The IAS would like to thank the following organizations for their generous support to the 2016 Towards an HIV Cure Symposium

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Research to develop an HIV cure or to achieve long-term remission of HIV infection has become an increasingly mainstream area of HIV research, and promising progress in the field generates significant excitement among researchers and community members alike. To that end, the mission of the Towards an HIV Cure initiative, a programme of the International AIDS Society (IAS), is to drive concerted efforts to accelerate global scientific research and engagement towards a cure for HIV.

**Goals**

- Leverage the facilitating power of IAS to promote scientific exchange and collaboration.
- Support capacity building to inform and empower a diverse and well-resourced pool of stakeholders.
- Leverage a well-informed, multi-disciplinary network of stakeholders to advocate for the prioritization of HIV cure in the global health agenda.

The 2016 annual report provides an overview of the number of ways in which the Towards an HIV Cure initiative has continued to drive concerted efforts to accelerate global scientific research and engagement towards a cure for HIV. This is in line with the Operational Plan of the IAS HIV Programmes, which focuses on influencing policy, inspiring research, and instigating action to remove structural barriers.

**MISSION AND GOALS**

**POLICY:** INFLUENCE GLOBAL AND NATIONAL HIV POLICY AND BRIDGE GAPS BETWEEN THE HIV RESPONSE AND THE BROADER INTEGRATED HEALTH LANDSCAPE.

**RESEARCH:** INSPIRE HIV RESEARCH TARGETING SCIENTIFIC GAPS THAT LINK RESEARCH TO STRATEGIC PROGRAMME PRIORITIES.

**STRUCTURAL BARRIERS:** INSTIGATE ACTION TO REMOVE STRUCTURAL BARRIERS AND ADDRESS HUMAN RIGHTS VIOLATIONS THAT INHIBIT ACCESS TO AND UPTAKE OF COMPREHENSIVE HIV SERVICES FOR SELECTED POPULATIONS AND COMMUNITIES.

“TODAY, THE SEARCH FOR A CURE HAS BECOME A TOP PRIORITY IN HIV RESEARCH. IN 2016, THAT SEARCH IS MARKED BY GROWING SCIENTIFIC INTEREST, AN INCREASING NUMBER OF NOVEL RESEARCH STRATEGIES IN DEVELOPMENT, AND A NEW OPTIMISM THAT A CURE OR SUSTAINABLE REMISSION FOR HIV IS FEASIBLE.”

– FRANÇOISE BARRÉ-SINOUSI, TOWARDS AN HIV CURE INITIATIVE CO-CHAIR, FRANCE

“THE COMMUNITY SECTOR IS CRITICALLY IMPORTANT TO THE SUCCESS OF HIV CURE RESEARCH, AND A PROUD CONTRIBUTOR TO THE IAS TOWARDS AN HIV CURE INITIATIVE. COMMUNITY REPRESENTATIVES PLAY A CRITICAL ROLE IN BUILDING SUPPORT FOR AND AWARENESS OF HIV CURE RESEARCH, IN ADDRESSING THE ETHICAL ISSUES RELATED TO CURE RESEARCH, AND IN MAKING THE WORLD AWARE THAT AN HIV CURE IS A KEY PRIORITY IN THE GLOBAL AIDS RESPONSE.”

– MOSES SUPERCHARGER NSUBUGA, JOINT CLINICAL RESEARCH CENTRE, UGANDA

“THE CMTA ILLUSTRATES THE INDUSTRY AND PRIVATE SECTOR JOINT COMMITMENT TO ADVANCING RESEARCH THAT COULD LEAD TO HIV REMISSION AND ULTIMATELY A CURE. THE AGREEMENT EMBODIES A GENUINE INTERNATIONAL COLLABORATIVE SPIRIT OF SHARING AND OPENNESS IN THE FIGHT AGAINST HIV.”

– DOMINIQUE LIMET, VIIV HEALTHCARE, UNITED KINGDOM
1. IAS Global Scientific Strategy: Towards an HIV Cure 2016

A key milestone in 2016 was the launch of the IAS Global Scientific Strategy: Towards an HIV Cure 2016, published in Nature Medicine, July 2016, the second strategy of its kind. The groundbreaking first IAS Towards an HIV Cure Global Scientific Strategy, published in 2012 in Nature Reviews Immunology, presented the first global overview of and strategic plan for HIV cure research. That initial strategy galvanized the interest and enthusiasm of researchers, funders and advocates worldwide to accelerate the HIV cure research agenda.

As both challenges and opportunities in HIV cure research continue to evolve rapidly, the IAS convened a 59-member multidisciplinary International Scientific Working Group of leading basic, clinical, and social scientists, ethicists, and global stakeholders to develop the second roadmap document over a two-year period.

The IAS Global Scientific Strategy: Towards an HIV Cure 2016 identifies the most pressing gaps in HIV cure research with a concentrated focus on the importance of social and behavioural sciences and the ethical aspects of HIV cure research, as well as research in resource-limited settings. The strategy analyzes current progress and makes concrete recommendations to serve as a guide for scientific research and advance the search for an HIV cure in seven key focal areas.


2. 2016 Towards an HIV Cure Symposium

The annual Towards an HIV Cure Symposium was held in Africa – in Durban, South Africa – for the first time on 16 and 17 July 2016. The symposium welcomed more than 300 senior, mid-career and junior scientists, clinical researchers, scientific journalists, research funding administrators, and community representatives from around the world.

An objective of the annual meeting is to develop knowledge on the priorities that future research must address in order to accelerate research on viral reservoirs and to tackle HIV persistence in patients on ART as the way towards achieving a cure or remission for HIV infection while also promoting increased investments in HIV cure research. The symposium is designed to provide an opportunity for those interested and involved in HIV cure research to share ideas, debate and network among their peers, and to provide a platform for information sharing between scientists, clinicians, funders, and members of civil society.

Dr. Anthony Fauci delivers the keynote address at the 2016 Towards an HIV Cure Symposium
The symposium programme, developed by the 2016 Programme Committee, focused on virology, immunology, clinical studies and social sciences research while retaining its characteristic cross-disciplinary dialogue. In 2016, for the first time, the Programme Committee joined forces with the Organizing Committee of the International Workshop on Paediatric HIV to organize a special joint session on paediatric HIV cure for delegates of both events, followed by a poster exhibition and networking reception.

The findings presented at the symposium are summarized in the scientific meeting report, published in the Journal of Virus Eradication².

The 2016 Towards an HIV Cure scholarship programme supported a record number of outstanding candidates (66 full and partial scholarships) to attend both the annual symposium and the 2016 International AIDS Conference (AIDS 2016) in Durban. Scholarship recipients included people from resource-limited settings, young scientists, basic researchers, and community representatives and peer educators, the majority of whom were from Africa (39%).

3. IAS-ANRS Lange/Van Tongeren Young Investigator Award – Special HIV Cure Prize

The IAS-ANRS Lange/Van Tongeren Young Investigator Award for HIV Cure is presented each year at the Towards an HIV Cure Symposium. The US$2,000 award is jointly funded by the IAS and the Agence National de Recherche sur le sida et les hépatites virales (ANRS) to support young researchers who demonstrate innovation, originality, rationale, and quality in the field of HIV/AIDS research. The 2016 prize was awarded to Tianyu He, University of Pittsburgh, Centre for Vaccine Research, United States for her study, entitled ‘T regulatory cell depletion in controller macaques reactivates SIV and boosts CTLs’.

POLICY

1. A Global Strategic Approach

To complement the launch of the IAS Global Scientific Strategy: Towards an HIV Cure 2016, the IAS issued a summary paper, A Global Strategic Approach. The paper details how the HIV cure research field has transformed since the publication of the 2012 Global Scientific Strategy and explains why an HIV cure is essential to end the epidemic. The paper also summarizes the key recommendations of the wider strategy and outlines the prerequisites necessary to achieve an HIV cure. Together, these documents serve as:

- A tool for funders and policy makers, to guide their support for the most effective and efficient research to advance the HIV cure agenda

- A framework for advocates, to support high-quality, ethical, and cost-effective research that can lead to a cure for HIV.

Importantly, the paper highlights that to impact the global epidemic, cure or remission strategies must ultimately prove to be safe and effective over the long term, affordable in developing counties, and scalable to address the global epidemic. In order to ensure dissemination and outreach of the key messages, the IAS coordinated several media briefings, press conferences, and interviews with key stakeholders in the HIV cure field, including Prof. Françoise Barré-Sinoussi, Dr. Anthony Fauci, Dr. Steven Deeks, and Prof. Sharon Lewin. The initiative was successful in generating strong interest from local and international media outlets, with a total of 39 original stories collected between 11 July and 5 August 2016, focusing exclusively on Towards an HIV Cure.

2. Resource Tracking of Global Investment in HIV Cure Research

In 2013, the IAS HIV Cure resource tracking group joined forces with AVAC acting on behalf of the Resource Tracking for HIV Prevention R&D to estimate global investments in HIV cure research. To date, this collaboration has yielded estimates for cure research investment from 2012 to 2015. The fourth edition of the annual resource tracking paper, *Global Investment in HIV Cure Research and Development*, was released in July 2016, in conjunction with the launch of the IAS Global Scientific Strategy: Towards an HIV Cure 2016.

The 2016 edition shows a continued positive trend for HIV cure funding with estimates for global investments more than doubled over the past four years. The Working Group estimates that in 2015, US$201.8 million was invested in cure research, representing a substantial increase of 25% over the US$160.8 million invested in 2014, and an increase of 129% over the US$88.1 million invested in 2012. The majority of investments (US$187.7 million) came from the public sector with US$14.73 million invested by philanthropies, such as amfAR, CANFAR, Fair Foundation, the Bill & Melinda Gates Foundation, and Wellcome Trust.

Despite outreach by the Working Group this year, only two companies responded to the survey although several companies are known to have active cure research programmes, resulting in a significant underestimation for commercial investment in cure research.

In 2015, the United States, through the US National Institutes of Health, contributed the majority of public funding; France, the European Union, Canada, Switzerland, United Kingdom, South Africa, and Australia were also significant contributors to HIV cure research. The successful implementation of the IAS Global Scientific Strategy: Towards an HIV Cure 2016 will require improved international scientific collaborative research teams and institutions at the international level to ensure an optimal use of resources.

The paper represents a unique tool to monitor global investment and identify trends in HIV cure research, as well as advocate for further commitment to the field.

In collaboration with AVAC.

3. Common Material Transfer Agreement

A major achievement to accelerate HIV cure research and lighten the burden for preclinical remission or cure studies was the launch of the common Material Transfer Agreement (cMTA) for the use of antiretroviral combinations in preclinical models in January 2016.
By providing a simplified, unified process for the donation and use of drugs in HIV cure and remission studies, the new cMTA clears the way for faster, more effective approaches to achieving viral suppression of SIV in non-human primate models. The cMTA comes at a key time in HIV cure research as NHP models now allow researchers to investigate strategies in animal models on ARVs. Such models are highlighted in the IAS Global Scientific Strategy: Towards an HIV Cure 2016 as a key priority in the research agenda.

The finalization of the cMTA, developed by the Towards an HIV Cure Industry Collaboration Group (ICG), was approved by five industry leaders in HIV research – ViiV Healthcare, Gilead, Bristol-Myers Squibb, Johnson & Johnson, and Merck – following three years of IAS-led negotiations.

**STRUCTURAL BARRIERS**

1. Multi-Stakeholder, Multi-Disciplinary Dialogue

One of the key objectives of the Towards an HIV Cure initiative is to ensure that the broad international community is fairly represented and involved in a concerted effort to accelerate global scientific research towards a cure or remission for HIV, and in advocating for increased investment in HIV cure research. To that end, the multi-stakeholder, multi-disciplinary working groups and committees of the initiative bring together leading scientists, community members and patient association representatives to focus on topics pertinent to HIV cure research to ensure meaningful engagement.

The finalization of the cMTA, developed by the Towards an HIV Cure Industry Collaboration Group (ICG), was approved by five industry leaders in HIV research – ViiV Healthcare, Gilead, Bristol-Myers Squibb, Johnson & Johnson, and Merck – following three years of IAS-led negotiations.

The mission of the Towards an HIV Cure Stakeholder’s Advisory Board is to ensure that key partners, including major institutions, funders and advocates of HIV cure research are engaged and informed throughout the process. In 2016, it invited the Treatment Action Campaign, South Africa, to join the board, and welcomed a new representative for the European AIDS Treatment Group (EATG). The advisory board provides strategic advice to the IAS Towards an HIV Cure initiative and guides the implementation of related activities.

The Towards an HIV Cure Stakeholder’s Advisory Board is co-chaired by Dr. Jack Whitescarver, United States, and Prof. Françoise Barré-Sinoussi, France.

2. Community Engagement Workshops

The IAS and the Towards an HIV Cure Stakeholder’s Advisory Board organize and coordinate a number of capacity-building events to create a fertile ground for information sharing and knowledge dissemination. The purpose of these events is to provide educational platforms and to encourage new collaborations and research projects in the field through information sharing.

In 2016, the Towards an HIV Cure initiative focused its community engagement efforts on organizing educational workshops with strong interactive elements and input from community members in all presentations to increase the knowledge and expertise of local peer educators.

The Engaging the Community Workshop, organized in Durban together with initiative partners AVAC, EATG, the Martin Delaney CAB, Sidaction, and TAG, attracted more than 150 HIV cure stakeholders globally. The three-hour workshop was open to all, and aimed in particular at community representatives, young researchers, researchers from outside the field, and the wider public interested in learning more about the current research directions and challenges for an HIV cure.

The workshop programme was designed to ensure community input with presentations prepared and delivered jointly by an academic and a community member. The format of the programme also encouraged strong feedback from the audience, opening with an interactive activity in which the audience were asked to indicate whether they agreed or disagreed with a number of statements, and to share their opinions; it finished with a panel discussion to address some of the more challenging questions related to an HIV cure.

The Towards an HIV Cure initiative also organized an Understanding HIV Cure Workshop, which took place in the Research Literacy Networking Zone of the Global Village at AIDS 2016, a space that is open to the general public, to allow ample opportunity for informal discussion and questions. The workshop was designed to provide a first step into the understanding of what HIV cure research is, including some of the concepts of basic and clinical research, social and behavioural sciences, and the ethics of HIV cure research, as well as reporting on and debunking some of the myths around an HIV cure.