THURSDAY 19 OCTOBER

09:30 Opening remarks by workshop chair

09:45 Keynote: Brain-Gut-Microbiota interactions and intestinal health
Wendy Henderson, PhD, MSN, CRNP
NINR, NIH, DHHS, USA

Session 1 Pathogenesis
Chairs: Cara Wilson & Stacy Carrington-Lawrence

10:30 Mining adaptive immunity to identify disease-promoting microbiota members in HIV
Ivan Vujkovic-Cvijin, PhD
National Institutes of Health, Mucosal Immunology Section, USA

11:00 Microbial colonization of the gut and brain development in infancy
Rebecca Knickmeyer, PhD
UNC School of Medicine, UNC-Chapel Hill, USA

11:30 Differential responses of colonic ILCs to gut commensal bacteria altered during HIV infection
Moriah Castleman, USA

11:45 Microbial dysbiosis does not alter immune activation or disease progression in SIV-infected rhesus macaques
Alexandra Ortiz, USA

12:00 Discussion & Session Evaluation

12:15 Group Photo & Lunch Break

Session 2 Transmission & Prevention
Chairs: Laurel Lagana & Piotr Nowak

13:15 Microbes: drug interactions and the impact on HIV infection and pathogenesis
Nicholle Klatt, PhD
University of Washington, USA

13:45 Cervicovaginal microbial dynamics and its impact on HIV acquisition risk
Douglas Kwon, MD, PhD
Ragon Institute of MGH, MIT and Harvard, USA

14:15 Vaginal lactic acid inhibits production of pro-inflammatory mediators from human cervicovaginal epithelial cells associated with HIV acquisition
Gilda Tachedjian, Australia

14:30 Discussion & Session Evaluation

14:45 Break & Poster Viewing (abstract #: O_01-O_04, P_01-P_08)

Session 3 GI Tract and Diet
Chairs: Nicholle Klatt & Satya Dandekar

15:30 Detrimental impact of a high fat diet on the natural history of SIV infection in non-human
Ivona Pandrea, MD, PhD
University of Pittsburgh, USA

16:00 Milk - guiding the infant microbiome
Bruce Germann, PhD
University of California, Davis, USA

16:30 Understanding complexities of gut microbiome dysbiosis in HIV infected populations using a large cohort
Abigail Armstrong, USA

16:45 Plasma tryptophan-kynurenine metabolites are altered with gut microbiota dysbiosis in HIV infection and associated with progression of carotid artery atherosclerosis
Qibin Qi, USA

17:00 Discussion & Session Evaluation

Adjourn

FRIDAY 20 OCTOBER

Session 4 Comorbidities
Chairs: Alan Landay & Ronald Collman

09:00 Inflammatory bowel disease (IBD) and colon cancer and microbiome
William DaPaola, PhD
University of Washington, USA

09:30 Microbial metabolites in HIV pathogenesis and comorbidities
Dana Gabriela, MD
Harvard Medical School, USA

10:00 Composite analysis of bacteriome and virome from HIV/HPV-coinfected pregnant women reveals proxies for intraepithelial lesions and immunodeficiency status
Marcelo Soares, Brazil

10:15 Discussion & Session Evaluation

10:30 Break & Poster Viewing (abstract #: O_05-O_09, P_10-P_16)

Session 5 Microbiome & Vaccines
Chairs: Que Dang & Angela Malaspina

11:30 Aging, the microbiome and vaccine responses
Daria Hazuda, PhD
Merck, USA

12:00 Mechanisms intersecting microbiota metabolomics with gut epithelial barrier repair in HIV infection
Satya Dandekar, PhD
University of California, Davis, USA

12:30 Role of the microbiome in HIV vaccine response heterogeneity
James Kublin, MD, MPH
Fred Hutch and University of Washington, USA

13:00 Effect of high-risk sexual behaviour on diversity of the vaginal microbiota and abundance of lactobacillus
Jocelyn Wessels, Canada

13:15 Discussion & Session Evaluation

13:30 Lunch break

Session 6 Metabolomics Biologic and Technical Issues
Chairs: Frederic Bushman & Roger Paredes

14:30 Studying the functional microbiome in vivo in HIV by metaproteomics approaches
Adam Burgener, PhD
University of Manitoba, Canada

15:00 Fatty acid profiles differ in HIV infection, persist despite suppressive ART, and are associated with immune activation
Nicholas Funderburg, PhD
Ohio State University College of Medicine USA

15:30 Modulation of gut microbiota by indoleamine 2,3-dioxygenase 1 inhibitor during antiretroviral suppressed SIV infection in rhesus macaques
Zhang Wang, USA

15:45 The microbial-derived short chain fatty acid butyrate directly and differentially inhibits gut T helper cell subset activation and proliferation
Jon Klabe, USA

16:00 Discussion & Session Evaluation

Closing remarks by workshop chair