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Program and Abstracts

The Twentieth International Conference on Antiviral Research

Sponsored by:

The International Society For Antiviral Research

At the Westin Mission Hills Resort

Palm Springs, CA, USA

April 29–May 3, 2007

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and
Twentieth International Conference on Antiviral Research

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Introduction To Sponsor
The International Society For Antiviral Research (ISAR)

The Society was organized in 1987 as a non-profit scientific organization for the purpose of advancing and disseminating knowledge in all areas of antiviral research. To achieve this objective, the Society organizes an annual meeting. The Society is now in its twenty first year of existence, and has about 600 members representing 30 countries. For membership application forms or further information, please contact Dr. Joseph M. Colacino, Secretary, ISAR; Vice President, Drug Discovery, PTC Therapeutics, Inc., 100 Corporate Court, south Plainfield, NJ 07080, USA, Phone +1 908 222 7000x131; fax +1 908 222 0567; E-mail jcolacin0@ptcbio.com. Membership application forms will also be available at the Conference Registration desk, or from our website http://m114.phrm.cf.ac.uk/isar/node/1.

Contributors to the 20th International Conference on Antiviral Research

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SATELLITE SYMPOSIUM

Clinical Update on Antiviral Drugs

Sunday, April 29, 2007
2:00–5:00 p.m.
Celebrity Ballroom EFGH
Westin Mission Hills Resort

SOCIAL EVENTS

Opening Reception

with light hors d'oeuvres
Sunday, April 29, 2007
6:00–8:00 p.m.

Masters Plaza
Westin Mission Hills Resort

Conference Banquet

Wednesday, May 2, 2007

Reception

7:30 p.m.
Celebrity Foyer and Plazas
Westin Mission Hills Resort

Dinner and Program

8:00–10:00 p.m.
Celebrity Ballroom EFGH
Westin Mission Hills Resort

Final Program

Twentieth International Conference on Antiviral Research

Sponsored by the

International Society for Antiviral Research

At the Westin Mission Hills Resort

Palm Springs, California

April 29–May 3, 2007

2007 International Conference on Antiviral Research

Monday, April 30, 2007

Opening Greetings

Celebrity Ballroom EFGH

Welcome to the 20th ICAR, Christopher McGuigan, President ISAR

Welcome to Palm Springs, John A. Secrist III, Chair, ICAR Conference Committee

Oral Session I: Retrovirus I

Celebrity Ballroom EFGH

Chairs: Wade Blair, Ph.D. and Masanori Baba, Ph.D.

08:45 Plenary Speaker
Daria Hazuda, Ph.D., Vice President, Merck Research Laboratories, West Point, PA, USA
"Inhibitors of HIV-1 Integrase: Lessons from In Vivo, Preclinical, and Clinical Studies"

09:15 1. Identification of a Novel Small Molecule Inhibitor that Targets HIV-1 Envelope Maturation
Judith Jimenez, Joan Cao, Lynn Jackson, Qinghai Peng, Hua Wu, Jason Isaacson, Scott Butler, Amy K. Patick, Wade S. Blair
Pfizer Global Research and Development (La Jolla, CA, USA)

09:30 2. GS-8374, a Novel Phosphonate HIV Protease Inhibitor with Potent In Vitro Antiretroviral Activity, Low Metabolic Toxicity, and Favorable Resistance Profile
Christian Callebaut[1], Kirsten Stray[1], Luong Tsai[1], Lianhong Xu[1], Gong-Xin He[1], Andrew Mulato[1], Tina Priskich[2], Neil Parkin[2], William Lee[1], Tomas Cihlar[1]
[1]Gilead Sciences, Foster City, CA, USA; [2]Monogram Biosciences, S. San Francisco, CA, USA

09:45 3. The CXCR4 Antagonist POL3026 is a Potent Inhibitor of Human Immunodeficiency Virus
Gemma Moncunill[1], Imma Clotet-Codina[1], Anuska LLano[1], Mercedes Armand-Ugón[1], Bonaventura Clotet[1], Jan Willem Vrijbloed[2], José A. Esté[1]
[1]Retrovirology Laboratory IrsiCaixa and AIDS Unit, Hospital Germans Trias i Pujol, 08916 Badalona, Spain; [2]Polyphor Ltd., Basel, Switzerland

10:00 *Break*

10:30 4. Mutations in the RNaseH Region Observed in the HIV-1 of Antiretroviral Treatment (ART) Experienced Patients
J. Waters[1], W. O'Neal[1], K. White[2], E. Lansdon[2], M. Miller[2], J. Harris[1], K. Borroto-Esoda[1]
[1]Gilead Sciences, Durham, NC, USA; [2]Gilead Sciences, Foster City, CA, USA

10:45 5. Involvement of New Mutational Pattern in HIV-1 gp41 in T-20 Treatment
Stefano Aquaro[1,2], Valentina Svicher[2], Roberta D'Arrigo[3], Mario Santoro[2], Giovanni Di Perri[4], Sergio Lo Caputo[5], Ubaldo Visco-Comandini[3], Pasquale Narciso[3], Andrea Antinori[3], Carlo Federico Perno[3]
[1]University of Calabria, Rende (CS), Italy; [2]University "Tor Vergata", Rome, Italy; [3]"L Spallanzani" Institute, Rome, Italy; [4]University of Turin, Italy; [5]"SM Annunziata" Hospital, Florence, Italy

11:00 6. Drug Resistance to Tipranavir (TPV) or Darunavir (DRV) According to New Interpretation Algorithms in PI-naïve HIV-1 Infected Patients
M. Stuermer[1], B. Dauer[1], A. Haberl[1], A. Mueller[1], P. Gute[2], S. Klauke[3], S. Staszewski[1], H.W. Doerr[1]
[1]JWG-University Hospital, Frankfurt, Germany; [2]HIV Specialty Practice, Frankfurt, Germany; [3]IFS, Frankfurt, Germany

11:15 7. HIV Interactions With Other Viruses Determine Pathogenesis in Human Lymphoid Tissues
Leonid Margolis
National Institute of Child Health and Human Development

11:30 *Lunch*

Elion Award Lecture

Celebrity Ballroom EFGH

13:30 Presentation of Award: Christopher McGuigan, Ph.D., President ISAR
Awardee lecture: Frederick Hayden, MD, USA, Medical Officer, World Health Organization, Geneva, Switzerland
"Influenza: Progress, Problems, and Future Prospects"

Oral Session II: Respiratory and West Nile Viruses

Celebrity Ballroom EFGH

Chairs: Colleen Jonsson, Ph.D. and Don Smee, Ph.D.

14:15 8. Identification and Biochemical Characterization of Small Molecule Inhibitors of West Nile Virus Serine Protease By A High Throughput Screen
Radhakris Padmanabhan[1], Niklaus Mueller[1], Nagarajan Pattabiraman[2]
[1]Department of Microbiology and Immunology, Georgetown University; [2]Biomids Inc.

14:30 9. Discovery of a New Class of Polycyclic RSV Inhibitors
Silas Bond[1], Alistair Draffan[1], John Lambert[1], Chin-Yu Lim[1], Bo Lin[1], Angela Luttick[1], Jeff Mitchell[1], Craig Morton[1], Roland Nearn[1], Vanessa Sanford[1], Simon Tucker[1]
[1]Biota Holdings Limited; [2]MedImmune Inc.

14:45 10. Potent Inhibition of Viral Entry and Replication of SARS-CoV by siRNAs Targeting the Genes Encoding the Cellular ACE2 Receptor or the Viral Nucleocapsid Protein
Xin Yan[1,2,3], Hua Shen[2], Yan Feng[1], Jun Wang[2], Shiwen Lou[4], Liping Wang[5], Gillian Wong[1], Zhaoxiong Yang[2], Hongjian Jiang[6], Xinqi Wu[6], Dan Hu[5], Yi Guan[4], Fiona Smaill[1], Chengsheng Zhang[1]
[1]Department of Pathology & Molecular Medicine, McMaster University, Canada; [2]New Medical Science Research Institute, New York, USA; [3]Institute of Chongqing Traditional Chinese Medicine, Chongqing, China; [4]Department of Microbiology, University of Hong Kong, Hong Kong; [5]Dana-Farber Cancer Institute, Harvard Medical School, Boston, USA; [6]Children's Hospital, Harvard Medical School, Boston, USA

15:00 11. Thiazolides: A New Class of Broad-Spectrum Antiviral Drugs Targeting Virus Maturation
M. Gabriella Santoro[1], Alessandra Ciucci[1], Patrizia Gianferretti[1], Giuseppe Belardo[1], Simone La Frazia[1], Stefania Carta[1], Jean-Francois Rossignol[2]
[1]Department of Biology, University of Rome Tor Vergata, Rome, Italy; [2]Division of Gastroenterology and Hepatology, Department of Medicine, Stanford University School of Medicine, Stanford, CA, USA

15:15 12. Oseltamivir-Ribavirin Combination Therapy for Highly Pathogenic H5N1 Influenza Virus Infection in Mice
Natalia A. Ilyushina, Robert G. Webster, Elena A. Govorkova
St. Jude Children's Research Hospital, Memphis, TN 38105, USA

15:30 13. Intramuscular Administration of Neuraminidase Inhibitor Peramivir Promotes Survival Against Lethal H5N1 Influenza Infection in Mice
David A. Boltz[1], Natalia A. Ilyushina[1], C. Shane Arnold[2], Y. Sudhakar Babu[2], Robert G. Webster[1], Elena A. Govorkova[1]
[1]St Jude Children's Research Hospital, Memphis, TN 38105, USA; [2]BioCryst Pharmaceuticals, Inc., Birmingham, AL 35244, USA

15:45 14. Treatment of Paralysis Caused by West Nile Virus in Hamsters
John D. Morrey[1], Venkatraman Siddharthan[1], Hong Wang[1], Aaron L. Olsen[1], Ramona Skirpstunas[1], Jeffery O. Hall[1], Hua Li[2], Scott Koenig[2], Syd Johnson[2], Jeffrey L. Nordstrom[2], Nicole Marlenee[3], Richard A. Bowen[3], Michael S. Diamond[4]
[1]Institute for Antiviral Research, ADVS Depart, Utah State Univ, USA; [2]Macrogenics, Inc.; [3]Depart of Biomed Sci, Colorado State Univ; [4]Depart of Mol Micro, Medicine, and Pathol & Immunol, Washington Univ, St. Loius

Poster Session I: Retrovirus, Respiratory Virus, West Nile Virus and Hepatitis Virus, and Antiviral Methods
Celebrity Ballroom ABCD

16:00–18:00

43. Intranasal Protollin Formulated Recombinant SARS-CoV S Protein Elicits Respiratory and Serum Neutralizing Antibodies
Dale Barnard[1], Mary Hu[2], Taff Jones[3], Richard Kenney[4], David Burt[3], George Lowell[3]
[1]Institute for Antiviral Research, Dept. ADVS, Utah State University; [2]GlaxoSmithKline Biologicals North America of Washington; [3]GlaxoSmithKline Biologicals North America of Quebec; [4]GlaxoSmithKline Biologicals North America of Maryland

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Phillip Kish[1], Jae Seung Kim[1], Blake Roessler[2], Shelby Campbell[1], John Hilfinger[1]
[1]TSRL, Inc. Ann Arbor, MI 48108; [2]University of Michigan, Dept of Internal Medicine, Ann Arbor 48109, USA

45. Lymphocytic Necrosis in Hamsters Inoculated with Western Equine Encephalitis Virus
Aaron Olsen[1], John Morrey[1], Justin Julander[1], Jeffery Hall[2], Ramona Skirpstunas[2], Robert Sidwell[1]
[1]Institute for Antiviral Research, Utah State University; [2]Utah Veterinary Diagnostic Laboratory, Utah State University

46. Combined Anti-Influenza Virus Effect of a Plant Polyphenol-Rich Extract and Ribavirin
Julia Serkedjieva, Ani Teodosieva
Institute of Microbiology, Bulgarian Academy of Sciences, Sofia, Bulgaria

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Lora Simeonova, Angel S. Galabov, Galina Gegova
The Stephan Angeloff Institute of Microbiology, Bulgarian Academy of Sciences, BG-1113, Sofia, Bulgaria

48. Phosphorodiamidate Morpholino Oligomer-Mediated Inhibition of Influenza A Virus in Mice
Thomas Voss[2], Kelly Warfield[3], Rebecca Brocato[2], Joseph Barbercheck[2], Bryan Kaplin[2], David Stein[1], Sina Bavari[1], Patrick Iversen[1]
[1]AVI BioPharma Inc., 4575 SW Research Way, Corvallis, OR 97333, USA; [2]Department of Microbiology and Immunology, Tulane University School of Medicine, New Orleans 70112 LA, USA; [3]US Army Medical Research Institute for Infectious Diseases, Fort Detrick, Frederick, MD 21702, USA

49. Practical Synthesis of (−)-Carbocyclic Cytosine (Carbodine) and its In Vitro Antiviral Activity against Venezuelan Equine Encephalitis (VEE) Virus and Yellow Fever Virus
J. R. Rao[1], J. G. Julander[2], R. W. Sidwell[2], C. K. Chu[1]
[1]The University of Georgia College of Pharmacy, Athens, GA, 30602, USA; [2]Utah State University Institute Antiviral Research, Logan, UT 84322, USA

50. Synthesis, Anti-HIV and CD4 Down-Modulation Activities of Novel CADA Compounds
Sreenivasa Anugu[1], Thomas Bell[1], Noah Duffy[1], Kurt Vermeire[2], Dominique Schols[2]
[1]Department of Chemistry, University of Nevada, Reno, NV, 89557, USA; [2]Rega Institute for Medical Research, Department of Microbiology and Immunology, Katholieke Universiteit Leuven, Leuven, Belgium

51. Synthesis and Antiviral Evaluation of Iso-methyl-alkoxyalkyl (S)-HPMPA Esters
James R. Beadle[1], Karl Y. Hostetler[1], R. Mark Buller[2], Jill Schriewer[2], Kathy A. Aldern[1], Mark N. Prichard[3], Kathy Keith[3], Earl R. Kern[3]
[1]University of California, San Diego and the San Diego Veterans Medical Research Foundation, San Diego, CA, USA; [2]Department of Molecular Microbiology and Immunology, Saint Louis University, St. Louis, MO, USA; [3]Department of Pediatrics, University of Alabama School of Medicine, Birmingham, AL, USA

52. Raft-tropic Antivirals: 1. Synthesis and anti-HIV-1 Evaluation of Cholesten-containing Polyanios
Y. Egorov, A. Serbin, O. Alikhanova, M. Burshtein, S. Lupandin, A. Bukrinskaya
Health RDF, Moscow, Russia

53. 7-Deaza Neplanocin Analogs Inhibit Hepatitis C Virus (HCV) in Vitro
HJ Kim[1], JN Wang[1], ZH Huang[2], MG Murray[2], RF Schinazi[3], CK Chu[1]
[1]The University of Georgia College of Pharmacy; [2]Southern Research Institute; [3]Emory University School of Medicine/ Veterans Affairs Medical Center

54. QSAR Analysis of Anti-Coxsackievirus B3 Nancy Activity of 2-Amino-3-Nitropyrazole[1,5-α]Pyrimidines by Means of Simplex Approach
V. Kuz'min[1,2], E. Muratov[1,2], A. Artemenko[2], I. Volineckaya[2], V. Makarov[3], O. Riabova[3], P. Wutzler[4], M. Schmidtke[4]
[1]Jackson State University, Jackson, MS, USA; [2]A.V. Bogatsky Physical-Chemical Institute, Odessa, Ukraine; [3]Research Center for Antibiotics, Moscow, Russia; [4]Institute of Virology and Antiviral Therapy, Friedrich Schiller University, Jena, Germany

55. The Design, Synthesis and Anti-HIV Activity of a selected group of 2′,3′-didehydro-2′,3′-dideoxyguanosine (d4G) and 2′,3′-dideoxyguanosine (ddG) 'ProTide' Derivatives
Youcef Mehellou[1], Christopher McGuigan[1], Jan Balzarini[2]
[1]Welash School of Pharmacy, Cardiff University, King Edward VII Avenue, Cardiff CF10 3XF, UK; [2]Rega Institute for Medical Research, Katholieke Universiteit Leuven, B-3000 Leuven, Belgium

56. Novel Diketo Phosphonic Acids Constructed on Nucleobase Scaffolds: Design, Synthesis, Molecular Modeling and anti-HIV Activity
Vasu Nair, Guochen Chi, Iwona Dams, Byung Seo, Vinod Uchil, Arthur Cox
Center for Drug Discovery and Department of Pharmaceutical and Biomedical Sciences, University of Georgia, Athens, GA 30602, USA

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Periyasamy Selvam[1], Narayanan Murugesh[2], Markandavel Chandramohan[3], Erik De Clercq[4], Christophe Pannecouque[4]
[1]Arulmigu Kalasalingam College of Pharmacy, Anand nagar, Krishnankoil 626190, India; [2]Institute of Pharmacology, Madurai Medical College, Madurai 625020, India; [3]Bharat Ratna Kamarajar Liver Hospital and Research Centre, Madurai 625001, India; [4]Rega institute of medical research, Katholieke Universiteit Leuven, Belgium

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A. Serbin, Y. Egorov, O. Alikhanova
Health RDF, Moscow, Russia

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Anadys Pharmaceuticals, Inc., San Diego, CA, USA

60. Synthesis of Novel Types of Anti-Coxsackie Virus Compounds
Michal Šála[1], Hubert Hřebabecký[1], Martin Dračínský[1], Armando De Palma[2], Johan Neyts[2], Antonín Holý[1]
[1]Centre for New Antivirals and Antineoplastics, Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, 166 10 Prague 6, Czech Republic; [2]Rega Institute for Medical Research, Minderbroedersstraat 10, BE-3000, Leuven, Belgium

61. Metabolism and Pharmacokinetic Studies of SB 9000—A Novel Anti-HBV agent
John Coughlin, Seetharamaiyer Padmanabhan, Radhakrishnan Iyer
Spring Bank Technologies, Inc., 113, Cedar Street, Suite S-7, Milford, MA 01757, USA
kiyer@springbanktech.com

62. Neutralizing Human Antibodies from Immune Phage Display Antibody Library Recognize p35 Orthopoxvirus Protein
Viktoriya Dubrovskaya, Belanov Evgeniy, Bormotov Nikolay, Tikunova Nina
FSRI SRC VB "Vector"

63. New Digital Method of Virus-Cell Interaction Description
Andriy Fedchuk[1], Oleksandr Fedchuk[1], Alla Fedchuk[2], Pavlo Fedchuk[3]
[1]I.I. Mechnikov Odesa National University; [2]I.I. Mechnikov Ukrainian Research Anti-Plague Institute; [3]Odesa State Academy of Refrigeration

64. Fractal Microscope—Multipurpose Device For Antiviral Research
Oleksandr Fedchuk[1], Andriy Fedchuk[1], Alla Fedchuk[2], Pavlo Fedchuk[3]
[1]I.I. Mechnikov Odesa National University; [2]I.I. Mechnikov Ukrainian Research Anti-Plague Institute; [3]Odesa State Academy of Refrigeration

65. Sublingual Delivery of SB 9000—An Anti-HBV Dinucleoside Phosphorothioate Analog
Radhakrishnan Iyer[1], Padma Devarajan[2], Sayalee Shastri[2], Swati Guhagarkar[2], Rita Mulherkar[3], Ganesh Joshi[3], Seetharamaiyer Padmanabhan[1], John Coughlin[1]
[1]Spring Bank Technologies, Inc., 113 Cedar Street, Milford, MA 01757, USA; [2]University Institute of Chemical Technology, Matunga, Mumbai 40019, India; [3]Tata Memorial Centre, Advanced Centre for Treatment, Research, and Education in Cancer, Navi Mumbai 410208, India

66. Initial Pharmacodynamic Evaluation of Orally Bioavailable Prodrugs of SB-9000, a Novel Anti-HBV Agent
Radhakrishnan Iyer[1], Seetharamaiyer Padmanabhan[1], John Coughlin[1], Guangrong Zhang[1], Cassandra Kirk[1], Brent Korba[2], John Morrey[3]
[1]Spring Bank Technologies, Inc., 113 Cedar Street, Milford, MA 01757, USA; [2]Division of Molecular Virology and Immunology, Georgetown University, Rockville, MD, USA; [3]Institute for Antiviral Research, Utah State University, Logan, UT 84322, USA
kiyer@springbanktech.com jmorrey@cc.usu.edu

67. Characterization of Influenza Virus Clinical Isolates Obtained during Clinical Study of Arbidol
Irina Leneva[1], Elena Burtseva[2], Elena Shevchenko[2], Alexander Shuster[3]
[1]Centre of Chemistry of Drugs, Moscow, Russia; [2]Ivanovsky Institute of Virology, Moscow, Russia; [3]Masterlek, Moscow, Russia

68. Preclinical Development of a New Class of Orally Active Drug Candidates for the Treatment of RSV Infections
Angela Luttick[1], Bo Lin[1], Craig Morton[1], Simon Tucker[1], Silas Bond[1], Alistair Draffan[1], John Lambert[1], Chin-Yu Lim[1], Jeff Mitchell[1], Vanessa Sanford[1], Jane Ryan[1], Annette Kerr[1], Jega Iswaran[1], JoAnn Suzich[2], Mike McCarthy[2]
[1]Biota Holdings Limited; [2]MedImmune, Inc.

69. Carbohydrate-Binding Agents (CBAs) Potently Inhibit HIV Infection in Human Primary Monocytes/Macrophages and Efficiently Prevent Viral Capture and Subsequent Transmission to CD+4 T Lymphocytes
Michela Pollicita[1,2], Stefano Aquaro[2], Willy J. Peumans[3], Els JM Van Damme[3], Carlo Federico Perno[2], Dominique Schols[1], Jan Balzarini[1]
[1]Rega Institute for Medical Research, K.U.Leuven, Leuven, Belgium; [2]University of Rome, Tor Vergata, Italy; [3]Department of Molecular Biology, Ghent University, Belgium

70. Generation and Characterization of Fully Human Antibodies Against Orthopoxviruses
Tatynana Yun[1], Nina Tikunova[1], Ludmila Shingarova[2]
[1]FSRI SRC VB "Vector"; [2]Shemyakin and Ovchinnikov Institute of Bioorganic Chemistry

71. Susceptibility of German Porcine H3N2 influenza A Viruses Against Existing Antiviral Drugs
Katja Bauer[1], Christina Schrader[2], Jochen Suess[3], Peter Wutzler[1], Michaela Schmidtke[1]
[1]Institute of Virology and Antiviral Therapy, FSU, Jena, Germany; [2]Federal Institute for Risk Assessment, Berlin, Germany; [3]Friedrich Loeffler Institute, Jena, Germany

72. Activation of GS-7340 and Other Tenofovir Phosphonoamidate Prodrugs by Human Proteases
Gabriel Birkus, Nilima Kutty, Gong-Xin He, Andrew Mulato, William Lee, Martin McDermott, Tomas Cihlar
Gilead Science, 333 Lakeside Drive, Foster City, CA 94404, USA

73. NIM811, A Cyclophilin Inhibitor, and NM107, an HCV Polymerase Inhibitor, Synergistically Inhibits HCV Replication and Suppresses the Emergence of Resistance In Vitro
Joanna Boerner, Sue Ma, Teresa Compton, Kai Lin
Novartis Institutes for Biomedical Research, 500 Technology Sq., Cambridge, MA 02139, USA

74. Identification of Novel Low Molecular Weight HIV-1 gp41 Fusion Inhibitors Using A New Quantitative High Throughput Fluorescence Intensity Assay
Miriam Gochin[1,2], Lifeng Cai[1]
[1]Dept. Basic Sciences, Touro University—California, Vallejo, CA 94592, USA; [2]Dept. Pharmaceutical Chemistry, UCSF, San Francisco, CA 94143, USA

75. Development of ATP/Luminescence Assays for Profiling Compounds Against a Panel of Positive-Strand RNA Viruses
Edwin Gong, Tania Ivens, Christel Van den Eynde, Sabine Hallenberger, Kurt Hertogs
Tibotec BVBA, Generaal De Wittelaan L11B3, 2800 Mechelen, Belgium

76. Discovery of Two Novel Classes of Inhibitors of Hepatitis C Virus (HCV) Replication utilizing a Dicistronic Reporter HCV Replicon High Throughput Assay
Weidong Hao, Peter Weady, Fausto Maldonado, Amy Patick, Rohit Duggal
Pfizer Global Research and Development, San Diego, CA 92121, USA

77. Development and Validation of a High Throughput Screen for Inhibitors of Respiratory Syncytial Virus
Marintha Heil, Michael McDowell, Colleen Jonsson, William Severson
Department of Biochemistry and Molecular Biology, 2000 9th Avenue South, Southern Research Institute, Birmingham, AL 35205, USA

78. Development of Intergenotypic Chimeric Replicons for Broad-Spectrum Antiviral Activity Characterization of Hepatitis C Virus Polymerase Inhibitors
Koleen Herlihy
Pfizer PGRD, La Jolla Laboratories

79. shRNAs Targeting Hepatitis C: Effects of Sequence and Structural Features, and Comparison With siRNA
Brian Johnston[1,4], Alexander Vlassov[1,3], Brent Korba[2], Heini Ilves[1], Roger Kaspar[1,5], Sergei Kazakov[1], Kristine Farrar[2], Sampa Mukerjee[2], Attila Seyhan[1]
[1]Somagenics, Inc., Santa Cruz, CA, USA; [2]Department of Microbiology and Immunology, Georgetown University Medical Center; [3]Institute of Chemical Biology and Fundamental Medicine, Novosibirsk, Russia; [4]Department of Pediatrics, Stanford University School of Medicine; [5]TransDerm, Inc., Santa Cruz, CA, USA

80. Synthesis and Anti-HBV Activity of 7-Deaza-Neplanocin A Analogs
Hyo-Joong Kim[1], Ashoke Sharon[1], B. E. Korba[2], Chung K. Chu[1]
[1]The University of Georgia College of Pharmacy, Athens, GA 30602; [2]Georgetown University School of Medicine, Rockville, MD 20850, USA

82. Pharmacodynamics of NPI-5291, an Adamantane Class Compound, for Influenza A Viruses
James McSharry[1], Kris Zager[1], Qingmei Weng[1], David Chernoff[2], George Drusano[1]
[1]Ordway Research Institute; [2]Neuromolecular Pharma

83. The Triple Combination of Tenofovir, Emtricitabine and Efavirenz Shows Synergistic Anti-HIV-1 Activity In Vitro
F. Myrick[1], J. Feng[1], E. Svarovskaia[1], M. Miller[2], K. Borroto-Esoda[1]
[1]Gilead Sciences, Durham, NC, USA; [2]Gilead Sciences, Foster City, CA, USA

84. High Throughput Screening of a 100,000 Compound Library for Inhibitors of Influenza A virus (H3N2)
William Severson[1], Michael McDowell[1], Lynn Rasumussen[2], Mindy Sosa[2], Subramaniam Ananthan[3], James Noah[1], Lucile White[2], Colleen Jonsson[1]
[1]Department of Biochemistry and Molecular Biology; [2]High Throughput Screening Center; [3]Department of Chemistry, Southern Research Institute, Birmingham, AL 35205, USA

85. Antiviral Activity of Reverse Transcriptase Inhibitors against Porcine Endogenous Retroviruses (PERV)
Minyi Shi[1,2], Xin Wang[1], Erik De Clercq[3], Sonshin Takao[2], Masanori Baba[1]
[1]Center for Chronic Viral Diseases, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, Japan; [2]Frontier Science Research Center, Kagoshima University, Kagoshima, Japan; [3]Rega Institute for Medical Research, Katholieke Universiteit Leuven, Leuven, Belgium

86. 17-AAG, an Hsp90 Inhibitor, Suppress Hepatitis C Virus (HCV) Replication
Saneyuki Ujino[1], Kunitada Shimotohno[3], Hiroshi Takaku[1,2]
[1]Department of Life and Environmental Sciences; [2]High Technology Research Center, Chiba Institute of Technology, 2-17-1 Tsudanuma Narashino, Chiba 275-0016, Japan; [3]Department of Viral Oncology, Institute for Virus Research, Kyoto University, Kyoto 606-0507, Japan

87. Development of Anti-Infective Topical Microbicides: 2. Quantifying Inhibition of Virus Transmission in Microbicidal Setting
Karen Watson, Lu Yang, Robert Buckheit Jr.
ImQuest BioSciences, Inc., Frederick, MD, USA

88. Development of Anti-Infective Topical Microbicides: 1. Effects of Seminal and Vaginal Fluids and Other Additives on Viral Infection and Drug Efficacy
Karen Watson, Lu Yang, Robert Buckheit Jr.
ImQuest BioSciences, Inc., Frederick, MD, USA

89. Development of Anti-Infective Topical Microbicides: 3. Combination Microbicidal Approaches Targeting Multiple Virus Targets or Utilizing Multi-Functional Anti-Infective Agents
Karen Watson, Tracy Hartman, Lu Yang, Robert Buckheit Jr.
ImQuest BioSciences, Inc., Frederick, MD, USA

90. Peptidomimetic Dimerization Inhibitors of HIV-1 Protease: Further Insights Into Structural Variations and Mechanism of Action
Ludovic Bannwarth[1], Thierry Rose[2], Silvia Frutos[3], Ernest Giralt[3], Regis Vanderesse[4], Brigitte Jamart-Grégoire[4], Anamaria Vidu[5], Sandrine Ongeri[5], Sames Sicsic[5], Christophe Pannecouque[6], Erik De Clercq[6], Michèle Reboud-Ravaux[1]
[1]Lab. Molecular and Functional Enzymology, FRE2852, CNRS-University Paris 6, Paris, France; [2]Macromolecular Biophysics Facility, Institut Pasteur, Paris, France; [3]Institut di Recerca Biochèmica, Parc scientific de Barcelona, Barcelona, Spain; [4]Lab. Macromol. Chemistry and Physics, UMR7568, ENSIC, Nancy, France; [5]Lab. Mol. Recognition and Synthesis, Biocis-CNRS, UMR C8076, Fac. Pharmacy, Châtenay-Malabry, France; [6]Rega Institute, Leuven, Belgium

91. A High Throughput HIV-1 Full Replication Assay that Includes HIV-1 Vif as an Antiviral Target
Joan Cao, Jason Isaacson, Amy Patick, Wade Blair
Pfizer Global Research and Development, La Jolla, CA, USA

92. DC-SIGN is not Required for HIV-1 Transmission to CD4+ T Lymphocytes
Imma Clotet-Codina, Berta Bosch, Ruth Peña, Bonaventura Clotet, Margarita Bofill, José A. Esté
Retrovirology Laboratory irsiCaixa, Hospital Universitari Germans Trias i Pujol, Universitat Autònoma de Barcelona, 08916 Badalona, Spain

93. The Virtues of Unique Ribonucleotide Reductase Inhibitors Didox and Trimidox for Retrovirus Therapy
Howard Elford[1], Ron Lee[2], Jadwiga Turchan[3], Vincent Gallicchio[4], Michael Ussery[5], John Hiscott[2], Avindra Nath[3]
[1]Molecules for Health, Inc.; [2]McGill University; [3]Johns Hopkins University; [4]Clemson University; [5]NIAID, National Institutes of Health

94. Human Immunodeficiency Virus Type 1 Does Not Escape From Novel Single-Stranded DNAzyme Expression-Mediated Inhibition
Masaak Hyafune[1], Yuka Mouri[1], Naoko Miyano-Kurosaki[1,2], Kahoko Hashimoto[1], Hiroshi Takaku[1,2]
[1]Department of Life and Environmental Sciences; [2]High Technology Research Center, Chiba Institute of Technology, Tsudanuma, Narshino, Chiba 275-0016, Japan

95. Characterization of a New Class of Polycyclic RSV Inhibitors
Angela Luttick[1], Bo Lin[1], Craig Morton[1], Simon Tucker[1], Silas Bond[1], Alistair Draffan[1], John Lambert[1], Chin-Yu Lim[1], Jeff Mitchell[1], Vanessa Sanford[1], Mike McCarthy[2], JoAnn Suzich[2], Nita Patel[2], Bettina Richter[2]
[1]Biota Holdings Limited; [2]MedImmune Inc.

96. HIV Coreceptor Switch Induced by Antagonism to CCR5
Gemma Moncunill, Mercedes Armand-Ugón, Bonaventura Clotet, José A. Esté
Retrovirology Laboratory irsiCaixa, Hospital Universitari Germans Trias i Pujol, Universitat Autònoma de Barcelona, 08916 Badalona, Spain

97. Induction of IL-6 and IL-8 by siRNAs Targeting HIV Correceptor CCR5
Eduardo Pauls, Jordi Senserrich, Margarita Bofill, Bonaventura Clotet, Jose Esté
Retrovirology Laboratory irsiCaixa

98. Identification and Characterization of a Novel, Potent HCV Helicase Inhibitor
Junzhong Peng, Chunsheng Huang, Michael G. Murray, Zhuhui Huang
Southern Research Institute, Frederick, MD 21701, USA

99. Design, Synthesis and Anti-HIV Activity of Some Novel Isatin Derivatives
Periyasamy Selvam[1], Narayanan Murugesh[2], Markandavel Chandramohan[3], Zeger Debyser[4], Myriam Witvrouw[4], Yves Engelborghs[5]
[1]Arulmigu Kalasalingam College of Pharmacy, Anand nagar, Krishnankoil 626190, India; [2]Institute of Pharmacology, Madurai Medical College, Madurai 625020; [3]Bharat Ratna Kamarajar Liver Hospital and Research Centre, Madurai 625001; [4]Molecular Medicine, Katholieke Universiteit Leuven and IRC KULAK, Leuven, Flanders, Belgium; [5]Laboratory for Biomolecular Dynamics, Katholieke Universiteit Leuven, Leuven, Flanders, Belgium

100. HIV-1 Resistance to the Anti-HIV Activity of a siRNA Targeting Rev
Jordi Senserrich, Eduardo Pauls, Bonaventura Clotet, Jose A Esté
Retrovirology Laboratory irsiCaixa, Hospital Universitari Germans Trias i Pujol

101. Design and Cellular Kinetics of Dansyl-Labeled CADA Derivatives With Specific Anti-HIV and CD4 Receptor Down-Modulating Properties
Kurt Vermeire[1], Andrea Lisco[2], Jean-Charles Grivel[2], Paul Blank[2], Vincent Schram[2], Noah Duffy[3], Emily Scarbrough[3], Kaka Dey[3], Thomas Bell[3], Leonid Margolis[2], Dominique Schols[1]
[1]Rega Institute for Medical Research, Department of Microbiology and Immunology, Katholieke Universiteit Leuven, Leuven, Belgium; [2]Laboratory of Molecular and Cellular Biophysics, National Institute of Child Health and Human Development, Bethesda, MD 20892, USA; [3]Department of Chemistry, University of Nevada, Reno, NV 89557, USA

152. Anti-HBV Nucleotide Prodrug Analogs: Synthesis, Bioreversibility, and Cytotoxicity Studies
Seetharamaiyer Padmanabhan, John Coughlin, Guangrong Zhang, Cassandra Kirk, Radhakrishnan Iyer
Spring Bank Technologies, Inc., 113, Cedar Street, Suite S-7, Milford, MA 01757, USA

Tuesday, May 1, 2007

Mini-symposium: Hepatitis C Virus: Translating Research to Medicine
Celebrity Ballroom EFGH
Chairs: Joseph M. Colacino, Ph.D. and Rohit Duggal, Ph.D.

08:30 Joseph Puglisi, Ph.D.
Stanford University School of Medicine, Stanford, CA, USA
"Translational control in HCV infection"

09:00 Thomas Michalak, Ph.D.
Memorial University of Newfoundland, St. John's, Canada
"Hepatitis C Virus Lymphotropism and Occult Persistence"

09:30 Ann Kwong, Ph.D.
Vertex Pharmaceuticals, Cambridge, MA, USA
"Risk reduction in drug discovery: Telaprevir (VX-950) Preclinical Development"

10:00 *Break*

10:30 Anita Howe, Ph.D.
Wyeth Research, Collegeville, PA, USA
"Discovering Hepatitis C Polymerase Inhibitors"

11:00 John Tatlock, Ph.D.
Pfizer Global Research & Development, San Diego, CA, USA
"Discovery of Dihydropyrone-containing Hepatitis C NS5B Polymerase Inhibitors with Potent Antiviral Activity"

11:30 Dr. Tarek Hassanein, MD
University of California, San Diego, CA, USA
"Hepatitis C: The Current Epidemic"

12:00 General Panel Discussion

12:30 *Adjourn.*

Free afternoon and Palm Springs Tours

Wednesday, May 2, 2007

Prusoff Young Investigator Award Lecture
Celebrity Ballroom EFGH

09:00 Presentation of Award: Christopher McGuigan, Ph.D., President ISAR
Awardee Lecture: Chris Meier, Ph.D., University of Hamburg, Hamburg, Germany
"Prodrugs of antiviral nucleotides and phosphonates—the /cyclo/Sal-story"

Oral Session III: Herpesviruses I and Poxviruses I
Celebrity Ballroom EFGH
Chairs: Mark Prichard, Ph.D. and Mark Schleiss, MD

09:45 15. Synthesis and Structure–Activity Aspects of Some Cyclic Cidofovir Peptidomimetic Prodrugs
Larryn W. Peterson[1], Boris A. Kashemirov[1], Katarzyna M. Blazewska[1], Julie Breitenback[4], Kathy Borysko[4], John C. Drach[3,4], Jae Seung Kim[2], Paul Kijek[2], John M. Hilfinger[2], Charles E. McKenna[1]
[1]Dept. of Chemistry, University of Southern California, Los Angeles, CA 90089, USA; [2]TSRL, Inc., Ann Arbor, MI 48108 USA; [3]College of Pharmacy, University of Michigan, Ann Arbor, MI 48109 USA; [4]School of Dentistry, University of Michigan, Ann Arbor, MI 49109, USA

10:00 16. Synthesis and Antiviral Activity of 1-(*S*)-[3-Hydroxy-2-(Phosphonomethoxy)Propyl]-5-Azacytosine and its Ester Prodrugs
Marcela Krecmerova[1], Antonin Holy[1], Alois Piskala[1], Graciela Andrei[2], Robert Snoeck[2], Lieve Naesens[2], Johan Neyts[2], Jan Balzarini[2], Erik De Clercq[2]
[1]Gilead Sciences & IOCB Research Centre, Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic; [2]Rega Institute for Medical Research, Katholieke Universiteit Leuven, Belgium

10:15 17. In Vivo Antiviral Activity of 1-(*S*)-[3-Hydroxy-2-(Phosphonomethoxy)Propyl]-5-Azacytosine and its Cyclic Form
Graciela Andrei[1], Marcela Krecmerová[2], Antonín Holý[2], Lieve Naesens[1], Johan Neyts[1], Jan Balzarini[1], Erik De Clercq[1], Robert Snoeck[1]
[1]Rega Institute for Medical Research, Katholieke Universiteit Leuven, Minderbroedersstraat 10, B-3000 Leuven, Belgium; [2]Gilead Sciences & IOCB Research Centre, Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Flemingovo nam. 2, 166 10 Prague 6, Czech Republic

10:30 *Break*

10:50 Invitation to the 21st ICAR, Montreal, Quebec, John A. Secrist, III

11:00 ISAR Business Meeting

11:15 18. Isolation and Characterization of an Helicase-Primase Inhibitor (HPI)-Resistant HSV-1 Mutant in Tissue Culture and a Mouse-Skin Model
Subhajit Biswas, Hugh Field
Cambridge University Centre for Veterinary Science

11:30 19. Evidence For In Vivo Inhibition of CMV Infection by the Quinazoline Class Protein Kinase Inhibitor Gefitinib
Mark Schleiss[1], Michael McVoy[2], Xiaohong Cui[2], Yeon Choi[1], Jodi Anderson[1], Thomas Stamminger[3], Bert Klebl[4], Jan Eickhoff[4], Manfred Marschall[3]
[1]Center for Infectious Diseases and Microbiology Translational Research, Department of Pediatrics, Minneapolis, MN, USA; [2]Virginia Commonwealth University, Department of Pediatrics, Richmond, VA, USA; [3]Institute for Clinical and Molecular Virology, University of Erlangen-Nuremberg, Germany; [4]GPC Biotech AG, Martinsried, Germany

11:45 20. Successful Treatment in the Monkeypox and Variola Primate Models of Smallpox by the Oral Drug ST-246
John Huggins[1], Arthur Goff[1], Mucker Eric[1], Nancy Twenhafel[1], Jennifer Chapman[1], Mallory Tate[2], Rob Jordan[3], Tove' Bolken[3], Dennis Hruby[3]
[1]US Army Medical Research Institute of Infectious Diseases; [2]Centers for Disease Control and Prevention; [3]Siga Technologies Inc.

12:00 *Lunch*

Oral Session IV: Hepatitis Viruses I

Celebrity Ballroom EFGH

Chairs: Michael Murray, Ph.D. and Ann Kwong, Ph.D.

14:00 21. Design and Characterization of R1626, A Prodrug of the HCV Replication Inhibitor R1479 (4′-Azidocytidine) With Enhanced Oral Bioavailability
Klaus Klumpp[1], David Smith[1], Michael Brandl[1], Tom Alfredson[1], Keshab Sarma[1], Mark Smith[1], Isabel Najera[1], Wen-Rong Jiang[1], Sophie Le Pogam[1], Vincent Leveque[1], Han Ma[1], Yaping Tu[1], Rebecca Chan[1], Chiao-Wen Chen[1], Xiaoyang Wu[1], Raj Birudaraj[1], Steven Swallow[1], Joseph A. Martin[1], Nick Cammack[1], Heather Berns[1], Scott Fettner[2], David Ipe[1], Marie Mannino[2], Edward O'Mara[2], Carla Washington[1], Stuart Roberts[3], Graham Cooksley[4], Greg Dore[5], David Shaw[6] David R Blue Jr[1], Friederike Zahm[7], George Hill[1]
[1]Roche Palo Alto LLC; [2]F. Hoffmann-La Roche Ltd, Nutley, NJ, USA; [3]Alfred Hospital, Melbourne, Vic., Australia; [4]Royal Brisbane Hospital, Brisbane, Qld., Australia; [5]Christchurch Clinical Study Trust, Christchurch, New Zealand; [6]Royal Adelaide Hospital, Adelaide, SA, Australia; [7]F. Hoffmann La Roche, Basel, Switzerland

14:15 22. Novel 4′-Azido-2′-Deoxy-Nucleoside Analogs Are Potent Inhibitors of NS5B-Dependent HCV Replication
David Smith[1], Han Ma[1], Sophie Le Pogam[1], Vincent Leveque[1], Carl Brown[1], Nils Gunnar Johansson[2], Genadiy Kalayanov[2], Staffan Eriksson[3], Elena Usova[3], Christian Sund[2], Anna Winqist[2], Tatiana Maltseva[2], Mark Smith[1], Joseph Martin[1], Isabel Najera[1], Klaus Klumpp[1]
[1]Roche Palo Alto LLC; [2]Medivir AB, Huddinge, Sweden; [3]Swedish University of Agricultural Sciences, Dept. Mol. Biosciences, The Biomedical Centre, Uppsala, Sweden

14:30 23. Characterization of the Intracellular Metabolism of β-D-2′-Deoxy-2′-Fluoro-2′-C-Methyl-Cytidine and the Inhibition of HCV Polymerase NS5B by its 5′-Triphosphate Species
Han Ma, Wen-Rong Jiang, Nicole Robledo, Vincent Leveque, Samir Ali, David Smith, Mohammad Masjedizadeh, Teresa Lara-Jaime, Nick Cammack, Klaus Klumpp, Julian Symons
Roche Palo Alto LLC, Palo Alto, CA, USA

14:45 24. Sub Micromolar Inhibitors of HCV Generated from Inactive Nucleosides by Application of ProTide Technology
Christopher McGuigan[1], Plinio Perrone[1], Giovanna Luoni[1], Mary Rose Kelleher[1], Felice Daverio[1], Annette Angell[1], Sinead Mulready[1], Costantino Congiatu[1], Sonal Rajyaguru[2], Joseph Martin[2], Vincent Lévêque[2], Sophie Le Pogam[2], Isabel Najera[2], Klaus Klumpp[2], David Smith[2]
[1]Welsh School of Pharmacy, Cardiff University; [2]Roche Palo Alto

15:00 25. GL59728: A Potent Allosteric Inhibitor of the HCV NS5b RNA Dependent RNA Polymerase With Excellent Pharmacokinetic Properties
Christopher Roberts, Janos Botyanszki, Dong-fang Shi, Joshua Gralapp, Samantha Koo-McCoy, John Zhang, Kevin Fung, Mohan Sivaraja, Jeffrey Pouliot, Ting Wang, Kevin Dunlop, Wenbao Li, Lillian Lou, Uli Schmitz, Peter Young, Ron Griffith
Genelabs Technologies, Inc. 505 Penobscot Dr., Redwood City, CA 94063, USA

15:15 26. Substituted Imidazopyridines As Potent Inhibitors of Hepatitis C Virus Replication that Target the Viral Polymerase
Inge Vliegen[1], Jan Paeshuyse[1], Laura S. Lehman[2], Weidong Zhong[2], Sofie Roofthooft[1], Hélène Dutartre[3], Barbara Selisko[3], Bruno Canard[3], Nina Boddeker[2], Steven Bondy[2], David Oare[2], Erik De Clercq[1], William A. Lee[2], Gerhard Pürstinger[4], Johan Neyts[1]
[1]Rega Institute, K.U.Leuven, Belgium; [2]Gilead Sciences, Foster City, CA, USA; [3]CNRS and Universités d'Aix-Marseille I et II, France; [4]Universität Innsbruck, Austria

15:30 27. Potent HCV NS5B Polymerase Inhibitors Derived From 5-Hydroxy-3(2H)-Pyridazinones: Part 1. Exploration of Pyridazinone 4-Substituent Variation
Y. Zhou, L.-S. Li, S. Webber, P. Dragovich, D. Murphy, C. Tran, F. Ruebsam, A. Shah, M. Tsan, R. Showalter, J. Brooks, E. Okamoto, T. Nolan, D.A. Norris, L. Kirkovsky
Anadys Pharmaceuticals, Inc., San Diego, CA, USA

15:45 28. Development of Hepatitis C Virus (HCV) Chimeric Replicons for Identifying Broad Spectrum NS3 Protease Inhibitors
Joseph Binder, Selwyna Tetangco, Megan Wick, Karen Maegley, Laura Lingardo, Amy Patick, George Smith
Pfizer Global Research and Development (La Jolla, CA, USA)

Poster Session II: Herpesviruses, Poxviruses, other Antivirals and Medicinal Chemistry
Celebrity Ballroom ABCD
16:00–18:00

102. An Animal Model of HCMV Infection in SCID Mice
Fernando Bravo, Rhonda Cardin, David Bernstein
Division of Infectious Diseases, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA

103. Use of CpG DNA in Co-Administration With Cidofovir or Monoclonal Antibody as a Post Exposure Antiviral Therapy
Amanda Phelps[1], Lin Eastaugh[1], Art Kreig[2], Amanda Gates[1]
[1]Dstl, Biomedical Sciences, Porton Down, Salisbury, WILTS, SP4 0JQ; [2]Coley Pharmaceutical Group Ltd.

104. Efficacy of Oral CMX-001 Therapy Against Human Herpes Virus-6 Infections in SCID-hu Mice
Debra Quenelle[1], Mark Prichard[1], Shannon Daily[1], Deborah Collins[1], Terri Rice[1], George Painter[2], Alice Robertson[2], Earl Kern[1]
[1]Department of Pediatrics, University of Alabama School of Medicine; [2]Chimerix, Inc.

105. Efficacy of Delayed Therapy Using Combinations of ST-246 with CMX-001 Against Systemic Cowpox Virus Infections in Mice
Debra Quenelle[1], Mark Prichard[1], Kathy Keith[1], Deborah Collins[1], Robert Jordan[2], Dennis Hruby[2], George Painter[3], Alice Robertson[3], Earl Kern[1]
[1]Department of Pediatrics, University of Alabama School of Medicine; [2]Siga Technologies, Inc.; [3]Chimerix, Inc.

106. Design and Synthesis of Novel anti-HCMV Agents: Modifications to the Bicyclic Pyrimidine Base
Rina Adak[1], Christopher McGuigan[1], Robert Snoeck[2], Graciella Andrei[2], Eric De Clercq[2], Jan Balzarini[2]
[1]Welsh School of Pharmacy, Cardiff University, Cardiff, UK; [2]Rega Institute for Medical Research, Leuven, Belgium

107. HINT as Putative Phosphoramidase Responsible of ProTides Activation: Molecular Modelling Studies
Costantino Congiatu, Christopher McGuigan, Andrea Brancale
The Welsh School of Pharmacy, Cardiff University, Cardiff, UK

108. Design, Synthesis, and Biological Evaluation of Novel Anti-VZV Agents
Marco Derudas[1], Christopher McGuigan[1], Robert Snoeck[2], Graciella Andrei[2], Erik De Clercq[2], Jan Balzarini[2]
[1]Welsh School of Pharmacy, Cardiff University, Cardiff, UK; [2]Rega Institute for Medical Research, Leuven, Belgium

109. Synthesis and Properties of Chiral Open-Ring Acyclic Nucleoside Bisphosphonates
Petra Doláková, Martin Dračínský, Antonín Holý
Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Flemingovo nam. 2, 166 10 Prague

110. Properties of Aminoacid Esters Linked to cyclo Sal-Pronucleotides
Henning Jessen[1], Jan Balzarini[2], Chris Meier[1]
[1]University of Hamburg, Institute of Organic Chemistry, Hamburg, Germany; [2]Rega Institute for Medical Research, Katholieke Universiteit Leuven, Leuven, Belgium

111. Discovery of Cage Antiviral Agents
Yuri Klimochkin[1], Eugene Boreko[2], Andrey Shiryaev[1], Igor Moiseev[1], Eugene Golovin[1], Marina Leonova[1]
[1]Samara State Technical University, 244 Molodogvardeyskaya St., 443100 Samara, Russia; [2]Research Institute for Epidemiology & Microbiology, 23 Philimonova St., 220114 Minsk, Belarus

112. Pyrimidine Nucleosides Containing 5-Substituent: Synthesis and Antiviral Activity
Stanislav V. Korkach, Olga A. Valueva, Veronika V. Doubniakova, Vladimir A. Korshun, Alexey V. Ustinov
Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Moscow, Russia

113. New Ribonucleosides with Surrogate Bases: Synthesis, Enzymology, Molecular Docking Studies and Antiviral Activity
Vasu Nair[1], Xiaohui Ma[1], Fan Zhang[1], Malik Nishonov[1], Qingning Shu[1], Robert Sidwell[2], Earl Kern[3]
[1]Center for Drug Discovery and Department of Pharmaceutical and Biomedical Sciences, University of Georgia, Athens, GA 30602, USA; [2]Institute of Antiviral Research, Utah State University, Logan, UT 84322, USA; [3]University of Alabama at Birmingham, Birmingham, AL 35233, USA

114. Novel Synthetic Approaches to Cidofovir and Foscarnet Prodrugs
Larryn W. Peterson[1], Boris A. Kashemirov[1], Kanokkarn Saejueng[1], Julie Breitenbach[4], Kathy Borysko[4], John C. Drach[3,4], Jae Seung Kim[2], Paul Kijek[2], Stefanie Mitchell[2], John M. Hilfinger[2], Charles E. McKenna[1]
[1]Dept. of Chemistry, University of Southern California, Los Angeles, CA 90089, USA; [2]TSRL, Inc., Ann Arbor, MI 48108, USA; [3]College of Pharmacy, University of Michigan, Ann Arbor, MI 48109, USA; [4]School of Dentistry, University of Michigan, Ann Arbor, MI 49109, USA

115. Chloroquine a Novel and Versatile Anti viral Agent with nine prong modes of anti viral actions and postive approach in radical cure of viral hepatitis varieties B and C Both Acute and Chronic Forms
M. Chandramohan[1], S.C Vivekanandan[1], D. Sivakumar[1], P. Selvam[2]
[1]Kamarajar Jaundice Liver Hospital & Research Centre, Madurai 625001,Tamilnadu, India; [2]Arulmigu Kalasalingam College of Pharmacy, Krishnankoil, India

116. Brivudin (Zostex^{R}) in the Treatment of Herpes Zoster in Immunosuppressed Patients
Astrid Meerbach[1], Peter Wutzler[1], Bernd Gruhn[2]
[1]Institute of Virology and Antiviral Therapy, Friedrich-Schiller University Jena; [2]Department of Pediatrics, Friedrich-Schiller University Jena

117. Proteflasid as Inhibitor of EBV-Infection
N. Nesterova[1], S. Zagorodnya[1], G. Baranova[1], A. Golovan[1], V. Atamaniuk[2], A. Novik[2]
[1]Institute of Microbiology and Virology, Ukrainian NAS, Kyiv, Ukraine; [2]Ecopharm Research and Production Company, Kyiv, Ukraine

118. Enhanced Antiviral Actitity of Hexadecyloxypropyl-PME-N^{6}-cyclopropyl-diaminopurine Against Herpesviruses, Hepatitis B Virus and Vaccinia Virus, In Vitro
Graciela Andrei[1], Robert Snoeck[1], Johan Neyts[1], Erik De Clercq[1], Nadejda Valiaeva[2], James Beadle[2], Karl Hostetler[2]
[1]Rega Institute for Medical Research, Leuven, Belgium; [2]University of California, San Diego and the San Diego Veterans Medical Research Foundation, San Diego, CA, USA

119. Molecular Design of Active Antiherpetic Compounds Using Hierarchic QSAR Technology
A. Artemenko[1], V. Kuz'min[1,3], E. Muratov[1,3], A. Fedchuk[2], V. Lozitsky[2], T. Gridina[2], R. Lozytska[1], S. Basok[1], D. Chikhichin[1]
[1]A.V.Bogatsky Physico-Chemical Institute NAS of Ukraine, 86 Lustdorfskaya doroga, Odessa, Ukraine; [2]Ukrainian I.I.Mechnikov Research Anti-Plague Institute, Odessa, Ukraine; [3]Jackson State University, Jackson, MS, USA

120. Anti-orthopoxviral Activity of the 2-Cycloalkylimino-5-(4-Nitrophenyl)-1,3,4-Thiadiazines
Evgeny Belanov[1], Larisa Sidorova[2], Vladimir Rusinov[2], Nikolay Bormotov[1], Sergey Balakhnin[1], Olga Serova[1], Valerii Charushin[2], Oleg Chupakhin[2]
[1]State Research Center of Virology and Biotechnology "Vector", Koltsovo, Novosibirsk reg., Russia; [2]Ural State Technical University, Yekaterinburg, Russia

121. Development of Novel Cell Lines for the Detection and Quantification of Herpesvirus Replication
Susan Binford, Amy Patick, George Smith
Pfizer Global Research and Development, La Jolla, CA, USA

122. Discovery of Novel Small Molecule Inhibitors of Dengue Virus Replication
Chelsea Byrd, Eric Stavale, Andrews Wieczorek, Thaun Tran, Dennis Hruby, Robert Jordan
SIGA Technologies, Corvallis, OR, USA

123. Antiviral Activities of New Cidofovir Analogs Against Camelpox Virus, Used As A Model of Variola Virus, in Human Skin Equivalent Cultures
Sophie Duraffour[1,2], Robert Snoeck[1], Joost Van Den Oord[3], Marcela Krecmerová[4], Antonín Holý[4], Jean-Marc Crance[2], Daniel Garin[2], Erik De Clercq[1], Graciela Andrei[1]
[1]Rega Institute for Medical Research, K.U. Leuven, Belgium; [2]CRSSA, Grenoble, France; [3]Pathology Dpt, K.U. Leuven, Belgium; [4]Gilead Sciences & IOCB Research Centre, Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Prague, Czech Republic

124. Cytopathic Maporal Hantavirus Infection of Vero E6 Cells
Brian Gowen[1], Kie-Hoon Jung[1], Michelle Mendenhall[1], Irina Gavrilovskaya[2], Siddharthan Venkatraman[1], Erich Mackow[2,3], Robert Sidwell[1]
[1]Institute for Antiviral Research, Utah State University; [2]The Department of Medicine and the Department of Molecular Genetics and Microbiology, State University of New York at Stony Brook; [3]Northport Veterans Administration Medical Center

125. Comparison of Anti-Proliferative Activity of Selected Antiviral Agents in Various Assay Systems
Caroll Hartline, Harden Emma, Earl Kern, Prichard Mark
Department of Pediatrics, University of Alabama School of Medicine

126. Synthesis and Structure Activity Relationships among Non-nucleoside Analogs of Toyocamycin Active against Herpesviruses
Jack M. Hinkley[1], Katherine Z. Borysko[2], Julie M. Breitenbach[2], Keenan Bora[1], Shigetada Kosai[1], John C. Drach[1,2], Leroy B. Townsend[1]
[1]Department of Medicinal Chemistry, College of Pharmacy; [2]Department of Biologic & Materials Sciences, School of Dentistry, University of Michigan, Ann Arbor, MI 48109, USA

127. Combinations of CMX-001 and ST-246 Synergistically Inhibit Orthopoxvirus Replication In Vitro
Kathy Keith[1], Earl Kern[1], Shalisa Sanders[1], Robin Conley[1], Robert Jordan[2], Dennis Hruby[2], George Painter[3], Mark Prichard[1]
[1]University of Alabama School of Medicine, Dept. of Pediatrics, Birmingham AL, USA; [2]SIGA Technologies, Inc., Corvallis, OR, USA; [3]Chimerix Inc., Research Triangle Park, NC, USA

128. Inhibition of Cellular Entry and Spread of Lymphocytic Choriomeningitis Virus by Amphipathic DNA Polymers
Andrew Lee[1], Jillian Rojek[1], Anette Gundersen[1], Jean-Marc Juteau[2], Michael Oldstone[1,3], Andrew Vaillant[2], Stefan Kunz[1]
[1]Molecular and Integrative Neurosciences Department (MIND), Scripps Research Institute; [2]REPLICor Inc. Laval, Quebec, Canada; [3]Department of Infectology, Scripps Research Institute

129. Benzimidazole with Broad Spectrum of Antiviral Action
Regina Lozytska[1], Dmitry Chikhichin[1], Victror Lozitsky[1,3], Alla Fedchuk[2], Victor Kuz'min[1], Anatoly Artemenko[1], Larisa Shitikova[2], Lubov' Mudrik[2], Tatjana Gridina[2], Eugene Muratov[1,3]
[1]A.V. Bogatsky Phys.-Chem. Institute, NAS of Ukraine; [2]Ukrainian I.I.Mechnikov Research Anti-Plague Institute, Odessa, Ukraine; [3]Jackson State University, Jackson, MS, USA

130. A Rapid DNA Hybridization Assay for the Evaluation of Antiviral Compounds Against Epstein-Barr Virus
Mark Prichard, Shannon Daily, Geraldine Jefferson, Amie Perry, Earl Kern
Department of Pediatrics, University of Alabama School of Medicine

131. Design, Synthesis, Antiviral Activity and Cytotoxicity of Novel Sulphonamide Derivatives
P. Selvam[1], D.F. Smee[2], B.B. Gowen[2], C.W. Day[2], D.L. Barnard[2], J.D. Morrey[2]
[1]Arulmigu Kalasalingam College of Pharmacy, Krishnankoil, India; [2]Institute for Antiviral Research, Utah State University, Logan, UT, USA

132. Inhibition of the Tax-Dependent Human T-Lymphotropic Virus Type 1 (HTLV-1) Replication in Persistently Infected Cells by the Naphthalene Derivative JTK-101
Xin Wang[1], Minyi Shi[1], Jun-ichi Fujisawa[3], Yuetsu Tanaka[4], Shuji Izumo[2], Satoru Ikeda[5], Masanori Baba[1]
[1]Division of Antiviral Chemotherapy, Center for Chronic Viral Diseases, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, Japan; [2]Division of Molecular Pathology, Center for Chronic Viral Diseases, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, Japan; [3]Department of Microbiology, Kansai Medical University, Moriguchi, Japan; [4]Department of Immunology, Graduate School of Medicine, University of the Ryukyus, Okinawa, Japan; [5]Japan Tobacco Inc., Osaka, Japan

133. Combinations of Thiovir and Neuraminidase Inhibitors Exert Synergistic Antiviral Activity on Human, Equine and Avian Influenza In Vitro
Shani Waninger, Silvestre Ramos, Joan Robbins
ADVENTRX Pharmaceuticals, San Diego, CA 92121, USA

135. Development of a Cell-Based Assay For Identification of Viral Entry Inhibitors Against SARS-CoV by High Throughput Screening (HTS)
Chengsheng Zhang[1], Yan Feng[1], Gillian Wong[1], Liping Wang[2], Jonathan Cechetto[3], Jan Blanchard[3], Eric Brown[3], James Mahony[1]
[1]Department of Pathology & Molecular Medicine, McMaster University, Canada; [2]Dana-Farber Cancer Institute, Harvard Medical School, Boston, USA; [3]Department of Biochemistry and High Throughput Screening Laboratory, McMaster University, Canada

136. The Inhibitory Effects of Medicinal Herbs on SARS-CoV Entry In Vitro
Min Zhuang[1], Hong Jiang[2], Peng Xiao[1], Yasuhiro Suzuki[1], Toshio Hattori[1]
[1]Division of Infectious and Respiratory Diseases, Department of Internal Medicine, Tohoku University, Japan; [2]Institute of Laboratory Animal Science, Chinese Academy of Medical Science, Beijing, China

137. Uptake and Metabolism of Cidofovir and Oleyloxyethyl-cidofovir in Human Papillomavirus Positive ME-180 Human Cervical Cancer Cells
Kathy A. Aldern, James R. Beadle, Julissa Trahan, Karl Y. Hostetler
University of California, San Diego, La Jolla, California and the Veterans Medical Research Foundation, San Diego, CA, USA

139. Selection of Human Cytomegalovirus Resistant to a Second Generation Methylenecyclopropane Purine
Katherine Z. Borysko[1], Julie M. Breitenbach[1], Brian G. Gentry[1], Jiri Zemlicka[2], John C. Drach[1]
[1]Department of Biologic & Materials Sciences, University of Michigan, Ann Arbor, MI 48109, USA; [2]Karmanos Cancer Institute, Wayne State University, Detroit, MI 48201, USA

140. The Combination of Anti-Poxvirus Compounds ST-246 and TTP-018 are synergistic In Vitro
Yali Chen[1], Chris Harver[1], Guang Yang[1], Dennis Hruby[1], Robert Andrews[2], Robert Jordan[1]
[1]SIGA Technologies, Corvallis, OR, USA; [2]TransTech Pharaceuticals, High Point, NC, USA

141. Thiazolobenzimidazoles, a Novel Class of Enterovirus Inhibitors, Target the 2C Protein
Armando M. De Palma[1], Ward Heggermont[1], Erik De Clercq[1], Alba Chimirri[2], Johan Neyts[1]
[1]Rega Institute for Medical Research, University of Leuven, Leuven, Belgium; [2]Dipartimento Farmaco-Chimico, Università di Messina, Messina, Italy

142. Selective Phosphorylation of Antiviral Drugs by Vaccinia Virus Thymidine Kinase
Emma Harden[1], Kathy Keith[1], Mary Johnson[1], Alexis McBrayer[1], Ming Luo[2], Shihong Qiu[2], Debasish Chattopadhyay[2], Xuesen Fan[3], Paul Torrence[3], Earl Kern[1], Mark Prichard[1]
[1]Department of Pediatrics, University of Alabama School of Medicine; [2]Department of Microbiology, University of Alabama School of Medicine; [3]Northern Arizona University

143. Intracellular Localization of Herpes Simplex Virus Type 1 Thymidine Kinase in Cells Infected With various Thymidine Kinase-Deficient Viruses
Chong-Kyo Lee, Ju Ryung Nam, Pan Kee Bae, Jee Hyun Kim, Hae Soo kim, Myung-Jin Lee
Pharmacology Research Center, Korea Research Institue of Chemical Technology

144. Substrate Specificity and Molecular Modelling of Feline Herpesvirus-1 Thymidine Kinase
Islam Mohammad[1], Ricardo Nunez[2], Laurence Tiley[1], Hugh Field[1]
[1]Centre of Veterinary Science, Uiniversity of Cambridge, UK; [2]Department of Biochemistry, University of Cambridge, UK

145. Chemical Stability and Intracellular Metabolism of 1-(*S*)-[3-Hydroxy-2-(Phosphonomethoxy)Propyl]-5-Azacytosine
Lieve Naesens[1], Graciela Andrei[1], Ivan Votruba[2], Marcela Krecmerová[2], Antonín Holý[2], Jan Balzarini[1], Erik De Clercq[1], Robert Snoeck[1]
[1]Rega Institute for Medical Research, Katholieke Universiteit Leuven, Minderbroedersstraat 10, B-3000 Leuven, Belgium; [2]Gilead Sciences & IOCB Research Centre, Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Flemingovo nam. 2, 166 10 Prague 6, Czech Republic

146. Influence of Substitutes in the Central Phenyl Ring of Capsid Function Inhibitors on Anti-Coxsackievirus B3 Stivity
Michaela Schmidtke[1], Olga Riabova[2], Vadim Makarov[2], Peter Wutzler[1]
[1]Inst. of Virology and Antiviral Therapy, FSU, Jena, Germany; [2]Research Center of Antibiotics, Moscow, Russia

147. Efficacy of 5-halogenated 2'-deoxyuridines on vaccinia virus thymidine kinase positive and negative strains, and influence of cell type on antiviral potency
Donald Smee, Daniel Humphreys, Brett Hurst, Robert Sidwell
Institute for Antiviral Research, Utah State University, Logan, UT, USA

148. Nucleosidic Fusion Inhibitors
M. St.Vincent[1], S. Korkach[2], O. Valueva[2], V. Korshun[2], A. Ustinov[2], L. Schang[1]
[1]Biochemistry, University of Alberta, Canada; [2]Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences, Russia

149. Enhanced Potency and Efficacy of 29-mer shRNAs in Inhibition of enterovirus 71
Eng-Lee Tan[1], May-Chin Tan[2], Vincent Tak- Kwong Chow[1], Chit-Laa Poh[1]
[1]Department of Microbiology, National University of Singapore, Singapore; [2]Department of Biochemistry, National University of Singapore, Singapore

150. Crosstalk Between Scavenger Receptors (SR-A) and Toll-like Receptors (TLR) Results in Rapid Pro-Inflammatory Cytokine Differentiation in Monocytes Exposed to Cytomegalovirus (CMV)
Hooi Yew[1], Christopher Harrison[1,2]
[1]Children's Mercy Hospital; [2]University of Missouri School of Medicine-Kansas City

151. Solid-phase synthesis of the anti-HBV dinucleotide SB 9000—Microwave-assisted Functionalization of Solid Supports
Seetharamaiyer Padmanabhan, John Coughlin, Radhakrishnan Iyer
Spring Bank Technologies, Inc., 113, Cedar Street, Milford, MA 01757, USA

Thursday, May 3, 2007

Oral Session V: Hepatitis Viruses II, Herpesviruses II and Poxviruses II

Celebrity Ballroom EFGH

Chairs: Tomas Cihlar, Ph.D. and Rick Wagner, Ph.D.

08:30 Plenary Speaker
Christopher Aiken, Ph.D., Department of Microbiology and Immunology, Vanderbilt University School of Medicine, Nashville, TN, USA
"Small Molecule Inhibition of HIV-1 Maturation"

09:00 29. The Cyclophilin Inhibitor Debio-025 is A Potent Inhibitor of Hepatitis C Virus Replication In Vitro With a Unique Resistance Profile
Lotte Coelmont[1], Jan Paeshuyse[1], Suzanne Kaptein[1], Inge Vliegen[1], Artur Kaul[2], Erik De Clercq[1], Brigitte Rosenwirth[4], Pietro Scalfaro[3], Raf Crabbé[3], Ralf Bartenschlager[2], Jean-Maurice Dumont[3], Johan Neyts[1]
[1]Rega Institute, KULeuven, Belgium; [2]University of Heidelberg, Germany; [3]Debiopharm, Lausanne, Switzerland; [4]Med Universitaet Wien, Austria

09:15 30. The Imidazopyrrolopyridine Analogue AG110 is A Novel, Highly Selective Inhibitor of Pestivirus Replication and Targets the Viral RNA-Dependent RNA Polymerase
Jan Paeshuyse[1], Jean-Michel Chezal[6], Matheus Froeyen[1], Pieter Leyssen[1], Hélène Dutartre[3], Robert Vrancken[2], Bruno Canard[3], Carine Letellier[2], Tong Li[1], Harald Mittendorfer[5], Frank Koenen[2], Pierre Kerkhofs[2], Erik De Clercq[1], Piet Herdewijn[1], Gerhard Puerstinger[5], Alain Gueiffier[4], Olivier Chavignon[6], Jean-Claude Teulade[6] and Johan Neyts[1]
[1]K.U.Leuven, Belgium; [2]VAR/CODA, Belgium; [3]AFMB-UMR 6098, France; [4]University of Tours, France; [5]University of Innsbruck, Austria; [6]University of Auvergne, France

09:30 31. Nitazoxanide is an Effective Antiviral Agent Against Both HBV and HCV Replication In Vitro
Brent Korba[1], Muller Abigail[1], Ayers Marc[2], Jean-François Rossignol[2]
[1]Dept. of Microbiology & Immunology, Georgetown Univ. Med. Ctr., Rockville, MD, USA; [2]The Romark Institute for Medical Research, Tampa, FL, USA

09:45 32. Efficacy of Cationic Lipid-DNA Complexes (CLDC) on Hepatitis B Virus in Transgenic Mice
John D. Morrey[1], Neil E. Motter[1], Brandon Taro[1], Fairman Jeffery[2]
[1]Institute for Antiviral Research, ADVS Depart., Utah State University, Logan, UT, USA; [2]Juvaris BioTherapeutics, Inc., Pleasanton, CA, USA

10:00 *Break*

10:30 33. Mononuclear Cells as a Transfer Vehicle for Herpes Simplex Virus (HSV) or Vaccinia Virus (VV) Infection of Epithelial Cells Grown in 3D
Graciela Andrei[1], Joost Van den Oord[2], Erik De Clercq[1], Robert Snoeck[1]
[1]Rega Institute for Medical Research, K.U.Leuven, B-3000 Leuven, Belgium; [2]Laboratory of Morphology and Molecular Pathology, K.U. Leuven, B-3000 Leuven, Belgium

10:45 34. Structural Basis for the Expanded Substrate Specificity of Vaccinia Virus Thymidine Kinase: Insight from the Crystal Structure
Mark Prichard[1], Kathy Keith[1], Mary Johnson[1], Norbert Schormann[2], Alexandra Samal[2], Debasish Chattopadhyay[2,3], Earl Kern[1]
[1]Department of Pediatrics, University of Alabama School of Medicine; [2]Center for Biophysical Sciences & Engineering, University of Alabama School of Medicine; [3]Department of Medicine, University of Alabama School of Medicine

11:00 35. Inhibition of an Innate Antiviral Response by Human Cytomegalovirus UL97 Kinase is Antagonized by Maribavir
Mark Prichard, Shannon Daily, Amie Perry, Caroll Hartline, Earl Kern
Department of Pediatrics, University of Alabama School of Medicine

11:15 36. Vaccination as an Antiviral Strategy for Control of Cytomegalovirus (CMV) Disease: A Vectored Vaccine Approach Targeting the UL83 (pp65) Homolog Protects Against Congenital CMV Disease in the Guinea Pig Model
Mark Schleiss[1], Juan Lacayo[1], Yasmine Belkaid[2], Alistair McGregor[1], Greg Stroup[3], Jon Rayner[4], Kim Alterson[4], Jeff Chulay[4], Jonathan Smith[4]
[1]Center for Infectious Diseases and Microbiology Translational Research, University of Minnesota, Department of Pediatrics, Minneapolis, MN, USA; [2]Mucosal Immunology Unit, NIAID, National Institutes of Health, Bethesda, MD, USA; [3]Meridian Biosciences, Cincinnati, OH, USA; [4]AlphaVax, Research Triangle Park, NC, USA

11:30 37. JuvImmune is a Novel Vaccine Adjuvant that Enhances Protection of Mice from Lethal HSV-2 Infection Following Immunization
Jane Strasser[1], Rhonda Cardin[1], Claudia Chalk[1], James Ireland[1], Jeff Fairman[2], David Bernstein[1]
[1]Division of Infectious Diseases, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA; [2]Juvaris BioTherapeutics, Inc., Pleasanton, CA, USA

11:45 81. A Novel Class of Amphipathic DNA Polymers Inhibits Hepatitis C Virus Infection by Blocking Viral Entry
Takuya Matsumura[1], Takanobu Kato[1], Zonghi Hu[1], Jean-Marc Juteau[2], Andrew Vaillant[2], Jake Liang[1]
[1]Liver Diseases Branch, NIDDK, NIH, Bethesda, MD, USA; [2]REPLICor Inc. Laval, Quebec, Canada

12:00 *Lunch*

Oral Session VI: Other Viruses and Late Breaker Presentations
Celebrity Ballroom EFGH
Chairs: Brian Gowen, Ph.D. and Roger Ptak

13:30 38. Comparative Activity of Anti-Enteroviral Agents Against Poliovirus Replication In Vitro; Implications for the End Phase of the Polio Eradication Initiative
Armando M De Palma[1], Gerhard Pürstinger[2], Amy Patick[3], Koen Andries[4], Erik De Clercq[1], Bart Rombaut[5], Johan Neyts[1]
[1]Rega Institute for Medical Research, University of Leuven, Leuven, Belgium; [2]Department of Pharmaceutical Chemistry, Institute of Pharmacy, University of Innsbruck, Austria; [3]Department of Virology, Pfizer Global Research and Development, San Diego, CA, USA; [4]Johnson & Johnson Pharmaceutical Research & Development, Beerse, Belgium; [5]Department of Pharmaceutical Biotechnology and Molecular Biology, Vrije Universiteit Brussel, Belgium

13:45 39. Carbohydrate-Binding Agents (CBAs) Selectively Target the Glycoproteins of the HCV and HIV Envelope to Prevent Viral Entry
J. Balzarini[1], C. Bertaux[2], D. Daelemans[1], M. Meertens[2], E.G. Cornier[2], J.F. Reinus[3], W.J. Peumans[4], E.J.M. Van Damme[4], Y. Igarashi[5], T. Oki[6], D. Schols[1], T. Dragic[2]
[1]Rega Institute for Medical Research, Leuven, Belgium; [2]Albert Einstein College of Medicine, Bronx, NY; [3]Montefiore Medical Center, Bronx, NY; [4]UGent, Gent, Belgium; [5]Toyama Prefectural University, Toyama, Japan; [6]Keck School of Medicine, Los Angeles, CA, USA

14:00 40. In Vitro and In Vivo Activity of T-705 Against Arenavirus and Bunyavirus Infections
Kie-Hoon Jung[1], Min-Hui Wong[1], Yousuke Furuta[2], Andrew Sanders[1], Michelle Mendenhall[1], Kevin Bailey[1], Robert Sidwell[1], Brian Gowen[1]
[1]Institute for Antiviral Research, Utah State University, Logan, Utah; [2]Toyoma Chemical Co., Ltd., 3-2-5 Nishishinjuku, Shinjuku-ku, Tokyo

14:15 41. QSAR Studies on [(Biphenyloxy)Propyl]Isoxazole Derivatives With Anti-Rhinovirus 2 Activity
E. Muratov[1,2], V. Kuz'min[1,2], A. Artemenko[2], I. Volineckaya[2], V. Makarov[3], O. Riabova[3], P. Wutzler[4], M. Schmidtke[4]
[1]Jackson State University, Jackson, MS, USA; [2]A.V. Bogatsky Physical-Chemical Institute NAS of Ukraine, Odessa, Ukraine; [3]Research Center for Antibiotics, Moscow, Russia; [4]Institute of Virology and Antiviral Therapy, Friedrich Schiller University, Jena, Germany

14:30	42.	Antiviral Activity of (−)-Carbocyclic Cytosine [(−)-Carbodine] Against Venezuelan Equine Encephalitis Virus (VEEV) in a Mouse Model Justin Julander[1], Chung Chu[2], Jagadeeshwar Rao[2], Kristiina Shafer[1], John Morrey[1] [1]Institute for Antiviral Research, Utah State University; [2]The University of Georgia College of Pharmacy
14:45		Late-breaker presentation
15:00		Late-breaker presentation
15:15		Late-breaker presentation
15:30		Adjournment of the 20th ICAR

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