PEPFAR Scientific Advisory Board Members in Attendance

Judith Auerbach—Independent Science and Policy Consultant; Professor, Center for AIDS Prevention Studies, University of California San Francisco School of Medicine

Peter Berman—Professor, Global Health Systems and Economics, T.H. Chan School of Public Health, Harvard University

Connie Celum—Director, International Clinical Research Center, Department of Global Health, University of Washington School of Medicine

Judith Currier—Division Chief, Infectious Diseases and Associate Director, University of California Los Angeles (UCLA) Center for Clinical AIDS Research and Education (CARE); Professor of Medicine, UCLA School of Medicine

Carlos del Rio—Chair, Department of Global Health, Rollins School of Public Health, and Professor of Medicine, Division of Infectious Diseases, Emory University School of Medicine

Emilio Emini—Director, HIV Program, Bill and Melinda Gates Foundation

Sofia Gruskin—Director, Program on Global Health and Human Rights, Institute for Global Health, University of Southern California

Mark Harrington—Executive Director, Treatment Action Group (TAG)

Mark Heywood—Executive Director, SECTION27, O’Neill Institute for National & Global Health Law; Chairperson, UNAIDS Reference Group on HIV/AIDS and Human Rights

Jennifer Kates—Vice President and Director, Global Health and HIV Policy, Kaiser Family Foundation

Lejeune Lockett—Operations and Program Manager, Global Health, Charles Drew University of Medicine and Science; Angola Military HIV Prevention Program, Drew Cares International

Ruth Macklin—Professor Emerita of Bioethics, Einstein School of Medicine

Celia Maxwell—Associate Professor of Medicine and Associate Dean for Research, Howard University College of Medicine; Infectious Disease Specialist, Howard University Hospital

Kenneth Mayer—Co-Chair and Medical Research Director, Fenway Health; Director, HIV Prevention Research and Attending Physician, Beth Israel Deaconess Medical Center; Professor, Harvard Medical School and Harvard School of Public Health

Jesse Milan—President and CEO, AIDS United

Angela Mushavi—Coordinator, Mother-to-Child HIV Transmission Prevention and Pediatric HIV Care and Treatment, Ministry of Health and Child Welfare, Zimbabwe

Christine Nabiryo—Public Health Consultant, Uganda

Nyambura Njoroge—Project Coordinator, Ecumenical HIV and AIDS Initiatives and Advocacy, World Council of Churches

Jean William Pape—Professor, Weill Medical Cornell College; Director, GHESKIO (Haiti)

Robert Redfield—Robert C. Gallo, MD Endowed Professor in Translational Medicine and Co-Founder & Associate Director, Institute of Human Virology (IHV), University of Maryland School of Medicine

Rev. Edwin Sanders—Senior Server, Metropolitan Interdenominational Church of Nashville; Chair, The Legacy Project, a collaboration with the HIV Vaccine Trials Network; Member, Presidential Advisory Council on HIV/AIDS (PACHA)

Fredrick Sawe—Director, HIV/AIDS Research, Walter Reed Project, Kenya Medical Research Institute

Albert Siemens—Chair, FHI Foundation

Carole Treston—Chief Nursing Officer, Association of Nurses in AIDS Care

Mitchell Warren—Executive Director, AVAC: Global Advocacy for HIV Prevention
PEPFAR Scientific Advisory Board Members Not in Attendance
Quarraisha Abdool Karim—University of KwaZulu-Natal; Associate Scientific Director, Centre for the AIDS Programme of Research in South Africa (CAPRISA); Professor of Clinical Epidemiology, Mailman School of Public Health, Columbia University; Professor of Public Health, Nelson R. Mandela School of
Musimbi Kanyoro—President and CEO, Global Fund for Women
Etienne Karita—Site Leader, Project San Francisco, Rwanda Zambia HIV Research Group
David Peters—Chair, International Health, Johns Hopkins University School of Public Health

PEPFAR Senior Management Team
Ambassador Deborah L. Birx—United States Global AIDS Coordinator
Andrew Forsyth—Director, Office of Research and Science, Office of the U.S. Global AIDS Coordinator and Health Diplomacy (S/GAC)

Welcome, Meeting Overview, and Introductory Remarks
Dr. Forsyth welcomed attendees to this open, public meeting and reminded all that the Scientific Advisory Board (SAB) operates in accords with the Federal Advisory Committee Act (FACA). As such, it is charged with providing expert advice on scientific matters relevant to PEPFAR policy and programming. Subsequently, the SAB Chair, Dr. Carlos del Rio, thanked all members for their attendance and for the efforts of the working groups, particularly the HIV Prevention Continuum Working Group. He introduced briefly the two newest board members: Drs. Emilio Emini and Robert Redfield. In addition to reviewing the meeting agenda, Dr. del Rio underscored the important role of the SAB in assisting PEPFAR to accelerate progress toward HIV epidemic control.

PEPFAR Update: Optimizing Results
Ambassador Birx prefaced her PEPFAR update by expressing appreciation for SAB members’ expertise, dedication, and continued service; she also recognized SAB member, Ruth Macklin, for receiving the Public Responsibility in Medicine and Research (PRIM&R) Lifetime Achievement Award (LAA) in 2017 for Excellence in Research Ethics.

In her update, Ambassador Birx highlighted progress among PEPFAR country and regional programs toward achieving their 90-90-90 targets as part of their UNAIDS Fast Track strategy for ending the AIDS epidemic by 2030. She noted the recent release of the 2017-2020 Strategy announced by Secretary Tillerson, which reaffirms U.S. government support to more than 50 countries and outlines a path for accelerating epidemic control by 2020 in a subset of 13 high-burden countries. As highlighted on World AIDS Day, Ambassador Birx noted the continued global impact of PEPFAR as of September 2017, as evidenced by a cumulative total of 85.5 million HIV tests provided, 15.2 million voluntary medical male circumcisions performed, 13.3 million people treated with antiretroviral medications, 2.2 million babies born HIV-free, 6.4 million orphans and vulnerable children received care and support, and 250,000 new health care workers trained. Further, PEPFAR achieved a 25 – 40% decline in new HIV diagnoses among adolescent girls and young women in the 10 African countries implementing the Determined, Resilient, Empowered, AIDS-Free, Mentored, and Safe (DREAMS) initiative.

Moreover, new surveillance data from 5 African countries suggest that they are approaching their 90-90-90 targets and gaining control over their HIV epidemics. The Ambassador noted that PEPFAR priorities moving forward included a stronger programmatic focus on those subsets of the population that are not achieving their diagnosis, treatment, and viral suppression targets (e.g., men < 35 years and women < 25 years); more efficient HIV case-finding using self- and index-partner testing; stemming
attrition from the treatment continuum through better adherence and retention strategies; and ensuring that resources continue to be allocated for maximal epidemiological impact.

Following her presentation, SAB members offered a number of comments and questions about sustaining progress in a flat or declining funding environment, increasing PEPFAR’s emphasis on preventing new infections, improving access to HIV prevention and treatment services for men, promoting adherence in order to achieve higher viral suppression rates, accelerating the transition of pilot projects to fully scaled programs, task sharing with nurses and other members of clinic teams, and implementing alternative service delivery models that will free clinical resources for non-communicable disease care and treatment. Finally, members raised important questions about the impact of the Protecting Life in Global Health Assistance and urged PEPFAR to track tuberculosis-associated (TB) mortality in order to better understand the impact of its programming, particularly for those with HIV/TB co-infection.

**Epidemic Control Teams**

Deputy Coordinator Irum Zaidi provided the SAB an overview of the new Epidemic Control Team (ECT) structure, which is intended to better utilize headquarters (HQ) expertise and resources to improve the targeting of HIV prevention and treatment for all populations, improve patient outcomes, and identify and share best or promising practices across country teams. PEPFAR designates countries and regional programs to four tiers, including those that: 1) have attained epidemic control (ECT I), 2) have achieved >70% ART coverage for at least one population (ECT II), 3) have achieved <70% ART coverage (ECT III), and 4) are defined by epidemics that are concentrated in key populations (ECT IV). As presented elsewhere, the ECTs seek to accelerate epidemic control by offering specific solutions based on a comprehensive understanding of the local epidemic, progress toward achieving country targets, and structural and other barriers to program scale-up and efficient implementation.

Ms. Zaidi noted that country programs approaching epidemic control face unanticipated challenges that would benefit from SAB input. For example, a recurring theme for many pertains to ensuring the sustainability of programs once transferred fully to host countries. Similarly, there are concerns about mobilizing sufficient domestic resources, in the face of declining external funding, to support health systems and maintain gains in HIV control while simultaneously expanding services to non-HIV treatment services. Future discussions with the SAB may also help to determine how best to adjust if countries elect not to invest in programming designed to meet the needs of key and priority populations or to scale interventions shown to be effective in PEPFAR-funded demonstration projects. Finally, engaging SAB members in building the business case for ongoing investment by ministries of health and finance may help to guide resource prioritization, particularly where HIV is not among the leading causes of morbidity and mortality within host countries.

**Combination Prevention Trials Updates**

As part of the agenda, SAB members were provided an update on the status of three of four large combination prevention trials funded by PEPFAR to address known implementation challenges for HIV case-finding, linkage to and retention in treatment, and achieving durable viral suppression. On behalf of the Botswana Combination Prevention Project (BCPP) team, CDC’s Dr. Jan Moore presented lessons from a community randomization trial in its final phases that tested the benefits of a combination package of extensive HIV testing, linkage to treatment, and immediate ART initiation. Key lessons pertained to using multiple testing modalities to increase HIV diagnoses in those hardest to reach; streamlining and monitoring linkage to HIV medical treatment; reducing loss-to-follow-up; and facilitating immediate ART initiation (e.g., moving adherence counseling to community, presumptive ART initiation while awaiting lab results, returning to clinic only if labs are abnormal); and using
electronic health records and unique patient identifiers for improved service delivery and clinical outcomes.

On behalf of the Population Effects of Antiretroviral Therapy to Reduce HIV Transmission (PopART; HPTN 071) team, Principal Investigator, Dr. Helen Ayles presented findings from a cluster randomized trial in Zambia and South Africa that seeks to investigate whether universal HIV testing and treatment can reduce HIV incidence at the community level. Key findings included the significant improvement in awareness of HIV infection in the general population, men, and younger adults with self-testing, including secondary distribution of testing kits; and that delays in ART initiation attributable to structural and other barriers (e.g., stigma, clinical milieu, staff friendliness) are amenable to intervention using clinic navigators, linkage specialists, and community-delivered ART.

Finally, Principal Investigator Dr. Diane Havlir provided an overview of the Sustainable South Africa Research in Community Health (SEARCH) study, which is a cluster randomized trial of thirty-two communities in rural Uganda and Kenya that examines the impact of HIV diagnosis, targeted pre-exposure prophylaxis (PrEP), and immediate ART initiation on HIV incidence. The study increased significantly HIV diagnosis among youth, men, and children at risk and improved treatment cascades for youth and adults, albeit at different levels. In addition, the study demonstrated alternative service delivery approaches that expedited ART initiation (e.g., patient-centered clinical care, specialized retention strategies, structured viral load counseling).

SAB members raised a number of questions about the CPTs, such as how best to integrate findings from large community randomized trials with considerable heterogeneity in their sampled populations, methods, and results. In addition, members inquired about the relative lack of attention to HIV prevention interventions in these trials; the costs associated with enhanced testing campaigns; and the relative benefit of using technologies other than electronic medical records (e.g., cell phones, biometrics) to improve outcomes tracking, de-duplication, and re-engagement in treatment. Given the numbers of questions raised, the presenters were offered the chance to respond in writing after the meeting.

HIV Prevention Continuum Modeling

Presenting on behalf of the PEPFAR HIV Prevention Continuum Working Group, Dr. Judith Auerbach and Mr. Mitchell Warren reported on recent efforts to use PEPFAR monitoring, evaluation, and reporting (MER) indicators to construct prevention continua. Modeled after the HIV treatment continuum, the group presented draft continua for PrEP that suggested a method for determining coverage levels among eligible, targeted subsets of the population. The group also identified a number of challenges using existing MER indicators, including the inability to track outcomes for unique individuals, difficulty discerning pre- and post-HIV test results, and the need for other indicators necessary to determine whether receipt of the intervention achieved its intended purpose (e.g., averting new HIV infections). Consistent with its recommendations, SGAC committed to piloting the working group’s recommendations and continuing to explore what additional steps would be needed to improve their usability and to endorse their use by PEPFAR-funded teams.

Dolutegravir as Preferred First- and Second-line ARV Regimen

Dr. Sean Cavanaugh provided an update about an August 2017 cable to country missions announcing PEPFAR revisions to its first-line drug guidelines in support of the rapid transition in FY18 to a dolutegravir-containing regimen for adults and adolescents who are 1) treatment naïve or 2) on first-line efavirenz-based (EFV) regimens. Due to its superior efficacy, tolerability, and resistance to viral mutation, PEPFAR has added co-formulated tenofovir/lamivudine/dolutegravir (TLD) and removed EFV-400 mg products from its antiretroviral (ARV) prioritization list. Dr. Cavanaugh underscored the
importance of monitoring the available research and program data to better understand the implications of this policy shift on treatment outcomes for pregnant women and persons co-infected with TB. PEPFAR will prioritize 11 countries for FY18 transition and will continue to coordinate procurement, provide policy support, and take stock of lessons applicable to other country contexts.

Dr. George Siberry presented for SAB input a proposal for adopting TLD as the preferred second-line ARV in PEPFAR-supported programs, including criteria for determining eligibility for its use. In his presentation, he reviewed the occurrence of viral resistance in first-line non-nucleoside reverse transcriptase inhibitor-based antiretroviral therapy (ART) and highlighted TLD’s favorable efficacy, tolerability and safety data as second-line ART. In addition to improving clinical and public health outcomes, the potential for cost-savings and supply chain simplification were offered as reasons to justify the shift. Acknowledging limitations in the scientific data, SAB members with medical backgrounds endorsed SGAC’s plan to transition from EVF to TLD both as preferred first-line and second-line treatment however urged PEPFAR as well as NIH/OAR to support research studies that will help understand the implications of this transition, particularly as second-line therapy. Concerns remain about the lack of safety data in pregnant women and TB/HIV co-infected patients, but ongoing monitoring of research and programmatic data, along with adjusted viral load monitoring timelines, were also recommended.

**Next Steps and Summary Comments**

No comments were offered during the public comment period. SAB members offered a number of comments pertaining to adding indicators to better monitor outcomes for individuals living with TB/HIV co-infection, refining PEPFAR’s research agenda with members’ input, and reviewing research underway across country programs.

AMB Birx closed the meeting with an expression of gratitude to the SAB for providing their expertise to PEPFAR. Dr. del Rio noted that a summary of this meeting, along with answers to the questions that were not addressed herein and a list of research, will be made available to SAB members. The meeting adjourned at 4:22 pm EST.