Day One: Wednesday, 7th June 2017

Pre-Function Area

11:00 – 12:00  Registration and Refreshments

12:00 – 13:00  The Cellar Kitchen
                   Lunch

13:00 – 13:15  Shiraz
                   Welcome
                   Tony Cunningham (ACH²) and Peter Revill (ACHV)

13:15 – 14:00  HIV Plenary
                   Chair: Tony Cunningham
                   Professor Dan Barouch
                   Title: Therapeutic vaccines for targeting persistent SIV

14:00 – 15:00  Joint Session 1
                   Advancing Antiviral Vaccines
                   Chairs: Stephen Kent and Heidi Drummer

14:00 – 14:15  Branka Grubor-Bauk
                   Induction of genotype-cross reactive, hepatitis C virus-specific cell mediated
                   immunity in DNA-vaccinated mice
                   [16]

14:15 – 14:30  Charani Ranasinghe
                   Pre-clinical assessment of intranasally delivered IL-13Rα2 and IL-4R antagonist
                   adjuvanted HIV vaccines
                   [44]

14:30 – 14:45  Andy Poumbourios
                   A novel glycan deletion mutation in HIV-1 Env enhances exposure of 4 key broad
                   neutralization epitopes
                   [40]
Christopher Gonelli

Immunogenicity of HIV-1 mature-form virus-like particles with enhanced Env incorporation and antigenicity

15:00 – 15:30

Pre-Function Area

Afternoon Tea

15:30 – 17:30

Shiraz

Joint Session 2

Antiviral T-Cell Immunity

Chairs: Eric Gowans and Charani Ranasinghe

15:30 – 15:45

Medhi Rasoli Pirozyan

Chemokine-regulated recruitment of HCV-specific T cell sub-populations to the liver in acute and chronic HCV infection

15:45 – 16:00

Anastasia Agathos

The role of CD8 memory stem cells in protection against hepatitis C infection

16:00 – 16:15

Curtis Cai

Phenotyping effector and exhausted CD8+ T cell subsets in chronic HCV infection

16:15 – 16:30

Jerome Samir

Linking phenotype with the clonotype and transcriptome of human B and T cells using VDJPuzzle

16:30 – 16:45

Silvana Gaudieri

Viral adaptation to CD4+ T cell-mediated immune pressure

16:45 – 17:00

Break

17:00 – 18:00

Cabernet

ACHV AGM

18:00 – 19:00

Free Time

19:00

Shiraz

Dinner
# Day Two: Thursday, 8th June 2017

<table>
<thead>
<tr>
<th>Time</th>
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| 07:00 – 08:30 | **The Cellar Kitchen**  
Breakfast                                                               |
| 08:30 – 09:15 | **Shiraz**  
**Hepatitis Plenary**  
Chair: Peter Revill  
**Professor Brian J. McMahon**  
**Title:** *Challenges in the Global Elimination of HBV* |
| 09:15 – 10:00 | **Joint Session 3**  
**Hepatitis Epidemiology and the Goal of Virus Elimination**  
Chairs: Michael Beard and Michael Mina |
| 09:15 – 10:45 | Peter Revill  
The International Coalition to Eliminate Hepatitis B                        |
| 09:30 – 09:45 | Chaturaka Rodrigo  
Establishment of the InC3 Viral Sequence Repository (InC3 VSR) and its applications |
| 09:45 – 10:00 | Sofia Bartlett  
Phylogenetic clustering of recently acquired hepatitis C virus infection from 2004-2015 |
| 10:00 – 10:30 | **Pre-Function Area**  
**Morning Tea**                                                              |
| 10:30 – 12:15 | **Shiraz**  
**Concurrent Session 1**  
**HIV Persistence**  
Chairs: Dan Barouch and Sarah Palmer |
| 10:30 – 10:45 | Eunok Lee  
The Impact of Treatment Duration on Defective and Expanded Identical HIV Genomes in T cell Subsets from Peripheral Blood and Tissues |
10:45 – 11:00 Bethany Horsburgh
Intact HIV-1 provirus is enriched in effector memory and HLA-DR⁺ memory CD4⁺ T cells

11:00 – 11:15 Carolin Tumpach
High prevalence of CXCR4-using virus in long lived latently infected naïve and central memory CD4+ T cells in individuals on ART

11:15 – 11:30 Jenny Anderson
CCR6+ rectal CD4+ T-cells are a significant reservoir in HIV-infected individuals on ART

11:30 – 11:45 Michael Roche
The circadian transcription factors CLOCK and BMAL1 activate HIV transcription through the viral Long Terminal Repeat

11:45 – 12:00 Youry Kim
Evaluation of PI3K inhibitors as a strategy to eliminate latently infected CD4+ T-cells

12:00 – 12:15 Damian Purcell
Discovery of new HIV latency reversing agents that target novel gene expression pathways

10:30 – 11:45 Cabernet

Concurrent Session 2

Hepatitis Virus-Host Interactions

Chairs: Nick Eyre and Nick Shackel

10:30 – 10:45 Byron Shue
Identification of novel host factors critical for HCV replication using a CRISPR/Cas9 genome-wide KO screen

10:45 – 11:00 Mustafa Najim
Transmembrane 6 superfamily member 2 (TM6SF2) is involved in Hepatitis C virus (HCV) replication

11:00 – 11:15 Colt Nash
Single Cell Analysis of Interferon-α Stimulation and Hepatitis C Virus Infection

11:15 – 11:30 Zina Valaydon
Type 1 interferon is a key mediator of early viral suppression on basal core promoter and precore variants of Hepatitis B
11:30 – 11:45  Magdalena Budzinska
  Analysis of HBV DNA integration events in HBeAg-positive and -negative patients

11:45 – 12:15  Break

12:15 – 13:00  The Cellar Kitchen
  Lunch

The Cellar Kitchen
Lunch with international guests

Semillon B
ACH² Executive Meeting & Working Lunch

13:00 – 14:30  Shiraz
  Concurrent Session 3
  HIV-Host Interaction
  Chairs: Stuart Turville and Jenny Anderson

13:00 – 13:15  Najla Nasr
  Defining the role of HIV-1 accessory proteins in blocking interferon induction by dysregulation of TBK1

13:15 – 13:30  Alberto Ospina Stella
  Resolving the intersection of HIV and F-ACTIN

13:30 – 13:45  Andrew Harman
  Examining the Role of Human Mononuclear Phagocytes in Mediating Sexual Transmission of HIV

13:45 – 14:00  Hafsa Rana
  Identification and Characterisation of Novel Human Epidermal Mononuclear Phagocyte Populations; Implications for Transmission of HIV

14:00 – 14:15  Jake Rhodes
  Defining the Subsets of Mononuclear Phagocytes Present in Human Anogenital Tissue

14:15 – 14:30  Heeva Baharlou
  An in situ Study to Define Early HIV Target Cells in the Human Anorectal Tract
13:00 – 14:15  Cabernet

Concurrent Session 4

Hepatitis Virus Humoral Immunity

Chairs:  Andrew Lloyd and Danushka Wijesundara

13:00 – 13:15  Melanie Walker

Characterising the interplay between viral evolution and the humoral immune response in early primary HCV infection

13:15 – 13:30  Michael Mina

Anti-envelope antibody responses in highly-exposed seronegative individuals may be associated with protection from HCV infection

13:30 – 13:45  Alex Underwood

Identification of Novel HCV-specific Epitopes That Induce Broad Neutralising Antibodies

13:45 – 14:00  Nicholas Brasher

Understanding the immunodominance of B cell epitopes in primary hepatitis C virus infection

14:00 – 14:15  Bing-Ru Wu

Identification and characterisation of HCV-specific B cells using E2 envelope tetramers

14:15 – 14:30  Penelope Adamson

Characterisation of serum antibody variable-region repertoires following Hepatitis B (HBV) vaccination

14:30 – 15:00  Pre-Function Area

Afternoon Tea

15:00 – 16:15  Shiraz

Concurrent Session 5

Monocytes, Macrophages and NK Cells in HIV Pathogenesis

Chairs:  Anna Hearps and Anupriya Aggarwal

15:00 - 15:15  Michelle Wong

Persistence of HIV DNA in monocytes from virologically suppressed HIV+ individuals

15:15 – 16:00  [Pre-Function Area]
15:15 – 15:30  Noémi Anna Nagy
Evaluating monocyte mitochondrial dysfunction and inflammation biomarkers in frail older HIV+ men in Melbourne Australia [29]

15:30 – 15:45  Riya Palchaudhuri
Evaluating monocyte metabolic activation and mitochondrial changes in frail older HIV+ men in Melbourne Australia [35]

15:45 – 16:00  Srihari Parise
Do Natural Killer Cells Mediate Killing of HIV-infected Macrophages by Natural Cytotoxicity? [37]

16:00 – 16:15  Break

15:00 – 16:15  Cabernet

Concurrent Session 6

Hepatitis Virus Replication Cycles and Model Systems

Chairs: Margaret Littlejohn and Auda Eltahla

15:00 - 15:15  Nicholas Eyre
Sensitive luminescent reporter viruses reveal appreciable release of hepatitis C virus NS5A protein into the extracellular environment [13]

15:15 – 15:30  Thao Huynh
Investigating replication capacity of HBV variants using a 1-mer system [21]

15:30 – 15:45  Julie Nigro
Ex vivo 3-dimensional liver organoids as a novel model for chronic hepatitis B [33]

15:45 – 16:00  Ciccy Wang
A study of HBV infection in vitro using the HepG2-NTCP cell culture model [58]

16:00 – 16:15  Jackie Yu
Modelling chronic hepatitis B induced hepatocellular carcinoma using ex vivo 3D liver organoids [64]

16:15 – 16:30  Break

16:30 – 17:45  Shiraz

Joint session 4
Developments of Diagnostics

Chairs: David Anderson and Scott Bowden

16:30-16:45
Francois Lamoury
Hepatitis C virus core antigen as simplified hepatitis C virus diagnostic tools

16:45-17:00
Tanya Applegate
Evaluation of the Xpert® HCV Viral Load point-of-care assay from venipuncture-collected and finger-stick capillary whole-blood samples: A prospective study

17:00-17:15
Huy Van
An immunochromatographic test for measurement of Alanine Aminotransferase (ALT) at point-of-care

17:15-17:30
Clovis Palmer
Glut1 SNP to predict HIV disease progression and immune functions in people living with HIV infection

17:30–17:45
Sofia Bartlett
Methods for sequencing of hepatitis C virus to detect direct-acting antiviral resistance: Systematic review & expert guidance

17:45-18:45
Free Time

18:45
Coaches depart for Chateau Tanunda

19:00
Pre-Dinner Drinks

19:30
Dinner

22:30
First Coach departs Chateau Tanunda

23:00
Last Coach departs Chateau Tanunda
Day Three: Friday, 9th June 2017

07:00 – 08:30
The Cellar Kitchen
Breakfast

08:30 – 9:15
Shiraz

Special Guest Speaker
Chair: Gilda Tachedjian
Professor Alan Landay
Title: HIV and the Microbiome

09:15 – 09:45
Joint Session 5
Microbicides
Chairs: Andrew Harman and Najla Nasr

09:15 – 09:30
David Tyssen
Lactic acid and its role in the intrinsic anti-HIV properties of cervicovaginal fluid

09:30 – 09:45
Anna Hearps
Vaginal lactic acid elicits an anti-inflammatory response from human cervicovaginal epithelial cells and inhibits production of pro-inflammatory mediators associated with HIV acquisition

9:45 – 10:15
Pre-Function Area
Morning Tea

10:15 – 11:45
Shiraz

Concurrent Session 7
Antiviral Therapeutics
Chairs: Brian McMahon and Tanya Applegate

10:15 – 10:30
Darren Wong
On-treatment ALT flares are associated with HBsAg loss in genotype A chronic hepatitis B-infected subjects treated with nucleotide analogue therapy

10:30 – 10:45
Stephen Headey

Developing high affinity inhibitors of LEDGF-integrase interaction

10:45 – 11:00  Adam Johnson  [22]
New drug classes for HIV: Allosteric inhibitors targeting novel sites on HIV-1 reverse transcriptase

11:00 – 11:15  Rebecca Pavlos (EoI Update)  [38]
Variation In ERAP Influences Risk For HLA-B*57:01 Positive Abacavir Hypersensitivity

11:15 – 11:30  Andrew Wong  [60]
Design of a Gene Therapy Particle to Functionally Cure of HIV-1

11:30 – 11:45  Break

10:15 – 12:00  Cabernet

Concurrent Session 8

Novel Vaccine Strategies for Hepatitis and HIV

Chairs: Andy Poumbourios and Branka Grubor-Bauk

10:15 – 10:30  Heidi Drummer  [12]
Refolding the HCV E2 glycoprotein for vaccine production

10:30 – 10:45  Makutiro Masavuli  [27]
Novel DNA vaccine formulations encoding secreted HCV-E1/E2 fused to the IMX313 oligomerisation domain are immunogenic in mice

10:45 – 11:00  Danushka Kumara Wijesundara  [59]
A novel mucosal HIV vaccination regimen to elicit protective HIV-specific immunity

11:00 – 11:15  Hannah King  [15]
Introduction of a novel glycan deletion mutation into a Transmitter/Founder HIV Envelope protein enhances exposure of a major bNAb epitope

11:15 – 11:30  Natalia Salazar-Quiroz  [49]
Characterisation of the antibody response in cows elicited by different HIV Envelope gp140 vaccine regimens

11:30 – 11:45  Damian Purcell  [41]
Evolution of anti-HIV bovine neutralising antibodies

11:45 – 12:00  Bruce Wines  [65]
Novel methods for predicting the FcR-dependent effector function of anti-HIV
envelope antibodies

12:00 – 13:00  The Cellar Kitchen
       Lunch

13:00 – 13:45  Shiraz

13:15 – 13:30  Awards Presentation

13:30 – 13:45  Closing Remarks
       Tony Cunningham

13:45-14:15  Pre-Function Area
      Collect boxed afternoon tea and board Coaches

14:15  Coaches depart for Adelaide Airport