Global
HIV Vaccine
Enterprise
IAS

International AIDS Society

2025 HIV Vaccine Science Academy

6 – 9 May 2025

Dakar, Senegal

iasociety.org

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Introduction

IAS Global HIV vaccine enterprise

The Global HIV Vaccine Enterprise of IAS – the International AIDS Society – aims to share knowledge, foster collaboration, enable solutions and expand support critical to the development of, and future access to, an HIV vaccine. It engages stakeholders and funders to accelerate HIV vaccine development and prepare the field for the discovery of a safe, effective and globally accessible HIV vaccine. It does so by:

- Strengthening the HIV vaccine pipeline by encouraging diverse approaches in HIV vaccine research and advancing the HIV vaccine portfolio
- Expanding and diversifying engagement and resources by fostering interest in HIV vaccine R&D and broadening research talent in the HIV vaccine field
- Mobilizing knowledge to accelerate product development by driving opportunities to address unanswered scientific questions
- Leveraging synergies with other infectious disease research

The 2025 HIV Vaccine Science Academy Fellows visiting the Institut Pasteur de Dakar

2025 HIV Vaccine Science Academy

Successful HIV prevention requires an increased contribution to the research efforts of countries and regions that are hardest hit by the pandemic. Central, eastern, southern and western Africa remain the most severely affected regions, with 25.9 million adults and children living with HIV and 640,000 new acquisitions in 2023 (UNAIDS). The need for an Africa-centric vaccine and prevention product design is further substantiated on the African continent, where researchers find the most genetically diverse HIV subtypes in the world. A safe and effective HIV vaccine would make a significant contribution to controlling the pandemic, particularly in young women, one of the most vulnerable groups that face the greatest disease burden.

There is a great need for multiple sectors in countries in Africa to contribute to the development of a safe and effective HIV vaccine. However, it is an ongoing challenge for African researchers to conduct and lead HIV vaccine research and development (R&D). There is an undisputable benefit to supporting and empowering African researchers in their ongoing efforts to mobilize, advocate and coordinate action towards an increased role in shaping the HIV vaccine R&D agenda.

The HIV Vaccine Science Academy is designed to support participants in establishing themselves as independent researchers and team leaders in their host institutions, thus contributing to long-term continuity, networking and research ownership in the HIV response.

The HIV Vaccine Science Academy complements two ongoing activities of the IAS **Enterprise African Research Network** (EARN) of the Global HIV Vaccine Enterprise: the **Vaccine Enterprise Mentorship Programme** and **HIV Vaccine Advocacy Academy**. These two activities provide capacity building to early- to mid-career scientists and advocates.

The 2025 HIV Vaccine Science Academy Fellows presenting their research proposals

The 2025 HIV Vaccine Science Academy Fellows visiting the Institut Pasteur de Dakar

Goals

The purpose of the HIV Vaccine Science Academy is to support and empower African early- to mid-career researchers ("fellows") from central, eastern, southern and western Africa and equip them to carve their paths as independent researchers and dynamic change makers in the HIV vaccine field.

The academy serves as a space where participants can interact with leading researchers in the HIV vaccine R&D field. Participants elevate their literacy in HIV vaccine research and improve their leadership skills to advance the field. Specific objectives of the academy include:

- **Training from experts:** Deliver training on state-of-the-art HIV vaccine research and development, including innovative vaccine and trial design, novel vaccine platforms and relevant leadership tools and skills (such as scientific writing).
- **Networking opportunities:** Fellows can engage with leaders in the HIV vaccine field in a retreat-type setting to build collaborations that link African scientists to global networks.
- **Collaboration with African researchers:** Fellows can establish sustainable networks across research institutions and create momentum for African-led research.

Programme

Monday, 5 May: Welcome and dinner

10:00 – 16:00	**Arrival at hotel**
19:00 – 20:30	**Welcome and dinner**

Tuesday, 6 May: Foundational HIV vaccine science

Day one offers an overview of HIV vaccine R&D, covering immune responses, vaccine mechanisms and their evolution. Interactive sessions focus on practical applications, with a "brain to bench" segment and networking to foster collaboration.

07:30 - 08:30	**Breakfast**	
08:30 - 08:35	**Welcome and overview of the programme**	**Asli Heitzer**, IAS, Switzerland
08:35 - 09:20	**HIV prevention R&D: Where are we now and where do we go from here?**	**Tandakha Ndiaye Dieye,** Université Cheikh Anta Diop, Senegal
09:20 - 10:05	**How do vaccines work and what are the different vaccine platforms?**	**Tandakha Ndiaye Dieye,** Université Cheikh Anta Diop, Senegal
10:05 - 10:30	**Break**	
10:30 - 11:15	**The induction of broadly neutralizing antibodies**	**Romy Rouzeau,** IAVI, US
11:15 – 12:00	**HIV vaccines: Past, present and future**	**Romy Rouzeau,** IAVI, US
12:00 – 13:00	**Lunch break**	
13:00 – 14:15	**Workshop: Implementing your ideas**	**All fellows**
14:15 – 14:30	**Energizer**	
14:30 – 15:45	**Workshop: Implementing your ideas**	**All fellows**
15:45 - 16:15	**Break**	
16:15 - 18:15	**Workshop: Implementing your ideas – B2B brain to bench**	**Roger Tatoud,** Origena Consulting, France
19:00 - 20:00	**Dinner**	

Wednesday, 7 May: Diversity, antibodies and alliances

Day two will dive into HIV genetic diversity and broadly neutralizing antibodies. It includes sessions on partnership building, research tools and presentation skills, ending with a group networking discussion.

07:30 – 08:30	**Breakfast**	
08:30 – 09:15	**The HIV family: Type, group and clade and why it matters for HIV vaccine R&D in West Africa**	**Marcel Tongo Passo,** Centre de Recherche sur les Maladies Émergentes et Réémergentes (CREMER/ IMPM), Cameroon
09:15 – 10:00	**A deeper dive into HIV genetic diversity**	**Marcel Tongo Passo,** Centre de Recherche sur les Maladies Émergentes et Réémergentes (CREMER/ IMPM), Cameroon
10:00 – 10:30	**Break**	
10:30 – 11:15	**Passive immunization: Broadly neutralizing antibodies for HIV prevention**	**Romy Rouzeau,** IAVI, US
11:15 – 12:00	**Building partnerships and collaborations**	**Roger Tatoud,** Origena Consulting, France
12:00 – 12:45	**Lunch break**	
12:45 – 13:30	**Work on your CATWOE**	**Roger Tatoud,** Origena Consulting, France
13:30 – 16:30	**Institut Pasteur Dakar - Site visit**	**All faculty and fellows**
16:30 – 17:15	**Work on your CATWOE**	**Roger Tatoud,** Origena Consulting, France
19:00 – 20:30	**Dinner**	

Thursday, 8 May: HIV prevention and treatment approaches

The final day will focus on how to successfully present research proposal concepts to relevant stakeholders.

08:00 – 09:00	**Breakfast**	
09:00 – 09:45	**Research tools for literature search and management**	**Roger Tatoud,** Origena Consulting, France
09:45 – 10:30	**Presenting for success**	**Roger Tatoud,** Origena Consulting, France
10:30 – 11:00	**Break**	
11:00 – 12:30	**B2B brain to bench – CATWOE analysis**	**All fellows** Prep-work
12:30 – 13:30	**Lunch break**	
13:30 – 15:00	**B2B brain to bench – CATWOE analysis**	**All faculty and fellows** 6 presentations
15:00 – 15:30	**Break**	
15:30 – 17:00	**B2B brain to bench – CATWOE analysis**	**All faculty and fellows** 6 presentations
17:00 – 17:30	**Closing of academy & awarding of certificates**	
19:00 – 20:30	**Dinner**	

Faculty

The academy faculty comprises internationally renowned scientists who will deliver presentations on key topics in the programme and support the fellows in their HIV vaccine science literacy and learning.

Marcel Tongo Passo
CREMER/IMPM, Cameroon

Romy Rouzeau
IAVI, US

Roger Tatoud
Origena Consulting, France

Tandakha Ndiaye Dieye
Université Cheikh Anta Diop, Senegal

"Once trained, I will be able to lead training and research activities in this area while strengthening local and regional capacities."

Almoustapha Issiaka Maiga

Virologist, University of Sciences Techniques and Technologies of Bamako

Country of work: Mali

What is your motivation to attend the academy?

I wish to participate in this programme to actively contribute to the development of HIV prevention tools. The development of vaccines and the implementation of pre-exposure prophylaxis (PrEP) strategies are essential to control the HIV epidemic in African countries, where high levels of stigma hinder access to care for certain key populations.

Biology plays a crucial role in the implementation and effectiveness of these strategies. By better understanding the biological mechanisms and innovations in this field, we can promote solutions tailored to the specific needs of our populations.

Once trained, I will be able to lead training and research activities in this area while strengthening local and regional capacities. Through our networks, such as WANETAM, RESAPSI, ANRS-MIE and others in West Africa, I am committed to sharing the acquired knowledge to ensure effective and equitable care for people.

I would be honoured to participate in this training and demonstrate how my contribution could be pivotal to the objectives of IAS 2025. I am confident that this opportunity will enhance our collective impact in the response to HIV in Africa and beyond.

How do you plan to use the knowledge gained during the academy?

I would like to organize training sessions for our clinical and prevention teams, as well as conduct mass education and awareness campaigns in collaboration with youth organizations, such as student associations at the Faculty of Medicine and Pharmacy. We could also apply for grants to fund research in the field of prevention, which is critically important for our countries.

Organizing visits with healthcare client associations and groups representing key populations would help us better understand the specific challenges they face. These initiatives could play a significant role in convincing our authorities to reduce stigma and judicial repression against certain key populations.

Such programmes cannot be successfully implemented without the involvement of international actors, particularly the IAS and the United Nations, which are essential in coordinating and supporting these efforts.

"I'm particularly motivated by the prospect of exchanging ideas with peers and leaders in the field, which will help establish regional and international collaborations that are essential to accelerating the development of effective and sustainable solutions."

Martin Herbas Ekat

Infectious disease specialist, Centre Hospitalier Universitaire de Brazzaville

Country of work: Republic of the Congo

What is your motivation to attend the academy?

This academy represents an exceptional opportunity for me to develop my skills in the field of HIV vaccine research and contribute to the collective effort to end the pandemic.

Currently, I work as an infectious disease specialist at the University Hospital Center (CHU) of Brazzaville, where my work focuses on the comprehensive care of clients living with HIV. Participating in the academy will allow me to deepen my knowledge of vaccine design and development and also acquire practical skills in such areas as scientific writing and research team management. In addition, the workshops will provide me with an up-to-date perspective on innovative strategies in vaccine research.

I am particularly motivated by the prospect of exchanging ideas with peers and leaders in the field, which will help establish regional and international collaborations that are essential for accelerating the development of effective and sustainable solutions. I also hope to actively contribute to the emergence of a dynamic network of researchers in West Africa, which is a crucial challenge for strengthening local scientific research capacities.

How do you plan to use the knowledge gained during the academy?

The academy will enable me to update my knowledge of HIV prevention methods and also gave me tips on how to develop projects for funding applications.

I'm a teacher-researcher and, in our training programme, we have a module focusing on infectious disease prophylaxis, so I'm going to integrate the knowledge I acquire into the prophylaxis and therapeutics module. During training seminars for healthcare workers and workshops to promote prevention methods for the most vulnerable populations, I'll be sharing this new knowledge.

"I will leverage this opportunity to identify potential collaborators to conduct assays we currently lack the capacity for in our labs and support them with the assays they lack. These bilateral collaborations will help us achieve more with limited resources."

Edwin Magomere

PhD student, West Africa Center for Cell Biology of Infectious Pathogen, University of Ghana

Country of work: Ghana

What is your motivation to attend the academy?

My current research focuses on understanding the immune profiles of individuals with both HIV-1 and HIV-2. My objective is to delineate immune responses between people with HIV-1 or HIV-2 and those with both subtypes. Identification of unique immune markers among these categories of people will provide insights into potential targets for development of immunotherapy and/or vaccine. Previous studies have demonstrated that people with both subtypes have a slower disease progression than those with HIV-1. We still do not clearly understand the mechanism behind the slow progression of disease in these individuals.

We set out to investigate the specific immune markers involved in the slowed disease progression among people with both subtypes. If identified, these markers could be explored further as vaccine targets. Additionally, considering that the West African epidemic is predominated by a circulating recombinant form, CRF02_AG, we seek to screen plasma samples from people living with HIV in Ghana and Togo for broadly neutralizing antibodies (bNAbs). These antibodies will be sequenced and cloned for mass production and application in clinical trials. BNAbs entering clinical trials, some advancing to Phase II and III, were mainly isolated from the plasma of individuals with subtype B and other pure subtypes and may not be effective against recombinant forms dominating epidemics in West Africa.

Attending this academy will enhance my expertise in conceptualizing research ideas and evaluating feasibility of my study designs. I also hope to gain knowledge on formulating good research questions and hypotheses. This training will enable me to complete my current research, and also solidify my long-term research career in vaccine development and clinical trials.

I hope to acquire skills and knowledge in study design for clinical trials, grant proposal writing, manuscript writing, research idea conceptualization and literature search. I plan to explore the full potential of this academy, including establishing networks with peers and experts in the field, which is very important in fostering collaborative research and idea sharing.

How do you plan to use the knowledge gained during the academy?

I will use the opportunity to learn the skills that I need to enhance my HIV vaccine research. As a PhD student, I am shaping my skills in writing proposals for grant applications. I will aim to improve my proposal writing ability to increase my chances of securing research funding. I will also apply the knowledge gained to improve my research literature search and research question development.

This will be an important opportunity to meet and network with experts and peers in the field of HIV vaccine research. I will establish collaborative research with peers from other institutions and initiate applications for funding for collaborative research with peers and experts in HIV vaccine research. I will leverage this opportunity to identify potential collaborators to conduct assays we currently lack the capacity for in our labs and support them with the assays they lack. These collaborations will help us achieve more with limited resources.

Lastly, I will leverage this opportunity to identify principal investigators who have vacancies for postdoctoral fellows in HIV vaccine research. I will complete my PhD research in 2025 and hope to start postdoc research immediately. Mentorship from such experts will go a long way in nurturing my long-term career goals.

"I will also begin seeking collaboration with other researchers working on vaccine development trials."

Axel Cyriaque Ambassa

Associate researcher, Université de Yaoundé 1

Country of work: Cameroon

What is your motivation to attend the academy?

As I am a researcher with a PhD working in the field of tuberculosis and HIV co-infection, the HIV field remains a major area of focus for the continuation of my career. After participating in a training programme on clinical trials in Kinshasa in 2022, I became passionate about pursuing research in this area.

While my thesis advisor is currently conducting research on the development of a vaccine against the hepatitis C virus, I am more interested in the development of a vaccine against HIV, which would be highly beneficial for Africans.

By participating in this training, I hope to enhance my skills in vaccinotherapy, as well as vaccine synthesis.

How do you plan to use the knowledge gained during the academy?

The knowledge I gain will help me in my efforts to seek collaboration with a host laboratory, such as the Centre Pasteur in Cameroon, which has an excellent reputation in advanced research. I will strive to apply everything I learn to the fullest extent possible.

At the national level, I also intend to actively seek collaboration with other researchers working on vaccine development trials, such as those affiliated with the Ministry of Scientific Research and Innovation.

"I am particularly motivated by the opportunity to gain in-depth knowledge about HIV vaccine development, a field that holds immense hope for the elimination of this pandemic as a threat to public health."

Alex Stéphane Ndjip Ndjock

Epidemiologist, District de Santé d'Edéa

Country of work: Cameroon

What is your motivation to attend the academy?

My motivation to participate in the academy is rooted in my deep commitment to contributing to the response to a pandemic that continues to affect millions of people, especially in resource-limited settings, such as the one in which I work.

As an epidemiologist and data manager in the Edéa Health District, I am directly involved in HIV surveillance, prevention and care, as well as the promotion of vaccination. Although my current work does not focus exclusively on vaccine development, it has allowed me to build strong expertise in analysing epidemiological data, designing public health strategies and evaluating the impact of interventions.

I am particularly motivated by the opportunity to gain in-depth knowledge about HIV vaccine development, a field that holds immense hope for the elimination of this pandemic as a threat to public health. I hope to strengthen my skills in the design of clinical trials, understanding the immunological mechanisms related to HIV, and integrating new technologies (such as artificial intelligence and predictive modelling) into vaccine research. These skills will enable me to better understand the scientific and operational challenges related to vaccine development and contribute to local and regional initiatives aimed at accelerating their deployment.

I also wish to enhance my ability to communicate complex scientific concepts to diverse audiences, including policy makers and local communities, to promote acceptance of future HIV vaccination programmes. Finally, I am excited about the opportunity to collaborate with international experts and peers who share the same goals, which will enrich my perspective and strengthen my professional network.

How do you plan to use the knowledge gained during the academy?

After attending the academy, I plan to apply the knowledge and tools gained to strengthen local capacity by organizing training sessions on vaccine development and clinical trials for my team and healthcare workers in the Edéa District. I will integrate epidemiological modelling and data analysis methods to assess the impact of HIV vaccines and identify priority populations.

I plan to leverage collaborations formed during the academy to initiate applied research projects on vaccine acceptability and barriers to vaccination. In parallel, I will lead awareness and advocacy campaigns to inform communities and decision makers about the importance of HIV vaccines.

Finally, I will be better prepared to contribute to clinical trials in the region, whether in trial design, data collection or monitoring. These actions will enable me to play an active role in the global response to HIV.

"Participating in this training will offer me new perspectives in my professional career, especially since, to date, Niger has no studies on the development of an HIV vaccine."

Abdoulwahidou Adamou Darey

Specialist in infectious and tropical diseases, Cabinet Médical SAGUIA

Country of work: Niger

What is your motivation to attend the academy?

I am a specialist doctor in infectious and tropical diseases working at the SAGUIA Medical Practice in Niamey, Niger. After completing my general medical training at the Faculty of Health Sciences at Abdou Moumouni University in Niamey, Niger, I pursued a Master's degree in the socio-anthropology of health at the Faculty of Arts and Humanities at the same university. I completed specialized studies in infectious and tropical diseases at the Medical Sciences Training Unit of Félix Houphouët-Boigny University in Abidjan, Côte d'Ivoire. Additionally, I hold a certification in epidemiology.

I have worked in several medical clinics, practices and NGOs in Niger. I have also carried out assignments in socio-anthropological, nutritional and public health research for major institutions, including Médecins Sans Frontières Switzerland, the Ministry of Public Health/ Directorate of Statistics, Helen Keller International, Cabinet Afrique Conseil, Action Against Hunger/UNICEF, the National Institute of Statistics, and the Coordination Unit of the Early Warning System and Disaster Prevention.

I participated in patient care during the COVID-19 response in the Infectious and Tropical Diseases Department at Treichville University Hospital in Abidjan, Côte d'Ivoire, from March 2021 to June 2023.

I am deeply interested in innovation and medical research, and your training programme strongly caught my attention. Participating in this training will offer me new perspectives in my professional career, especially since, to date, Niger has no studies on the development of an HIV vaccine.

How do you plan to use the knowledge gained during the academy?

This training will allow me to acquire knowledge and skills that I will put to good use for the benefit of my community by bringing innovative strategies learnt to HIV prevention efforts.

I plan to participate in scientific congresses and conferences to share our research findings on HIV vaccine development, as well as contribute to the academic and professional training of new generations.

I will also stay connected with the network built during the training to foster future knowledge-sharing opportunities.

"I place great hope in the search for an HIV vaccine, which could bring an end to this pandemic, just as it did for polio."

Ben Cheick Isaac Soumahoro

Clinical research associate,
PAC-CI Programme

Country of work: Côte d'Ivoire

What is your motivation to attend the academy?

Participating in the academy would be a significant opportunity for me as an early-career researcher. I would have the chance to meet experts in the field of HIV research and deepen my understanding of new technologies aimed at ending the HIV pandemic.

In my daily work, it has become clear that antiretroviral therapy (ART) alone will not be enough to stop new HIV acquisitions despite the many efforts of healthcare professionals and the government. We must turn toward innovative approaches, such as long-acting ART, which improve adherence to treatment and quality of life.

However, their high cost and limited accessibility in tropical regions, particularly in West Africa and specifically in my country, Côte d'Ivoire, lead me to place great hope in the search for an HIV vaccine, which could bring an end to this pandemic, just as it did for polio.

This training will be an opportunity for me to engage with research professionals in fruitful exchanges that will provide me with the necessary knowledge to respond effectively to HIV with a view to ending the pandemic in the near future.

How do you plan to use the knowledge gained during the academy?

I will grow professionally as the new knowledge acquired will first help me improve the quality of my scientific writing, thereby enhancing my future research work.

It will also allow me to develop a network of expert researchers in the field of innovative HIV research, keeping me updated on the latest advancements and enabling me to refine my work accordingly.

Most importantly, I plan to put these insights into practice for the benefit of the scientific community in my country, contributing to ending the HIV pandemic – and more broadly, to the improvement of public health in West African populations, who remain among the most affected in the world.

"I am motivated to broaden my horizon in HIV vaccine to support my country in addressing possible barriers as it is crucial to recruit young people in the vaccination trials and gain their perspectives in distribution of these vaccines when made available."

Okoli Godfrey Chidera

Graduate trainee, New HIV Vaccine Advocacy and Advocacy Society

Country of work: Nigeria

What is your motivation to attend the academy?

My journey in science began when I was 15 years old, in my first year of high school as a young gay man with no knowledge of HIV transmission. I was diagnosed with HIV at an early stage and this moment changed my life entirely – it gave me a purpose to dedicate my life to HIV research, prevention and advocacy. Ever since then, my desire has been to join communities, learn from experts and contribute to the advancement of HIV science.

Growing up with HIV was not easy. I faced stigma, anxiety and exclusion issues, even within my LGBTQ communities. One question has always been on everyone's lips: when do we have an HIV cure or vaccine? Despite the advancement of evidence-based interventions, an HIV vaccine remains a priority!

During my undergraduate degree, I wrote a research paper, exploring the link between genetics and disease. It looked at the urgency of understanding the genetic factors that influence susceptibility to HIV acquisition. This heightened my interest in an HIV vaccine and I joined the Global HIV Vaccine Enterprise in 2023 as an advocacy fellow.

Today, my role in HIV vaccine R&D requires more advanced skills. The public health system is in a perilous condition, foreign aid is freezing, and governments must begin to reimagine and rethink approaches for HIV prevention and research. I am motivated to broaden my horizon in HIV vaccine R&D. I believe I can support my country in addressing possible barriers to HIV vaccine R&D, especially as it is crucial to recruit young people in vaccination trials and gain their perspectives in distributing these vaccines when available.

My overall dream is to establish an HIV-free generation in Nigeria through increased engagement of young people and other vulnerable groups in HIV prevention activities. I am looking forward to participating in the academy for West Africa. This would be a huge turning point in my career as it would provide me with skills development and opportunities to support my career growth and international networking in HIV vaccine R&D.

How do you plan to use the knowledge gained during the academy?

Attending the academy will give me valuable knowledge about vaccine development, clinical trials and community engagement. I plan to use these skills to strengthen HIV vaccine research efforts in Nigeria, especially through my work with the New HIV Vaccine and Microbicide Advocacy Society (NHVMAS).

I will share what I have learnt about vaccine science, trial design and ethics with the NHVMAS. This will help build the capacity of young researchers and advocates in Nigeria. I will also spark discussions on HIV vaccine research within NHVMAS, encouraging more young people to get involved in advocacy for local vaccine development.

A key goal is to push for more investment in local HIV vaccine research and clinical trials. With the knowledge gained, I will continue, with NHVMAS, to engage with policy makers, advocating for increased funding and support for local vaccine initiatives. By equipping myself with advanced knowledge in vaccine science, I can help strengthen NHVMAS's advocacy efforts and make a stronger case for local clinical trials.

Beyond advocacy, my long-term goal is to become a researcher in molecular biology and vaccine development. I plan to pursue a Masters in molecular biology to gain advanced laboratory skills. The knowledge from the academy will prepare me for hands-on work in vaccine research.

The academy will help me connect with international research organizations and other global institutions working on HIV vaccine development. These networks can provide mentorship, collaboration opportunities and access to research projects. The experience will also help me understand vaccine hesitancy and strategies to improve public trust in vaccine research, which is a key issue in Nigeria.

"I am already eager to pass on this new knowledge to other healthcare providers during my upcoming training sessions. This is a collective effort, and every link in the chain will matter."

Leonella Mossiang Kadje

Doctor, Hôpital Central de Yaoundé

Country of work: Cameroon

What is your motivation to attend the academy?

This will be a valuable opportunity to deepen my skills in this field to disseminate these innovations to HIV care providers and influence strategic research directions in the HIV response. It will also be a chance to engage with experts in the field of HIV vaccine research and build a strong regional and international network to strengthen collaboration in HIV vaccine research.

How do you plan to use the knowledge gained during the academy?

I hope to gain first-hand insight into scientific advances, as well as a deeper understanding of the immense complexity behind the quest for a vaccine. I will be committed to sharing this experience with my colleagues, the communities, and the patients I support, as it will represent a glimmer of hope in HIV care.

Through this workshop, I will grasp the key issues involved and will feel better equipped to speak about prevention in a more concrete way. In my daily work, where I often face persistent misconceptions, I will be able to provide clear, evidence-based information.

I also plan to get involved in advocacy here at home, to promote local research and help pave the way for future vaccine trials.

Lastly, I am already eager to pass on this new knowledge to other healthcare providers during my upcoming training sessions. This is a collective effort, and every link in the chain will matter.

"Once I return, the knowledge gained will be specifically presented and discussed with collaborators at our research centre so that, together, we can draft projects in collaboration with national and international partners that will contribute to advancing knowledge on vaccines in our context."

Aude Christelle Ka'e

Medical virology researcher, Centre International de Référence Chantal Biya

Country of work: Cameroon

What is your motivation to attend the academy?

I am a young researcher in the field of virology at the Chantal Biya International Reference Centre in Cameroon. The doctoral thesis I recently defended focused on the characterization of viral reservoirs in adolescents who acquired non-B HIV strains through vertical transmission and received antiretroviral treatment in a resource-limited country like Cameroon.

As a continuation of paediatric HIV research, I recently led, in collaboration with our laboratory team, on studies that included "HIV-1 drug resistance in children and implications for pediatric treatment strategies: A systematic review and meta-analysis" and "Cytokines profiling, HIV-1 DNA levels and viral replication among antiretroviral treatment-experienced adolescents in Cameroon: Paving the way toward pediatric HIV functional cure". These studies produced globally relevant findings on antimicrobial resistance and HIV-1 reservoirs.

Since then, I have developed a growing interest in understanding and learning about HIV vaccine design methodologies. My goal in participating in the academy is to better understand the current state of research on HIV vaccine candidates in central, eastern, southern and western Africa. At the same time, I want to equip myself with the latest knowledge on vaccine design and evaluation processes.

How do you plan to use the knowledge gained during the academy?

The tools and knowledge gained from this programme will enable me to identify research questions related to vaccine candidate design and HIV prevention projects tailored to the western and central African context. Once I return, the knowledge gained will be presented and discussed with collaborators at our research centre so that, together, we can draft projects in collaboration with national and international partners that will contribute to advancing knowledge on vaccines in our context.

"Over the past few years, I have observed a surge in HIV diagnoses, and quite heartbreakingly, the demographic distribution of new acquisitions mainly involves very young people."

Kitabu Jammeh

Research clinician, Medical Research Council Unit The Gambia at London School of Hygiene & Tropical Medicine

Country of work: The Gambia

What is your motivation to attend the academy?

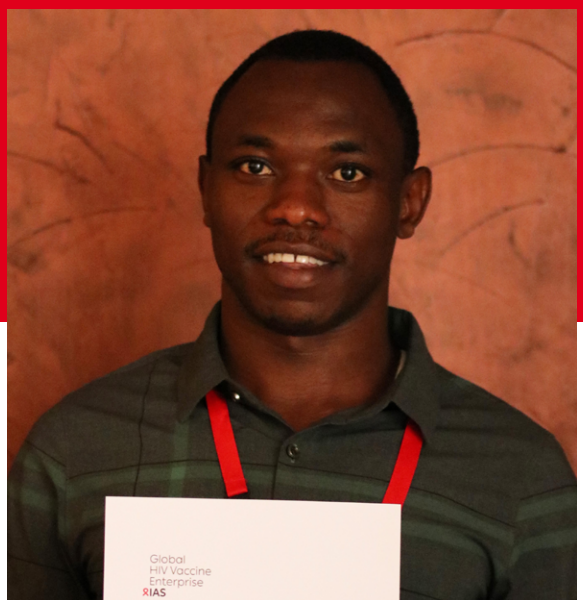
As a clinician, researcher and care provider, I can attest to numerous strides taken against HIV transmission. I have managed people firsthand for their follow-up care and treatment of complications. Over the past few years, I have observed a surge in HIV diagnoses, and quite heartbreakingly, the demographic distribution of new acquisitions mainly involves very young people. This has made me realize that a lot of work is still required in responding to HIV.

The academy will provide an opportunity for exposure to, and deeper understanding of, current strides to control HIV acquisition. This will broaden my sights regarding key aspects of current HIV research and how I may be able to contribute.

How do you plan to use the knowledge gained during the academy?

I am focused all out, as a professional and a student, to learn from people experienced in the field of HIV vaccine research. The goal is to leave the academy well prepared for the noble task of HIV vaccine research. This will mean a deeper understanding of current vaccine research objectives and making connections so that we can share the needed links and expertise in grant applications and partnerships for multi-country research.

"These academies are like superhero training schools for HIV vaccine research! I want to learn all about how the virus works, how vaccines are made, and how we can run trials that are safe and effective, especially in places like Burundi where resources are limited."



Methode Minani

Researcher, Health Healing Network Burundi

Country of work: Burundi

What is your motivation to attend the academy?

I am a medical doctor and a researcher with Health Healing Network Burundi. We are trying to solve the puzzle of HIV. Every day, I dive into the latest ways to prevent and treat HIV, especially in kids, and to prevent vertical transmission. It is a busy job! I work with people all over the world, and we are constantly looking at data to figure out the best ways to help our communities. We have made huge progress, but what we really need is a vaccine – the ultimate superhero against HIV. Developing a vaccine is like building a complicated puzzle. That is why I am so excited about the chance to go to this special training in Dakar. These academies are like superhero training schools for HIV vaccine research! I want to learn all about how the virus works, how vaccines are made, and how we can run trials that are safe and effective, especially in places like Burundi where resources are limited.

I want to learn the best strategies so I can bring them back home. I want to understand how to design trials that are fair and helpful, and how to make sure everyone who needs the vaccine can get it. I am eager to connect with other scientists and leaders with whom we can work to find even better solutions!

Ultimately, I want to be able to take all that amazing research and turn it into real-life help for people in Burundi. I also want to bridge the gap between the lab and the community. By learning from the best, I can help make sure future vaccine trials are right for our people and that we can finally get ahead of HIV. It is about empowering our community with knowledge and hope and making sure Africa is leading the way in the HIV response.

How do you plan to use the knowledge gained during the academy?

My participation in the academy will enhance my ability to contribute to HIV vaccine development and trials through advanced scientific knowledge, technical skills and global collaborations. I will integrate these learnings into my work by strengthening HIV vaccine research and implementation, particularly in paediatric HIV and prevention of vertical transmission. By incorporating vaccine trial methodologies, I will improve HIV prevention strategies in settings with limited resources.

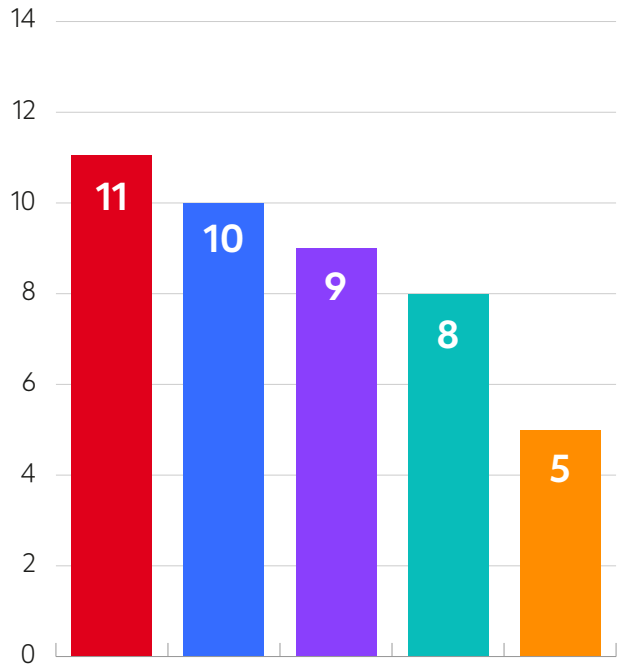
Additionally, I will translate immunological insights into policy recommendations for HIV prevention programmes. As a researcher and mentor, I will train early-career professionals, develop educational materials and bridge the gap between research and public health interventions. Leveraging the academy's global networks, I will foster collaborations with research institutions to initiate multi-centre vaccine studies and advocate for increased funding and policy support. I will also engage with community-based organizations to ensure that HIV vaccine trials are culturally sensitive and inclusive, particularly in central, eastern, southern and western Africa. Drawing from my expertise in bioethics and research governance, I aim to strengthen ethical review processes and contribute to national and regional guidelines for HIV vaccine trials.

Furthermore, I will drive innovation by exploring novel vaccine candidates, utilizing data science and epidemiological modelling, and investigating how co-infections influence vaccine response to optimize strategies for diverse populations. The academy will provide me with the scientific expertise, technical tools and collaborative networks needed to drive HIV vaccine research and clinical trials.

Survey results

> **I am especially grateful for the collaborative environment that encouraged open discussion and learning. This experience has greatly enhanced my understanding of HIV vaccine research, and I am excited to apply the knowledge to my work at Health Healing Network Burundi. Thank you for organizing such an impactful and enriching programme.**
>
> Fellow

What did you gain by attending this academy?



- **11** A better understanding of HIV science and new findings
- **10** It gave me new contacts in the field of HIV
- **9** It gave me new ideas on how the latest findings in HIV can be applied to local issues
- **8** It gave me opportunities for collaboration in order to improve HIV policies and programmes
- **5** Ideas and solutions for challenges I face at work

After attending this academy:

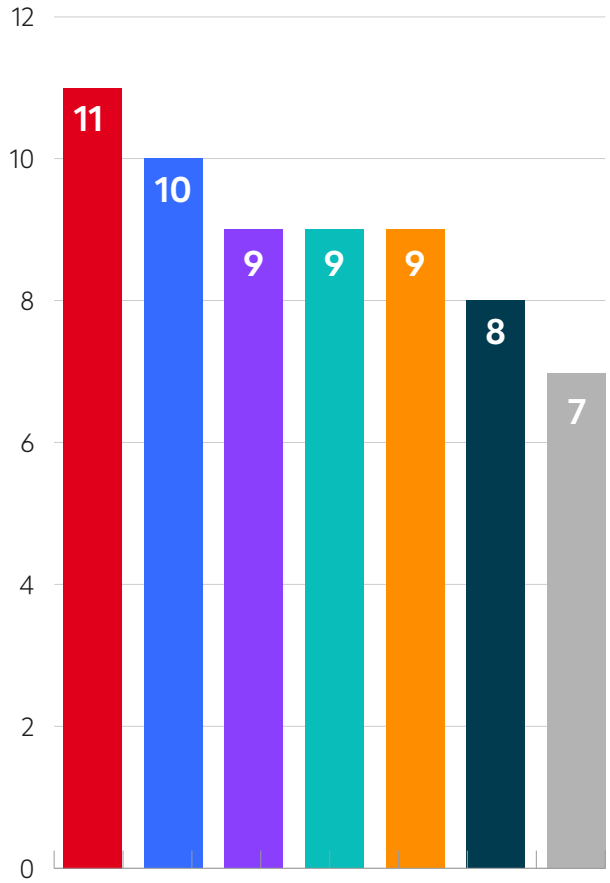
> **I will use what I learnt to help my peers better understand HIV vaccines through myresearch and public health work at Health Healing Network Burundi. I will share clear and accurate information in community education programmes to correct false beliefs and build trust in HIV vaccine science.**
>
> Fellow

After attending this academy:

> **I will initiate a collaboration with an immunology lab to investigate humoral andcellular responses in people with co-infections. I plan to develop a community-based HIV vaccine literacy programme in Yaoundé targeting young people and key populations. This programme will include interactive workshops and culturally adapted educational materials led by peer educators.**
>
> Fellow

> **Step one will be to share knowledge gained with colleagues on the present and future work on HIV vaccines, sharing the promise that bNAbs hold in infant vaccination and for preventing vertical transmission. In the long term, it is my wish to conduct studies comparing bNAbs to currently used ARVs, and to take part in any successes attained with bNAbs and their gradual introduction into the healthcare system and EPI schedule of vulnerable children.**
>
> Fellow

I now intend to:



- **11** Use new knowledge gained to contribute to HIV science
- **10** Improve my ability to engage in the HIV response
- **9** Refine/improve existing work/research practice or methodology
- **9** Initiate a new project, activity and/or research or scale up existing projects/programmes
- **9** Develop new collaborations or strengthen existing ones (e.g., create a partnership/network)
- **8** Change the way I do my work/adapt my practices to the latest evidence
- **7** Improve my ability to engage communities living with or affected by HIV in my work

https://www.iasociety.org/ias-programme/global-hiv-vaccine-enterprise