



COLLABORATIVE INITIATIVE FOR PAEDIATRIC  
HIV EDUCATION AND RESEARCH

2017 ANNUAL REPORT



# ACKNOWLEDGEMENTS

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## KEEPING THE FOCUS ON WHAT IS NEEDED

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2017 marked five years since the launch of the Collaborative Initiative for Paediatric HIV Education and Research (CIPHER). During this time, it has grown from a two-year research promotion initiative to being the flagship paediatric and adolescent programme of the International AIDS Society (IAS). Since CIPHER's 2012 launch, the epidemic has matured, with fewer children living with HIV worldwide and a wave of adolescents with perinatally-acquired HIV reaching adulthood yet showing higher mortality. New tools and drugs have become available and global policy has moved to a treat-all approach.

Yet the paediatric treatment gap still exists, with less than 50% of children in need receiving treatment, and an 8-10-year lag before paediatric formulations of new ARVs are developed. Fast-track targets to end AIDS among children by 2030 are daunting, but they can be achieved. To do so, we need evidence to inform global policy change and ensure better outcomes for children living with and affected by HIV.

On a global level, to focus research efforts and provide clear goals for funders, CIPHER and the World Health Organization (WHO) launched global research agendas for paediatric and adolescent populations in 2017. To further ensure that CIPHER remains focused on the most pertinent questions in the rapidly changing landscape of paediatric and adolescent HIV, project specific strategy

discussions were held throughout the year. In October, a CIPHER-wide strategy review was launched, in view of developing a strategy for the next five years.

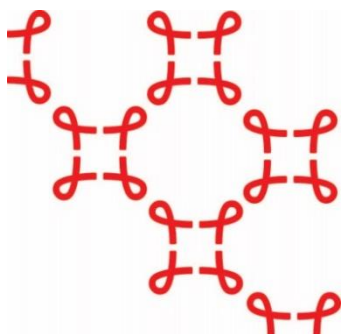
### **Mission and objectives**

CIPHER aims to optimize clinical management and delivery of services to infants, children and adolescents affected by HIV in resource-limited settings through advocacy and research promotion.

In line with the IAS Programme three-pillar approach of Policy, Research, and Structural Barriers, CIPHER works to meet the following key objectives:

- Promoting and investing in targeted research to address priority knowledge gaps in paediatric HIV
- Convening stakeholders and establishing collaboration mechanisms to strengthen communication, knowledge-transfer and exchange among paediatric HIV cohorts
- Advocacy to support evidence-informed clinical, policy and programmatic decision-making

This 2017 annual report illustrates the continued growth of CIPHER, highlighting where its investments in research, young investigators and cohort collaboration are informing policy at national and global levels.



# POLICY

## CIPHER and WHO identify the most critical research needs for infants, children and adolescents living with HIV

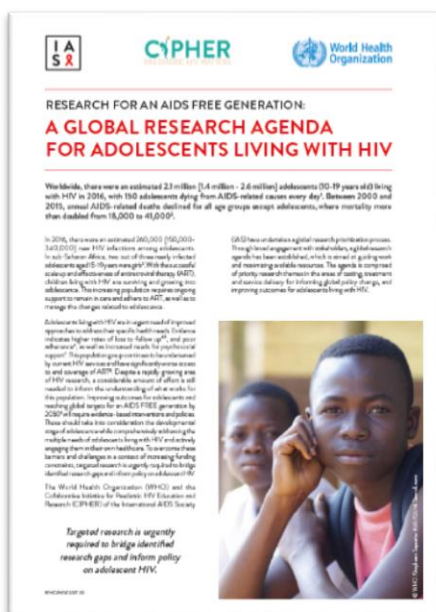
*"We must take action now to close the gaps in the HIV response for children and adolescents, to deliver better HIV prevention, treatment and testing to those in greatest need ... The IAS/WHO process has helped us to define priority areas for further research, to inform global policies and implementation to bring us closer to an AIDS-free generation for infants, children and adolescents."*  
WHO HIV Department Director Dr Gottfried Hirnschall

### Global research agendas for amplified impact

With ambitious fast-track targets to end paediatric and adolescent AIDS by 2030, evidence is needed to inform global policy change and ensure better outcomes for infants, children and adolescents living with and affected by HIV. To focus research efforts where they are really needed and provide clear goals for funders, CIPHER and WHO have partnered to develop global research agendas on HIV testing, treatment and service delivery for paediatric and adolescent populations. Based on the Child Health and Nutrition Research Initiative methodology for setting priorities in health research, the year-long process for developing the agendas involved a wide range of stakeholders across the globe

including researchers, policy makers, programme managers, implementers, community representatives and young people living with HIV.

The agendas were launched in two policy briefs at a satellite event at the 9th IAS Conference on HIV, Mind the Gap: Filling knowledge gaps in paediatric and adolescent HIV for an AIDS-FREE generation. The briefs present the five top research themes in the areas of testing, treatment and service delivery, with key considerations for implementing the agendas and a Call to Action for all stakeholders to implement the agendas in their respective roles. The briefs are available in French and English at <https://www.iasociety.org/CIPHER>.



## RESEARCH

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### CIPHER grants and fellowships encourage innovative responses to paediatric and adolescent HIV

*“The impact of HIV on infants, children and adolescents is most severe in sub-Saharan Africa. Yet research funding, capacity and leadership are often concentrated far from the heart of the epidemic ... CIPHER grants and fellowships help to bridge that gap by supporting innovative research and mentorship where they are needed most, and where they might never exist without CIPHER support.”*  
IAS President Linda-Gail Bekker

#### Growing the Leaders of Tomorrow Fellowship Programme

Building and supporting global research leadership in the response to paediatric HIV is the focus of CIPHER’s “Growing the Leaders of Tomorrow” Fellowship Programme, launched in 2017. The programme strengthens paediatric HIV clinical research capacity in sub-Saharan Africa by providing promising early-stage investigators with two-year, \$70,000 research fellowships and by supporting their connections with internationally renowned mentors to help guide their investigations in paediatric HIV.

Through this framework, the programme supports innovative research, strengthens each fellow’s research skills, helps facilitate their integration into international clinical research networks and enhances their ability to compete for international funding – while also building critically important paediatric HIV research capacity in sub-Saharan Africa.

Recipients of the first Growing the Leaders of Tomorrow Fellowship:

- **Adrie Bekker** from South Africa, with mentor Prof. Mark Cotton, for the study: The pharmacokinetic and safety characteristics of nevirapine and lopinavir/ritonavir in HIV-exposed and infected low birth weight infants in South Africa.
- **Namangolwa Jane Mutanga**, from Zambia, with mentor Prof. Philip Thuma, for the study: Long-term health outcomes and survival of perinatally HIV-exposed children in Zambia: designing a comprehensive model of care for long term follow-up.



Growing the Leaders of Tomorrow Fellowship award ceremony at IAS 2019: (from left to right) Namangolwa Jane Mutanga, Linda-Gail Bekker, Adrie Bekker



CIPHER Grant Programme award ceremony at IAS 2019: (from left to right) Ute Feucht, Andrew McCrary, Linda-Gail Bekker, Amy Slogrove, Wipaporn Songtaweelin

## The CIPHER Grant Programme

Since 2012, CIPHER research grants have provided nearly \$3.75 million to support crucial research by early-stage investigators working to address priority evidence gaps across the HIV cascade for infants, children and adolescents affected by HIV in resource-limited settings. The intention is to attract early-stage investigators – from inside and outside the field of HIV research – to address critical research questions while providing a unique opportunity for professional development.

Recipients of the 2017 CIPHER research grants were awarded up to \$150,000 each over two years to support their investigations. The most innovative and promising study proposals were selected from applicants from 30 countries.

### 2017 CIPHER Grantees:

- **Andrew McCrary**, from the USA, for the project: Evaluating indicators of cardiac function in children living with HIV in Kenya.
- **Amy Slogrove**, from South Africa, for the study: Does initiation of antiretroviral therapy prior to immune suppression protect against maternal hypertensive disorders in pregnancy and associated adverse birth outcomes in HIV-infected women in South Africa?
- **Wipaporn Songtaweasin**, from Thailand, for the study: Youth-focused strategies to promote adherence to pre-exposure prophylaxis (PrEP) among youth at risk for HIV in Thailand.
- **Ute Feucht**, from South Africa, for the study: Assessment of factors that impact foetal and infant immunity and growth in HIV- and antiretroviral-exposed uninfected children in South Africa.

## CIPHER Global Cohort Collaboration

Launched in 2013, the CIPHER Global Cohort Collaboration is the largest paediatric and adolescent observational cohort collaboration to date, representing networks across the globe. Working together, the group addresses questions of major public health impact that cannot be addressed by one network alone. Two new analyses from the collaboration were presented at conferences during the year:

- *Predictors of switch to second-line ART in HIV-positive children: a global analysis.* For the first time, global estimates on incidence of switch to second-line ART in children living with HIV and the factors associated with switch were presented, with data from 93,351 children worldwide. [CROI 2017 Abstract 815](#).
- *Inequality in mortality and access to antiretroviral therapy in adolescents living with perinatally acquired HIV in sub-Saharan Africa: a Collaborative Initiative for Paediatric HIV Education and Research (CIPHER) Cohort Collaboration analysis.* This study presents one of the most comprehensive pictures of treatment outcomes for adolescents living with perinatally acquired HIV in sub-Saharan Africa by country

income group. The analysis includes data on more than 30,000 adolescents, from seven networks and 25 countries. [IAS 2019 Oral Abstract MOAB0203](#).

In 2017, CIPHER awarded a new grant of nearly \$0.5 million to the global collaboration. This was to fund further studies on growth and immunology of adolescents with perinatal HIV infection in order to: inform UNAIDS modelling and WHO ART demand forecasting; and evaluate the potential for an HIV-exposed uninfected (HEU) child cohort collaboration. Funding for these projects includes two early-stage investigator opportunities for researchers from resource-limited settings to work with the data centres involved in the Collaboration.

### The 3rd HIV-exposed Uninfected Child Workshop

CIPHER was proud to co-sponsor the 3<sup>rd</sup> HIV-exposed Uninfected (HEU) Child Workshop with WHO and the Pediatric HIV/AIDS Cohort Study (PHACS) of the US National Institutes of Health (NIH). The workshop, which took place at IAS 2017, drew more than 200 participants to consider recent evidence showing the disparities of developmental and survival outcomes for HEU children to discuss the challenges and possibilities of developing a public health policy response in this field.

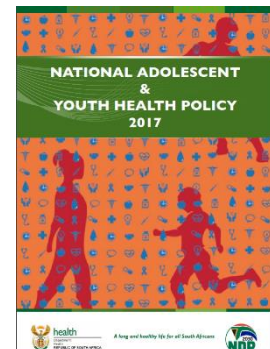
### Spotlight: CIPHER funded research impacting policy



#### CIPHER grantee alumni is first author on new South African Adolescent & Youth Health Policy

Working in collaboration with the South African government, CIPHER 2013 grantee Rebecca Hodes, and the Mzantsi Wakho study has informed the [2017 South African National Adolescent & Youth Health Policy](#),

which takes a holistic approach to adolescent health and wellbeing, and recognizes the social and structural determinants of health. Dr. Hodes, a medical historian and Director of the AIDS and Society Research Unit, University of Cape Town, is first author of the new national policy.



#### Improvements to the 2017 UNAIDS Estimates Model

In 2017, data from the CIPHER Global Cohort Collaboration was used in collaboration with the UNAIDS Reference Group on Estimates, Modelling and Projections to improve the 2017 UNAIDS estimates model for the number of children living with HIV globally. Specifically, the data on young children provided by the Collaboration improved the distribution of children starting on ART by age. This was one of a number of improvements made to the UNAIDS estimates model in 2017; results were published in the 2017 UNAIDS Global Update, [Ending AIDS: Progress towards the 90-90-90 targets](#).



# STRUCTURAL BARRIERS

In 2017, CIPHER focused on two major structural barriers to wellbeing for adolescents living with HIV: transition of adolescents from paediatric to adult care and access to optimal treatment formulations for children and adolescents.

## Special issue in JIAS - Transitioning adolescents through paediatric into adult HIV care: Where are we now?

Building on the CIPHER Adolescent Transition Workshops, this special issue outlines where and how research, implementation, and policy efforts can improve the quality of HIV care for adolescents and young adults. Guest edited by Annette H. Sohn (TREAT Asia/amfAR), Rachel Vreeman (Indiana University School Medicine) and Ali Judd (University College London), it provides a comprehensive review of the transition situation globally, from estimates of the size of the adolescent epidemic to mental health issues, and from HIV treatment and care services to policy responses. Launched in May 2017 at the INTEREST workshop in Lilongwe, Malawi, the special issue can be accessed here: <http://jiasociety.org/index.php/jias/issue/view/1489>.



## A stakeholder in paediatric and adolescent HIV

In 2017, CIPHER actively contributed as a stakeholder in several working groups on key issues in paediatric and adolescent HIV.

### CIPHER is represented as a partner, member or observer in the following fora:

- Adolescent HIV Treatment Coalition (ATC)
- Global Pediatric Antiretroviral Commitment-to-Action (CTA)
- Global Accelerator for Paediatric formulations (GAP-f)
- Inter-Agency Task Team for Prevention and Treatment of HIV Infection in Pregnant Women, Mothers and Children; Child Survival Working Group (IATT CSWG)
- New Horizons Collaborative
- Paediatric ARV Procurement Working Group (PAPWG)
- Paediatric ARV Working Group (PAWG)
- Paediatric HIV Treatment Initiative (PHTI)

### Meetings where we are present:

- HIV Adolescence Workshop, Virology Education (Organizing Committee)
- International Workshop on HIV Paediatrics, Virology Education (Steering Committee)
- SPARK 17, ViiV Healthcare (Steering Committee)





<http://www.iasociety.org/cipher>