

Molecular Approaches to Vaccines and Immune Monitoring (J5)

joint with the meeting on [B Cell-T Cell Interactions \(J6\)](#)

Scientific Organizers: Peter D. Kwong, Brandon DeKosky and Jeffrey B. Ulmer

February 10–14, 2019

Keystone Resort, Keystone, Colorado, USA

Supported by the Directors' Fund

IT'S NOT TOO LATE TO SUBMIT YOUR ABSTRACT. Abstracts received can no longer be considered for oral short talks. Abstracts for poster display opportunities will be accepted until 6 weeks before meeting start date midnight MST.

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

DEADLINES:

*All deadlines end at 11:59 PM US Mountain Standard Time

Scholarship Deadline: Oct 23, 2018 [\[details\]](#)

Discounted Abstract Deadline: Oct 23, 2018 [\[details\]](#)

Abstract Deadline: Nov 7, 2018 [\[details\]](#)

Discounted Registration Deadline: Dec 6, 2018 [\[details\]](#)

[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, February 10 with registration from 16:00 to 20:00 and a welcome mixer from 18:00 to 20:00. Conference events conclude on Thursday, February 14 with a closing plenary session from 17:00 to 19:00, followed by a social hour and entertainment. We recommend return travel on Friday, February 15 in order to fully experience the meeting.

SUNDAY, FEBRUARY 10

16:00–20:00	Arrival and Registration	Longs Peak Foyer
18:00–20:00	Welcome Mixer	Longs Peak Foyer
No registration fees are used to fund alcohol served at this function.		

MONDAY, FEBRUARY 11

07:00–08:00	Breakfast	Colorado Rockies Ballroom
08:00–09:00	Welcome and Keynote Address (Joint)	Columbine Ballroom
	Registered attendees can view abstracts starting on 01/10/2019	
	Antonio Lanzavecchia, Institute for Research in Biomedicine, Switzerland <i>The B Cell Immune Response to Infection and Vaccination</i>	
09:00–11:15	Targeting Appropriate Immune Responses for Structure-based Design	Grays/Longs Peak
	Registered attendees can view abstracts starting on 01/10/2019	
	Dennis R. Burton, The Scripps Research Institute, USA <i>From Antibody to Vaccine</i>	

Coffee Break

George Georgiou, University of Texas at Austin, USA
Molecular Definition of Protective Serum Responses from Vaccination and for Immune Monitoring

Peter D. Kwong, NIAID, National Institutes of Health, USA
Iterative Structure-Based Optimization of Antibody-Guided Vaccines

Short Talk(s) Chosen from Abstracts

Following Session is for [B Cell-T Cell Interactions \(J6\)](#)

09:00–11:15

Tfh Biology

[Registered attendees](#) can view abstracts starting on 01/10/2019

Carola G. Vinuesa, Australian National University, Australia
Human Tfh Biology

Coffee Break

Hai Qi, Tsinghua University, China
Guidance Cues for Tfh Cells

Shane Crotty, La Jolla Institute for Allergy and Immunology, USA
Tfh Cell and Germinal Center B Cell Responses in the Context of Vaccines

Short Talk(s) Chosen from Abstracts

[Quandary Peak](#)

11:15–17:00

On Own for Lunch

11:15–13:00

Poster Setup

[Colorado Rockies
Ballroom](#)

13:00–22:00

Poster Viewing

[Colorado Rockies
Ballroom](#)

14:30–16:30

Workshop 1: Molecular Characteristics of Serum Responses Which Could Serve as Appropriate Templates for Vaccine Design

[Grays/Longs Peak](#)

Short Talks Chosen from Abstracts

Following Session is for [B Cell-T Cell Interactions \(J6\)](#)

14:30–16:30

Workshop 1: B Cell Biology in T-Dependent Responses

[Quandary Peak](#)

Short Talks Chosen from Abstracts

16:30–17:00

Coffee Available

[Longs Peak Foyer](#)

17:00–19:00

Clinical Results from Structure-based Vaccines

[Grays/Longs Peak](#)

[Registered attendees](#) can view abstracts starting on 01/10/2019

Sumana Chandramouli, GSK Vaccines, USA
A Structural Biology Approach to Developing an HCMV Vaccine

Amy S. Espeseth, Merck & Co., Inc., USA
mRNA Vaccines Expressing Forms of RSV-F Protein are Immunogenic and Protective in Preclinical Models of Respiratory Syncytial Virus Infection

Barney S. Graham, NIAID, National Institutes of Health, USA
Clinical Results from the Prefusion-Stabilized RSV F (DS-Cav1) Subunit Vaccine

Short Talk(s) Chosen from Abstracts

Following Session is for [B Cell-T Cell Interactions \(J6\)](#)

17:00–19:00

Regulation of the GC Response

[Registered attendees](#) can view abstracts starting on 01/10/2019

[Quandary Peak](#)

Andre Ballesteros-Tato, University of Alabama at Birmingham, USA
Regulation of IL-2 Responses in the GC

Michelle A. Linterman, Babraham Institute, UK
Ageing and the Germinal Centre Response

Di Yu, Australian National University, Australia
Follicular Cytotoxic T Cells: Friends or Foes?

Short Talk(s) Chosen from Abstracts

19:00–20:00	Social Hour with Lite Bites No registration fees are used to fund alcohol served at this function.	Longs/Quandary Peaks
19:30–22:00	Poster Session 1	Colorado Rockies Ballroom

TUESDAY, FEBRUARY 12

07:00–08:00	Breakfast	Colorado Rockies Ballroom
08:00–09:00	Keynote Address (Joint) Registered attendees can view abstracts starting on 01/10/2019 Michel C. Nussenzweig , HHMI/Rockefeller University, USA <i>Antibody Responses and Antibodies</i>	Columbine Ballroom
09:00–11:15	B Cell Ontogenies as Vaccine Templates Registered attendees can view abstracts starting on 01/10/2019 Lynn Morris , National Institute for Communicable Diseases, South Africa <i>V2-directed vaccine-like antibodies from HIV-1 infection mediate ADCC and block α4β7 interactions</i> Coffee Break William Schief , IAVI and The Scripps Research Institute, USA <i>Germline-Targeting Vaccine Design</i> Frederick W. Alt , Boston Children's Hospital, USA <i>Mouse Models for Lineage-Based Vaccines</i> Short Talk(s) Chosen from Abstracts	Grays/Longs Peak

Following Session is for [B Cell-T Cell Interactions \(J6\)](#)

09:00–11:15	Germinal Center Biology Registered attendees can view abstracts starting on 01/10/2019 Gabriel D. Victora , Rockefeller University, USA <i>Clonal Dynamics of the Antibody Response</i> Coffee Break Jason G. Cyster , HHMI/University of California, San Francisco, USA <i>Guidance Cues in the B Cell Response</i> Tomohiro Kurosaki , WPI Immunology Frontier Research Center, Osaka University, Japan <i>Memory Cell Differentiation in the Germinal Center</i> Short Talk(s) Chosen from Abstracts	Quandary Peak
11:15–17:00	On Own for Lunch	
11:15–13:00	Poster Setup	Colorado Rockies Ballroom
13:00–22:00	Poster Viewing	Colorado Rockies Ballroom
14:30–16:30	Workshop 2: Antibody Isolation and B Cell Sequencing Short Talks Chosen from Abstracts	Grays/Longs Peak

Following Session is for [B Cell-T Cell Interactions \(J6\)](#)

14:30–16:30 **Workshop 2: Tfh/Tfr Differentiation and Function**

Short Talks Chosen from Abstracts

[Quandary Peak](#)

16:30–17:00 **Coffee Available**

[Longs Peak Foyer](#)

17:00–19:00 **Tackling Difficult Pathogens with Antibody-Based Vaccine Design**

[Grays/Longs Peak](#)

[Registered attendees](#) can view abstracts starting on 01/10/2019

Ian A. Wilson, The Scripps Research Institute, USA
Towards a Universal Influenza Virus Vaccine: Is it Better to Target the HA Head or Stem?

Sarah F. Andrews, National Institutes of Health, USA
Identifying Common Antibody Lineages to Evaluate Clinical Responses to Influenza Vaccination

Erica Ollmann Saphire, The Scripps Research Institute, USA
Vaccine Design from a Prefusion-Stabilized Lassa Virus Trimer Structure

Short Talk(s) Chosen from Abstracts

Following Session is for [B Cell-T Cell Interactions \(J6\)](#)

17:00–19:00 **Programming T Cells to Help B Cells**

[Registered attendees](#) can view abstracts starting on 01/10/2019

[Quandary Peak](#)

Virginia Pascual, Cornell University, USA
Talk Title to be Announced

Casey T. Weaver, University of Alabama at Birmingham, USA
Programming the Early Bifurcation of Tfh and Non-Tfh Effector Responses

Philippa C. Marrack, HHMI/National Jewish Health, USA
Tfh Memory

Short Talk(s) Chosen from Abstracts

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

[Longs/Quandary Peaks](#)

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

19:30–22:00 **Poster Session 2**

[Colorado Rockies Ballroom](#)

WEDNESDAY, FEBRUARY 13

07:00–08:00 **Breakfast**

[Colorado Rockies Ballroom](#)

08:00–09:30 **Keynote Session (Joint)**

[Columbine Ballroom](#)

[Registered attendees](#) can view abstracts starting on 01/10/2019

Facundo D. Batista, Ragon Institute of MGH, MIT and Harvard, USA
Importance of B Cell-T Cell Interactions in Mouse Vaccine Models

Hedda Wardemann, German Cancer Research Center, Germany
Development and Clonal Evolution of Human Memory B Cell Antibody Responses

Coffee Break

09:50–11:15 **Immune Monitoring of B Cell Responses**

[Grays/Longs Peak](#)

[Registered attendees](#) can view abstracts starting on 01/10/2019

Michael Joseph Mina, Brigham and Women's Hospital, USA
Reading the Record of Immunity: Profiling the Anti-Virome Antibody Repertoire with Phage Display and Deep Neural

Networks

Margaret Ellen Ackerman, Dartmouth College, USA
Measuring and Mining Serum Antibody Responses to Understand Protection from Infection

Short Talk(s) Chosen from Abstracts

Following Session is for [B Cell-T Cell Interactions \(J6\)](#)

09:50–11:15

B Cell Responses in Infectious Disease

[Registered attendees](#) can view abstracts starting on 01/10/2019

Patrick C. Wilson, University of Chicago, USA
The B Cell Response to Influenza and Vaccination

Frances E. Lund, University of Alabama at Birmingham, USA
T Cell Dependent Memory B Cell Responses in Influenza Infection and Vaccination

Short Talk(s) Chosen from Abstracts

[Quandary Peak](#)

11:15–17:00

On Own for Lunch

11:15–13:00

Poster Setup

[Colorado Rockies Ballroom](#)

13:00–22:00

Poster Viewing

[Colorado Rockies Ballroom](#)

14:30–16:30

Workshop 3: Molecular Approaches to Probe the Elicited Vaccine Response

[Grays/Longs Peak](#)

Short Talks Chosen from Abstracts

Following Session is for [B Cell-T Cell Interactions \(J6\)](#)

14:30–16:30

Workshop 3: B Cell-T Cell Interactions in Disease

Short Talks Chosen from Abstracts

[Quandary Peak](#)

16:30–17:00

Coffee Available

[Longs Peak Foyer](#)

17:00–19:00

Optimizing Vaccine Responses

[Registered attendees](#) can view abstracts starting on 01/10/2019

Neil P. King, University of Washington, USA
Atomic-Level Design to Increase the Magnitude of B Cell Responses

Günther Staffler, AFFiRiS AG, Austria
Towards a Heart Attack Vaccine: PCSK9 as a Immunogen

Speaker to be Announced

Short Talk(s) Chosen from Abstracts

[Grays/Longs Peak](#)

Following Session is for [B Cell-T Cell Interactions \(J6\)](#)

17:00–19:00

Memory Humoral Responses

[Registered attendees](#) can view abstracts starting on 01/10/2019

Marc K. Jenkins, University of Minnesota Medical School, USA
Memory T and B Cell Responses

Mark J. Shlomchik, University of Pittsburgh School of Medicine, USA
Memory B Cell Subsets

Marion Pepper, University of Washington, USA
Memory B Cells in Plasmodium Infection

Short Talk(s) Chosen from Abstracts

[Quandary Peak](#)

19:00–20:00	Social Hour with Lite Bites No registration fees are used to fund alcohol served at this function.	Longs/Quandary Peaks
19:30–22:00	Poster Session 3	Colorado Rockies Ballroom

THURSDAY, FEBRUARY 14

07:00–08:00	Breakfast	Colorado Rockies Ballroom
08:00–11:00	Vaccines: Better, Faster, and Less Expensive! Registered attendees can view abstracts starting on 01/10/2019 Rino Rappuoli , GlaxoSmithKline Vaccines, Italy <i>Developing Vaccines against Pandemics and for the Developing World</i> Laura M. Walker , Adimab, USA <i>Rapid Antibody Identification to Speed Pandemic Responses</i> Coffee Break Brandon DeKosky , University of Kansas, USA <i>Paired Heavy-Light Chain Sequencing and Display to Optimize Immune Readout from Vaccination and for Immune Monitoring</i> Julie Ledgerwood , NIAID, National Institutes of Health, USA <i>Immune Monitoring to Increase the Likelihood of Phase 2 Success</i> Short Talk(s) Chosen from Abstracts	Grays/Longs Peak
Following Session is for B Cell-T Cell Interactions (J6)		
08:00–11:00	Humoral Autoimmunity and Allergic Responses Registered attendees can view abstracts starting on 01/10/2019 Rachel Ettinger , Viela Bio, USA <i>VIB4920, a Novel CD40L Antagonist, Decreased Disease Activity and Improved Biomarkers of Immune Activation in a Phase 1b, Proof-of-Concept Study in Rheumatoid Arthritis</i> Michael C. Carroll , Boston Children's Hospital, Harvard Medical School, USA <i>Epitope Spreading in Autoimmune Germinal Centers</i> Coffee Break Maria A. Curotto de Lafaille , NYU School of Medicine, USA <i>Biology of IgE Affinity Maturation</i> Christopher C. Goodnow , Garvan Institute of Medical Research, Australia <i>Progression from benign to pathogenic autoantibody by somatic mutation in a rogue clone: single cell RNA & DNA sequencing</i> Short Talk(s) Chosen from Abstracts	Quandary Peak
11:00–17:00	On Own for Lunch	
14:30–16:30	Workshop 4: Molecular Approaches for Rapid Identification/Optimization of Target Antigens Short Talks Chosen from Abstracts	Grays/Longs Peak
16:30–17:00	Coffee Available	Longs Peak Foyer
17:00–18:45	Reducing Vaccine Risks and Costs Registered attendees can view abstracts starting on 01/10/2019 Jeffrey B. Ulmer , GSK Vaccines, USA <i>Molecular Approaches to Streamlining Vaccine Discovery and Development</i> Katalin Karikó , BioNTech RNA Pharmaceuticals, Germany <i>Advantages of an mRNA Vaccine Approach</i>	Grays/Longs Peak

Gary J. Nabel, Sanofi, USA
*How Appropriate Choice of a Human Antibody Template Reduces
 Vaccine Development Risks*

Short Talk Chosen from Abstracts

Following Session is for [B Cell-T Cell Interactions \(J6\)](#)

17:00–18:45

T-Dependent B Cell Differentiation

[Registered attendees](#) can view abstracts starting on 01/10/2019

Klaus Rajewsky, Max Delbrück Center for Molecular Medicine,
 Germany
Transcriptional Programming of GC B Cell Differentiation

[Quandary Peak](#)

Meinrad Busslinger, Research Institute of Molecular Pathology,
 Austria
*Ikaros Prevents Autoimmunity by Promoting Anergy Induction
 and Restraining Toll-like Receptor Signaling in B cells*

Robert Brink, Garvan Institute of Medical Research, Australia
*Constant Region-Based Selection in the Germinal Center
 Reaction*

Short Talk Chosen from Abstracts

18:45–19:00

Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

[Registered attendees](#) can view abstracts starting on 01/10/2019

[Grays/Longs Peak](#)

Following Session is for [B Cell-T Cell Interactions \(J6\)](#)

18:45–19:00

Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

[Registered attendees](#) can view abstracts starting on 01/10/2019

[Grays/Longs Peak](#)

19:00–20:00

Social Hour with Lite Bites

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

[Longs/Quandary Peaks](#)

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.

[Colorado Rockies
 Ballroom](#)

FRIDAY, FEBRUARY 15

Departure

*Session Chair †Invited, not yet responded.

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