

CURRICULUM VITAE:
PROFESSOR SHARON LEWIN
FRACP, PhD

NAME **TITLE / POSITION**

Sharon Ruth Lewin, FRACP, PhD Professor/Director Infectious Diseases,
Alfred Hospital and Monash University

EDUCATION **DEGREE** **YEAR** **FIELD OF STUDY**

Monash University, Melbourne, Australia	MB BS (Hons)	1986	Medicine
Monash University, Melbourne, Australia	Ph.D.	1997	Microbiology
Royal Australasian College of Physicians Diseases	FRACP	1997	Infectious

DATE OF BIRTH: September 12th., 1962

POSITIONS HELD

1987-1990	Residency, Internal Medicine, Alfred Hospital, Melbourne, Australia
1991-1992	Medical Registrar, Royal Melbourne Hospital, Melbourne, Australia
1992-1993	Infectious Diseases Fellow, Royal Melbourne Hospital, Melbourne, Australia
1993-1996	Postgraduate Research Fellow, Macfarlane Burnet Center for Medical Research, Melbourne, Australia
1995-1997	Consultant Physician, Infectious Diseases and Internal Medicine, Royal Melbourne Hospital, Melbourne, Australia
1995-1997	Infectious Diseases Physician, Alfred Hospital, Melbourne, Australia.
1997-1999	Post-doctoral Research Fellow, Aaron Diamond AIDS Research Center, Rockefeller University, New York, NY
1998-1999	Attending Physician, The Rockefeller University Hospital, The Rockefeller University, New York, NY
1999-2001	The Ian Potter Foundation Fellow in Infectious Diseases, Department of Microbiology and Immunology, The University of Melbourne, Victoria
1999-2003	Consultant physician, Victorian Infectious Diseases Service, Royal Melbourne Hospital, Parkville, Victoria
2001-2003	Senior Research Fellow, Department of Microbiology and Immunology, The University of Melbourne
2003-2008	NHMRC Practitioner Fellow, SP1
2003-	Professor/Director Infectious Diseases, Alfred Hospital and Monash University, Melbourne
2003-	Honorary Professor, Department of Microbiology and Immunology, The University of Melbourne
2008-2013	NHMRC Practitioner Fellow, SP2
2009-	Co-Director, Centre for Virology, Burnet Institute

SCIENTIFIC DISCIPLINE INVOLVEMENT

National:

Australasian Society for HIV Medicine (ASHM)

ASHM is the peak body representing basic scientists, clinicians and allied health professionals working in the discipline of HIV medicine. ASHM has over 700 members and has an annual conference with over 1000 attendees. ASHM publishes treatment guidelines (both web based and as monographs), trains physicians and general practitioners to be S100 prescribers for HIV medications and runs both national and international education and training programs.

1999-2000	Secretary
2000-2005	Vice President
2001	Chair , Basic Science Track, 14 th annual ASHM conference
2005-2007	President
2005	Chair , 1 st Consensus Conference on the Australian Antiretroviral Guidelines
2006	Chair , 2 nd Consensus Conference on the Australian Antiretroviral Guidelines
2007	Co-Chair , National Hepatitis B Alliance

National Centre for HIV Epidemiology and Clinical Research (NCHECR), UNSW

1999-2000	Member, Immune Based Therapies Working Group (IBTWG). The IBTWG advises the Director, NCHECR, UNSW on strategies, protocol design and commercial collaborations for immunotherapeutics and vaccines for HIV.
2000-2002	Deputy Chair, Immune Based Therapies Working Group
2002-2005	Chair , Immune Based Therapies Working Group
2005-2008	Chair , Data Safety and Monitoring Board for Australian Trial of Treatment in Acute Hepatitis C (ATAHC; Principal investigators Professor John Kaldor and Associate Professor Greg Dore). This is a large NIH RO1 funded study that includes only Australian investigators. The clinical study has facilitated a large number of basic research studies. The budget is over 4 million dollars.
2008	Member, Protocol Steering Committee, Evaluation of Bovine Colostrum for enhancement of immune reconstitution of HIV-infected individuals

Australian Centre for HIV and Hepatitis (ACH2)

ACH2 represents basic scientists working in HIV and viral hepatitis. ACH2 oversees the Immunovirology research network (IVRN). The goal of the IVRN is to facilitate translational research and enhance collaborative activity between scientists and HIV clinical researchers.

2002-	Member, ACH2
2003	Member, Strategic Planning Group, ACH2
2003-	Deputy Chair , Immunovirology Research Network
2003-	Chair , Quality Assurance Program for PBMC collection. This is a national collaboration of laboratories around Australia to enhance and maintain high quality specimen collection of PBMC for clinical trials in HIV and viral hepatitis

Royal Australian College of Physicians

2003- Examiner, First part

Other

2002- Member, Scientific Advisory Board, National Reference Laboratory, St Vincents Hospital, Melbourne

2003- External judge, BHP Billiton, Health Safety, Environment and Community (HSEC) award

2005- Member, Monash Infection and Immunity Network (MIIN). MIIN is a network of all researchers within Monash University who work in infection and immunity. The goal is to facilitate collaborations and joint grant proposals amongst Monash researchers.

International:

2006 Invited external examiner to Masters of Medicine Program, University of Malaya, Kuala Lumpur, Malaysia

2005-2007 **Deputy Chair**, International AIDS Society Conference on HIV Pathogenesis, Treatment and Prevention, Sydney, 2007. This meeting was the first major international meeting to be held on HIV pathogenesis in Australia and attracted over 6000 delegates from 130 countries. I was responsible for the basic science stream in the conference and oversaw the work of three track chairs in basic science.

2007 **Chair**, Translating basic HIV immunology into novel interventions, Sydney, Australia. This was an interactive workshop for 250 delegates that preceded the IAS conference in Sydney. The international faculty included scientific leaders in both HIV and general immunology.

2008- **Invited member** (total members = 8), Immunology Interest Group for INSIGHT (a multinational network for the conduct in clinical research in HIV medicine that is funded by the US National Institutes of Health).

2009 **Member**, Basic Science Track, Scientific Organising Committee. 5th International AIDS Society Conference on HIV Pathogenesis, Treatment and Prevention, Cape Town, 2009

2009 **Member**, Scientific Organising Committee, Fourth International Meeting on HIV-Hepatitis Co-infection, Lisbon, 2009

2009 **Member**, Basic Science Track, Scientific Organising Committee, World AIDS Conference, Vienna, Austria, July 2010

2010 **Member**, Scientific Organising Committee, Fifth International Meeting on HIV-Hepatitis Co-infection, Israel, 2010

HONORS AND AWARDS

- 1983 The David Rosenthal Prize for the highest aggregate marks for anatomy and third year medicine, Monash University
- 1985 Lilly Industries Research Fellowship to study "The hormonal control of testicular descent" in the department of Anatomy, Oxford University
- 1986 The Sophie Davis Memorial Prize for overall highest aggregate marks for the medical course, Monash University
- 1993 The Robert Power Scholarship in Surgery, Alfred Hospital Clinical School
The Fairfield Hospital research scholarship for advanced trainees in Infectious Diseases
The Ian Gust Prize, Macfarlane Burnet Centre for Medical Research
National Health and Medical Research Council Postgraduate Scholarship
- 1996 Smith Kline Travel scholarship for advanced trainees in Infectious Diseases
- 1996 Awarded Fellowship of the Royal Australasian College of Physicians
- 1997 National Health and Medical Research Council CJ Martin Postdoctoral Fellowship for Aaron Diamond Center for AIDS Research, New York, USA
- 1998 Post doctoral travel grant, Sixth Conference on Retroviruses and Opportunistic Infections, Chicago.
- 1999 The Potter Fellowship for Infectious Diseases, Royal Melbourne Hospital, Parkville, Victoria.
- 2000 Zeneca Travel Scholarship 2000, Australasian Society for Infectious Diseases.
- 2000 Williamson Community Leadership Program, Feb-Nov 2000
- 2001 Best Poster Prize, International Conference on Antiviral Chemotherapy, Seattle, WA, April 2001
- 2002 Australasian Society for Infectious Diseases GlaxoSmithKline Advanced Research Award

RESEARCH TRANSLATION:

Commercialisation:

Patents

- 1999 International patent #09/288,207. Lewin, Kostrikis, Zhang, Ho. Method for quantifying equivalent markers and their use in quantitating cells and polynucleotide sequences therein (Rockefeller University, NY, NY.) Licensed to Mayo Corporation December 2006
- 2004 Provisional patent. Australia #2004/001440. Locarnini. Viral variants: detection and application (Melbourne Health). PCT Patent Application PCT/AU 2004/001440 "HBV Variants Detection and Application" Australian Priority No: 2003905776 Australian Priority No:2004900962. Australian Application No:2004285983 Europe 04789595. South Korea 10-2006-7009823 Japan 2006-535911 China 200480036842.7 Canada 2543538 USA 10/576,906 Hong Kong 07101729.9. Published 12 May 2005 WO 2005/042733 A1
- 2005 Provisional patent. Australia #2005/001538. Locarnini. Viral mutants

detection and application (Melbourne Health). This patent describes specific mutations selected during Abacavir treatment. The patent claims for both detection of the mutations in diagnostic assays as well as use of the mutants. Published: 20 April 2006 WO 2006/039739 A1

2007 Provisional patent #60/983062: Diagnostic and therapeutic protocols. Lewin, SR (Bayside Health). Filed 26/10/07

Industry

2000 Consultant (paid) – Probe Pharmaceuticals, Sydney, Australia (evaluation of activity of commercial antibody on HIV viral reservoirs)
2006- Consultant (paid) – Narhex, Melbourne, Australia (development of an HIV-specific protease inhibitor)
2006- Consultant (paid) – Biotron, Sydney, Australia (development of an antiviral with specific activity againsts HIV vpu)
2005 Consultant (paid) – Valeant Pharmaceuticals, Boston, MA
2008 Member (paid), Novartis International Advisory Board on HIV-HBV co-infection
2009 Consultant (paid) – CSL re development of a HBV therapeutic vaccine

PUBLICATIONS

REFEREED RESEARCH PUBLICATIONS

1. **Lewin SR**, Street AC. 1995. Maintenance therapy with fluconazole for disseminated histoplasmosis. *Aust NZ J Med* 25(1):56. **IF: not listed**
2. **Lewin SR**, Hoy J, Crowe SM, McDonald CF. 1995. The role of bronchoscopy in the diagnosis and management of pulmonary disease in HIV infected patients. *Aust NZ J Med* 25(2):133-139 . **IF: not listed**
3. Stent G, Irving L, **Lewin SR**, Crowe SM. 1995. The kinetics of surface expression of CD11/CD18 and CD54 on monocytes and macrophages. *Clin Exp Immunol* 100:366-376 **IF 2.805.**
4. **Lewin SR**, Sonza S, Irving L, McDonald C, Mills J, Crowe S. Low levels of surface CD4 are critical for HIV-1 in vitro infection of alveolar macrophages. 1996. *AIDS Res Hum Retrovirus* 12(10): 877-883 **IF 2.531.**
5. **Lewin SR**, Lambert P, Deacon NJ, Mills J, Crowe SM. 1997. Constitutive expression of p50 homodimer in freshly isolated human monocytes decreases with in vitro and in vivo differentiation. *J Virol* 71:2114-2119 **IF 5.178.**
6. **Lewin SR**, Kirihara J, Sonza S, Irving L, Mills J, Crowe S. 1998. HIV DNA and mRNA concentrations are similar in alveolar macrophages and blood monocytes. *AIDS* 12:719-727. **IF 5.835.**
7. Jin X, Bauer DE, Tuttleton SE, **Lewin SR**, Gettie A, Irwin CE, Safrit JT, Zhang LQ, Ho DD. Dramatic rise in plasma viremia after CD8+ T-Cell depletion in SIV-infected macaques. 1999. *J Exp Med* 189:991-998. **IF 13.965. (C x 534)**
8. **Lewin SR**, Vesanen M, Kostrikis L, Hurley A, Duran M, Zhang L, Ho DD, Markowitz M. 1999. The use of real-time PCR and molecular beacons to detect virus replication in HIV-1 infected individuals on prolonged effective antiretroviral therapy. *J Virol* 73:6099-6103 **IF 5.178. (C x 126)**
9. Zhang L, Ramratnum B, Tenner-Racz K, He Y, Guo Y, Duran M, Vesanen M, **Lewin SR**, Hurley A, Tsay J, Huang Y, Wang C-C, Talal A, Racz P, Perelson A, Korber B, Markowitz M, Ho DD. 1999. Quantifying residual HIV-1 replication and

- decay of the latent reservoir in patients on seemingly effective antiretroviral therapy. *N Engl J Med* 340:1605-1613. **IF 44.016. (C x 437)**
10. **Lewin SR***, Zhang L*, , Markowitz M, Lin H, Skulsky E, Karanicolas R, He Y, Jin X, Tuttleton S, Vesanen M, Spiegel H, Kost R, Wolinsky S, Borkowsky W, Palumbo P, Kostrikis L, and Ho DD. Measuring recent thymic emigrants in blood of normal persons and HIV-1-infected patients before and after effective therapy. 1999. *J Exp Med* 190:725-732. *Contributed equally to the work **IF 13.965 (C x 185)**
 11. Chakrabarti LA, **Lewin SR**, Zhang L, Gettie A, Luckay A, Martin LN, Ho DD, Cheng-Mayer C, and Marx P. Normal T cell turnover rate and thymic function in sooty mangabeys harboring active simian immunodeficiency virus infection. 1999. *J Virol* 74: 1209-1223. **IF 5.178 (C x 81)**
 12. Chakrabarti LA, **Lewin SR**, Zhang L, Gettie A, Luckay A, Martin LN, Skulsky E, Ho DD, Cheng-Mayer C, Marx PA. Age-dependent changes in T cell homeostasis and SIV load in sooty mangabeys. 2000. *J Med Primatol.* 29(3-4):158-65. **IF 1.480 (C x 17)**
 13. **Lewin SR**, Ribeiro RM, Walters T, Lau GK, Bowden S, Locarnini SA, Perelson AS 2001. Analysis of hepatitis B viral load decline under potent therapy: complex decay profiles observed. 2001. *Hepatology.* 34: 1012-1020 **IF 9.792 (C x 64)**
 14. Gahan ME, Miller F, **Lewin SR**, Cherry C, Hoy JF, Mijch, A, Rosenfeldt F, Wesselingh S. 2001. Quantification of mitochondrial DNA in peripheral blood mononuclear cells and subcutaneous fat using real-time PCR. *J Clinical Virology* 22: 241-247. **IF 2.623 (C x 28)**
 15. Kaufmann GR, Zaunders J, Murray J , **Lewin SR**, Solomon A, Kelleher AD, Smith D, Cooper DA. 2001. Relative significance of different pathways of immune reconstitution in HIV-1 infection as estimated by mathematical modeling. *AIDS Res Human Retrovirus.* 17: 147-159. **IF 2.531 (C x 7)**
 16. Kedzierska K, Ellery P, **Lewin SR**, Jaworowski A and Crowe S. 2002. HIV-1 inhibits expression of gamma signalling chain of FC γ R: a mechanism for inhibition of fc γ R-mediated phagocytosis by human macrophages. *J Immunol* 168(6):2895-903. **IF 6.387 (C x 18)**
 17. Ströbel Ph, Helmreich M, Menioudakis G, **Lewin SR**, Tiesinga J, Puppe B, Bauer A, Schneider Ch, W Nix, Schalke B, Elert O, Semik M, Müller-Hermelink HK, Marx A. 2002. Failure to Generate Mature CD4+ T-Cells in Thymomas Correlates with Absence of Paraneoplastic Myasthenia Gravis. *Blood* 100(1):159-66 **IF 10.131 (C x 11)**
 18. Cherry C, Gahan ME, McArthur JC, **Lewin SR**, Hoy JF, Wesselingh SL. 2002. Treatment with dideoxynucleosides is reflected in lowered mitochondrial DNA in subcutaneous fat. *J Acquired Immunodef* 30:271-277 **IF 5.835 (C x 46)**
 19. **Lewin SR**, Heller G, Zhang L, Rodrigues E, Skulsky E, van den Brink MRM, Small TN, Kernan NA, O'Reilly R J, Ho DD, and Young JW. 2002. Direct evidence for new T-cell generation by patients after either T-cell-depleted or unmodified allogeneic hematopoietic stem cell transplants. *Blood* 15;100(6):2235-42. **IF 10.131 (C x 35)**
 20. Torresi J, Earnest-Silveira L, Civitico G, Walters T, **Lewin S**, Fyfe J, Locarnini SA, Manns M, Trautwein C, Bock T. 2002. Restoration of replication phenotype of lamivudine resistant hepatitis B virus mutants by compensatory changes in the "fingers" sub-domain of the viral polymerase selected as a consequence of mutations in the overlapping S gene. *Virology* 299(1):88 **IF 3.080. (C x 23)**
 21. **Lewin SR**, Ribeiro RR, Kaufmann GR, Smith D, Zaunders J, Law M, Solomon A, Cameron PU, Cooper D, Perelson AS. 2002. Dynamics of T cells and TREC differ

22. Solomon A, Cameron PU, Bailey M, Dunne A, Crowe SM, Hoy J, **Lewin SR**. 2003. Immunological and virological failure following HIV-1 antiretroviral therapy is associated with enhanced peripheral and thymic pathogenicity. *J Infect Dis*. 187:1915-23 **IF 4.953 (C x 3)**
23. Cooley L, Ayers A, Bartholomeusz A, **Lewin S**, Crowe S, Mijch A, Locarnini S, (HBV) Sasadeusz J. 2003. Prevalence and characterisation of lamivudine-resistant Hepatitis B virus mutations in HIV and HBV co-infected individuals. *AIDS*. 17:1649-1657. **IF 5.835 (C x 18)**
24. Murray JM, Kaufmann GR, Hodgkin PD, **Lewin SR**, Kelleher AD, Davenport MP, Zaunders JJ. 2003. Naive T cells are maintained by thymic output in early ages but by proliferation without phenotypic change after age twenty. *Immunol Cell Biol*. 81(6):487-495. **IF 1.854 (C x 2)**
25. Wightman F, Walters T, Ayres A, Bowden S, Bartholomeusz A, Lau D, Locarnini SA, **Lewin SR**. 2004. Comparison of sequence analysis and a novel discriminatory real-time PCR assay for detection and quantification of lamivudine-resistant hepatitis B virus strains. *J Clin Micro* 42(8):3809-12. **IF 3.537 (C x 3)**
26. Hoy JF, Gahan ME, Carr A, Smith D, **SR Lewin**, S Wesselingh, DA Cooper. 2004. Changes in mitochondrial DNA in peripheral blood mononuclear cells from patients with HIV lipodystrophy randomized to abacavir. *J Infect Dis* 190(4):688-92 **IF 4.953 (C x 11)**
27. French MA, **Lewin SR**, Dykstra C, Krueger R, Price P, Leedman PJ. 2004. Graves' disease during immune reconstitution after highly active antiretroviral therapy for HIV infection: evidence of thymic dysfunction. *AIDS Res Hum Retroviruses* 20:157-162 **IF 2.531. (C x 14)**
28. Gouskos, T. Wightman, F. Chang J. Earnest-Silveira, L. Sasdeusz J. **Lewin SR** and Torresi. 2004. Severe hepatitis and prolonged hepatitis B virus specific CD8 T-cell response after selection of hepatitis B virus YMDD variant in an HIV/Hepatitis B virus co-infected patient. *AIDS* 18: 1734-1737 **IF 5.835 (C x 0)**
29. Pett SL, Williams LA, Day RO, Lloyd AR, Carr AD, Clezy KE, Emery S, Kaplan E, McPhee DA, McLachlan AJ, Gelder FB, **Lewin SR**, Liauw W, and Williams KM. 2004. A phase I study of the pharmacokinetics and safety of passive immunotherapy with caprine anti-HIV antibodies, (PE) HRG214, in HIV-1-infected individuals. *HIV Clin Trials* 5:91-8 **IF 1.785. (C x 4)**
30. Gouskos T, Wightman F, **Lewin SR**, Torresi J. 2004. Highly reproducible transient transfections for the study of hepatitis B virus replication based on an internal GFP reporter system. *J Virol Methods*. Oct: 121 (1) 65-72 **IF 1.886 (C x 0)**
31. Chang J, Wightman F, Bartholomeusz A, Ayres A, Kent SJ, Sasadeusz J and **Lewin SR** 2005. Reduced HBV-specific CD4+ T-cell responses in HIV-HBV co-infected individuals receiving highly active antiretroviral therapy. *J Virol* 79:3038-3051. **IF 5.178 (C x 6)**
32. Gray L, Sterjovski J, Churchill M, Ellery P, Nasr N, **Lewin SR**, Crowe SM, Wesselingh S, Cunningham A, Gorry P. 2005. Uncoupling coreceptor usage of human immunodeficiency virus type 1 (HIV-1) from macrophage tropism reveals biological properties of CCR5-restricted HIV-1 isolates from patients with acquired immunodeficiency syndrome. *Virology* 337(2):384-98 **IF 3.080 (C x 8)**
33. Solomon A, Lane N, Wightman F, Gorry P, **Lewin SR**. 2005. Enhanced replicative capacity and pathogenicity of HIV Isolated from Individuals Infected with Drug-Resistant Virus and Declining CD4+ T-cell Counts. *J Acq Immunodef*. 40: 140-148. **IF 5.835 (C x 3)**

34. Green JA, **Lewin SR**, Wightman F, Lee M, Ravindran TS, Paton NI. 2005. A randomised controlled trial of oral zinc on the immune response to tuberculosis in HIV-infected patients. *Int J Tuberc Lung Dis*. Dec;9(12):1378-84. **IF 1.456 (C x 1)**
35. Fernandez S, Nolan RC, Price P, Krueger R, Wood C, Cameron D, Solomon A, **Lewin SR**, French MA. 2006. Thymic function in severely immunodeficient HIV-1 infected patients receiving stable and effective antiretroviral therapy. *AIDS Research and Human Retrovirus* 22:136-170. **IF 2.531 (C x 1)**
36. Matthews G, Bartholameusz A, Locarnini S, Ayres A, Sasadeusz J, Seaberg E, Cooper DA, **Lewin SR**, Dore GJ, Thio C. 2006. Characteristics of HBV resistance in an international collaborative study of HIV/HBV infected individuals on extended lamivudine therapy. *AIDS* 20: 863-870 **IF 5.835 (C x 0)**
37. Giles ML, Garland SM, Grover SR, **Lewin SR**, Hellard ME. Impact of an education campaign on management in pregnancy of women infected with a blood-borne virus. 2006. *Med J Aust* 184: 389-392. **IF 2.127 (C x 1)**
38. Hui CK, Bowden S, Zhang HY, Wong A, **Lewin S**, Rousseau F, Mommeja-Marin H, Lee NP, Luk JM, Locarnini S, Leung N, Naoumov NV, Lau GK. Comparison of real-time PCR assays for monitoring serum hepatitis B virus DNA levels during antiviral therapy. *J Clin Microbiol*. 2006 Aug;44(8):2983-7. **IF 3.537 (C x 0)**
39. Visvanathan K, Skinner N, Thompson AJV, Riordan SM, Sozzi T, Edwards R, Kurtovic J, Chang J, **Lewin S**, Desmond P, and Locarnini S. 2006. Regulation of Toll-like receptor-2 expression in chronic hepatitis B by the precore protein. *Hepatology* 45(1):102-110 **IF 9.792 (C x 0)**
40. Cameron PU, Handley AJ, Baylis DC, Solomon AE, Bernard N, Purcell DF, **Lewin SR**. Preferential infection of dendritic cells during HIV-1 infection of blood leukocytes. *J Virol*. 2007;81(5):2297-306.
41. Dyer WB, Pett SL, Sullivan JS, Emery S, Cooper DA, Kelleher AD, Lloyd A, **Lewin SR**. 2007. Substantial improvements in performance indicators achieved in a PBMC cryopreservation quality assurance program using single donor samples. *Clinical and Vaccine Immunol* 14(1):52-9
42. Lau GKK, Cooksley H, Ribeiro RM, Power KA, Shudo E, Bowden S, Hui CK, Mommeja-Marin H, Sorbel J, Mondou E, Rousseau F, **Lewin S**, Perelson AS, Locarnini S, Naoumov N. Impact of early viral kinetics on T-cell reactivity during antiviral therapy in chronic hepatitis. *Antiviral Therapy* 2007; 12(5):705-18 **IF:5.286**
43. Shehu-Xhilaga M, Kent S, Dale J, de Kretser D, Ellis S, O'Bryan M, Cameron P, **Lewin SR**, Hedger M. SIV and SHIV infection in the male genital tract. *Retrovirology* 2007;4(1):7. **IF 2.98**
44. Ellery PJ, Tippett E, Chiu YL, Paukovics G, Cameron PU, Solomon A, **Lewin SR**, Gorry PR, Jaworowski A, Greene WC, Sonza S, Crowe SM. The CD16+ Monocyte Subset Is More Permissive to Infection and Preferentially Harbors HIV-1 In Vivo. *J Immunol*. 2007 May 15;178(10):6581-9. **IF:6.387**
45. PA Revill, M Littlejohn, A Ayres, L Yuen, D Colledge, A Bartholomeusz, J Sasaduesz, **SR Lewin**, GJ Dore, GV Matthews, CL Thio, SA Locarnini¹. Identification of a Novel HBV PreCore/Core Deletion Mutant in HIV/HBV Co-Infected Individuals *AIDS* 2007; 21(13):1701-10. **IF: 5.63**
46. Singh KP, Howard JL, Wild SP, Jones SL, Hoy J, **Lewin SR**. Human cytomegalovirus (CMV)-specific CD8+ T-cell responses are reduced in HIV-infected individuals with a history of CMV disease despite CD4+ T-cell recovery. *Clin Immunol* 2007; 124(2):200-6
47. Giles ML, Garland SM, **Lewin SR**, Hellard ME. What are the barriers to offering HIV testing in an antenatal setting? A national study of obstetricians from a developed country. *AIDS* 2007; 21(12):1601-1606. **IF: 5.63**

48. JJ Chang , AJV Thompson , K Visvanathan, SJ Kent, PU Cameron, F Wightman, P Desmond, SA Locarnini and **SR Lewin**. 2007. The phenotype of Hepatitis B Virus (HBV)-specific T-cells differ in the liver and blood in chronic HBV infection. *Hepatology* 2007 46(5):1332-40. **IF: 9.792**
49. Cooper DA, Cahn P, **Lewin S**, Kaldor J, McClure C, Kort R, Boyd. 2007. The Sydney declaration: a call to scale up research. *Lancet* 370(9581): 7-8. **IF:25.8**
50. Gorry PR, McPhee DA, Verity E, Dyer WB, Wesselingh SL, Learmont J, Sullivan JS, Roche M, Zaunders JJ, Gabuzda D, Crowe SM, Mills J, **Lewin SR**, Brew BJ, Cunningham AL, Churchill MJ. Pathogenicity and immunogenicity of attenuated, nef-deleted HIV-1 strains in vivo. *Retrovirology*. 2007 Sep 23;4(1):66. **IF: 2.98**
51. Saleh S, Solomon A, Wightman F, Xhilaga M, Cameron PU, **Lewin SR**. CCR7 ligands CCL19 and CCL21 increase permissiveness of resting memory CD4+ T-cells to HIV-1 infection: a novel model of HIV-1 latency. *Blood*. 2007; 110(13):4161-4. **IF: 10.838**
52. **SR Lewin**, JM Murray, A Solomon, F Wightman, PU Cameron, DJ Purcell, JJ Zaunders, P Grey, M Bloch, D Smith, DA Cooper, AD Kelleher. Virological determinants of success following structured treatment interruptions of antiretrovirals in acute HIV-1 infection. *J Acq Immunodef* 2008;47(2):140-47
53. Sida MM, Mijch AM, **Lewin SR**, Hoy JF, Hocking J and Fairley CK. Incidence of putative HIV superinfection and sexual practices among HIV-infected men who have sex with men. *HIV Med* 2008; 5(1):61-7
54. Giles M, McDonald A, Elliott EJ, Ziegler JB, Hellard M, **Lewin SR**, Kaldor J. Variable uptake of recommended interventions to reduce perinatal HIV transmission in Australia 1982-2005. *Med J Aust* 2008 Aug 4;189(3):151-4
55. Cherry C, Mills J, Hoy J, Krum H, **Lewin SR**. Phase 1 single dose studies to optimize the pharmacokinetics of DG17, a novel HIV-protease inhibitor pro-drug, using sodium bicarbonate and ritonavir. *Current HIV Research* 2008;6(3):272-5.
56. Sasadeusz J, Audsley J, Mijch A, Baden R, Caro J, Hunter H, Matthews G, McMahon MA, Olender SA, Siliciano RF, **Lewin SR** and Thio CL. The anti-HIV activity of Entecavir: a multicentre evaluation of lamivudine-experienced and -naïve patients. *AIDS*. 2008;22(8):947-55.
57. S Preiss, M Littlejohn, P Angus, A Thompson, P Desmond, **SR Lewin**, J Sasadeusz, G Matthews, G Dore, T Shaw, V Sozzi, L Yuen, G Lau, CK Hui, C Thio, A Avihingsanon, K Ruxrungtham, S Locarnini and PA Revill. 2008. Defective HBV DNA is not associated with disease status, but is reduced by HBV polymerase mutations associated with antiviral resistance. *Hepatology* April 21st epub. **IF: 10.446**
58. Matthews GV, Avihingsanon A, **Lewin SR**, Amin J, Rerknimitr R, Petcharapirat P, Marks, Sasadeusz J, Cooper DA, Bowden S, Locarnini S, Ruxrungtham K, Dore GJ. 2008. A randomised trial of combination Hepatitis B therapy in HIV/HBV coinfecting antiretroviral naïve individuals in Thailand. 2008 *Hepatology* Aug 11 epub. **IF: 10.446**.
59. Fairley CK, Fehler G, **Lewin SR**, Pitts M, Chen MY, Bradshaw CS, Hocking JS. Sexually transmissible infection and HIV management among men who have sex with men with and without HIV: survey of medical practitioners who are members of the Australasian Society for HIV Medicine. *Sex Health*. 2008 Jun;5(2):155-9
60. Audsley J, Arrifin N, Yuen L, Ayres A, Crowe S, Bartholomeuz A, Mijch A, Locarnini SA, **Lewin SR**, Sasadeusz J. Prolonged use of Tenofovir in HIV-HBV co-infected individuals does not lead to HBV polymerase mutations and is associated with persistence of Lamivudine HBV polymerase mutations. *HIV Med* 2009 Apr;10(4):229-35

61. Crane M, Oliver B, Matthews G, Avihingsanon A, Ubolyam S, Markovska V, Chang JJ, Dore GJ, Price P, Visvanathan K, French M, Ruxrungtham K, **Lewin SR**. Immunopathogenesis of hepatic flare in HIV-Hepatitis B Virus (HBV) co-infected individuals following initiation of HBV-active antiretroviral therapy. *J Infect Dis* 2009; 199(7):974-81
62. **Lewin SR**, Ribeiro RM, Avihingsanon A, Bowden S, Matthews G, Marks P, Locarnini SA, Ruxrungtham K, Perelson AS, Dore GJ. Viral dynamics of hepatitis B virus (HBV) DNA in HIV-1-HBV co-infected individuals: similar effectiveness of lamivudine, tenofovir or combination therapy. *Hepatology* 2009 Apr;49(4):1113-21
63. Giles M, **Lewin SR**, O'Brien M, Hellard M. The 'work' of women when considering and using interventions to reduce mother to child transmission (MTCT) of HIV. *AIDS Care* 21(10):1230-7
64. Giles ML, Pedrana A, Jones C, Garland S, Hellard M, **Lewin SR**. Antenatal screening practice for infectious diseases by general practitioners in Australia. *Aust N Z J Obstet Gynaecol.* 2009 Feb;49(1):39-44.
65. Westhorpe CLV, Webster NL, Kalionis B, **Lewin SR**, Jaworowski A, Muller WA, Crowe SM. Effects of HIV-1 infection in vitro on transendothelial migration by monocytes and monocyte-derived macrophages. *J Leuk Biol* 2009 (in press, accepted 26/2/09).
66. Matthews GV, Seaberg E, Tang Y, Philp F, Sasadeusz J, Marks P, Bowden S, Locarnini SA, **Lewin SR**, Dore GJ, Thio C. Combination HBV therapy is linked to greater HBV DNA suppression in a cohort of lamivudine-experienced HIV/HBV co-infected individuals. *AIDS* 2009; 23(13):1707-15
67. Shehu-Xhilaga M, Rhodes D, Wightman F, Liu HB, Solomon A, Saleh S, Dear A, Cameron PU, **Lewin SR**. The novel histone deacetylase inhibitors metacept-1 and metacept-3 potentially increase HIV-1 transcription in latently infected cells. *AIDS* 2009 (July 15 epub)
68. Chang JJ, Sirivichayakul S, Avihingsanon A, Thompson AJV, Revill P, Iser D, Slavin J, Buranapraditkun S, Marks P, Matthews G, Cooper DA, Kent SJ, Cameron PU, Sasadeusz J, Desmond P, Locarnini S, Dore GJ, Ruxrungtham K, Lewin SR. Impaired Quality of the HBV-Specific T-Cell Response in HIV-1-HBV Co-Infection. *J Virol* 2009; 83(15):7649-58.
69. Van der Meulen J, Mifsud NA, Abud D, Paul E, Varney MD, Lewin SR, Cameron PU, Kotsimbos TC. Differential dynamics of donor DC and non-DC peripheral blood mononuclear cell microchimerism in lung transplantation. *Clin Immunol.* 2009 Aug 18 (epub).
70. Crane M, Sirivichayakul S, Chang JJ, Avihingsanon A, Ubolyam S, Buranapraditkun S, Thantiworasit P, Wightman F, Locarnini SA, Matthews G, Dore GJ, Ruxrungtham K, Lewin SR. No increase in HBV-specific CD8+ T cells in patients with HIV-1-1 HBV co-infection following HBV-active HAART. *J Virol* 2009 (in press)
71. Thompson AJV, Nguyen T, Iser D, Ayres A, Littlejohn M, Slavin J, Bowden S, Gane EJ, Abbott W, Lau GKK, Lewin SR, Visvanathan K, Desmond PV, Locarnini SA. Levels of HBsAg and HBeAg vary independently of viral replication *in vivo*: Implications for patient management. *Hepatology* 2010 (in press)
72. Cornall A, Sharma L, Solomon A, Gorry PR, Crowe SM, Cameron PU and Lewin SR. A novel, rapid method to detect infectious HIV-1 from plasma from persons infected with HIV-1. *J Virol Methods* 2010 (in press)

REVIEWS:

73. **Lewin SR**, Crowe SM. 1994. AIDS pathogenesis. *AIDS* (suppl 2):S1-S11 **IF:**

5.835

74. **Lewin SR**, Yung A, Crowe SM. 1994. Recognising infections in the immunocompromised patient. *Current Therapeutics* 1:17-21.
75. **Lewin SR**, Crowe S, Chambers DE, Cooper DA. 1997. Antiretroviral therapies for HIV. In Stewart G (ed.). *Managing HIV*. Australian Medical Publishing Company Limited, Sydney, Australia. 45-55. **IF: 2.127**.
76. **Lewin SR** and Bowden S. 2002. Viral dynamics. *Australian Microbiology* (in press)
77. Cooley L and **Lewin SR**. 2003. HIV viral entry inhibitors. *J Clin Virol* 2003 26(2):121-32 **IF: 2.623**.
78. **Lewin SR**, Walters T and Locarnini. 2003. Hepatitis B viral dynamics. *Antiviral Research* 55(3):381-96 **IF: 3.406**
79. Visvanathan K and **Lewin SR**. 2006. Immunopathogenesis of Hepatitis B virus: Role of Innate & Adaptive Immune Responses. *Semin in Liver Dis*. 26(2):104-15 **IF: 3.752**
80. Giles ML, Hellard M, **Lewin SR**, Mijch A. 2006. The evidence for a change in antenatal HIV screening policy in Australia. *Med J Aust*. 185(4):217-20. **IF: 2.217**
81. Chang JJ and **Lewin SR**. 2007. The immunopathogenesis of hepatitis B virus infection. *Immunol Cell Biol* 85(1):16-23 **IF: 1.854**.
82. Chen L, Hoy J and Lewin SR. 2007. New drugs, old drugs: treatment of HIV infection. *Med J Aust* 186(3):146-51. **IF 2.127**
83. **Lewin SR**, Kaldor JM, Cooper DA. 2006. HIV research in Australia: Translating basic research into clinical and public health outcomes. *Retrovirology*. 1;3:86. **IF: 2.98**
84. Evans V, Cameron PU, **Lewin SR**. Thymic DCs: phenotype, function and Localisation. *Clin Immunol* 2008 Jan;126(1):1-12.
85. Desmond CP, Bartholomeusz A, Gaudieri S, Revill PA and **Lewin SR**. A systematic review of T-cell epitopes in hepatitis B virus: identification, genotypic variation and relevance to antiviral therapeutics. *Antiviral Therapy*, 2008;13: 161-175
86. Crane M, Matthews G, **Lewin SR**. Hepatitis virus immune restoration disease in the liver. *Current Opinion in HIV and AIDS*, 2008. **3(4)**: p. 446-452
87. Iser D, **Lewin SR**. Immunopathogenesis of HIV-Hepatitis B virus co-infection. *Antiviral Therapy*, 2009;14(2):155-64
88. Patricia Price, **Sharon Lewin**, David Murdoch, Upasna Agarwal, Julian Elliot, Martyn French. Immune Restoration Disease is a collection of syndromes with distinct immunopathological aetiologies. *Clinical Microbiology Reviews* 2009 (in press)
89. Iser D, **Lewin SR**. Future directions in the treatment of HIV-HBV co-infection. *HIV Therapy* 2009 (in press, accepted)
90. Iser D, **Lewin SR**. Treatment of Hepatitis B Virus (HBV) in the Setting of HIV-HBV Co-infection. *Asian Biomedicine* 2009 (in press, accepted)

RESEARCH BOOK:

91. **Lewin SR** and Hoy JF (editors). 2003. *HIV Management in Australasia*. Published by the Australasian Society of HIV Medicine.
92. **Lewin SR**, Post J, Street A and Hoy JF (editors). 2009. *HIV Management in Australasia*. Published by the Australasian Society of HIV Medicine.

BOOK CHAPTERS:

93. **Lewin SR** and Markowitz M. 1999. HIV Pathogenesis. In Humes HD (ed.). *Kelley's*

- Textbook of Internal Medicine, 4th edition. pages 2316-2319.
94. **Lewin SR** and Ho DD. 2002. AIDS Pathogenesis. *In* Crowe SM, Hoy J, Mills J (ed.). Management of the HIV infected patient. Pages 35-50.
 95. **Lewin SR**. Urinary tract infections. 2001. *In* Yung A, Street A, Johnson P (ed). Clinical Approach to Infectious Diseases, 1st edition.
 96. **Lewin SR**. Urinary tract infections. 2005. *In* Yung A, Street A, Johnson P (ed). Clinical Approach to Infectious Diseases, 2nd edition.
 97. Bartholomeusz A, Chang JJ, Locarnini SA, **Lewin SR**. Hepatitis B Virus Pathogenesis. 2006 *In* *Zakim and Boyer's Hepatology*, 5th ed. Boyer TD, Wright TL, and Manns MP, eds. Saunders Elsevier, Philadelphia, PA. 635-663.
 98. Giles M, Audsley J, Lewin SR. Lamivudine. 2009. *In* Crowe S, Mills J, Grayson L (ed). Kucers' Use of Antibiotics, 6th edition (in press)
 99. Gorry P, Ellett A, Lewin SR. Maraviroc. 2009. *In* Crowe S, Mills J, Grayson L (ed). Kucers' Use of Antibiotics, 6th edition (in press)

OTHER PUBLICATIONS (letters):

100. **Lewin SR**, Street AC, Snider J. 1993. Suppurative Thyroiditis due to *Nocardia Asteroides*. *J Infection* May:339-340
101. **Lewin SR**, Street AC. 1995. Maintenance therapy with fluconazole for disseminated histoplasmosis. *Aust NZ J Med* 25(1):56.
102. Lim L, Street AC, **Lewin SR**. 2001. Pneumocystis carinii pneumonia after cessation of secondary prophylaxis in a patient on highly active antiretroviral therapy with a CD4 cell count greater than 200/mm³. *AIDS*. 15(14):1912-3
103. Worth L, Street A, Elliot J, Anderson J, **Lewin SR**. 2003. A cautionary tale: fatal lactic acidosis complicating nucleoside analogue and metformin therapy. *Clin Infect Dis*. 37:315-6
104. Baker M, Allen P, Shortt J, **Lewin SR**, Spencer A. 2007. Immune Recovery Uveitis in an HIV-Negative Individual. *Clin Exp Ophthal* 35(2):189-90.
105. Chang CC, McLean C, Vujovic O, Jenney A, Short M, Lyon S, Storey E, **Lewin SR**. Fatal acute varicella-zoster virus haemorrhagic meningomyelitis with necrotising vasculitis in an HIV-infected patient. *Clin Infect Dis* 2009 Feb 1;48(3):372-3.
106. Wright E, Cameron P, Reis E, Lewin SR. ASHM conference report 2009. HIV Therapy 2009 (in press)

RESEARCH SUPPORT

Ongoing Research Support

National Health and Medical Research Council, Program Grant #358399, 2005-2009

A Cunningham, B Brew, S Crowe, **SR Lewin**, B Slobedman, S Wesselingh
Pathogenesis of persistent human viral infections of global significance. \$2 million per year.
\$210,000 per year to SR Lewin.

Role: CI

National Health and Medical Research Council of Australia, Practitioner Fellowship #478100 2008-2013

Lewin SR. The Alfred Hospital and Monash University.

This grant provides salary and infrastructure support to Professor Lewin's laboratory.

\$75,000 per year

Role: PI

**National Health and Medical Research Council of Australia, Project Grant #491154
2008-2011**

Lewin SR, Cameron PU, Jaworski A.

Modulation of HIV-1 latency by chemokines and dendritic cells.

Role: CIA

Total: \$364,875

**National Health and Medical Research Council of Australia, Project Grant #455231
2008-2011**

Zaunders J, Murray J, Suzuki K (Lewin SR, Kelleher AD).

Processes underlying establishment & maintenance of the latent HIV reservoir & potential impact of integrase inhibitors.

Role: AI

Total: 305,500

**National Institutes of Health RO1 1 R01 AI060449
2004-2009**

SA Locarnini, C Thio, D Thomas, SR Lewin, J Sasadeusz, G Dore, D Cooper. The Natural History and Virology of HIV-HBV co-infection. \$500,000 USD per year. \$15,000 USD per year to S Lewin

Role: Co-investigator

**Roche FIND awards
2007-2008**

SR Lewin, SM Crowe. Viral fitness of T-20 resistant isolates. Total \$25,000

Role: PI

**American Foundation for AIDS Research (AmFAR) #106867
2007-2009**

M Xhilaga (mentor SR Lewin). Viral persistence in the male genital tract in RT-SHIV infected macaques treated with HAART. \$200,000 USD

**Medical Research Commercialisation Fund (Brandon Capital)
2008-2009**

SR Lewin. Development of a rapid test for HIV-1 co-receptor use. \$500,000 total

NHMRC Australian Clinical Research Fellowship ID# 433938

2007 – 2010

I Stratov (Mentor: SR Lewin and M Hogarth); \$70,000 per year over 4 years

Ramaciotti Award, Reference# RA36

2008

I Stratov, SJ Kent and SR Lewin. Evaluation of Immunity to HIV, \$30,000

Australian Centre for HIV and Hepatitis (ACH2)

Munn A, Mak J, Lewin SR. Effect of a novel anti-HIV compound on early events in infection. \$140,000 July 2008 – Dec 2009

Australian Centre for HIV and Hepatitis (ACH2)

Suhrbier A, Lewin SR. Novel use of chaperonin 10 to ameliorate endotoxin-induced immune activation and HIV replication. \$150,000. July 2008 – Dec 2009

Australian Centre for HIV and Hepatitis (ACH2)

Gorry P, Tachedjian G, Churchill M, Lewin SR. In vitro assay for assessment of resistance to the CCR5 antagonist maraviroc. \$140,000. July 2008 – Dec 2009

ANZ Trustees Ltd Small Grant

Kidd S, Chang C, Lewin SR. Cryptococcal Meningitis Immune Restoration Disease – Genotyping Study. \$16,000. Jan 2010 – Jan 2011

Completed Research Support

**National Health and Medical Research Council of Australia (NHMRC #977347)
1993-1996**

Postgraduate fellowship: **SR Lewin**. HIV infection of the lung.
This grant supported Professor Lewin's PhD studies at the Burnet Institute
Role: PI.

**National Health and Medical Research Council of Australia (NHMRC #938151)
1997-2001**

CJ Martin post-doctoral fellowship: **SR Lewin**. T cell dynamics in HIV infection.
This grant supported Professor Lewin's post-doctoral training at the Aaron Diamond AIDS Research Centre and the University of Melbourne
Role: PI.

**The Ian Potter Foundation:
1999-2001**

Fellowship in Infectious Diseases. **SR Lewin**. The role of the thymus in HIV-1 infection.
This grant supported studies in T cell turnover in HIV infection
Role: PI.

**The Wellcome Trust: #061013
2000-2002**

SR Lewin, PU Cameron, SJ Kent, C Cheers. Equipment Award for Biomedical Research in Australia:
This grant funded the establishment of a real-time PCR facility at the University of Melbourne
Role: PI.

**ANZ (Australia and New Zealand Bank) Trustees: Equipment Grant 2000.
2001-2002**

SR Lewin.
This grant funded equipment to establish Professor Lewin's laboratory following her return from the United States to Australia
Role: PI.

Cora Brennan Trust

2003

SR Lewin. Equipment to establish PC3 facility at the Burnet Institute. \$25,000

Role: PI

The National Institutes of Health: R01 – S146964-03

1999-2004

LQ Zhang, **SR Lewin** and L Chakrabati. Contribution of the thymus to the pathogenesis of SIV infection

This project investigates the role of the thymus in CD4 decline following SIV infection of macaques

Role: co-investigator.

National Health and Medical Research Council, Project Grant # 145802

2002-2004

SR Lewin. Thymic function in HIV-1 infection.

This project will characterize the immunological and virological determinants of responses to antiviral therapy for HIV

Role: PI.

Victor Hurley Foundation, The Royal Melbourne Hospital.

2002-2003

SR Lewin, J Sasadeusz, S Locarnini. The effect of HIV infection on viral kinetics of Hepatitis B (HBV).

This project will investigate the viral dynamic parameters of HBV in the setting of co-infection with HIV

Role: PI.

National Institutes of Health 1 R21 AI054207-01A1

2003-2005

P Gorry, SM Crowe, **SR Lewin,** D Purcell. Pathogenesis of macrophage tropic HIV-1.

This grant will investigate the mechanism of pathogenicity of macrophage tropic HIV-1 and how this evolves with disease progression. \$150,000 USD per year

Role: Co-investigator.

NHMRC Equipment Grant (Monash University)

2005

SR Lewin, S Wesselingh, S Crowe, J Rowlands, R O'Hehir, S Jackson, BH Toh.

Purchase of high speed cell sorter. \$272,000

Role: CI

Collier Trust

2005

SR Lewin. O Morrissey.

Purchase of automated magnetic bead cell sorter (autoMACS). \$20,000

Role: PI

Royal Womens Hospital Research and Education services

2005

Giles M and **Lewin SR.** Women, HIV and reproduction in Australia. \$5000

**Department of Human Services Public Health Research Projects
2005**

Hellard M, Giles M and **Lewin SR**. Barriers to implementation of a universal antenatal HIV screening policy in Australia. \$27,827.

**Syd and Ann Wellard Perpetual Trust
2005**

SR Lewin. PU Cameron.

Purchase of -70 freezer, incubator and biohazard containment hood. \$33,750

Role: PI

**National Health and Medical Research Council, Project Grant. #251563
2003-2006**

(now rolled into NHMRC Program Grant on HIV vaccines). Kent SJ, Purcell DFJ, **Lewin SR**. Determinants of the clearance of HIV infected cells by successful AIDS vaccines.

This project will characterize latent reservoirs of SIV infection following vaccination with DNA and fowlpox constructs and SIV challenge

Role: Co-investigator.

**National Institutes of Health R21 AI055379-01 A1
2004-2006**

SR Lewin, GJ Dore, R Ffrench, SJ Kent, SA Locarnini

The effect of HIV infection on the immunopathogenesis of Hepatitis B virus. \$150,000 USD per year

Role: PI

**Gilead Pharmaceuticals
2003-2006**

G Dore, **SR Lewin**, J Sasadeusz, SA Locarnini. The role of combination lamivudine and tenofovir in the treatment of HIV-HBV co-infection.

Role: PI

**Cellestis Pharmaceutcials
2004-2006**

SR Lewin. Reconstitution of CMV-specific immunity in HIV disease. \$30,000 total

Role: PI

**Immunovirology Research Network, Australian Centre for HIV and hepatitis
2006**

Lewin SR and Gorry P. The role of viral fitness in HIV disease progression, \$60,000

**National Health and Medical Research Council of Australia, CCRE #219275
2003-2007**

Brown GV, **Lewin SR**, Sasadeusz J, Slavin M, Torresi J, Biggs BA, Campbell D, Rogerson SJ.

Title: Centre for Clinical Research Excellence in Infectious Diseases

This grant provides funding for salaries to train clinician scientists in infectious diseases

Role: Co-investigator.

American Foundation for AIDS Research (AmFAR) #106715-40

2006-2007

SR Lewin. The role of CCR7 ligands and dendritic cells in latent HIV infection.

\$120,000USD

Role: PI

Roche PILLAR awards

2006-2007

SR Lewin, S Mallal, G Lau, S Locarnini, C desmond, S Roberts. Identification of hepatitis B virus adaptation to host HLA-restricted immune responses in vivo. \$40,000 total

Role: PI

Other professional involvement:

Postgraduate and Undergraduate students supervised since 1999:

- 2000 Dr Tomos Walters. HBV viral dynamics. Bachelor of Medical Science, Faculty of Medicine, The University of Melbourne. First Class honors
- 2002 Mr Ming Lee Goh. Development of a novel quantitative real-time PCR assay for the detection and quantification of integrated HIV DNA. Bachelor of Medical Science, Faculty of Medicine, The University of Melbourne.
- 2003 Ms Judy Chang. HBV-specific T cell immunity, Bachelor of Science (Honors), Department of Microbiology and Immunology, The University of Melbourne. First Class Honors (3rd in year)
- 2004 Ms Judy Chang. HBV-specific T cell immunity, PhD, Department of Microbiology and Immunology, The University of Melbourne, passed April 2008.
- 2004 Ms Natalie Lane. HIV envelope evolution. Bachelor of Science (Honors), Department of Immunology and Pathology, Monash University. First Class Honors
- 2005 Dr Michelle Giles, HIV and pregnancy in Australia, PhD, Department of Medicine, Monash University, passed January 2009
- 2005 Dr David Iser. Interactions between HIV and Hepatitis B Virus, PhD, Department of Medicine, St Vincents Hospital, The University of Melbourne, 2005-2008
- 2005 Dr Ben Cowie, Epidemiology of hepatitis B virus in Victoria. PhD, University of Melbourne (co-supervisor)
- 2005 Ms Vanessa Evans. The role of thymic dendritic cells in HIV pathogenesis. Department of Immunology, Monash University, First class honors.,
- 2006 Ms Vanessa Evans. Thymic dendritic cells and HIV infection. PhD, Department of Medicine, Monash University, 2006-2009
- 2006 Dr Christopher Desmond. Pathogenesis of Hepatitis B virus infection. PhD, Department of Medicine, Monash University, 2006-2009
- 2006 Ms Emma Tippet, Macrophages and HIV infection, PhD, Department of Medicine, Monash University, 2005-2008 (co-supervisor)
- 2007 Ms Melissa Chow. The role of CCR7 ligands in HIV latency. Honours (H2A), Department of Immunology, Monash University
- 2007 Ms Reena Rajasuriar. The role of IL-7 in immune reconstitution. PhD. Department of Medicine, Monash University

- 2008 Chitra Chandran, Histone Deacetylase inhibitors and HIV infection. Masters of Business and Commercialisation. Faculty of Business and Economics, Monash University
- 2008 Ashley Lam, Histone Deacetylase inhibitors and HIV infection. Masters of Business and Commercialisation. Faculty of Business and Economics, Monash University
- 2008 Gregor Lichtfuss. PhD. Department of Medicine, Monash University
- 2008 Wilson Chong. HIV in pregnancy. Bachelor of Medical Science, Monash University
- 2009 Natalia Martinez, Development of a novel assay to determine HIV coreceptor use. Faculty of Business and Economics, Monash University
- 2009 Wai Lau, Development of a novel assay to determine HIV coreceptor use. Faculty of Business and Economics, Monash University
- 2009 Ms Gabriella Khoury. PhD. The role of naïve T-cells in HIV persistence on antiviral treatment. Department of Medicine, Monash University
- 2009 Dr Christina Chang, PhD. Cryptococcal Immune Restoration Disease in HIV infection. Department of Medicine, Monash University

Local, National and International Profile:

Invitations to Major National and international Scientific Meetings:

- 1998 The role of the thymus in HIV infection.
Center for AIDS Research (CFAR), Columbia-Rockefeller Universities, New York, December
- 1999 The role of the thymus in HIV infection
Gordon Research Conference. The Chemotherapy of AIDS. Ventura, California, (chaired by Nobel Prize laureate, Dr David Baltimore)
- 1999 Consideration of the thymus in HIV vaccine development (plenary lecture).
National Institutes of Health, AIDS Vaccine Committee, Bethesda, Maryland
- 1999 HIV Viral Dynamics T cell dynamics in HIV infection.
The Fifth International Conference on AIDS in Asia-Pacific, Kuala Lumpur, October, 1999 (session chair and discussant)
- 1999 The role of the thymus in HIV infection (plenary lecture)
Australasian Society for HIV Medicine, Perth, December
- 2001 The role of the thymus in immune reconstitution in HIV infection (plenary lecture) Sixth International Conference on AIDS and the second AIDS Symposium at Chung San Medical and Dental College, Taichung, Taiwan, March
- 2001 New Targets for HIV-1 Antiviral Therapy (plenary lecture)
Structured Treatment Interruptions: scientific rationale (plenary lecture)
The Origin and Fate of T cells in HIV-1 infection
Australasian Society for HIV Medicine, Melbourne, October, 2001 (session chair and discussant)

- 2001 Introduction to HIV Immunology.
Update on HIV Pathogenesis
The Sixth International Conference on AIDS in Asia-Pacific, Melbourne
- 2002 Immunopathogenesis of HIV infection: Impact on Therapy and Outcome
(plenary lecture).
Australasian Society for Infectious Diseases, Barossa Valley, Adelaide
- 2002 Hepatitis B virus dynamics. (plenary lecture)
Ninth Conference of Antiretroviral testing, Melbourne
- 2002 T cell turnover in HIV infection: consensus and controversy
Australasian Society for HIV Medicine, Sydney, (also plenary chair)
- 2003 Hepatitis B Virus Dynamics (invited presentation)
11th International Symposium on Viral Hepatitis and Liver Disease, Sydney
- 2003 Mechanisms of CD4+ T-cell decline in HIV infection (invited symposium
speaker). Australian Society for HIV Medicine, Canberra, 2003
- 2003 HIV-hepatitis immunopathogenesis (keynote speaker).
4th Australasian Hepatitis C Conference, Canberra
- 2004 Hepatitis B and C viral dynamics (key note speaker and member, international
faculty). Asia Pacific Society for the Study of Liver Disease, New Delhi, India.
- 2004 HIV-HBV co-infection: natural history, virology and immunology (keynote
speaker). Second Shanghai-Hong Kong International Liver Meeting. Hong
Kong
- 2004 Pathogenesis of HIV-hepatitis co-infection (invited plenary speaker)
Australian Centre for HIV and Hepatitis, Barossa Valley
- 2005 HIV pathogenesis (plenary speaker). Australasian Society for Infectious
Diseases Annual Scientific Meeting Busselton Western Australia. October
- 2006 Determinants of HIV-related immune reconstitution (plenary speaker).
9th Bangkok HIV symposium, Bangkok
- 2006 Establishment of a National QA program for PBMC collection in Australia
(invited speaker), Laboratory Workshop, 9th Bangkok HIV symposium
- 2006 The adaptive immune response to hepatitis B virus infection (keynote
speaker). Immunopathogenesis of HIV-HBV co-infection (invited speaker)
Third Shanghai-Hong Kong International Liver Congress. Shanghai
- 2006 The adaptive immune response to hepatitis B virus infection (keynote
speaker), Pohang University T-cell Workshop

- 2006 The adaptive immune response to hepatitis B virus infection (keynote speaker), Korean Society for Immunology. Seoul
- 2007 HIV immune restoration disease (workshop speaker)
10th Bangkok HIV Symposium, Bangkok
- 2007 HIV-hepatitis co-infection (invited plenary speaker, declined)
Australasian Society for Infectious Diseases, Hobart
- 2007 Management of HIV infection: diagnosis, pediatrics and pregnancy,
Australia India Council, Ahmdabahd, Bhopal and Pune, India
- 2007 HIV immune failure and immune reconstitution (plenary speaker).
10th Bangkok HIV Symposium. Bangkok, January, 2007
- 2007 Management of HIV infection (invited speaker)
International Conference for AIDS in the Asia Pacific (ICAAP), Sri Lanka,
(declined)
- 2007 Management of HIV-HBV co-infection (invited symposium speaker).
Australian Gastrointestinal Week, Perth
- 2008 HIV latency: a novel in vitro model. (invited seminar)
Aaron Diamond AIDS Research Centre, New York, NY. February
- 2008 HIV latency: a novel in vitro model. (invited seminar)
University of Montreal, Montreal, Canada.
- 2008 HIV reservoirs (invited plenary speaker). Indian HIV Congress 2008, Mumbai
- 2008 HIV and solid organ transplantation (invited speaker)
Indian HIV Congress 2008, Mumbai
- 2008 HIV latency and reservoirs (invited speaker)
Innate Sculpting of Adaptive Immunity. Hamilton island
- 2008 Optimising antiretroviral dosing: (invited symposium speaker)
Australian Society for Infectious Diseases, Sunshine Coast
- 2008 HIV-hepatitis B co-infection (invited symposium speaker)
Australian Society for Medical Research, Melbourne
- 2008 HIV: will there ever be a cure? (invited plenary speaker)
Australian Society of Medical Students Annual Conference
- 2009 HIV pathogenesis, treatment and resistance (invited plenary speaker)
Australian Society for Antimicrobials (ASA), Melbourne
- 2009 HIV-HBV pathogenesis (invited symposium speaker), 5th IAS Conference on
HIV Pathogenesis, Treatment and Prevention

- 2009 Complex interactions in immune response to HIV and HBV (invited speaker). US Japan Cooperative Medical Science Program “Co-infection with HIV and Hepatitis Viruses: an Asian Perspective”, Portland, Oregon, September, 2009
- 2009 HIV latency and barriers to eradication (invited plenary speaker). Australasian Society for HIV Medicine Conference, Brisbane, September 2009
- 2009 The role of the male genital tract as a persistent HIV reservoir. American Foundation for AIDS Research (AmFAR) think tank. Endicott House, Boston, MA, September 2009
- 2009 HIV: will there ever be a cure? Royal Brisbane Hospital Health Care Symposium (invited plenary speaker), Brisbane, October 2009
- 2010 Management of HIV-HBV co-infection (invited plenary speaker, all costs paid). 13th HIV Bangkok Symposium, Bangkok, January, 2010
- 2010 Adaptive immunity in the liver (invited symposium speaker, all costs paid). Asia Pacific Association for the Study of Liver Disease, Beijing, March 2010
- 2010 State of the epidemic: towards a cure (invited plenary speaker, all costs paid). XIII International AIDS Conference, Vienna, Austria, July 2010
- 2010 HIV Reservoirs @ AIDS 2010: why & what? IAS Pre-Conference Workshop: “Towards a Cure”: HIV Reservoirs and Strategies to Control them (organized by Nobel Prize Laureate Françoise Barre-Sinoussi), Vienna, Austria, July 2010
- 2011 Pathogenesis of HIV-hepatitis B co-infection. 7th Australasian Conference on Viral Hepatitis, Melbourne, Sept, 2010

Peer Review Activities:

Editorial Boards

- 2004 Member Editorial Board, Sexual Health
 2009 Member Editorial Board, AIDS Care and Sexual Health
 2010 Member Editorial Board, Clinical Immunology

Journal Reviews:

Ad hoc reviewer:

- Journal of Infectious Diseases/Clinical Infectious Diseases: 2/year
 Antiviral Therapy: 3/year
 J Hepatology: 3 / year
 AIDS Research and Human Retroviruses: 5/year
 AIDS: 2/year
 Journal of Clinical Virology: 3/year
 Journal of AIDS: 5/year
 Clinical Immunology 3/yr

Clinical Infectious Diseases 3/yr
Sexual Health 2/yr
Blood: 2/yr

Occasional reviews:

Proceedings of the National Academy of Sciences
Journal of Experimental Medicine
Nature Reviews Drug Discovery
Hepatology
Journal of Theoretical Biology
Human Reproduction
Vaccine

Funding body reviews

1999 Invited reviewer, NHMRC Project Grants
2003 Invited reviewer, NHMRC Program Grant
2004 Invited reviewer, Career Scientist Awards and Project Grants, The Ontario HIV Treatment Network, Canada.
2004 Invited reviewer, NHMRC Fellowship Grants
2004 Invited reviewer, NHMRC Centre for Clinical Research Excellence Grants
2005 Invited reviewer, MRC Project/Program Grants, United Kingdom
2005 Invited reviewer, Wellcome Trust Grants, United Kingdom
2006 Member, Grant Review Panel Microbiology, NHMRC
2007 Invited Reviewer, National Medical Research Council, Singapore
2009 Deputy Chair, Grant Review Panel Microbiology, NHMRC
2009 Member, NHMRC Clinical Training Fellowship award panel
2010 Invited member, Review panel, NHMRC Centre for Research Excellence (invitation declined)

Government Advisory Bodies

2004-2007 Member, HIV Committee, Ministerial Advisory Committee on AIDS, Sexual Health and Hepatitis. This is the peak body that advises the Australian Health Minister on all matters related to HIV in Australia
2004- Member, Selection Committee, HIV Case Advisory Panel, Victorian Department of Human Services
2004 Member, Steering Committee, HIV Integrated Service Model, Victorian Department of Human Services
2007 Member, Executive Committee, Ministerial Advisory Committee on AIDS, Sexual Health and Hepatitis. This is the peak body that advises the Australian Health Minister on all matters related to HIV and viral hepatitis in Australia
2008 Member, Cellular Therapies Advisory Committee, National Health and Medical Research Council
2008 Member, Grants Review Panel (Microbiology), National Health and Medical Research Council
2009 Member, Ministerial Advisory Committee on Blood Borne Viruses and Sexually Transmitted infections. This is the new peak body that advises Nicola Roxon on all matters related to HIV and viral hepatitis in Australia. There are 18 members of this advisory group

Community based activities

Leadership Victoria: invited participant. Leadership Victoria aims to promote greater community involvement of emerging leaders in all aspects of Victorian life: cultural, artistic, sport, science and economic

2009 Invited Speaker, Australian Medical Association Women in Medicine Series, November, Melbourne