Conferences Financial Aid Support Us About Us FAQ

# Pattern Recognition Signaling: From Innate Immunity to Inflammatory Disease (X5)

joint with the meeting on Type I Interferon: Friend and Foe Alike (X6)

Scientific Organizers: Thirumala-Devi Kanneganti, Vishva M. Dixit and Mohamed Lamkanfi

March 19-23, 2017

Fairmont Banff Springs, Banff, Alberta, Canada

Sponsored by AbbVie Inc., Genentech, Inc. and Merck & Co., Inc.

IT'S NOT TOO LATE TO SUBMIT YOUR ABSTRACT. Abstracts received can no longer be considered for oral short talks; poster display opportunities remain open.

BEWARE of booking lodging through companies unaffiliated with Keystone Symposia. Click here for more details.

Keystone Symposia is committed to maintaining a positive and respectful environment at its meetings. To this end, please review and comply with our <u>policies</u>.

Registered attendees of one meeting in a joint pair may participate in sessions of the other, pending space availability.

#### **DEADLINES:**

Scholarship Deadline: Nov 17, 2016 [details]

Discounted Abstract Deadline: Nov 17, 2016 [details]

Abstract Deadline: Dec 20, 2016 [details]

Discounted Registration Deadline: Jan 19, 2017 [details]

Click here to view Cancellation Policy

No registration fees are used to fund entertainment or alcohol at this conference

## Conference Program Print | View meeting in 12 hr (am/pm) time

The meeting will begin on Sunday, March 19 with registration from 16:00 to 20:00 and a welcome mixer from 18:00 to 20:00. Conference events conclude on Thursday, March 23 with a closing plenary session from 17:00 to 19:00, followed by a social hour and entertainment. We recommend return travel on Friday, March 24 in order to fully experience the meeting.

#### SUNDAY, MARCH 19

16:00-20:00	Arrival and Registration	Van Horne Foyer
18:00—20:00	Welcome Mixer	Van Horne Foyer
	No registration fees are used to fund alcohol served at this	
	function.	

#### MONDAY, MARCH 20

07:00-08:00	Breakfast	Mezzanine 2
08:00-09:30	Welcome and Keynote Session (Joint)	Van Horne A/B
	Registered attendees can view abstracts starting on 02/19/2017	
	Anne O'Garra, Francis Crick Institute, UK	
	Type I IFN Regulation of Cytokine Networks and Consequences	
	for Infection	
	Daniel Kastner, National Institutes of Health, USA	
	PRR Signaling and Inflammatory Disease	
	Coffee Break	
09:50-11:45	Nucleic Acid Recognition Pathways Regulating Type I	Van Horne A/B

IFN Induction (Joint)

Registered attendees can view abstracts starting on 02/19/2017

Zhijian James Chen, University of Texas Southwestern Medical

Center, USA

Cytosolic Recognition of DNA thru cGAS/STING Pathway

Sun Hur, Harvard Medical School, USA

Cytosolic Sensing of Viral RNA by the RIG-I-Like Receptors

Gregory M. Barton, University of California, Berkeley, USA

Endosomal Recognition of Self-Nucleic Acids

Vishva M. Dixit, Genentech, Inc., USA

Inflammasome Signaling

11:45-14:30 On Own for Lunch

11:45—13:00 **Poster Setup** 

Mezzanine 2

13:00–22:00 Poster Viewing

Mezzanine 2

14:30-16:30 Workshop 1: PRRs in Inflammatory Diseases

Van Horne A/B

Short Talks Chosen from Abstracts

Following Session is for Type I Interferon: Friend and Foe Alike (X6)

14:30-16:30 Workshop 1: Innate Signals for Type I IFN Induction

Van Horne C

Short Talks Chosen from Abstracts

16:30-17:00 Coffee Available

Van Horne Foyer

Van Horne A/B

17:00-19:00 Nucleic Acids in TLR and NLR Signaling

Registered attendees can view abstracts starting on 02/19/2017

Jonathan C. Kagan, Boston Children's Hospital, USA

Initiation and Regulation of Innate Immune Signal Transduction

Kate A. Fitzgerald, University of Massachusetts Medical School,

USA

Novel Regulators of PRR-Driven Transcriptional Responses

Thirumala-Devi Kanneganti, St. Jude Children's Research

Hospital, USA

Inflammasomes and Pathogen Sensing

Short Talk Chosen from Abstracts

Following Session is for Type | Interferon: Friend and Foe Alike (X6)

17:00-19:00 Mendelian Interferonopathies and IFN-Deficiencies

Registered attendees can view abstracts starting on 02/19/2017

Van Horne C

<u>Dusan Bogunovic</u>, Icahn School of Medicine at Mount Sinai, USA <u>Loss of Type I Interferon Negative Regulation in Humans</u>

Min Ae Lee-Kirsch, Technische Universität Dresden, Germany Defective Intracellular Nucleic Acid Waste Management in Type 1 Interferon-Driven Autoinflammation and Autoimmunity

Raphaela Goldbach-Mansky, NIAID, LCID, National Institutes of Health, USA

Novel Insights into the Pathogenesis and Treatment Approaches of the Type I-IFN- Mediated Autoinflammatory Diseases, CANDLE and SAVI

Short Talk Chosen from Abstracts

Mezzanine 2

Van Horne C

19:00–20:00 Social Hour with Lite Bites

No registration fees are used to fund alcohol served at this

function.

19:30–22:00 Poster Session 1 Mezzanine 2

#### TUESDAY, MARCH 21

07:00-08:00	Breakfast	Mezzanine 2
08:00—11:00	Recent Insights in Inflammasome Signaling	Van Horne A/B
	Registered attendees can view abstracts starting on 02/19/2017	
	Fayyaz Sutterwala, Cedars-Sinai Medical Center, USA	
	Cardiolipin promotes mitochondrial localization of NLRP3 and caspase-1	
	John Bertin, GlaxoSmithKline, USA	
	RIPK1 Therapeutics: From Concept to Patients	
	Coffee Break	
	Kim Newton, Genentech, Inc., USA	
	Regulation of Inflammation and Cell Death by RIPK1	
	<u>Feng Shao</u> , National Institute of Biological Sciences, China Pyroptosis in Anti-Bacterial Immunity: Sensing & Execution	
	Short Talk(s) Chosen from Abstracts	

#### Following Session is for Type | Interferon: Friend and Foe Alike (X6)

08:00-11:00 Type I IFN Regulation of Viral Infection and Cancer

Registered attendees can view abstracts starting on 02/19/2017

<u>Ana Fernandez-Sesma</u>, Mount Sinai School of Medicine, USA Modulation of Innate Immunity by Dengue Virus: Feeling the STING

 ${\bf Andreas\ Wack},\ {\bf National\ Institute}$  for Medical Research, The Francis Crick Institute, UK

Unique and Overlapping Roles of Type I and Type III IFNs in Influenza Infection

Coffee Break

<u>John W. Schoggins</u>, University of Texas Southwestern Medical Center, USA

Cell Intrinsic Modulation of Viral and Bacterial Infection by IFN-Stimulated Genes

Thomas J. Braciale, University of Virginia, USA Innate Immune Control of Respiratory Virus Infection

Short Talk(s) Chosen from Abstracts

11:00-14:30	On Own for Lunch	
11:00-13:00	Poster Setup	Mezzanine 2
13:00-22:00	Poster Viewing	Mezzanine 2
14:30-16:30	Workshop 2: PRRs in Inflammatory Diseases	<u>Van Horne A/B</u>

Short Talks Chosen from Abstracts

Following Session is for Type | Interferon: Friend and Foe Alike (X6)

14:30-16:30 Workshop 2: Role of Type I IFNs in Control and

#### Enhancement of Infection/Malignancy

Van Horne C

Short Talks Chosen from Abstracts

16:30-17:00 Coffee Available

Van Horne Foyer

Van Horne A/B

17:00-19:00

Interfering with Pathogenic TLR and NLR Signaling

Registered attendees can view abstracts starting on 02/19/2017

Dana Philpott, University of Toronto, Canada

Nod2 Signaling

Dmitry M. Shayakhmetov, Emory University, USA

Non-canonical Regulated Necrotic Death and Sensing Danger

Jenny P.Y. Ting, University of North Carolina at Chapel Hill,

USA

Intracellular Innate Immune Receptors: Regulators of

Inflammation, Cancer and Immunity

Short Talk Chosen from Abstracts

Following Session is for Type I Interferon: Friend and Foe Alike (X6)

17:00-19:00

Type I IFN Regulation of Viral Infection

Registered attendees can view abstracts starting on 02/19/2017

Van Horne C

<u>Netanya Sandler Utay</u>, University of Texas Medical Branch at

Galveston, USA

Type I Interferons: Barrier or Pathway to HIV Disease?

**Adolfo García-Sastre**, Mount Sinai School of Medicine, USA *Regulation of Influenza Virus Sensing and Antiviral Responses by* 

Host and Virus Factors

Andreas Pichlmair, Max-Planck Institute of Biochemistry,

Germany

Interactions of Cellular Proteins with Viral Nucleic Acids

Short Talk Chosen from Abstracts

19:00-20:00

19:30-22:00

Social Hour with Lite Bites

Mezzanine 2

No registration fees are used to fund alcohol served at this function.

iunction.

Poster Session 2

Mezzanine 2

WEDNESDAY, MARCH 22

07:00-08:00

Breakfast

Mezzanine 2

Van Horne A/B

08:00-11:00

PRR Signaling in Bacterial and Viral Infection

Registered attendees can view abstracts starting on 02/19/2017

Russell E. Vance, University of California, Berkeley, USA Activation of Inflammasomes by Bacterial Pathogens

**Douglas Golenbock,** University of Massachusetts Medical School. USA

Pattern Recognition in Bacterial Infections: Dual Roles for TLRs and Nucleic Acid Sensors

Coffee Break

**Amal Amer,** Ohio State University, USA *Unconventional Functions of Inflammasomes* 

Denise M. Monack, Stanford University, USA

Inflammasomes and Bacterial Infections

Short Talk(s) Chosen from Abstracts

Following Session is for Type I Interferon: Friend and Foe Alike (X6)

08:00-11:00 Type I IFN Regulation of Bacterial Infection and

Disease

Registered attendees can view abstracts starting on 02/19/2017

Van Horne C

Jeffery S. Cox, University of California, Berkeley, USA Discriminating Pathogen from non-Pathogen: Beyond Type 1 IFN

Katrin D. Mayer-Barber, NIAID, National Institutes of Health,

The Dichotomy between Interleukin 1 and Ttype I Interferon during Mycobacterium Tuberculosis Infection Exposes Distinct and Opposing Classes of Inflammation

Coffee Break

Thomas J. Scriba, University of Cape Town, South Africa IFN signatures that predict human tuberculosis

Craig R. Roy, Yale University School of Medicine, USA Modulation of Type I Interferon Production during Infection by Vacuolar Pathogens

Short Talk(s) Chosen from Abstracts

11:00-17:00 On Own for Lunch

11:00-13:00 Poster Setup Mezzanine 2

13:00-22:00 **Poster Viewing** Mezzanine 2

16:30-17:00 Coffee Available

17:00-19:00 Inflammasome and NF-kB Regulatory Mechanisms

Registered attendees can view abstracts starting on 02/19/2017

Christian Stehlik, Northwestern University, USA Inflammasome inhibition

Eicke Latz, University of Bonn, Germany Inflammasomes in Health and Disease

Mohamed Lamkanfi, Ghent University, Belgium Inflammasome Regulation in Auto-Inflammation

Short Talk Chosen from Abstracts

Following Session is for Type I Interferon: Friend and Foe Alike (X6)

17:00-19:00 Role of Type I IFN in Complex Autoimmunity

Registered attendees can view abstracts starting on 02/19/2017

Virginia Pascual, Baylor Research Institute, USA Pathogenic Functions of Type I IFN in SLE

Richard M. Siegel, NIAMS, National Institutes of Health, USA Interferon, Anti-Interferon Antibodies and NK Cells in Systemic Autoimmunity

Robert C. Axtell, Oklahoma Medical Research Foundation, USA Immunological Heterogeneity in Neurological Autoimmunity. Lessons from Studying Type I Interferon Responses

Short Talk Chosen from Abstracts

Van Horne Foyer

Van Horne A/B

Van Horne C

19:00-20:00 Social Hour with Lite Bites

function.

19:30–22:00 Poster Session 3

No registration fees are used to fund alcohol served at this

THURSDAY, MARCH 23

07:00-08:00 Breakfast Mezzanine 2

08:00-11:00 Interactions between Microbiota and the Innate

Van Horne A/B

Mezzanine 2

Mezzanine 2

Immune System
Registered attendees can view abstracts starting on 02/19/2017

Ramnik Xavier, Massachusetts General Hospital and Broad

Institute, USA

Host Genetics and Microbe Interactions in Human Disease

Kathy D. McCoy, University of Calgary, Canada

Intestinal Commensal Microbiota and Education of the Innate

Immune System

Coffee Break

Gabriel Nuñez, University of Michigan, USA

Interactions between Commensals and NLRs in the Gut

**Andrew T. Gewirtz,** Georgia State University, USA *Microbial-Mediated Protection from Infectious Disease* 

Short Talk(s) Chosen from Abstracts

Following Session is for Type | Interferon: Friend and Foe Alike (X6)

08:00-11:00 Mechanisms Underlying Divergent Functions of Type

I IFNs

Registered attendees can view abstracts starting on 02/19/2017

Van Horne C

<u>Jae U. Jung</u>, Keck School of Medicine of USC, USA TRIM-Mediated Control of Type I IFN Pathway

 $\textbf{Marco Colonna}, \, \textbf{Washington University School of Medicine}, \, \textbf{USA}$ 

Targeting Type I IFN Activity through Plasmacytoid DC

Coffee Break

Laurel L. Lenz, University of Colorado, USA

Role of Type I - Type II IFN Crosstalk in Macrophage Effector

Function

Gideon Schreiber, Weizmann Institute, Israel

The Molecular Basis for Differential Activity of Type I

Interferons

Short Talk(s) Chosen from Abstracts

11:00-17:00 On Own for Lunch

14:30-16:30 Workshop 3: PRRs in Inflammatory Diseases

Van Horne A/B

Following Session is for Type I Interferon: Friend and Foe Alike (X6)

14:30-16:30 Workshop 3: Type I IFN in Clinical and Experimental

Autoimmunity

<u>Van Horne C</u>

Short Talks Chosen from Abstracts

Keystone Symposia Conference | Pattern Recognition Signaling: From Innate Immunity to Inflammatory Disease - Program

16:30-17:00 Van Horne Foyer Coffee Available

17:00-18:45 Innate Immune Receptors and Metabolism

Registered attendees can view abstracts starting on 02/19/2017

Luke A. J. O'Neill, Trinity Biomedical Sciences Institute, Ireland Metabolic Reprogramming in Innate Immunity and Inflammation

Vishwa Deep Dixit, Yale University, USA Metabolic Control of Inflammasomes

Mihai G. Netea, Radboud University, Netherlands Metabolic Basis for Trained Innate Immunity

Following Session is for Type | Interferon: Friend and Foe Alike (X6)

17:00-18:45 Tailoring Type I IFN Interventions to Achieve Cure

Registered attendees can view abstracts starting on 02/19/2017

Van Horne C

Geraldine P. Grouard-Vogel, Neovacs, France

Overexpression of IFNalpha and Derived Diseases: Innovative Approach with a Therapeutic Vaccine IFNalpha Kinoid

Miguel A. Sanjuan, Medimmune/Astrazeneca, USA Novel Pathogenic Role for IgE in SLE, and Pharmacological Blockade of Type I IFN Receptor in Patients

John J. O'Shea, NIAMS, National Institutes of Health, USA Targeting Type I IFN Signaling Pathways

18:45-19:00 Meeting Wrap-Up: Outcomes and Future Directions

(Organizers)

Registered attendees can view abstracts starting on 02/19/2017

Following Session is for Type | Interferon: Friend and Foe Alike (X6)

18:45-19:00 Meeting Wrap-Up: Outcomes and Future Directions

(Organizers)

Registered attendees can view abstracts starting on 02/19/2017

Van Horne C

Social Hour with Lite Bites No registration fees are used to fund alcohol served at this

function.

20:00-23:00 **Entertainment** 

Entertainment is not subsidized by conference registration fees nor any U.S. federal government grants. Funding for this expense is

provided by other revenue sources.

FRIDAY, MARCH 24

19:00-20:00

Departure

\*Session Chair †Invited, not yet responded.

Keystone Symposia thanks our Sponsors for generously supporting this meeting:

http://www.keystonesymposia.org/index.cfm?e=web.Meeting.Program&meetingid=1481

Van Horne A/B

Van Horne A/B

Mezzanine 2

7/8

Mezzanine 2







We gratefully acknowledge support for this conference from:

### **Directors' Fund**

These generous unrestricted gifts allow our Directors to schedule meetings in a wide variety of important areas, many of which are in the early stages of research.

<u>Click here</u> to view all of the donors who support the Directors' Fund.

We gratefully acknowledge additional support for this conference from:





We gratefully acknowledge additional in-kind support for this conference from those foregoing speaker expense reimbursements:

Genentech, Inc.

We appreciate the organizations that provide Keystone Symposia with additional support, such as marketing and advertising:

Click here to view more of these organizations

Special thanks to the following for their support of Keystone Symposia initiatives to increase participation at this meeting by scientists from underrepresented backgrounds:

Click here to view more of these organizations

If your organization is interested in joining these entities in support of Keystone Symposia, please contact: **Sarah Lavicka**, Assistant Director of Development, Email: <a href="mailto:sarah@keystonesymposia.org">sarah@keystonesymposia.org</a>, Phone:+1 970-262-2690

Click here for more information on Industry Support and Recognition Opportunities.

If you are interested in becoming an advertising/marketing in-kind partner, please contact: **Yvonne Psaila**, Director, Marketing and Communications, Email: <a href="mailto:yvonnep@keystonesymposia.org">yvonnep@keystonesymposia.org</a>, Phone:+1 970-262-2676