isirv
Antiviral Group

4th isirv-AVG Conference
Novel Antiviral Therapies for Influenza and other Respiratory Viruses: Bench to Bedside

Tuesday 2 - Thursday 4 June 2015
Avaya Auditorium, Peter O'Donnell Jr Building
University of Texas, Austin, USA

REPORT

The 4th AVG Conference held at the University of Texas on 2-4 June was opened by Professor Dean Appling, Associate Dean of Natural Sciences. It attracted a capacity audience of 200 registered participants.
The theme of the conference was effective in bringing together a good mix of scientists from industry, academia, and research and public health organisations, with about half of the participants representing some 45 different companies. While the majority(60%) of participants were from USA, 22 other countries from around the world were represented.

Against a backdrop of resistance to the licensed antivirals against influenza viruses and the lack of effective interventions against other respiratory viruses, the 3-day programme covered the discovery and development of inhibitors of novel virus targets and key host cell factors. While the principal focus was on influenza, presentations also featured development of antivirals against RSV, coronaviruses, in particular MERS-CoV, rhinoviruses and EV-D68, as well as of more broad-spectrum inhibitors.

The ten sessions covered the whole gamut of steps from molecular biology to clinical studies. A wide variety of types of inhibitor were discussed, from small molecules to antibodies and siRNA, targeting various virus-specific activities, in particular of virus polymerase components and membrane fusion activities of influenza HA and RSV F proteins. The recent *tour de force* of the determination of the crystal structure of the trimeric influenza polymerase emphasized the increasing wealth of structural information available to assist design of novel inhibitors, against both virus and host targets. The established influenza targets NA and M2 were revisited with respect to the potential for development of alternative inhibitors to overcome the limitations of resistance to the licensed agents. Updates on the clinical potential of Favipiravir and DAS-81, and of the merit of different drug combinations were presented. Several presentations described targeting key host factors in virus-host interaction, important for virus replication or the inflammatory response and which may influence susceptibility to disease, or repurposing of drugs licensed for other purposes, as a means of mitigating disease severity.

In relation to the therapeutic potential of broad-spectrum monoclonal antibodies to influenza and RSV, concerns about antibody-dependent enhancement of disease were discussed. A final session included consideration of clinical trial endpoints and regulatory issues towards licensure. Oral presentations included 36 'overview' presentations from invited specialists, together with 19 research papers selected from submitted abstracts; 40 posters on various themes were presented.

Coverage of the conference on Twitter by some of the Travel Scholars was a successful novel introduction. More than 160 tweets under the hashtag "#isirvAVG2015" were posted and the number of twitter "followers" of isirv-AVG doubled. The 'live' coverage via social media not only showcased the speakers, but also reached out to the wider scientific community.

Generous financial support for the conference was received from 15 companies, and NIAID and WHO provided support for 12 Travel Scholarships to assist young scientists and scientists from low-resource countries to attend.
An overview of the conference will be published in *Antiviral Research*.

Programme

Tuesday 2nd June	
8.00-8.30	**Opening** Robert Krug, *University of Texas, Austin, USA* (Chair Organising Committee) & Alan Hay, *Francis Crick Institute, London, UK (Chair isirv-AVG)* **Welcome** *Dean Appling, Associate Dean, Natural Sciences, University of Texas, Austin, USA*
08.30-10.00 08.30-09.15 09.15-10.00	**Session 1** **Chairs:** Ruben Donis, *Centers for Disease Control, Atlanta, USA &* Maria Zambon, *Public Health England, London, UK* • **Keynote Lecture:** Public Health Impact of Antiviral Therapy for Respiratory Diseases *Nancy Cox, Centers for Disease Control, Atlanta, USA* • **Keynote Lecture:** Clinical Development of Antivirals for Respiratory Diseases *Frederick Hayden, University of Virginia, Charlottesville, USA*
10.00 -10.30	**Refreshments**
10.30 -12.30 10.30 -11.15 11.15 -11.45 11.45 -12.15 12.15 -12.30	**Session 2: Inhibitors of Virus Polymerases, Nucleoproteins and Accessory Proteins** **Chairs:** Stephen Cusack, *EMBL, Grenoble, France* & Robert Krug, *University of Texas, Austin, USA* • **Keynote Lecture:** Structure, Mechanism and Drug Targeting of Influenza Polymerase *Stephen Cusack, EMBL, Grenoble, France* • Safety and Efficacy of JNJ-63623872 (VX-787), a Novel Non-nucleotide Polymerase Inhibitor Targeting Influenza A *Lorant Leopold, Janssen Pharma R&D, Titusville, USA* • The Nucleoprotein of Influenza Virus, a Target for New Antivirals *Anny Slama-Schwok, INRA, Jouy en Josas, France* • Identification and Characterization of Influenza Variants Resistant to a Viral Endonuclease Inhibitor *Gyanendra Kumar, St. Jude Children's Research Hospital, Memphis, USA*
12.30 -13.30	**Lunch and viewing of posters**
13.30 -15.20 13.30 -13.45 13.45 -14.15 14.15 -14.45	**Session 2 continued** • Structure-Based Development of a New Class of Influenza Endonuclease Inhibitors *Joseph Bauman, Rutgers University, Piscataway, USA* • Discovery and Development of ALS-8176, a Nucleoside Analog Inhibitor of the RSV RNA Polymerase *Julian Symons, Alios Bio Pharma Inc, San Francisco, USA* • RSV Polymerase and Nucleoprotein Inhibitors: Mechanism of Action and Resistance *Qin Yu, AstraZeneca R&D Boston, Waltham, USA*

14.45 -15.05 15.05 -15.20	• The Clinical and Anti-Influenza Virus Effects of Favipiravir, a Novel Anti-RNA Virus, Anti-Influenza Agent *Carol Epstein, MediVector Inc, Boston, USA* • Novel Broad-spectrum Antiviral against Influenza Blocks dsRNA Binding to NS1A Protein and Restores Antiviral Responses *Ji-Young Min, Institut Pasteur Korea, South Korea*
15:20-15:50	**Refreshments**
15:50-17:40 15:50-16:20 16:20-16:50 16:50-17:10 17:10-17:25 17:25-17:40	**Session 3: New Inhibitors of Influenza NA and M2 Activities** **Chairs:** Alan Hay, *Francis Crick Institute, London, UK* & Aeron Hurt, *WHO CC, Melbourne, Australia* • The Influenza Neuraminidase – Old Target, New Approaches *Jenny McKimm-Breschkin, CSIRO, Parkville, Australia* • Is M2 a Good Target to Combat Drug Resistance of the Influenza A Viruses? *Jun Wang, University of Arizona, Tucson, USA* • New Inhibitors of Influenza A Virus Neuraminidases *Mario Pinto, NSERC, Ottawa, Canada* • Delayed Oseltamivir and T-705 Combination Therapy Protects Mice Against Lethal Influenza A(H5N1) Virus Infection *Bindumadhav Marathe, St. Jude Children's Research Hospital, Memphis, USA* • Influenza Viral Load and Peramivir Kinetics after Single Administration *Masatoki Sato, Fukushima, Medical University, Fukushima, Japan*
18.30-21.00	**Reception and Buffet at the Tejas Conference Dining, AT&T Center Hotel**

Wednesday 3rd June	
08.00-09.30 08.00-08.30 08.30-09.00 09.00-09.15 09.15-09.30	**Session 4: Inhibitors of Virion Attachment/Fusion Proteins** **Chairs:** Sylvie van der Werf, *Institut Pasteur, Paris, France &* Elena Govorkova, *St Jude Children's Research Hospital, Memphis, USA* • The Influenza HA as an Antiviral Target *George F Gao, Chinese Academy of Sciences, Beijing, China* • Blocking Influenza Virus by Stabilizing the Pre-Fusion Conformation of HA *Megan Shaw, Mount Sinai Hospital, New York, USA* • Prophylactic and Therapeutic Protection Against Influenza by a Computationally Engineered Protein *Merika Treants, University of Washington, Seattle, USA* • Novel Family of Peptides with Potent Antiviral Activity Against Influenza Viruses *Seema Jasim, University of Edinburgh, Edinburgh, UK*
09.30-10.00	**Refreshments**
10.00 - 11.00 10.00 - 10.30 10.30 - 11.00	**Session 4 continued** • RSV Antivirals: Fusion Inhibitors and Beyond *John DeVincenzo, University of Tennessee, Memphis, USA* • Discovery and Proof of Concept of GS-5806 in RSV Disease *Seth Toback & Mike Perron, Gilead, Foster City, USA*

11.00 – 12.00 11.00 – 11.30 11.30 – 12.00	**Session 5: Inhibitors of Seasonal and Emerging Threats** **Chairs:** Amy Krafft, *NIAID, Rockville, MD, USA* & Nahoko Shindo, *WHO, Geneva, Switzerland* • Antiviral Strategies for Prevention and Treatment of Rhinovirus Infections *Ronald Turner, University of Virginia, Charlottesville, USA* • Severe Illness Associated with EV-D68 Infection in the United States and Approaches to Management *Sue Gerber, Centers for Disease Control, Atlanta, USA*
12.00 - 13.00	**Lunch and viewing of posters**
13.00 -14.05 13.00 -13.30 13.30 -13.45 13.45 -14.05	**Session 5 continued** • New Targets and Approaches for Coronavirus Antiviral Inhibitors *Mark Denison, Vanderbilt University School of Medicine, Nashville, USA* • Functional Dipeptidyl Peptidase 4 (DPP4) in Mink Supports Entry and Replication of Middle Eastern Respiratory Syndrome Coronavirus: American Mink (Neovision vision), a Novel in Vivo Model of MERS-CoV Infection *Thomas Voss, SRI International, Harrisonburg, VA USA* • Phase III Multi-Center Clinical Trial of Nitazoxanide in Adult Patients with Uncomplicated Influenza A and B and Other Influenza-Like Illness: Results on 1,876 Subjects from the United States, Canada, Australia and New Zealand *Marc Ayers, Romark Laboratories, L.C., Tampa, USA*
14.05 - 15.10 14.05 - 14.35 14.35 - 14.55 14.55 - 15.10	**Session 6: Monoclonal Antibodies as Therapeutics** **Chairs:** Frederick Hayden, *University of Virginia School of Medicine, Charlottesville, USA* & Karoline Bragstad, *National Influenza Centre, Oslo, Norway* • Monoclonal Antibodies as Therapeutics Against Respiratory Viruses *Wayne Marasco, Harvard Medical School, Boston, USA* • New Antibody-Based Strategies Against Viral Respiratory Diseases *Qing Zhu, Medimmune LLC, Gaithersburg, USA* • VIS410 Monoclonal Antibody Demonstrates Potent Efficacy Against Neuraminidase Inhibitors-Susceptible and -Resistant Influenza A(H7N9) Viruses and Protects Mice from Development of ARDS *Tatiana Baranovich, St. Jude Children's Research Hospital, Memphis, USA*
15.10 - 15.40	**Refreshments**
15.40 - 17.15 15.40 - 16.10 16.10 - 16.25	**Session 7: Antibody-Dependent Enhancement (ADE) of Disease: Implications for Therapeutic Monoclonal Antibody Development** **Chairs:** Wayne Marasco, *Harvard Medical School, Boston, USA &* Jose Trevejo, *Visterra Inc, Cambridge, USA* • Influence of Antibodies and T Cells on Dengue Disease Outcome *Sujan Shresta, La Jolla Institute for Allergy and Immunology, La Jolla, USA* • Influenza Vaccine-Induced Anti-HA2 Antibodies Promote Virus Entry and Enhance Lung Pathology After Influenza A Infection *Surender Khurana, FDA, Bethesda, USA*

16.25 - 16.45 16.45 - 17.05 17.05 - 17.15	• Does Antibody-Dependent Enhancement of Disease Occur in Influenza Infections? *Man-Wah Tan, Genentech, South San Francisco, USA* • VIS410, a Broadly Neutralizing Antibody to Influenza A: Characterisation and Potential for ADE *Jose Trevejo, Visterra Inc, Cambridge, USA* • Discussion
17.15 - 19.30	**Poster Session Reception – Norman Hackerman Building (NHB)**

Thursday 4th June	
08.00 - 09.50 08.00 - 08.30 08.30 - 09.00 09.00 - 09.30 09.30 - 09.50	**Session 8: Host Cell Targets: Factors Involved in Virus Replication or Mediating the Inflammatory Response** **Chair:** Jane Tao, *Rice University, Houston, USA* & Makoto Yamashita, *University of Tokyo, Tokyo, Japan* • Using Genetic Approaches to Discover Host-Virus Interactions *Abe Brass, Ragon Institute of Massachusetts General Hospital, Massachusetts, USA* • Sphingosine-1-Phosphate Receptor Modulation of Cytokine Amplification *Sean Studer, The Scripps Research Institute, La Jolla, USA* • Host Cell Factors in Influenza A Virus Uncoating *Ari Helenius, ETH Zurich, Zurich, Switzerland* • Update on DAS-181 *Ronald Moss, Ansun Biopharma, USA*
09.50 – 10.15	**Refreshments**
10.15 – 11.30 10.15 – 10:30 10.30 – 10:45 10.45 – 11:00 11.00 – 11:15 11.15 – 11:30	**Session 8 continued** • A Novel Class of Host Directed Antivirals with Broad Spectrum Activity Against Respiratory Viruses *Kristin Bedard, Kineta, Inc., Seattle, WA. USA* • Potent Anti-Influenza and Anti-Inflammatory Activity of Verdinexor, a Selective Inhibitor of Nuclear Export (SINE), Across a Broad Panel of Influenza Strains, Including Avian Influenza A H7N9 *Margaret Lee, Karyopharm Therapeutics, Inc., Newton, USA* • Targeting Sirtuins, Novel Viral Restriction Factors, to Limit Acquired Resistance *Lillian Chiang, FORGE Life Science, LLC, Doylestown, USA* • Repurposing of Signal Transduction Inhibitors to Fight the Flu – An Update *Stephan Ludwig, University of Muenster, Muenster, Germany* • Eritoran (E5564), a TLR4 Antagonist Effective Against Influenza-Induced Disease *Jorge Blanco, Sigmovir Biosystems, Rockville, USA*

11.30 – 12.30	**Session 9: Diagnostics & Resistance** **Chairs:** Hui-Ling Yen, *Division of Public Health Laboratory Sciences, The University of Hong Kong, Hong Kong SAR, China* & Adam Meijer, *National Institute for Public Health, Bilthoven, The Netherlands*
11.30-12.00	• Detection of Drug Resistance in Influenza: Current Status and Future Directions *Larisa Gubareva, Centers for Disease Control, Atlanta, USA*
12.00-12.15	• Characterization of a Large Cluster of Influenza A(H1N1)pdm09 Virus Cross-Resistant to Oseltamivir and Peramivir During the 2013-2014 Influenza Season in Japan *Emi Takashita, National Institute of Infectious Diseases, Tokyo, Japan*
12.15-12.30	• Six Years of Monitoring Emergent Oseltamivir Resistance in Patients with Influenza A Virus Infections in the Influenza Resistance Information Study (IRIS) *Bruno Lina, University Claude Bernard, Lyon, France*
12.30 -13.30	**Lunch**
13.30 – 14.00	**Session 9 continued** • The Changing Landscape of Influenza Diagnostics and the Effect on Clinical Management *Alicia Fry, Centers for Disease Control, Atlanta, USA*
14.00 -16.45	**Session 10: Regulatory Issues & Clinical Trial Endpoints** **Chairs:** Michael Ison, *Northwestern University Feinberg School of Medicine, Chicago, USA* & Melissa Willis, *Biomedical Advanced Research and Development Authority (BARDA), Washington, USA*
14.00 -14.30	• Regulatory Perspectives on Antiviral Drug Development for Influenza and Endpoint Considerations *Dr Peter Miele, FDA, Silver Spring, USA*
14.30 -15.00	• Human Respiratory Viral Challenge Models: A Worthwhile Challenge *Matthew Memoli, NIAID, Bethesda, USA*
15.00 -15.15	• The Human Viral Challenge Model – Accelerating Drug And Vaccine Development *Anthony Gilbert, Retroscreen Virology, London, UK*
15.15 -15.35	• Design and Conduct of a Drug Development Program for Severe/Complicated Influenza: Lessons from the IV Zanamivir Experience *Amanda Peppercorn, GlaxoSmithKline, North Carolina, USA*
15.35 -15.55	• Challenges in Designing Informative Clinical Trials in Patients Hospitalized with Influenza: The Peramivir Experience *Sylvia Dobo, BioCryst, Durham, USA*
15.55 -16.15	• Antibody-Based Therapy for Influenza B *Man-Wah Tan, Genentech, South San Francisco, USA*
16.15 -16.30	• Supporting Advanced Development of Novel Influenza Antiviral Therapeutics *Michael Wathen, Biomedical Advanced Research and Development Authority (BARDA), Washington, USA*
16.30 -16.45	• Multi-Center Evaluation of Outpatient Endpoints for RSV and Other Respiratory Virus Antivirals *John DeVincenzo, University of Tennessee, Memphis, USA*
16.45 -17.00	**Closing Remarks**

Organising and Scientific Committees

Organising Committee	Scientific Advisory Committee
Robert Krug - Chair University of Texas at Austin Austin USA	**Ruben Donis - Chair** Center for Disease Control and Prevention Atlanta USA
Alan Hay – Co Chair Francis Crick Institute London UK	**Michael Ison – Co Chair** Northwestern University Feinberg School of Medicine Chicago USA
Regina Dutkowski d3 Medicine New Jersey USA	**Stephen Cusack** EMBL Grenoble France
Frederick Hayden University of Virginia School of Medicine Charlottesville USA	**John DeVincenzo** University of Tennessee School of Medicine Memphis USA
Mark Krystal Bristol-Myers Squibb Company New York USA	**George Gao** Chinese Academy of Sciences Beijing China
Jane Ryan Consultant at Sementis Australia	**Amy Krafft** NIAID Rockville, MD USA
Jane Tao Rice University Houston USA	**Jenny McKimm Breschkin** CSIRO Materials Science and Engineering Parkville Australia
Sylvie van der Werf Institut Pasteur Paris France	**Melissa Willis** Biomedical Advanced Research and Development Authority (BARDA) Washington USA
Richard Whitley The University of Alabama at Birmingham Birmingham USA	**Makoto Yamashita** University of Tokyo Tokyo Japan
	Hui-Ling Yen Division of Public Health Laboratory Sciences The University of Hong Kong Hong Kong SAR, China

Collated Conference Evaluation

Respondents: 30	**Very good**	**Good**	**Average**	**Poor**	**No Response**
Tuesday 2nd June **Session 1:** **Chairs:** *Ruben Donis & Maria Zambon*	**20**	**5**	**1**	**0**	**4**
Session 2: Inhibitors of Virus Polymerases, Nucleoproteins and Accessory Proteins **Chairs:** *Stephen Cusack & Robert Krug*	**17**	**10**	**0**	**0**	**3**
Session 3: New Inhibitors of Influenza NA and M2 Activities **Chairs:** *Alan Hay & Aeron Hurt*	**18**	**7**	**1**	**0**	**4**
Wednesday 3rd June **Session 4:** Inhibitors of Virion Attachment/Fusion Proteins **Chairs:** *Sylvie van der Werf & Elena Govorkova*	**18**	**10**	**0**	**0**	**2**
Session 5: Inhibitors of Seasonal and Emerging Threats **Chairs**: *Amy Krafft & Nahoko Shindo*	**16**	**11**	**0**	**0**	**3**
Session 6: Monoclonal Antibodies as Therapeutics **Chairs**: *Frederick Hayden & Karoline Bragstad*	**19**	**8**	**1**	**0**	**2**
Session 7: Antibody-Dependent Enhancement (ADE) of Disease: Implications for Therapeutic Monoclonal Antibody Development **Chairs:** *Wayne Marasco & Jose Trevejo*	**22**	**5**	**0**	**0**	**3**
Thursday 4th June **Session 8:** Host Cell Targets: Factors Involved in Virus Replication or Mediating the Inflammatory Response **Chairs:** *Jane Tao & Makoto Yamashita*	**14**	**12**	**0**	**0**	**4**
Session 9: Diagnostics & Resistance **Chairs:** *Hui-Ling Yen & Adam Meijer*	**16**	**10**	**1**	**0**	**3**
Session 10: Regulatory Issues & Clinical Trial Endpoints **Chairs:** *Michael Ison & Melissa Willis*	**19**	**7**	**1**	**0**	**3**

Any other specific comments?

- Many respondents felt there were too many presentations and the sessions were too long. Better time management for talks would have allowed more time for questions and discussion.
- Some responded that there should have been more time spent discussing specific issues that are either safety concerns, drug development roadblocks, etc.
- Organizers have to provide an opportunity to faculty members from Asian countries to chair sessions, also for their promotion and exposure.
- Not enough time to talk to speakers; a longer poster session would have also been beneficial.
- Excellent. The topics, speakers, and discussion of speaker topics were very engaging. Thought provoking and informative conference.
- Lack of easy access to microphones for discussions; those towards the back may not have heard all the comments.
- Venue ideal, although would have been nice to permit food / drink into the meeting room.

Please rate the conference organisation	**Very good**	**Good**	**Average**	**Poor**	**No Response (NR)**
Registration process, before and at the Conference	23	5	0	1	1
Conference information provided in advance	20	7	2	0	1
Conference Programme & Abstract Book and materials provided at the Conference	17	8	4	0	1
Conference Venue	15	7	4	2	2
Quality of Food & Beverage	16	8	5	0	1
Conference Dinner Event	21	6	1	0	2
Poster Reception	13	10	2	1	4
Helpfulness of the conference organisers	26	3	0	0	1
Overall rating for the Conference	18	8	1	0	3
Would you attend a similar isirv-AVG Conference again in the future?	**26 – Yes / 1 – No / 3 – NR**				
Would you recommend the Conference to your colleagues?	**27 – Yes / 1 – No / 2 – NR**				

What aspects of the Conference did you like most? And least?

Most:

- Many commented on good sessions, topics, content and speakers and participation of key researchers and key government organisations.
- Small sized conference enabled time to talk to other delegates, experts and speakers.
- Poster session was good.
- The conference dinner social hour was the best time to talk to other people in the field.
- Some of the lectures were very knowledgeable to plan our future research.
- Covered all aspects of influenza research.
- This conference is one of the most efficient and informative, as data presented are innovative and of high interest to anyone in the ISIRV community.
- Key emerging treatments in preclinical and clinical development represented.
- Many commented on the good mix of people.
- The deep level of expertise in a small group of individuals.
- Clinical applications and testing.
- The size of event that allowed for interactions; excellent venue.
- The inclusion of RSV, HRV, and coronaviruses in the discussions. I really liked the inclusion of Dengue and ADE in the discussion on flu immunity and the development of mAb therapy for flu.
- Many praised the helpfulness of the organisers.

Least:

- Many respondents commented on the fact that sessions were too long or overran as timings were not enforced.
- Unable to bring coffee into the session room.
- The venue wasn't up to expectations e.g. people came in and ate the food during the set out for breaks / lunches.
- A lot of information and not much time to communicate with other participants.
- The lecture room was quite small.
- The fact that the posters and lunch (first day) were in another building was not ideal.
- Wifi difficult to stay connected.
- Too much industry, especially for the few non-industry attendees.

Do you have any suggestions for improving the Conference?

- Perhaps having sessions from about 8 am until 5:30 pm would be better for participants.
- Better organization, two tracks for speakers.
- More poster presenters should be given opportunity to deliver a 10 minute talk.
- Session chairs need to be briefed better. Some invited questions when speakers had overrun, some started asking their own questions before inviting the audience and some forgot to thank speakers.
- Add a networking or speed dating session, which could also be theme based.
- Greater participation of scientists working in developing countries.
- The talks might be shortened and time for discussion increased in this forum (small size).
- A meeting summary could be written and published.
- Abstract book should include abstracts for poster session, not just talks. Biographies were too long.
- I think that a little more focus on viral targets for therapeutic discovery will be a good place to improve the conference in the future. A larger focus on host targets would be ideal.
- Please add more time for networking each day, which was very intense (long sections).
- Small tour of the city/town/location of conference.
- I was awarded a travel grant. It would be nice if all the awardees can meet for one of the lunch breaks to meet each other.

How did you hear about the Conference?

- Colleagues (x 10)
- By invitation (x 2)
- Email (x 2)
- ISIV member
- From my supervisor
- GSAID website
- AVG website
- Webpage
- Online

Is there anything you would like to see at a future conference that was not included?

- Ability to download presentations at conference.
- Poster award.
- Oral presenter prize.
- Maybe some more data from developing countries as they begin to emerge.
- More participation of young scientists, generally who are doing their PhD now.
- A shuttle from the venue to the hotel.
- Would like to see recent trends and techniques of applied virology at a future conference.
- More on emerging viruses, including bunyaviruses that cause respiratory disease, maybe Adenovirus too.
- More breaks included during the day to enjoy conference location.
- More clinical applications from clinicians.
- Maybe organise some social activities for the dinner event or any other day.

Any suggestions for topics at the next isirv-AVG conference?

- Perhaps the next AVG conference might have a session on how Next Generation Sequencing is improving our understanding of antiviral resistance.
- Clinical trial endpoints are very important - need to ensure FDA is at that session.
- Maybe a meeting focusing on safety aspects of newly emerging drug candidates, as there seems to be a lot of room for interaction and mutual learning (following up on the excellent ADE session).
- Updates on the current topics would be of interest.
- More emerging preclinical and clinical treatment options to be represented.
- A session on animal models and correlation to human challenge model endpoints would be a good topic for several speakers to present findings in. I think that for influenza and other respiratory viruses, there is enough data with multiple models to make this non-clinical to clinical transition difficult and some input from the clinical side to those of us in the model side of the equation would be very helpful.
- Cost analysis for evaluating testing for trialing antivirals.
- Antiviral treatment of zoonotic respiratory infections in domestic animals.

Any other comments

- Many commented that the conference was excellent and very well organised.
- There were also several comments on the helpfulness of the organisers and going above and beyond the call of duty; "Fantastic job by Lida and her colleagues"
- Good atmosphere for discussion; nice to interact with peers.
- It would be good to have a conference book with a space for specific comments for presentations (posters) next to each abstract.
- Many people did not bring their business cards. Maybe a page (sticky address labels) can be added to book with contact information. It will be easier to share it.
- "A very special thank you to Lida de Souza, who is always the first contact point for conference attendees, always there for questions and responding swiftly. Lida goes above and beyond what we usually see at conferences, giving these meetings a personal touch. She is welcoming and accommodating, making ISIRV conferences a very positive experience for all attendants. This time, my poster roll had been lost by the airline (I am still getting updates from them after returning home). Within a few hours only she had found a way to have this printed locally exhibited in time for the session. Chapeau!"

Photo Album