Monday, 19 October 2009
08:00 - 16:00  Satellite Sessions

17:00 - 18:30  Welcome and Opening Remarks

Jean-François Delfraissy, ANRS, France

Alan Bernstein, Global HIV Vaccine Enterprise, USA

Michel Kazatchkine, The Global Fund to Fight AIDS, Tuberculosis and Malaria, Switzerland

Michel Sidibé, UNAIDS, Switzerland

17:40 - 18:05  The state of HIV prevention: How well are we doing in preventing HIV worldwide, and how can we do better?
Peter Piot, Global Health Institute, Imperial College, UK

18:05 - 18:30  Partner, participants and problem-solvers: Expanding from "Informed Consent" to "Informed Communities" in the Search for the AIDS Vaccine
Mitchell Warren, AVAC, USA

Tuesday, 20 October 2009
08:30 - 10:00  Special Session: Recent Lessons From Clinical Trials

08:30 - 09:00  AIDS Vaccine Clinical Evaluation: Where Are We and Where Can We Go?
Gary Nabel, Vaccine Research Center, NIH, USA

09:00 - 09:20  Clinical Outcomes from the STEP Study
Susan Buchbinder, HIV Research Section, San Francisco Department of Public Health, USA

09:20 - 09:40  Recent Immunologic Findings from the Step and Related HIV Vaccine Clinical Trials
Nicole Frahm, Fred Hutchinson Cancer Research Center, USA

09:40 - 10:00  Interim Efficacy Analysis of HVTN 503/Phambili: A phase IIB test of concept trial of the MRKAd5 HIV-1 gag/pol/nef vaccine conducted in HIV-1 uninfected adults in South Africa
Glenda Gray, Perinatal HIV Research Unit, University of Witwatersrand, South Africa
10:00 - 10:50  New Session: Spotlight on RV144, the phase III Thai trial

10:00 - 10:20  Phase III Trial of HIV Prime-Boost Vaccine Combination in Thailand: Result of Final Analysis
Supachai Rerks-Ngarm, Ministry of Health, Thailand

10:20 - 10:35  Post-infection cellular immune responses in recipients following ALVAC-HIV + AIDSVax B/E prime-boost vaccination in the Thai phase III trial
Jerome Kim, Military HIV Research Program, USA

10:35 - 10:50  Immunogenicity of ALVAC-HIV® (vCP1521) and AIDSVAX® B/E prime boost vaccination in RV144, the Thai phase III HIV vaccine trial
Mark de Souza, US Military HIV Research Program/AFRIMS, Thailand

10:50 - 11:15  Coffee Break

11:15 - 12:45  Plenary Session 1: Initiation of the Immune Response

11:15 - 11:45  Innate Control of Adaptive Immunity to Vaccines and Pathogens
Bali Pulendran, Emory Vaccine Center, Emory University, USA

11:45 - 12:15  Harnessing Human Dendritic Cell Subsets for HIV Vaccines
Jacques Banchereau, Baylor Institute for Immunology Research, USA

12:15 - 12:45  T cell control and viral escape
Phil Goulder, University of Oxford, UK

12:45 - 14:00  Lunch + Poster Session 01

14:00 - 16:00  Symposium 1: Mechanisms of Protection against Transmission and Disease Progression

14:00 - 14:25  Epigenetic control of retroelements
Didier Trono, École Polytechnique Fédérale de Lausanne, Switzerland

14:25 - 14:50  Crosstalk between RNAi and HIV
Monsef Benkirane, Institut de Génétique Humaine, France

14:50 - 15:15  Regulation of Harmful Immune Activation during Non Pathogenic SIVagm Infection in African Green Monkeys
Michaela Müller Trutwin, Institut Pasteur, France

15:15 - 15:30  Phenotypic Analyses of CD8+ T cells that Mediate Virus Inhibition from HIV-1 Vaccinees and HIV-1+ Virus Controllers
Stephanie Freel, Duke University Medical School, USA

15:30 - 15:45  HLA-A*7401 is Associated with Protection from HIV-1 Acquisition and Disease Progression in Mbeya, Tanzania
Rebecca Koehler, US Military HIV Research Program/ Henry M Jackson Foundation, USA

15:45 - 16:00  HIV Specific T Cell Responses and Response Patterns Associated with Viral Control Independent of Classical Non-Progessor HLA class I Alleles
Christian Brander, Irsicaixa AIDS Research Institute, Spain
14:00 - 16:00  Symposium 2: Generation of Antibody Responses and Diversity

14:00 - 14:25  Regulation of Broadly Neutralizing Antibody Responses: The Initial B Cell Repertoire To HIV-1 Envelope
Barton Haynes, Duke University Medical Center, USA

14:25 - 14:50  Factors Associated with the Development of HIV Neutralization Breadth
Lynn Morris, National Institute for Communicable Diseases, South Africa

14:50 - 15:15  Eliciting Broad Anti-HIV Neutralizing Antibodies by Vaccination: Lessons Learned from Natural Infection
Leonidas Stamatatos, Seattle Biomedical Research Institute, USA

15:15 - 15:30  A Large-Scale Analysis of Immunoglobulin Sequences Derived From Plasmablasts/Plasma Cells in Acute HIV-1 Infection Subjects
Supriya Munshaw, Duke University, USA

15:30 - 15:45  Broadly neutralizing anti-HIV-1 antibodies disrupt a hinge-related function of gp41 at the membrane interface
Mikyung Kim, Dana-Farber Cancer Institute, USA

15:45 - 16:00  Potent and Broad Neutralizing Antibodies from HIV-1 non-Clade B Infected Donor Reveal a New HIV-1 Vaccine Target
Sanjay Phogat, IAVI, USA

16:00 - 17:00  Coffee Break + Poster Viewing

17:00 - 18:30  Oral Abstract Session 1: Early Events in Transmission and Infection

17:00 - 17:15  Early events of human immunodeficiency virus type 1 (HIV-1) ex vivo penetration in the foreskin mimicking HIV-1 sexual transmission
Yonatan Ganor, Cochin Institute, France

17:15 - 17:30  Defining the Mechanisms of HIV Entry and Interactions with the Female Genital Tract
Ann Carias, Northwestern University, USA

17:30 - 17:45  Clusterin, a natural ligand of DC-SIGN present in human semen inhibits HIV capture and transmission by dendritic cells
Juan Sabatte, National Reference Center for AIDS, Argentina

17:45 - 18:00  Striking elevations in systemic and mucosal cytokine and chemokine levels in acute HIV-1 infection.
Andrea Stacey, Jenner Institute, University of Oxford, UK

18:00 - 18:15  TLR-mediated pDC responses to HIV-1 ligands
J. Judy Chang, Ragon Institute of MGH, MIT and Harvard, USA

18:15 - 18:30  HIV-1 Plasma RNA Risk of HIV-1 Transmission
Jairam Lingappa, University of Washington, USA
**17:00 - 18:30** Oral Abstract Session 2: Vaccine Design

**17:00 - 17:15**
Construction and characterization of replication competent attenuated NYVAC-based vectors as potential HIV vaccines
Bert Jacobs, Arizona State University, USA

**17:15 - 17:30**
Replicating measles-SHIV vaccine induces long term preservation of central memory CD4 cells in the gut of vaccinated macaques challenged with SHIV
Frederic Tangy, Institut Pasteur, CNRS, France

**17:30 - 17:45**
Design and Development of DNA vaccines for the Co-expression of micro-RNA and HIV-1 Env
Adam Wheatley, University of Melbourne, Australia

**17:45 - 18:00**
HIV-1 gp41 Envelope MPER Mutation Altered Epitope Conformation in Lipid and Increased Sensitivity to 2F5 and 4E10 Neutralizing Antibodies
Xiaoying Shen, Duke University, USA

**18:00 - 18:15**
Insertion of the HIV-1 gp41 Epitopes 2F5 and 4E10 into the Membrane-Proximal Region of the Vesicular Stomatitis Virus Glycoprotein
Ivo Lorenz, International AIDS Vaccine Initiative, USA

**18:15 - 18:30**
Recombinant modified Vaccinia Virus Ankara expressing HIV-1 genes activates NK subset capable of controlling HIV infection in vitro
Jean-Saville Cummings, Institut Pasteur, France

**17:00 - 18:30** Oral Abstract Session 3: Modulation of the Immune Response to Infection

**17:00 - 17:15**
HIV-1 infection is characterized by early loss of CD161+ Th17 Cells and Gradual Decline in Regulatory T cells
Andrew Prendergast, University of Oxford, UK

**17:15 - 17:30**
Regulatory T cells inhibit CD8 T cell proliferation in HIV-1 infection through CD39/Adenosine pathway
Yves Levy, AP-HP, Groupe Henri-Mondor Albert-Chenevier; Universite Paris 12, France

**17:30 - 17:45**
Increased Regulatory T cell Frequency and HIV-1 Specific Suppression After Therapeutic Vaccination of HIV-Infected Patients on Antiretroviral Therapy
Bernard Macatangay, University of Pittsburgh, USA

**17:45 - 18:00**
Impairment of HIV-1-specific CD8+ T cell function by soluble epithelial adhesion molecules
Hendrik Streeck, Ragon Institute of MGH, MIT and Harvard, USA

**18:00 - 18:15**
HIV escape from natural killer cytotoxicity: Nef inhibits NKp44L expression on HIV-infected CD4+ T cells.
Vincent Vieillard, INSERM UMR945, France

**18:15 - 18:30**
Unique stimulatory properties of myeloid dendritic cells in individuals with "elite" HIV-1 control
Mathias Lichterfeld, Massachusetts General Hospital, USA
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<thead>
<tr>
<th>Time</th>
<th>Session/Session 5: Novel Vaccinal Approaches</th>
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<tr>
<td>09:00 – 10:30</td>
<td>Plenary Session 2: In Vivo Response to Pathogens and Vaccines</td>
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<td>09:00 - 09:30</td>
<td>In Vivo Dynamics of the Immune Response as Revealed by Multiphoton Imaging</td>
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<td>Ron Germain, NIAID NIH, USA</td>
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<td>09:30 - 10:00</td>
<td>Efficacy of CMV/SIV Vectors</td>
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<td>Louis Picker, Vaccine and Gene Therapy Institute, OHSU, USA</td>
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<td>10:00 - 10:30</td>
<td>TB Vaccine Development</td>
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<td>Jerald Sadoff, AERAS Global TB Vaccine Foundation, USA</td>
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<td>11:00 - 12:15</td>
<td>Oral Abstract Session 4: Update on Clinical Trials</td>
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<td>11:00 - 11:15</td>
<td>Safety and Immunogenicity of LIPO-5, a HIV-1 lipopeptide vaccine: Results of ANRS VAC18, a Phase 2, Randomized, Double-Blind, Placebo-Controlled Trial</td>
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<td>Dominique Salmon-Céron, Hôpital Cochin, Université Paris Descartes, France</td>
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<td>11:15 - 11:30</td>
<td>Strong HIV-specific CD4 and CD8 T-lymphocyte proliferation in HIV-1 DNA prime/modified Vaccinia virus Ankara (MVA) heterologous boost vaccines</td>
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<td>Charlotta Nilsson, Swedish Institute for Infectious Disease Control, Karolinska Institute, Sweden</td>
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<td>11:30 - 12:30</td>
<td>Oral Abstract Session 5: Novel Vaccinal Approaches</td>
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<td>In Vivo Electroporation Enhances the Immunogenicity of ADVAX, a DNA-based HIV-1 Vaccine Candidate, in Healthy Volunteers</td>
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<td>Sandhya Vasan, Aaron Diamond AIDS Research Center, Rockefeller University, USA</td>
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<td>11:15 - 11:30</td>
<td>Analysis of DNA compared to Ad5 vaccination, as single and mixed modalities, demonstrates robust induction of cellular immune responses in macaques</td>
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<td>Lauren Hirao, University of Pennsylvania, USA</td>
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<td>11:30 - 11:45</td>
<td>Efficacy study of a T-cell-based DNA vaccine delivered by intradermal electroporation in macaques</td>
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<td>Frédéric Martinon, CEA / Division of Immuno-Virology, France</td>
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11:45 - 12:00  
**Gp96-Ig-SIV vaccines induce predominant immune responses at mucosal sites**  
Natasa Strbo, University of Miami Miller School of Medicine, USA

12:00 - 12:15  
**Impact of in vivo CD4 binding during HIV-1 Env trimer immunizations of rhesus macaques**  
Iyadh Douagi, Karolinska Institutet, Sweden

12:15 - 12:30  
**First-in-human phase 1 safety and immunogenicity of an Adenovirus Serotype 26 HIV-1 vaccine vector**  
Dan Barouch, Beth Israel Deaconess Medical Center, USA

11:00 - 12:30  
**Oral Abstract Session 6: Dynamics of HIV Infection and the Immune Response**

11:00 - 11:15  
**Multiplicity of infection by HIV-1 in injection drug users, men who have sex with men and heterosexuals**  
Katharine Bar, University of Alabama at Birmingham, USA

11:15 - 11:30  
**Monospecific Expansion of SIVmac251 During Acute Infection Masks Multiple Transmitted Virus Variants Revealed During the Chronic Phase**  
Barbara Felber, HRPS, VB, NCI-Frederick, USA

11:30 - 11:45  
**Dynamics of CTL Epitope Escape and Reversion in an African Subtype C cohort**  
Malinda Schaefer, Emory University, USA

11:45 - 12:00  
**The Role Of Early T-Cell Responses In Subjects With Acute HIV-1 Infection**  
Michael Liu, University of Oxford, UK

12:00 - 12:15  
**Adaptation of HIV-1 to the Human Immune System at the Population Level is Driven by Protective HLA-B Alleles**  
Ingrid Schellens, University Medical Center Utrecht, Netherlands

12:15 - 12:30  
**Evidence of vaccine-induced changes in breakthrough HIV-1 strains from the Step trial**  
James Mullins, University of Washington, USA

12:30 - 14:00  
**Lunch + Poster Session 02**

14:00 - 16:00  
**Symposium 3: Immunological Memory and Protection**

14:00 - 14:25  
**System Biology to Study Immunological Memory during HIV Infection**  
Elias Haddad, McGill University, Canada

14:25 - 14:50  
**Correlates of protection to HIV**  
Alexandre Harari, Centre Hospitalier Universitaire Vaudois, Switzerland

14:50 - 15:15  
**T Cell Clonotypic Correlates of Virus Control**  
Daniel Douek, Vaccine Research Center, NIH, USA

15:15 - 15:30  
**Transitional and Central Memory CD4 T Cells are highly infected in Long Term Non Progressors and Elite Controllers**  
Benjamin Descours, Université Paris VI UPMC, INSERM UMRs945, France
15:30 - 15:45  A Less Differentiated Memory Phenotype of Gag-Specific CD4+ T-cells during Primary HIV Infection Associates with Viral Control at 12 Months
Pholo Maenetje, National Institutes for Communicable Diseases, South Africa

15:45 - 16:00  Rapid perforin upregulation by CD8 T cells in elite controllers as a correlate of immune-mediated control of HIV replication
Adam Hersperger, University of Pennsylvania, USA

14:00 - 16:00  Symposium 4: Antigen Presentation and T Cell Epitopes

14:00 - 14:25  Semen clusterin binds DC-SIGN and inhibits HIV-1 capture and transmission by dendritic cells
Sebastian Amigorena, Institut Curie, Paris, France

14:25 - 14:50  Immune recognition of HIV-1 during acute infection
Marcus Altfeld, Ragon Institute of MGH, MIT and Harvard, USA

14:50 - 15:15  Transcriptional control of crosspresentation programs in dendritic cells
Kenneth Murphy, Washington University School of Medicine, USA

15:15 - 15:30  HIV-specific responses induced by anti-CD40 targeting antibodies
Nicolas Loof, INSERM U899-BIIR/INSERM/ANRS Center for Human Vaccines, USA

15:30 - 15:45  The intracellular production of HIV antigenic peptides is guided by predictable motifs and can be altered: implications for immunogen design
Sylvie Le Gall, Harvard Medical School and Mass General Hospital, USA

15:45 - 16:00  Polyvalent Gag-specific CD8 T-cells with enhanced functional properties are enriched in HIV-1 clade C infected individuals with lower viral loads
Boris Julg, Ragon Institute of MGH, MIT and Harvard, USA

16:00 - 17:00  Coffee Break + Poster Viewing

17:00 - 18:40  Symposium 5: Protection Against Mucosal Transmission and Viral Dissemination

17:00 - 17:25  Characterization of viral variants that initiate systemic infection after mucosal transmission
Eric Hunter, Emory Vaccine Center, USA

17:25 - 17:50  Target Cell Availability and Prevention of Mucosal Transmission
Ashley Haase, University of Minnesota Medical School, USA

17:50 - 18:15  Do Mucosal T-cell Responses Contribute Significantly to HIV Control?
Barbara Shacklett, UC Davis, USA

18:15 - 18:40  Treatment as Prevention
Bernard Hirschel, University Hospital Geneva, Switzerland

17:00 - 18:40  Symposium 6: Refining Immunogen Design

17:00 - 17:25  Structural basis of broad neutralization of HIV-1
Ian Wilson, The Scripps Research Institute, USA
Primary Immunization Influences the Magnitude, Quality and Breadth of Gag Specific T Cell Responses Following an rAd-5 Boost
Robert Seder, Vaccine Research Center, NIH, USA

New Applications for Mosaic Antigen Designs
Bette Korber, Los Alamos National Laboratory, USA

HIV-1 Mosaic Antigens Expand Cellular Immune Breadth and Depth in Rhesus Monkeys
Dan Barouch, Beth Israel Deaconess Medical Centre, Harvard Medical School, USA

Thursday, 22 October 2009

09:00 – 10:30  Plenary Session 3: B Cell Biology

Development of anti-HIV antibodies in humans with high titers of broadly neutralizing antibodies
Michel Nussenzweig, Howard Hughes Medical Institute, The Rockefeller University, USA

From Antibody to Vaccine – a Tale of Structural Biology and Epitope Scaffolds
Peter Kwong, Vaccine Research Center, NIH, USA

Induction and Function of the Mucosal Immune System
Per Brandtzaeg, University of Oslo, Norway

11:00 - 11:45  Oral Abstract Session 7: T Cell Responses to Vaccine

HIV-Specific CD8+ T-Cells of Vaccinees Exhibit Proliferative and Cytotoxic Capacities Comparable to Those of Progressors
Julia Rood, National Institute of Health, USA

Adenovirus vectors induce expansion of memory CD4 T cells with a mucosal homing phenotype that are readily susceptible to HIV-1 infection.
Adel Benlahrech, Imperial College, UK

Influence of Preexisting Vaccinia Immunity on a DNA/MVA SIV Vaccine, Decreased Cellular Immunity but Enhanced Control of a Pathogenic SIV Challenge
Rama Amara, Yerkes National Primate Center of Emory University, USA

11:45 - 12:35  Closing Session

11:45 - 12:10  HIV Vaccinology: What Does the Future Hold?
Anthony Fauci, NIAID, NIH, USA

Are we targeting the right HIV determinants?
Françoise Barré-Sinoussi, Institut Pasteur, France

12:35 – 12:45  Closing Remarks and Handover

12:35 - 12:40  Yves Levy, ANRS, France

12:40 - 12:45  Eric Hunter, Emory Vaccine Center, USA