The IAS would like to thank the following organizations for their generous support to the 2015 Towards an HIV Cure Symposium:

Welcome Statement 4

2015 Programme Committee 5

18 July 2015 6

Opening Session 6

Pathways to establishing and maintaining HIV latency 6

Roundtable: Advancing Paediatric HIV Cure Research 7

Activating latent HIV infection in vitro and in vivo 7

Roundtable: Combination Therapy Trials 8

Poster Exhibition & Networking Session 8

19 July 2015 9

Novel strategies to identify and quantify virus persistence in vivo (biomarkers) 9

Immunology and persistence 10

Roundtable: Key Partnerships: Community & Private Sector 11

Closing Session 11

Poster Exhibition 12

Scholarship Recipients 21

IAS/ANRS HIV Cure Young Investigator Award 22

IAS Towards an HIV Cure Timeline 23

Programme at a Glance 24

Abstracts Embargo Policy

Most abstracts presented at the symposium will also be presented at the IAS 2015 Conference. The Conference Embargo Policy states that all oral abstracts accepted for inclusion at IAS 2015 may not be published before the start date and time of the press conference in which the oral abstract is featured or the start time of the scientific session at IAS 2015 in which the oral abstract is being presented – whichever is earlier. The embargo dates and times of those abstracts being presented at IAS 2015 are clearly indicated beside the abstract title in this programme book.

In line with the Conference Embargo Policy, any uploading of abstract presentations CONTENT (images, text, video, audio) is STRICTLY FORBIDDEN until the start date and time of the session or press conference at IAS 2015 in which the abstract is first being presented.
Dear Colleagues,

On behalf of the International AIDS Society (IAS), the Programme Committee, and all members of the Towards an HIV Cure initiative, it is our pleasure to welcome you to Vancouver for the fourth annual Towards an HIV Cure Symposium.

Following the success of previous editions, we are delighted to convene another symposium in 2015 to provide a unique setting for the presentation and discussion of the latest research on HIV cure across a variety of disciplines and create a fertile setting for dialogue with the broader community.

Today, HIV cure research has become one of the main priorities in the field. Research on viral persistence under antiretroviral therapy and on strategies towards an HIV Cure is moving fast and generates a great deal of scientific excitement. Many members of the scientific community now agree that antiretroviral free remission may be within reach.

The two-day symposium will include invited speakers, oral and poster abstract presentations as well as roundtable discussions, to present and discuss the most recent results in the field and look ahead together at future research directions.

The symposium is open to senior, mid-career and junior scientists, clinical researchers, community representatives, research funding administrators and scientific journalists, and registrations were purposely limited to 275 to ensure optimal interaction between the participants. The symposium places strong emphasis on scientific excellence and representation from the global community, with scholarships being provided to more than 45 participants worldwide.

We are confident that once again the symposium will be a platform where the international HIV/AIDS community will continue to share their knowledge, debate and network among their peers.

In order to disseminate the information shared at this symposium, the issues and findings will be widely available through the publication of the presented abstracts and audio podcasts on the IAS website.

We look forward to a thought-provoking and fruitful meeting.

Sincerely,

Pr. Francoise Barre Sinoussi  
Dr. Steven Deeks  
Pr. Sharon Lewin  
Symposium Co-Chairs

2015 Programme Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Françoise Barré-Sinoussi</td>
<td>Inserm and Institut Pasteur</td>
<td>France</td>
</tr>
<tr>
<td>Steven Deeks (Chair)</td>
<td>University of California, San Francisco</td>
<td>USA</td>
</tr>
<tr>
<td>Sharon Lewin (Chair)</td>
<td>Doherty Institute, The University of Melbourne</td>
<td>Australia</td>
</tr>
<tr>
<td>Jintanat Ananworanich</td>
<td>US Military HIV Research Program</td>
<td>USA</td>
</tr>
<tr>
<td>Paula Cannon</td>
<td>University of Southern California</td>
<td>USA</td>
</tr>
<tr>
<td>Nicolas Chomont</td>
<td>University of Montreal</td>
<td>Canada</td>
</tr>
<tr>
<td>Daniel Douek</td>
<td>Vaccine Research Center, NIAID/NIH</td>
<td>USA</td>
</tr>
<tr>
<td>Romas Gelezijunas</td>
<td>Gilead Sciences Inc.</td>
<td>USA</td>
</tr>
<tr>
<td>Richard Koup</td>
<td>Vaccine Research Center, NIAID/NIH</td>
<td>USA</td>
</tr>
<tr>
<td>Daniel Kuritzkes</td>
<td>Brigham &amp; Women’s Hospital, Harvard Medical School</td>
<td>USA</td>
</tr>
<tr>
<td>John Mellors</td>
<td>University of Pittsburgh</td>
<td>USA</td>
</tr>
<tr>
<td>Keymantiri Moodley</td>
<td>CMEL, Stellenbosch University</td>
<td>South Africa</td>
</tr>
<tr>
<td>Vicente Planelles</td>
<td>University of Utah</td>
<td>USA</td>
</tr>
<tr>
<td>Peter Reiss</td>
<td>Academic Medical Center</td>
<td>Netherlands</td>
</tr>
<tr>
<td>Bruno Spire</td>
<td>Inserm</td>
<td>France</td>
</tr>
</tbody>
</table>

Scientific coordination

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anna Laura Ross</td>
<td>ANRS and IAS</td>
<td>France</td>
</tr>
</tbody>
</table>

Event organisation

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosanne Lamplough</td>
<td>IAS</td>
<td>Switzerland</td>
</tr>
</tbody>
</table>
18 JULY 2015

9.00 – 10.05 Opening Session
Co-Chairs: Françoise Barré-Sinoussi, Inserm and Institut Pasteur, France
Jack Whitescarver, United States

9.00 – 9.20 Welcome and Introduction

9.20 – 9.50 Keynote Address
Progress and challenges in HIV cure research
Daniel Kuritzkes, Brigham & Women’s Hospital, Harvard Medical School, United States

9.50 – 10.05 Community Speaker
Community involvement in HIV cure-related research: Not just guinea pigs
Matthew Sharp, Long-term Survivor, HIV Education and Advocacy Consultant, United States

10.05 – 11.25 Oral Abstract Session 1: Pathways to establishing and maintaining HIV latency
Co-Chairs: Éric Cohen, Institut de recherches cliniques de Montréal, Canada
Michaela Muller-Trutwin, Institut Pasteur, France

10.05 – 10.25 Overview Speaker
HIV-1 broadly neutralizing antibodies: Potential role in HIV treatment approaches
John Mascola, Vaccine Research Center, NIAID/NIH, United States

10.25 – 10.40 OA1-1
CTLA-4-expressing memory CD4+ T-cells are critical contributors to SIV viral persistence
C. McGary, S. Paganini, B. Cervasi, X. Yu, M. Lichterfeld, G. Silvestri, M. Paiardini
United States

10.40 – 10.55 OA1-2
Molecular Determinants of HIV-1 Permissiveness and Persistence in Gut-Homing CD4+ T-Cells Expressing the Th1 Marker CCR6
Canada
Under embargo until 14.30 on 22 July 2015

10.55 – 11.10 OA1-3
Dasatinib preserves SAMHD1 antiviral activity in CD4+ T cells treated with IL-7
I. Alkand, M. Bermejo, B. Descours, E. Mateos, M.M. Lederman, M. Benkirane, M. Coiras
Spain

11.10 – 11.25 OA1-4 LB
Estrogen blocks HIV re-emergence from latency and points to gender-specific differences in HIV reservoirs
J. Karn, B. Das, C. Dobrowolski, E. Scully, S. Deeks, M. Gandhi, R. Johnston
United States
Under embargo until 14.30 on 21 July 2015

11.25 – 11.55 COFFEE BREAK

11.55 – 13.00 Roundtable: Advancing Paediatric HIV Cure Research
Chair: Jintanat Ananworanich, US Military HIV Research Program, United States
Panelists:
Marie Elizabeth Theunissen, FAMCRU, South Africa
Hugo Soudeyns, CHU Sainte-Justine Research Center and Université de Montréal, Canada
Deborah Persaud, Johns Hopkins University, United States
Ann Chahroudi, Emory University School of Medicine, United States
Daria Hazuda., Merck, United States

13.00 – 14.00 LUNCH BREAK
Lunch will be provided the Plaza Ballroom in the poster exhibition area.

14.00 – 15.50 Oral Abstract Session 2: Activating latent HIV infection in vitro and in vivo
Co-Chairs: David Margolis, University of North Carolina at Chapel Hill, United States
Monique Nijhuis, University Medical Center Utrecht, Netherlands

14.00 – 14.20 Overview Speaker
Immune recognition following latency reversal
Marcus Altfeld, Heinrich-Pette Institute, Leibniz Institute for Experimental Virology, Germany

14.20 – 14.35 OA2-1
Histone deacetylase inhibitors alter the accumulation of spliced HIV mRNA - implications for virus production
Australia

14.35 – 14.50 OA2-2
Latency reversal Agent (LRA) Romidepsin Reactivates Latent Virus in Two Rhesus Macaque (RM) Models of Controlled SIV Infection in the Absence of Antiretroviral Therapy (ART)
B. Policicchio, E. Brocca-Cofano, C. Xu, D. Ma, T. He, H. Li, G. Haret-Richter, T. Dunsmore, G. Shaw, R. Ribeiro, I. Pandrea, C. Apetrei
United States
19 JULY 2015

9.00 – 10.35 Oral Abstract Session 3: Novel strategies to identify and quantify virus persistence in vivo (biomarkers)

Co-Chairs: Jean-Pierre Routy, McGill University Health Centre, Royal Victoria Hospital, Canada
Gabriela Turk, Instituto Investigaciones Biomédicas en Retrovirus y SIDA, Argentina

9.00 – 9.20 Overview Speaker

Engineering T cells to functionally cure HIV-1 infection
James Riley, Perelman School of Medicine, University of Pennsylvania, United States

9.20 – 9.35 OA3-1

Immunological Markers associated with HIV Persistence During ART Identified by Iterated Conditional Random Forests Analysis
Canada

9.35 – 9.50 OA3-2

Patient-derived defective HIV-1 proviruses containing large internal deletions can be transcribed and translated
R. Pollack, K. Bruner, Y.-C. Ho, R. Siliciano
United States

15.50 – 17.00 Roundtable: Combination Therapy Trials

Chair: Daniel Kuritzkes, Brigham & Women’s Hospital, Harvard Medical School, United States
Panelists: Brigitte Autran, Hôpital Pitié Salpêtrière, CIMIT-Paris, UPMC/INSERM U1135, France
Joseph Eron, University of North Carolina at Chapel Hill, United States
Irina Tcherepanova, Argos Therapeutics, Inc., United States
Jeffrey Lifson, Frederick National Laboratory for Cancer Research, United States
David Evans, Project Inform, United States

17.00 – 18.30 Poster Exhibition & Networking Session

During the poster session, we invite you to meet and discuss with the HIV Cure 2015 scholars. The scholarship recipients can be identified by a red strip on their badges; the full list of scholarship recipients can be found on page 21.
Drinks and light refreshments will be served.
10.35 – 11.00  COFFEE BREAK

11.00 – 11.35  Oral Abstract Session 4: Immunology and persistence
Co-Chairs: Di Yu, Monash University, Australia, Sarah Read, NIAID/DAIDS, NIH, United States

11.00 – 11.20  Overview Speaker
CHERUB: Collaboration in HIV eradication in the UK; Predictors of PTC and viral reactivation strategies
Sarah Fidler, Imperial College London, United Kingdom

11.20 – 11.35  OA4-1
Transcriptomics and Metabolomics identify inflammatory profiles that segregate subjects with High and Low inducible HIV reservoir
United States
Under embargo until 11.00 on 20 July 2015

11.35 – 11.50  OA4-2
Virologic and immunologic correlates of viral control post-ART interruption in SIV-infected rhesus macaques
L. Mici, E. Ryan, R. Fromentin, C. Benne, N. Chomont, J. Lifson, M. Paiardini
United States
Under embargo until 11.00 on 20 July 2015

11.50 – 12.05  OA4-3
Zinc Finger Nuclease Gene Editing for Functional Cure in a Nonhuman Primate Model of HIV/AIDS
United States
Under embargo until 14.30 on 21 July 2015

12.05 – 12.20  OA4-4 LB
HIV-1 virological remission for more than 11 years after interruption of early initiated antiretroviral therapy in a perinatally-infected child
France
Under embargo until 11.00 on 20 July 2015

12.20 – 12.35  OA4-5 LB
A Novel Therapeutic HIV-1 Vaccine Trial in Patients under HAART
United States

12.35 – 14.00  LUNCH BREAK & POSTER EXHIBITION
Lunch will be provided in the Plaza Ballroom in the poster exhibition area.

14.00 – 14.50  Roundtable: Key Partnerships: Community & Private Sector
Chair: Sharon Lewin, Doherty Institute, The University of Melbourne, Australia
Panelists:
David Margolis, University of North Carolina at Chapel Hill, United States
Andrew Spaltenstein, GlaxoSmithKline, United States
Lynda Dee, CARE CAB; AIDS Action Baltimore, United States
Erik Iverson, Infectious Diseases Research Institute, United States
Veronica Miller, UC Berkeley; Forum for HIV Collaborative Research, United States

15.00 – 16.00  Closing Session

15.00 – 15.30  Closing Lecture
HBV Cure: Possible lessons for HIV-AIDS
Stephen Locarnini, Victorian Infectious Diseases Reference Laboratory, Australia
Chair: Steven Deeks, University of California, San Francisco, United States

15.30 – 15.45  IAS-ANRS HIV Cure Young Investigator Award Ceremony
Information on the award can be found on page 22.
Co-Chairs: Jean-François Delfraissy, ANRS, France
Chris Beyrer, Johns Hopkins, Bloomberg School of Public Health, United States

15.45 – 16.00  Closing Remarks
Françoise Barré-Sinoussi, Inserm and Institut Pasteur, France
Carl Dieffenbach, NIAID/NIH, United States
Reverse transcription and integration
1. Primary resistance against dolutegravir decreases HIV integration
T. Mesplede, K. Anstett, N. Osman, S. Hassounah, J. Liang, Y. Han, M. Wainberg
Canada
Under embargo until 11.00 on 21 July 2015

2. HIV-1 Integrase Variants Retarget Proviral Integration and Are Associated with Disease Progression
J. Derneulemeester, S. Vets, R. Schrijvers, P. Madalata, M. De Mooyer, J. De Rijck, T. Ndung’u,
Z. Debyser, R. Gijbers
Belgium
Under embargo until 11.00 on 21 July 2015

Intrinsic cellular defences and restriction factors
3. HIV-1 Vpu Exploits the Crosstalk Between BST2 and the ILT7 Receptor to Inhibit Innate Sensing of Infected T Cells by Plasmacytoid Dendritic Cells
M.G. Bego, É.A. Côté, N. Aschman, M. Mercier, W. Weissenhorn, É.A. Cohen
Canada

4. Decreased Interferon Signature in HIV-1 Viremic Controllers
United States

5. Differential Effects of Cell-surface CD4 and Tetherin on ADCC Mediated by Non-neutralizing and Broadly Neutralizing Anti-HIV Antibodies: the Role of Nef and Vpu
T.N.O. Rhym, G. Perron, É.A. Cohen
Canada

Type I Interferons (viral inhibition, immunomodulatory functions)
6. Comparison of gene expression profile between human and macaque dendritic cells infected with virus carrying or not Vpx-loaded particles and assessment of their pathogenic impact.
É. Calonge, M. Bermejo, I. Mangeot, N. Gonzalez, M. Cairas, L. Jimenez, J. Garcia-Perez, R. Legrand, J. Alcamí
Spain

Viral mechanisms of HIV/SIV persistence and latency
7. Low frequency of HIV rebound after antiretroviral treatment interruption
Australia

8. Purging HIV-1 from Latent Reservoirs Using Human Methyltransferase Inhibitors
S. Somer, L.B. Giron, M.S. Arif, T.M. Oshiro, M.C. Sucupira, A. Duarte, R.S. Díaz
Brazil

Host cellular factors and latency
9. Transcriptional Profiling Identifies RORC and PPARγ as Two Major Mechanisms Regulating HIV Permissiveness in Primary Th17 Cells
Canada

Cellular and tissue reservoirs of HIV/SIV
10. Progressive Contraction of the Latent HIV Reservoir around a Core of Less-Differentiated CD4+ Memory T-Cells
France

Measurement of HIV/SIV reservoirs
14. Defining the Unique Biomarkers of Latently Infected T cells
M. Tenzer, B. Aiamkitsumrit, S. Nekhai, M. Bukrinsky, G. Simon
United States

15. Flow-based differentiation between latently HIV-1-infected single cells expressing Gag mRNA alone or in conjunction with Gag protein following latency reversal
G. Martrus, M. Altfeld
Germany

16. HIV-1 transcription is stable during frequent longitudinal sampling in aviremic patients on ART: Implications for HIV cure research
S. Leeb, R. Nyman, S. Jørgensen, T.A. Rasmussen, L. Østergaard, P.W. Denton, M. Tolstrup, O.S. Søgaard
Denmark
Under embargo until 11.00 on 20 July 2015

17. Anti-HIV antibody responses reflect the quantifiable HIV reservoir size
United States
Under embargo until 11.00 on 20 July 2015
18. Improved Assays to Measure the Inducible Latent HIV Reservoir  
M. Massanella, C. Yek, S.M. Loda, M.C. Strain, D.D. Richman  
United States

19. Time associated changes in cell-associated HIV RNA in HIV-infected subjects on suppressive antiretroviral therapy - implications for clinical trials of cure interventions (Late Breaker)  
Australia  
Under embargo until 11.00 on 20 July 2015

20. Assay To Measure The Latent Reservoir Of Replication-Competent HIV-1 In Suppressed Patients Based On Ultra Deep Sequencing (Late Breaker)  
United States

HIV-1 controllers (including post-treatment controllers)

21. Profound Alterations in Cholesterol Metabolism Restrict HIV-1 Trans Infection of CD4 T Cells in Nonprogressors  
United States

Asymptomatic long term non-progression

22. Characterization of anti-gp41 antibodies eliciting viral neutralization and protecting against CD4 depletion in long-term non-progressors  
V. Vieillard, A. Samri, O. Luccar, J. Crouzet, D. Costagliola, P. Debré, French ALT study group  
France

23. CD40L-induced tunneling nanotube networks facilitate proinflammatory dendritic cell-mediated HIV-1 trans-infection of CD4+ T cells  
C. Zaccard, R. Mailliard, G. Rappocciolo, S. Watkins, C. Rinaldo  
United States

Targeting HIV persistence during ART (cure strategies)

24. MGI and VSVΔ51 viruses target and kill latently HIV-infected myeloid cells  
N. Ranganath, S. Cité, T. Sandstrom, J. Angel  
Canada

25. Minimal HIV-1 Gag Epitope Presentation in a T Cell Line During Reactivation  
X.T. Kuang, G. Amoile, P. Mwimanzi, M.A. Brockman  
Canada

26. Combinatorial CRISPR/Cas9 approaches targeting different steps in the HIV life cycle efficiently limits viral reactivation and halts viral replication  
M. Nijhuij, D. de Jong, F. Wolters, E. Wiertz, R.J. Lebbink  
Netherlands

27. Anti-HIV CAR+ lymphocytes protected from HIV-infection by CCR5 disruption as a strategy to cure HIV  
T. Wimmer, A. Bernard, M. Hale, G. Romano, I. Khan, J. Sahni, A. Scharenberg, D. Rawlings  
United States

28. Universal Tre-recombinase (uTre) specifically targets the majority of primary HIV-1 isolates  
Germany

29. Polyvalent immune responses correlate with lower number of HIV infected CD4 T cells in chronically infected subjects treated with autologous RNA pulsed DC therapy  
I. Tcherepanova, J. Krisko, J. Harris, A. Gamble, W. Lewis, M. DeBenedette, C. Nicolette  
United States

30. HIV rebound and meningoencephalitis following ART interruption after allogeneic hematopoietic stem cell transplant: an investigation of the source of HIV rebound  
United States

31. Robust HIV-specific T cells in Post-Treatment Controllers from the VISCONTI cohort  
A. Samri, V. Avettand-Fenoel, L. Hocqueloux, C. Bacchus-Souffan, A. Cheret, A. Emarre, B. Descours, A. Saez-Cirion, C. Rouzioux, B. Autran, VISCONTI Study group  
France

32. Nef inhibition for enhanced NK cell killing of cells expressing reactivated HIV-1  
E. Scully, A. Lockhart, W. Garcia Beltran, A. Bodair, M.-C. Rouyez, S. Benichou, D. Kuritzkes, M. Altfeld  
United States

33. HIV-specific latency reversing therapies that exploit novel pathways for suboptimal Tat protein expression  
Australia

34. Type-I programmed dendritic cells induce primary CTL capable of effectively targeting the HIV-1 reservoir  
R.B. Mailiiard, K.N. Smith, P. Piazza, J.I. Mullins, C.R. Rinaldo  
United States  
Under embargo until 14.30 on 22 July 2015

35. Predictive pharmacodynamics model of transgene delivery for curative HIV gene therapy  
P. Roychoudhury, H. De Silva Feelixge, H. Pietz, D. Stone, K. Jerome, J. Schiffer  
United States

36. Novel activators of latent HIV-1 from natural products (Late Breaker)  
Canada

37. Protective HLA alleles fail to predict immune control of HIV after ART interruption in chronically infected patients with low HIV-DNA from the ULTRASTOP Study (Late Breaker)  
C. Hamimi, R. Calin, G. Carcelain, A. Samri, S. Lambert-Nicolat, A.G. Marcelin, Y. Dulio, L. Assoumou, R. Tubiana, V. Calvez, V. Appay, I. Theodorou, D. Costagliola, C. Katlama, B. Autran, Ultrasatp study group  
France
38. Reversal of HIV-1 latency by activation of patient-derived CD4+ T-cells results in clonal expansion and sustained production of infectious virus from a subset of cells (Late Breaker)
United States

39. Potent and broad neutralizing activity of small antibody fragments targeting CD4i (CD4-induced) epitope
K. Tanaka, T. Kuwata, Y. Maruta, K. Ramirez, M. Alam, Y. Egami, Y. Kawanami, S. Matsushita
Japan

40. A novel TLR-9 agonist (MGN1703) activates NK-cells and enhances NK-cell mediated viral killing of HIV-1 infected CD4+ T cells ex vivo
Denmark

41. Treatment with anti-α4β7 integrin antibody reduces virus-mediated gastrointestinal pathology by targeting distinct mucosal tissues
S. Byrareddy, J. Arthos, C. Cicla, K. Reimann, T. Parslow, P. Santangelo, F. Vilinger, A. Fauci, A. Ansari
United States

42. Novel CD4-based bispecific chimeric antigen receptors provide potent and targeted killing of HIV-infected cells: a potential functional cure strategy (Late Breaker)
B. Dey, L. Liu, B. Patel, M. Ghanem, V. Bundac, N. Begum, V. Garcia-Martinez, E. Berger
United States

Novel approaches in Immunotherapeutics (including bnAbs and anti-inflammatory mediators)

43. Monocyte-derived DC Electroporated with mRNAs Encoding both specific HIV Antigens and DC Adjuvants are able to improve T cell Functionality
A.C. Crespo, L. Miralles, J. Aerts, K. Thielemans, B. Mothe, J. Martinez-Picado, C. Brander, F. Garcia, M. Plana, iHIVARNA consortium
Spain

44. Therapeutic conserved elements (CE) DNA vaccine increases T-cell responses against highly conserved viral sequences in the setting of pre-existing immunodominant responses induced by chronic viral infection
United States

45. Immune response to sequences surrounding the 12 protease cleavage sites generated during ARV treatment improved CD4 counts of SIVmac251 infected rhesus monkeys
Canada

46. Safety and immunogenicity of ChAd.HIVconsv and MVA.HIVconsv therapeutic vaccines in a cohort of early treated HIV-1 infected individuals
B. Mothe, C. Manzardo, P. Coll, P. Cobarsi, A. Sanchez-Bernabeu, R. Escrig, N. Perez-Alvarez, J.M. Miró, L. Darrel, B. Cletet, T. Hanke, C. Brander, BCN01 study group
Spain
Under embargo until 14.30 on 22 July 2015

47. Development of a latency reversing activator vaccine (ACT-VEC) platform for HIV-1 cure therapy
J.S. Mann, T. Biru, P.T. Wille, K. Klein, E.J. Arts
Canada
Under embargo until 14.30 on 21 July 2015

48. Broadly specific, cytolytic T cell responses and lower inflammatory responses correlate with durable viral remission following therapeutic DNA vaccination in SIV-infected macaques
D. Fuller, A. Narendran, P. Rajakumar, J. Che, E. Yager, C. Stagmar, M. Murphey-Corb
United States

49. Crispr/Cas9 gene editing eradicates latent and protects cells against new HIV-1 infection
R. Kaminski, W. Hu, Y. Zhang, J. Karn, K. Khalili
United States
Under embargo until 14.30 on 21 July 2015

50. High rates of non-reactive HIV serology after antiretroviral treatment initiated in acute HIV infection
Thailand
Under embargo until 14.30 on 22 July 2015

51. Early initiation rather than prolonged duration of antiretroviral therapy in HIV infection contributes to reducing CD8 T-cell elevation: Relevance for clinical outcome (Late Breaker)
Canada

52. HIV reservoirs in semen at the time of Primary infection (Late Breaker)
France

53. CD4/CD8 ratio at ART initiation as a predictor of viral rebound following interruption of ART initiated in primary HIV infection (Late Breaker)
United Kingdom

Acute and early infection

54. Reversal of HIV-1 latency by activation of patient-derived CD4+T-cells results in clonal expansion and sustained production of infectious virus from a subset of cells (Late Breaker)
United States
Long-term non-progressors and elite controllers

54. Ultrastop: Is remission achievable in HIV-1 patients with low HIV DNA reservoir?
R. Calin, S. Lambert-Nicolot, C. Hamimi, Y. Dudot, L. Assoumou, R. Tubiana, V. Calvez, B. Autran, D. Castragliota, C. Katlama
France

Timing of therapy initiation

55. Initiation of Antiretroviral Therapy at high CD4 cell counts is associated with Increased Adherence, Viral Suppression, and Decreased HIV Drug Resistance in British Columbia, Canada
Canada

56. Long-term Early Antiretroviral Therapy Limits the HIV-1 Reservoir Size as Compared to Later Treatment Initiation but not to Levels Found in Long-term Non-Progressors
Belgium
Under embargo until 14.30 on 22 July 2015

Ethical issues in clinical trials and treatment strategies

57. Proposed HIV Cure Research in South Africa: perspectives of HIV researchers, clinician and advocates on the anticipated ethical challenges
K. Moodley, T. Rassouw, C. Staunton, C. Calvin
South Africa

58. The Ethics of HIV Cure Clinical Research among Acutely Infected Adults: Points for Consideration
A.L. Gilbertson, S. Rennie, J. Tucker
United States, United Kingdom

Therapeutic vaccine trials

59. HIV-1 Reservoir Dynamics after Vaccination and Antiretroviral Therapy Interruption Are Driven by Dendritic Cell-Vaccine Induced T-Cell Responses
Spain

60. Patient-reported receptiveness to a HIV therapeutic vaccine
France

61. Vacc-4x/Lenalidomide Increases Naïve CD4 T-Cells in Well Controlled Patients on ART with Low preART CD4 Counts and Poor Immune Reconstitution
Germany

62. A first-in-human phase I/II trial demonstrates the safety and the immunogenicity of a lentiviral-based therapeutic HIV vaccine eliciting potent polyfunctional multispecific CD8 and CD4 T-cell responses in HIV-infected individuals (Late Breaker)
H. Toussaint, E. Sarry, A. Bejanaru, S. Agaugué, M. Rodriguez, E. Sabbah-Petrover, C. Bauche
France

Complementary and traditional medicines

China

Curative interventions (including those aimed at reservoir depletion)

64. Reduction in Total HIV-1 Proviral DNA Following Re-Boost Immunizations Using The Peptide-based Therapeutic Vaccine Candidate, Vacc-4x, During ART
Germany, United States

65. Optimized antiretroviral therapy during allogeneic hematopoietic stem cell transplantation in HIV-infected individuals
United States

66. VAC-3S immunotherapeutic HIV vaccine combined with ART is Immunogenic and Safe. Phase II Initial Analysis of the IPROTECT1 Multicenter European Study
France

67. VAC-3S, a safe Immunotherapeutic HIV Vaccine decreased total HIV DNA and increased CD4/CD8 ratio: Phase I Final Results (Late Breaker)
France

68. Perspectives on the acceptability of HCRC trials: the challenges for physicians and PLWHiV (ANRS APSEC) (Late Breaker)
M. Preau, M. Daumergue, M. Mora, C. Goujard, C. Pratière, L. Meyer, J.D. Lelièvre, F. Raffi, B. Spire, O. Lambotte, M. Suzan Monti
France
Clinical trials and antiretroviral therapy in children and adolescents

69. Low but Detectable IFN-γ Responses against Clade-Matched HIV-1 Peptides in Early-Treated Vertically-Infected Children with Long-Term Sustained Viral Suppression (Late Breaker)
   H. Dieumegard, I. Salem Fourati, A. Le Campion, F. Kakkar, J. Brophy, L. Samson, M. Hawkes, S. Read, A. Bitnun, H. Soudeyns, EPIC4 Research Team
   Canada

Engagement of community in service delivery

70. Results of a community needs assessment and pilot test of a novel HIV cure research training curriculum
   United States

71. Bringing Community to Cure
   L. Sylla, M. Louella, E. Seelbach, T. Andrus
   United States

72. Planning and Community Engagement for HIV Cure Research in Canada, A Collaborative Program Between National Research Teams and Key Populations
   R. Reinhard, J. Brophy, H. Soudeyns, É.A. Cohen, K. Fowke
   Canada

73. The transition from incurable to curable: Pediatric leukemia, psychological dimensions of new disease cures, and implications for HIV
   C. Gliwa, M.E. Grewe, R. Necochea, S. Rennie, J. Tucker
   United States

74. HIV cure goes viral: an analysis of HIV cure #hashtags (Late Breaker)
   United States

Full affiliations can be found in the abstract book, available online at www.towardsanhivcure.org
# Scholarship Recipients

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aubin Joseph Nanfack</td>
<td>New University School of Medicine</td>
<td>United States</td>
</tr>
<tr>
<td>Opany Evans Odhiambo</td>
<td>Kydesa Rainbow Community/lShtar MSM</td>
<td>Kenya</td>
</tr>
<tr>
<td>Simon Oduwoor Ondiek</td>
<td>HIV/AIDS Research &amp; Advocacy Program</td>
<td>Kenya</td>
</tr>
<tr>
<td>Alexander Pasternak</td>
<td>Academic Medical Center of the University of Amsterdam</td>
<td>Netherlands</td>
</tr>
<tr>
<td>Delphine Planas</td>
<td>CHUM-Research Center</td>
<td>Canada</td>
</tr>
<tr>
<td>Benjamin Policicchio</td>
<td>University of Pittsburgh</td>
<td>United States</td>
</tr>
<tr>
<td>Nischal Ranganath</td>
<td>Ottawa Hospital Research Institute</td>
<td>Canada</td>
</tr>
<tr>
<td>Joelle Reid</td>
<td>Federation of Ugandan Medical Students Associations (FUMSA)</td>
<td>Uganda</td>
</tr>
<tr>
<td>Robert Reinhard</td>
<td>Institut de recherches clinique de Montreal and The Ontario HIV Treatment Network</td>
<td>Canada</td>
</tr>
<tr>
<td>Yasir Layth Saleem</td>
<td>Youth Engagement and Education Council</td>
<td>Iraq</td>
</tr>
<tr>
<td>Sadia Samer</td>
<td>Federal University of Sao Paulo</td>
<td>Brazil</td>
</tr>
<tr>
<td>Rui Andre Saraiva Raposo</td>
<td>The George Washington University</td>
<td>United States</td>
</tr>
<tr>
<td>Theodomir Sebazungu</td>
<td>E-Aunt Initiative</td>
<td>Rwanda</td>
</tr>
<tr>
<td>Kazuki Tanaka</td>
<td>Matsushita Project Laboratory, Center for AIDS Research, Kumamoto University</td>
<td>Japan</td>
</tr>
<tr>
<td>John Thornhill</td>
<td>Imperial College London</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Gabriela Julia Ana Turk</td>
<td>Instituto de Investigaciones Biomédicas en Retrovirus y SIDA, Universidad de Buenos Aires</td>
<td>Argentina</td>
</tr>
<tr>
<td>Yuwei Zhang</td>
<td>CHUM Research Center</td>
<td>Canada</td>
</tr>
</tbody>
</table>

# IAS-ANRS HIV Cure Young Investigator Award

The US$2000 IAS/ANRS HIV Cure Young Investigator Award is jointly funded by the International AIDS Society (IAS) and the Agence National de Recherche sur le sida et les hépatitis virales (ANRS) to support young researchers who demonstrate innovation, originality, rationale and quality in the field of HIV/AIDS research.

The 2015 Prize is awarded to Christopher Peterson, Fred Hutchinson Cancer Research Center, Seattle, United States.

---

**IAS Towards an HIV Cure Timeline**

**July 2010**
Pre AIDS 2010 IAS workshop on HIV viral reservoirs
"Towards a Cure: HIV reservoirs and strategies to control them"

**Spring 2011**
1st Stakeholders Advisory Board meeting. The Advisory Board is co-chaired by Prof. Françoise Barré-Sinoussi and Dr. Jack Whitescarver. The International Scientific Working Group begins to develop a Global Scientific Strategy

**Summer 2011**
Launch of the Rome Statement: Major HIV AIDS Stakeholder’s call for HIV cure research to be accelerated

**Early 2012**
Establishment of the Working Group on Ethics, the Psychosocial Studies Group and the Industry Collaboration Group (ICG)

**July 2012**
Launch of the Global Scientific Strategy: Towards an HIV cure at the 2012 Symposium. Publication in Nature Reviews Immunology

**July 2015**
2015 Towards an HIV Cure Symposium
Towards an HIV Cure: Canadian <-> Global Stakeholder’s Engagement Workshop, Vancouver

**Autumn 2014**
Help End AIDS Together: Towards Vaccine and Cure For HIV/AIDS Satellite, Cape Town
Establishment of the 2015-2016 International Scientific Working Group to revise and update the Global Scientific Strategy

**January 2014**
Towards an HIV Cure Community Engagement Workshop, Chennai

**June 2013**
2013 Towards an HIV Cure Symposium

**July 2014**
Towards an HIV Cure: Community Engagement Satellite, Melbourne

**July 2014**
2013 Towards an HIV Cure Symposium

**July 2015**
2015 Towards an HIV Cure Symposium
Towards an HIV Cure: Canadian <-> Global Stakeholder’s Engagement Workshop, Vancouver

---

**IAS-ANRS HIV Cure Young Investigator Award**

The US$2000 IAS/ANRS HIV Cure Young Investigator Award is jointly funded by the International AIDS Society (IAS) and the Agence National de Recherche sur le sida et les hépatitis virales (ANRS) to support young researchers who demonstrate innovation, originality, rationale and quality in the field of HIV/AIDS research.

The 2015 Prize is awarded to Christopher Peterson, Fred Hutchinson Cancer Research Center, Seattle, United States.
## 2015 Towards an HIV Cure Symposium

### Saturday 18th July

<table>
<thead>
<tr>
<th>TIME</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 - 9:20</td>
<td>Welcome Remarks</td>
</tr>
<tr>
<td>9:20 - 9:50</td>
<td>Keynote Address: Daniel Kuritzkes</td>
</tr>
<tr>
<td>9:50 - 10:05</td>
<td>Invited Community Speaker: Matthew Sharp</td>
</tr>
<tr>
<td>10:05 - 11:25</td>
<td>Roundtable: S1: Pathways to establishing and maintaining HIV latency &lt;br&gt; Invited speaker: John Mascola</td>
</tr>
<tr>
<td>11:25 - 11:55</td>
<td>Break</td>
</tr>
<tr>
<td>11:55 - 13:00</td>
<td>Roundtable: Advancing Paediatric HIV Cure Research</td>
</tr>
<tr>
<td>13:00 - 14:00</td>
<td>Lunch</td>
</tr>
<tr>
<td>14:00 - 15:00</td>
<td>Roundtable: S2: Activating latent HIV infection in vitro and in vivo &lt;br&gt; Invited speaker: Marcus Altfeld</td>
</tr>
<tr>
<td>15:50 - 17:00</td>
<td>Roundtable: Combination Therapy Trials</td>
</tr>
<tr>
<td>17:00 - 18:30</td>
<td>Poster Exhibition and Networking Session</td>
</tr>
</tbody>
</table>

### Sunday 19th July

<table>
<thead>
<tr>
<th>TIME</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 - 10:35</td>
<td>S3: Novel strategies to identify and quantify virus persistence in vivo (biomarkers) &lt;br&gt; Invited speaker: James Riley</td>
</tr>
<tr>
<td>10:35 - 11:00</td>
<td>Break</td>
</tr>
<tr>
<td>11:00 - 12:35</td>
<td>Roundtable: S4: Immunology and persistence &lt;br&gt; Invited Speaker: Sarah Fidler</td>
</tr>
<tr>
<td>12:35 - 14:00</td>
<td>Lunch Break and Poster Exhibition</td>
</tr>
<tr>
<td>14:00 - 15:00</td>
<td>Roundtable: Key Partnerships: Community &amp; Private Sector</td>
</tr>
<tr>
<td>15:00 - 15:30</td>
<td>Closing Address: Stephen Locarnini</td>
</tr>
<tr>
<td>15:30 - 16:00</td>
<td>IAS/ANRS HIV Cure Young Investigators Award and Closing Remarks</td>
</tr>
</tbody>
</table>

### 2015 Symposium Sponsors:

- National Institutes of Health (NIH)
- CIHR-IRSC
- Bristol-Myers Squibb
- Gilead
- gsk
- VIIV Healthcare
- MSD
- Sanofi
- Réseau SIDA/MI
- Sidaction

---

[Image of sponsors logos]