CSF biological activity varies between vendors. Miltenyi Biotec's Human GM-CSF, premium grade (black bar) shows higher specific activity than another commercially available product (gray bar) when performing a calibrated proliferation assay using TF-1 cells (NIBSC 88/646).

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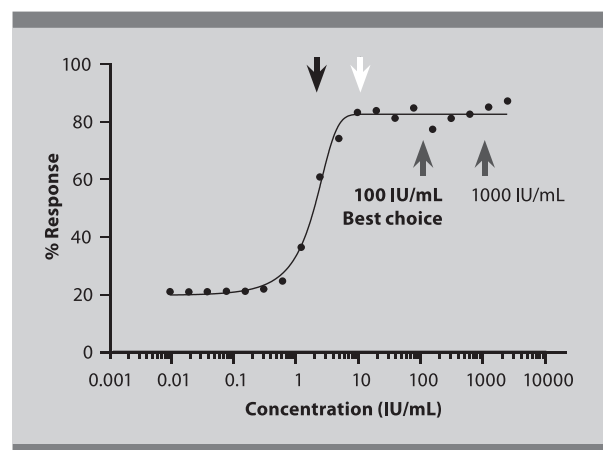


Figure 2: Efficient cytokine usage with specific unit-dosing. Gray arrows indicate concentration of cytokine input to reach maximum cellular response. Identical activity can be reached with cytokine concentrations of 100 IU/mL and 1000 IU/mL. Black and white arrows indicate insufficient cytokine input.

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【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) 重症ケトアシドーシス、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ため、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】

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IV)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。)
- 1) 脳下垂体機能不全又は副腎機能不全
- 2) 栄養不良状態、飢餓状態、不規則な食事摂取、食事摂取量の不足又は衰弱状態
- 3) 激しい筋肉運動
- 4) 過度のアルコール摂取者
- (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))

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と併用する場合は、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」、「重大な副作用」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。脱水、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、利尿剤併用患者等)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、腔カンジタ症等の性器感染を起こすことがある。十分な観察を行うなど尿路感染及び性器感染の発症に注意し、発症した場合には適切な処置を行うとともに、状態に応じて休薬等を考慮すること。尿路感染及び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(腎性糖尿、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り、また、患者の不養生、感染症の合併等により効果がなくなったり、不十分と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) 高度腎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、ケトアシドーシスがあらわれ、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)

- 1) 悪心・嘔吐、食欲減退、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に併用中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、P-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)

糖尿病薬(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、ビッグナイド系薬剤、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、サルチル酸剤、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) ジョギング、リファンピリン、フェニトイン、フェニバルビタール、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II相用量設定試験及び第III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速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」の項参照)
- 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。口渇、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(糖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)

- 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。

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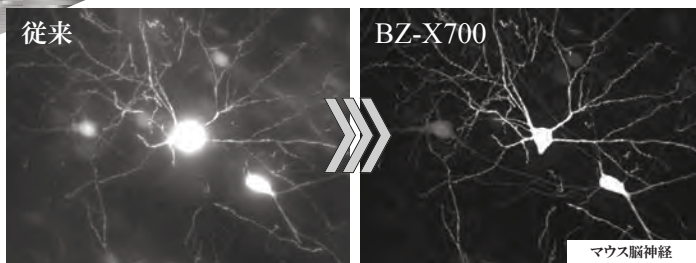
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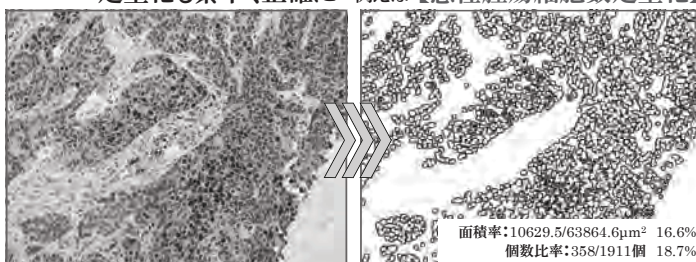
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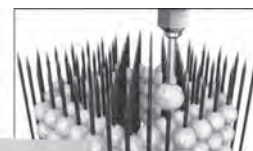
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