

6th
**COLORADO
ALPHAHERPESVIRUS
LATENCY SYMPOSIUM**

Vail, Colorado

May 18-21, 2016



*To convene researchers active in alphaherpesvirus latency
To discuss current advances in a relaxed venue*

Colorado Alphaherpesvirus Latency Symposium

May 18-21, 2016

Christiania Lodge
Vail, Colorado

Wednesday, May 18

7:00 pm dinner: Bully Ranch

Thursday, May 19

7:00 – 8:00 am breakfast & poster set up: Christiania Lodge

8:00 – 8:10 am Welcome: Randy Cohrs

8:10 – 10:10 am Session I: Clinical

10:10 – 10:30 am break

10:30 – 12:30 pm Session II: Host interactions

12:30 – 2:00 pm lunch / free time

2:00 – 4:00 pm Session III: Neurons

4:00 – 4:15 pm break

4:15 – 5:15 pm Plenary talk: James Eberwine

5:15 – 6:15 pm Music by Tamara Goldstein & Don Gilden

6:45 pm group photograph

7:00 pm dinner: Up the Creek

Friday, May 20

7:00 – 8:00 am breakfast: Christiania Lodge

8:00 – 10:00 am Session IV: Immune response

10:00 – 10:20 am break

10:20 – 12:20 pm Session V: Mechanism

12:20 – 2:00 pm lunch / business meeting: Christiania Lodge

2:00 – 5:00 pm Session VI: Poster presentations

2:00 – 2:45 pm Oral overview

2:45 – 5:00 pm Poster viewing

5:00 free time

7:00 pm dinner: Alpenrose

Following dinner round table discussion: Christiania Lodge

Saturday, May 21

7:00 breakfast: Christiania Lodge

Thursday morning, May 19

7:00 breakfast & poster setup: Christiania Lodge

8:00 Welcome: Randy Cohrs

Session I: Clinical. Moderator: Todd Margolis

8:10 Don Gilden
Granulomatous vasculitis: one virus, three phenotypes

8:30 Don Gilden
Successful antiviral treatment after 6 years of chronic progressive VZV brain infection

8:50 Maria Nagel
Burning mouth syndrome associated with varicella zoster virus

9:10 Padma Srikanth
Varicella Zoster Virus infection: a report from a tertiary care center in Chennai, India

9:30 Jeffrey Cohen
Severe herpes zoster: more than bad luck

9:50 Judy Breuer
Intrahost diversity provides insight into VZV pathogenesis

10:10 coffee break

Session II: Host interactions. Moderator: Anne Cliffe

10:30 Nancy Sawtell
Long term latent HSV infection associated with behavioral deficits

10:50 Edouard Cantin
HSV induced neurocognitive impairment in latently infected mice

11:10 Richard Thompson
Infection of neurons from the body surface is characterized by initial entry into the latent program followed by regulated de novo VP16 expression and transactivation dependent emergence into the lytic cycle in a subset

11:30 Clinton Jones
The canonical wnt/b-catenin signaling pathway is active in in sensory neurons of calves latently infected with bovine herpesvirus 1

11:50 Angus Wilson
Control of host microRNA expression during HSV-1 infection

12:10 Jim Goodrich
The response of RNA polymerase II transcription to HSV-1 infection

12:30 lunch / free time

Thursday afternoon, May 19

Session III: Neurons. Moderator: Donna Neumann

- 2:00 Ron Goldstein
A scalable and easily manipulated experimental model for study of varicella-zoster virus latency
- 2:20 David Bloom
Evaluation of a differentiated human iPSC neuron model of HSV latency
- 2:40 Susanne Himmelein
Anatomical preparation and characterization of human vestibular ganglia in the context of vestibular neuritis
- 3:00 Homayon Ghiasi
Interrelationship of primary virus replication in the eye, level of latency and time to reactivate in the trigeminal ganglia of latently infected mice
- 3:20 Robert Hendricks
Critical role for sympathetic corneal nerves in primary and reactivated herpes stromal keratitis
- 3:40 Andrea Bertke
Sympathetic neuronal pathways differentially regulate HSV1 and HSV2 genital infection
- 4:00 coffee break
- 4:15 **Plenary Talk. James Eberwine with introduction by Todd Margolis**
Adult human and mouse neuronal cell transcriptome variability: Insights into cell identity and function
- 5:15 Music by Tamara Goldstein & Don Gilden
- 6:45 group photograph
- 7:00 dinner: Up the Creek

Friday morning, May 20

7:00 breakfast: Christiania Lodge

Session IV: Immune response. Moderator: David Knipe

- 8:00 Greg Smith
TLR3 promotes latency by rapidly protecting CNS neurons from HSV-1 infection
- 8:20 Patrick Stuart
CD28 defective mice display reduced latency, increased genome load, reduced CD8+ T cells in trigeminal ganglia
- 8:40 David Tschärke
Making HSV more visible to CD8⁺ T cells increases lesion size but does not alter latency
- 9:00 Paul "Kip" Kinchington
The influence of expression on CD8+T cell immunodominance, priming and ganglionic retention during latency of HSV-1 in the murine C57Bl6 model
- 9:20 Dan Carr
Mice vaccinated with a mutant HSV-1 deficient in the nuclear location signal of ICP0 (0ΔNLS) are highly resistant to subsequent HSV-1 challenge in comparison to naive mice or mice vaccinated with a HSV gD-2 subunit
- 9:40 David Davido
Mutations in HSV-1 ICP6 impair pathogenesis in mice and constitute a potential vaccine against HSV-1
- 10:00 coffee break

Session V: Mechanism. Moderator: Catherine Sadzot

- 10:20 Victor Hsia
Volatile organic compound released upon Herpes Simplex Virus Type -1 acute infection modulates membrane potential of human neuron-like cells and represses subsequent viral infection
- 10:40 Philip Krause
Novel functions of Herpes Simplex Virus ICP27 in regulating host pre-mRNA processing
- 11:00 Charles Grose
Autophagy facilitates transport of VZV particles without degradation following VZV reactivation
- 11:20 Moriah Szpara
Neuronal differentiation impacts host responses to HSV infection in vitro
- 11:40 Matthew Taylor
Role for superinfection exclusion during neuroinvasive alphaherpesvirus spread
- 12:00 Kamel Khalili
Gene editing strategy for suppressing HSV-1 replication
- 12:20 lunch / business meeting: Christiania Lodge

Friday afternoon, May 20

Session VI: Poster presentations. Moderators: Martine Aubert and David Davido

2:00 Oral overviews

- Poster 1 Laura Benjamin
The use of imaging to explore the association of VZV reactivation and surrogate markers of stroke and stroke subtype
- Poster 2 Leonardo D'Aiuto
New human neuronal progenitor cells (NPCs)-based drug screening platform for CNS HSV-1 infections
- Poster 3 Kevin Egan
HSV-1 replication kinetics and immune response in the Lip Scarification model of infection
- Poster 4 Robert Figliozzi
Zebrafish as Models of Alpha Human Herpes Virus Infection and Latency
- Poster 5 Dallas Jones
VZV-mediated regulation of the PD-1:PD-L1 pathway in human T cells
- Poster 6 Marielle Lebrun
Role of Varicella Zoster virus ORF9p in the secondary egress: importance of its interaction with the cellular Adaptin Protein-1
- Poster 7 Jennifer Lee
HSV-1 ICP0 regulates the structure of latent viral chromatin
- Poster 8 Lora McClain
Exploring the mechanism of action of the antiherpetic alkloid trans-dihydrolycoricidine (R430)
- Poster 9 Chandra Menendez
HSV-1 activity persists in a unique region of the brain during latency and is associated with a loss in resident T cell function
- Poster 10 Elena Moraitis
Mechanisms of Varicella zoster virus related cerebral arteriopathy
- Poster 11 Julian Scherer
Two-color herpesvirus discriminate inoculum from progeny
- Poster 12 Shannan Washington
Deletion of the HSV-1 Ctcf binding motif Ctrl2 enhances the acute infection at the expense of latency in the mouse

2:45 Poster viewing

5:00 free time

7:00 dinner – Alpenrose

Following dinner - round table discussion (optional): Christiania Lodge

Saturday morning, May 21

7:00 breakfast: Christiania Lodge

Departure

Discussants

Martine Aubert
Nicholas Baird
Mark Challberg
Anna Cliffe
Elisabeth Cohen
Randall Cohrs
Seth Fietze
Thomas Goodwin
Ken Jones
Benedikt Kaufer
Peter Kennedy
David Knipe
Katherine Lee
Ravi Mahalingam
Todd Margolis
Satish Mehta
Donna Neumann
Duane Pierson
Joel Rovnak
Catherine Sadzot
Scott Schmid
Deepak Shukla
Vicki Traina-Dorge
Jim Treybig
Brian Wigdahl
Leigh Zerboni

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Agilent Technologies, Inc.

Bully Ranch

Cellular Dynamics International, a Fujifilm Company

The Christiania Lodge

Colorado Mountain Express

Don Gilden

FedEx, store #2004

Genewiz

Integrated DNA Technologies

Molly's Spirits

Research Products International

Rocky Mountain SIMS

Thermo Fisher Scientific

Tivoli Distributing Company

Tivoli Lodge

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