Curriculum vitae - Professor David Lewis:

<u>Career summary</u>: Prof David Lewis has worked in the field of sexually transmitted infections (STIs) and blood-borne viruses (BBVs) in a variety of clinical, microbiological and public health roles for over 30 years. He is an elected a Fellow of the Royal Colleges of Physicians (UK) and the Australasian Chapter of Sexual Health Medicine.

He qualified as a doctor in the UK in 1987, obtained the Diploma of Tropical Medicine & Hygiene and Membership of the Royal Colleges of Physicians (UK) and, subsequently, undertook specialist training in Microbiology (MSc in Clinical Microbiology) and Genitourinary Medicine (GUM) (Diploma in GUM, with distinction). In 1997, he was awarded a competitive 3-year Wellcome Trust Training Fellowship in Clinical Tropical Medicine to undertake a PhD on the molecular pathogenesis of Haemophilus ducreyi within Imperial College, London (UK) and University of Texas Southwestern Medical Centre, Dallas (USA). He worked within UK National Health Service as a Consultant STI/HIV (GUM) in London for 4 years, until he moved to South Africa to lead the work of the STI Reference Centre, and subsequently the newly created Centre for HIV and STIs, at the National Institute for Communicable Diseases in Johannesburg. This role provided substantial experience in STI/HIV related surveillance, STI syndromic management and, importantly, public health leadership at the national and regional level. During this time, he established clinical, aetiological and gonococcal antimicrobial resistance surveillance programmes within South Africa. He also supported the WHO's efforts to re-establish GASP activities in Africa, assisting countries with STI surveys and undertaking in-country training of clinical and laboratory staff.

Since 2014, Prof. Lewis has held the position of Director of Western Sydney Sexual Health Centre (WSSHC), which is a publicly funded Sexual Health service providing care for approximately 4,150 outpatients annually (>17,800 occasions of service/year). The Centre's patient cohort includes approximately 500 patients living with HIV, a small number of whom are co-infected with hepatitis B or C. Many of the Centre's patients are born overseas, reflecting the culturally- and linguistically-diverse population that it serves. WSSHC focuses on caring for defined priority populations, including men-who-have-sex-with-men (MSM), transgender clients, sex workers and injecting drug users. As well as providing clinical management for STI, HIV and hepatitis B/C co-infections, WSSHC staff have initiated HIV PrEP in over 1,000 MSM and transwomen since 2017.

Prof. Lewis holds academic appointments as a Conjoint Professor at the University of Sydney (Australia) and as an Honorary Professor at the University of Cape Town (South Africa). His department implements the University of Sydney's Masters Course in Sexual and Reproductive Health (150 enrolments in 2021), with pathways for Advanced HIV (incorporating viral hepatitis), Advanced STIs and Public Health.

Research overview, output, support and collaborations: Prof Lewis' STI/HIV research interests focus on antimicrobial resistance, ano-genital discharge and ulcerative syndromes, surveillance, diagnostics, and biomedical HIV prevention strategies. He has experience in undertaking HIV/STI-related clinical trials, quantitative and to a lesser extent, qualitative research. He is regarded as a world expert on gonorrhoea and tropical genital ulcers. He has almost 200 publications, mostly in the field of STI/HIV and within peer-reviewed journals. He speaks frequently at international and national scientific meetings. Over the past decade, he has undertaken research in collaboration with colleagues at the Universities of Cape Town and the Witwatersrand (South Africa), the Centers for Disease Control and Prevention (US), the

University of Versailles-Saint Quentin (France), Örebro University (Sweden), The Wellcome Trust Sanger Institute (UK), Public Health England (UK) and the London School of Hygiene and Tropical Medicine (UK). Since his move to Australia in 2014, he has established collaborations with researchers at several Australian Universities (Melbourne, Monash, UNSW, UQ, USYD). In the past 5 years, he has been Principal or co-Investigator on competitive research proposals awarded more than AUD 16 million in funding.

Contribution to the field of research: Since 2011, Prof Lewis has published data on the high prevalence of fluoroquinolone resistance in South Africa and Uganda, and reported the first case of cefixime treatment failure in Africa. He championed the re-establishment of WHO's Gonococcal Antimicrobial Susceptibility Programme in Africa and was actively involved in the design of the WHO's Action Plan to Control the Spread and Impact of Antimicrobial Resistance in N. gonorrhoeae (published in 2012). His research and surveillance findings played a key role in modifying the 2014 South African treatment guidelines for the presumptive treatment of gonorrhoea and genital ulceration. He was a leading member of the study team that reported, in 2013, a substantial impact of voluntary medical male circumcision (VMMC) on reducing HIV prevalence in circumcised men, particularly younger men, and also among women within South Africa's Orange Farm community. This flagship project has received international acclaim from donors and public health organizations, including UNAIDS and WHO. Study findings have influenced VMMC programme policy in several African countries. Within Australia, he was a site Principal Investigator for a large HIV PrEP roll-out clinical trial (EPIC-NSW), a randomised placebo-controlled trial to determine optimal treatment for rectal chlamydia and his Centre is one of four sites for the GoGoVax randomised placebo controlled trial to investigate the efficacy of the Bexsero® 4CMenB vaccine in reducing gonorrhoea incidence.

International standing, professional involvement, peer review: Prof. Lewis is an internationally recognised expert and leading thinker in the Sexual Health field, as evidenced by his appointment as Director for the International Union against STIs' (IUSTI) Africa region (2005-2013), his subsequent election as IUSTI-World President (2013-2017), his election to the International Executive Committee of the International Society for STD Research (2007-2013) and his election to the International Society for Infectious Diseases' Council (2020-2026). He has extensive experience in chairing and supporting national/international conferences, predominantly in the STI field. He has undertaken almost 30 assignments for WHO in Temporary Technical Advisor, Expert Advisory Panel Member or other roles since 2005. He has provided technical assistance for health departments/ministries in several countries (Australia, Madagascar, Namibia, South Africa, Tanzania and Zimbabwe). He has been active in STI guideline development at local, national and global levels and is a current member of the WHO's STI Guideline Development Group. He supports the work of nongovernmental organizations and community groups within Australia in respect of STI and BBV infections, and more recently, the impact of COVID-19 on STI/BBV service provision (ASHM International Advisory Board, ACON-hosted Asian Gay Men's Action Group).

<u>Supervision and mentoring</u>: Prof Lewis has currently supervises two University of Sydney PhD students. He also supports other researchers in a mentoring (trainees, co-workers) and an external advisory capacity (National Survey of Sexual Attitudes and Lifestyles (NATSAL 4), UK; NHMRC Centre for Research Excellence in Aboriginal Sexual Health and Blood Borne Viruses, Australia). He has many years' experience of contributing to workforce capacity building/strengthening in areas such as clinical management, research and surveillance programmes.

Research Grants (2017-2021)

- 1. "Building institutional capacity to strengthen sexual health services in the SE Asia region". Funded by the Australian Department of Foreign Affairs and Trade to host 15 participants from Indonesia, Cambodia and Timor-Leste in Round 17 of the Australia Awards (Coapplicant, Lead applicant Shailendra Sawleshwarkar) (2017-2018)
- 2. "Building institutional capacity to strengthen sexual health services in the Pacific region". Funded by the Australian Department of Foreign Affairs and Trade to host 15 participants from PNG, Solomon Islands and Fiji in Round 17 of the Australia Awards (Co-applicant, Lead applicant Shailendra Sawleshwarkar) (2017-2018)
- 3. "Use of molecular resistance assays to provide alterative oral treatment strategies for gonorrhoea in Indigenous and other high-risk populations; a randomised cluster trial". Funding from the Australian National Health and Medical Research Council (Chief Investigator H, CI-A David Whiley) (2017-2021).
- 4. "A randomized controlled trial of daily antimicrobial mouthwash to reduce pharyngeal gonorrhoea among men who have sex with men". Funding from the Australian National Health and Medical Research Council (Chief Investigator F, CI-A Eric Chow) (2017-2019)
- 5. "A randomized controlled trial (RCT) of azithromycin versus doxycycline for the treatment of rectal chlamydia infection in men who have sex with men". Funding from the Australian National Health and Medical Research Council (Associate Investigator, CI-A Jane Hocking) (2017-2019)
- 6. "A GIFT (Genital Inflammation Test) for HIV prevention". Funding from the South African Medical Research Council to support GIFT device validation and pilot rollout studies (Co-Investigator, Co-Principal Investigators Jo-Ann Passmore and Lindi Masson) (2017-2020)
- 7. NSW Health Prevention Research Support Program (PRSP) Round 5. Funding from the NSW Ministry of Health (Co-applicant with V. Sintchenko, T. Sorrell, L. Gilbert, J. Iredell, D. Dwyer, S. Chen, C. Webb, M. Douglas, W. Meyer, M. O'Sullivan, D. Lewis, J. Kok) (2017-2021)
- 8. "Modelling response strategies to inform future public health interventions against emergence and spread of extensively drug resistant gonorrhoea". Triple I seed grant from University of New South Wales (co-PI, Principal PI David Regan) (2018-2019)
- 9. "Modelling the impact of strategies to control gonorrhoea and minimise the threat of antimicrobial resistance in remote Indigenous and other high risk populations". Funding from the Australian National Health and Medical Research Council (Chief Investigator H, CI-A David Regan) (2018-2020)
- 10. "Antibiotic treatment of male partners to reduce recurrence of bacterial vaginosis in women: a randomised double-blind controlled trial". Funding from the Australian National

- Health and Medical Research Council (Chief Investigator E, CI-A Catriona Bradshaw) (2018-2020)
- 11. "ARC Research Hub to Combat Antimicrobial Resistance". Funding from the Industrial Transformation Research Hubs scheme of the Australian Research Council (Researcher [Other Organizations], Lead Investigator, Rebecca Guy) (2019-2024)
- 12. "Defining pathways of epithelial spread of Herpes simplex virus after genital infection" Funding from the Australian National Health and Medical Research Council (Associate Investigator, CI-A Anthony Cunningham) (2019-2023)
- 13. "A multicentre randomised controlled trial evaluating the efficacy of the meningococcal B vaccine, 4CMenB (Bexsero), against Neisseria gonorrhoeae infection in gay and bisexual men". Funding from the Australian National Health and Medical Research Council (Chief Investigator E, CI-A Kate Seib) (2020-2023)
- 14. "The development of novel pharmacokinetic techniques to optimise treatment and reduce antimicrobial resistance for sexually transmitted infections (STIs)" (Associate Investigator, CI-A Fabian Kong) (2020-2022)

Research Publications (2017 to 2021)

A. Original Articles

- 1. Goire N, Kundu R, Trembizki E, Buckley C, Hogan TR, **Lewis DA**, Branley JM, Whiley DM, Lahra, MM. Mixed gonococcal infections in a high-risk population, Sydney, Australia 2015: implications for antimicrobial resistance surveillance? J. Antimicrob. Chemother. 2017;**72**:407-409
- 2. Maraux B, Lissouba P, Rain-Taljaard R, Taljaard D, Bouscaillou J, **Lewis DA**, Puren A, Auvert B. Women's knowledge and perception of male circumcision before and after its roll-out in the South African township of Orange Farm from community-based cross-sectional surveys. PLoS ONE 2017;**12**(3):e0173595
- 3. **Lewis DA**. Antimicrobial resistance surveillance for Neisseria gonorrhoeae what do we really need to know in order to guide public health interventions? Sex. Transm. Dis. 2017;44:202-204
- 4. Lau A, Kong F, Fairley CK, Donovan B, Chen M, Bradshaw C, Boyd M, Amin J, Timms P, Tabrizi S, Regan DG, **Lewis DA**, McNulty A, Hocking JS. Treatment efficacy of azithromycin 1g single dose versus doxycycline 100mg twice daily for 7 days for the treatment of rectal chlamydia among men who have sex with men a double blind randomised controlled trial protocol. BMC Infect Dis. 2017;17:35
- 5. Callander D, Read P, Prestage G, Minichiello V, Chow E, **Lewis D**, McNulty A, Hammad A, Hellard M, Guy R, Donovan B. A cross-sectional study of HIV and sexually transmissible infections among male sex workers attending Australian sexual health clinics. Sex. Transm. Infect. 2017:**93**:299-302
- 6. Chow EPF, Walker S, Hocking JS, Bradshaw CS, Chen MY, Law MG, Tabrizi SN, Howden BP, Law MG, Maddaford K, Read TRH, **Lewis DA**, Whiley DM, Zhang L, Gruhlich AE, Kaldor JM, Cornelisse VJ, Phillips S, Donovan B, McNulty AM, Templeton DJ, Roth N, Moore R, Fairley CK. A multicentre double-blind randomised controlled trial evaluating the efficacy of daily use of antibacterial mouthwash against oropharyngeal gonorrhoea among men who have sex with men: the OMEGA (Oral Mouthwash use to Eradicate GonorrhoeA) study protocol. BMC Infect. Dis. 2017;**17**:456
- 7. Chow EPF, Callander D, Fairley CK, Zhang L, Donovan B, Guy R, **Lewis DA**, Hellard M, Read P, Ward A, Chen MY. Increased syphilis testing of men who have sex with men: greater detection of asymptomatic early syphilis and relative reduction in secondary syphilis. Clin. Infect. Dis. 2017;65:389-395
- 8. Hadfield J, Harris SR, Seth-Smith HMB, Parmar S, Andersson P, Giffard PM, Schachter J, Moncada J, Ellison L, Vaulet MLG, Fermepin MR, Radebe F, Mendoza S, Ouburg S, Morré SA, Sachse K, Puolakkainen M, Korhonen SJ, Sonnex C, Wiggins R, Jalal H, Brunelli T, Casprini P, Pitt R, Ison C, Savicheva A, Shipitsyna E, Hadad R, Kari L, Burton MJ, Mabey D, Solomon AW, **Lewis D**, Marsh P, Unemo M, Clarke IN, Parkhill J, Thomson

- NR. Comprehensive global genome dynamics of Chlamydia trachomatis show ancient diversification followed by contemporary mixing and recent lineage expansion. Genome Res. 2017;27:1220-1229
- 9. Alirol E, Wi TE, Bala M, Bazzo ML, Chen X, Deal C, Dillon JR, Kularatne R, Heim J, Hooft van Huijsduijnen R, Hook EW, Lahra MM, **Lewis DA**, Ndowa F, Shafer WM, Tayler L, Workowski K, Unemo M, Balasegaram M. Multidrug-resistant gonorrhea: A research and development roadmap to discover new medicines. PLoS Med 2017;14(7):e1002366
- 10. Tomlins L, Sawleshwarkar S, **Lewis DA**. Responding to Australia's chlamydial epidemic. Medicine Today 2017;**18**:54-57
- 11. Zhang L, Regan DG, Chow EPF, Gambhir M, Cornelisse V, Gruhlich A, Ong J, **Lewis DA**, Hocking J, Fairley CK. Neisseria gonorrhoeae transmission among men who have sex with men: an anatomical site-specific mathematical model evaluating the potential preventive impact of mouthwash. Sex. Transm. Dis. 2017;**44**:586-592
- 12. Lennard K, Dabee S, Barnabas SL, Havyarimana E, Blakney A, Jaumdally SZ, Botha G, Mkhize NN, Bekker L, **Lewis DA**, Gray G, Mulder N, Passmore JS, Jaspan H. Microbial composition predicts genital tract inflammation and persistent bacterial vaginosis in South African adolescent females. Infection and Immunity 2017;86:e00410-00417
- 13. Rietmeijer CA, Mungati M, Machiha A, Mugurungi O, Kupara V, Rodgers L, Kilmarx PH, Herman-Roloff A, Gonese E, Tippett-Barr BA, Shambira G, **Lewis DA**, Handsfield HH, Tshimanga M. The etiology of male urethral discharge in Zimbabwe: results of the Zimbabwe STI Etiology Study. Sex. Transm. Dis. 2018;**45**:56-60
- 14. Mungati M, Machiha A, Mugurungi O, Tshimanga M, Kilmarx PH, Nyakura J, Shambira G, Kupara V, **Lewis DA**, Gonese E, Tippett-Barr BA, Handsfield HH, Rietmeijer CA. The etiology of genital ulcer disease and coinfections with Chlamydia trachomatis and Neisseria gonorrhoeae in Zimbabwe: Results from the Zimbabwe STI Etiology Study. Sex. Transm. Dis. 2018;**45**:61-68
- 15. Mbulawa ZZA, Van Schalkwyk C, Hu N, Meiring TL, Barnabas S, Dabee S, Jaspan H, Kriek J, Jaumdally SZ, Muller E, Bekker L, **Lewis DA**, Dietrich J, Gray G, Passmore JS, Williamson A. High human papillomavirus (HPV) prevalence in South African adolescents and young women encourages expanded HPV vaccination campaigns. PLoS One 2018;**13**:e0190166
- 16. Callander D, McManus H, Guy R, Hellard M, O'Connor CC, Fairley CK, Chow EPF, McNulty A, **Lewis DA**, Carmody C, Schmidt HMA, Kim J, Donovan B. Rising chlamydia and gonorrhoea incidence and associated risk factors among female sex workers in Australia: a retrospective cohort study. Sex. Transm. Dis. 2018;**45**:199-206
- 17. Jamil MS, McManus H, Callander D, Prestage G, Ali H, O'Connor CC, Chen M, McNulty AM, Knight V, Duck T, Keen P, Gray J, Medland N, Hellard M, **Lewis DA**, Grulich AE, Kaldor JM, Fairley CK, Donovan B, Guy RJ. Understanding the targeting and uptake of HIV testing among gay and bisexual men attending sexual health clinics. AIDS Behav. 2018;22:513-521

- 18. Kularatne RS, Müller EE, Maseko DV, Kufa-Chakezha T, **Lewis DA**. Trends in the prevalence of genital ulcer disease pathogens and association with HIV infection in Johannesburg, South Africa 2007-2015. PLoS One 2018;**13**(4):e0194125
- 19. Barnabas SL, Dabee S, Passmore JS, Jaspan HB, Lewis DA, Jaumdally SZ, Gamieldien H, Masson L, Muller E, Maseko VD, Mkhize N, Mbulawa Z, Williamson A, Gray CM, Hope TJ, Chiodi F, Dietrich J, Gray G, Bekker L. Converging epidemics of sexually transmitted infections and bacterial vaginosis in southern African female adolescents at risk of HIV. Int. J. STD AIDS 2018:29:531-539
- 20. Kilmarx PH, Gonese E, **Lewis DA**, Chirenje ZM, Tippett-Barr BA, Latif AS, Gwanzura L, Handsfield HH, Machiha A, Mugurungi O, Rietmeijer CA. HIV Infection in patients with sexually transmitted infections in Zimbabwe results from the Zimbabwe STI etiology study. PLoS ONE 2018;**13**(6):e0198683
- 21. Cornelisse VJ, Walker S, Phillips T, Hocking JS, Bradshaw CS, **Lewis DA**, Grulich AE, Fairley CK, Chow EPF. Risk factors for oro-pharyngeal gonorrhoea in men who have sex with men: an age matched case-control study. Sex. Transm. Infect. 2018;**94**:359-364
- 22. Balle C, Lennard K, Dabee S, Barnabas SL, Jaumdally SZ, Gasper MA, Maseko V, Mbulawa ZZA, Williamson A, Bekker L, **Lewis DA**, Passmore JS, Jaspan HB. Endocervical and vaginal microbiota in South African adolescents with asymptomatic Chlamydia trachomatis infection. Sci Rep 2018;**8**:11109
- 23. Couldwell DL, Jalocon D, Power M, Jeoffreys NJ, Chen SC, **Lewis DA**. Mycoplasma genitalium: high prevalence of resistance to macrolides and frequent anorectal infection in men who have sex with men in western Sydney. Sex. Transm. Infect. 2018;**94**:406-410
- 24. Grulich AE, Guy R, Amin J, Jin F, Selvey C, Holden J, Schmidt HA, Zablotska I, Price K, Whittaker B, Chant K, Cooper C, McGill S, Telfer B, Yeung B, Levitt G, Ogilvie EE, Dharan NJ, Hammoud MA, Vaccher S, Watchirs-Smith L, McNulty A, Smith DJ, Allen DM, Baker D, Bloch M, Bopage RI, Brown K, Carr A, Carmody CJ, Collins KL, Finlayson R, Foster R, Jackson EY, **Lewis DA**, Lusk J, O'Connor CC, Ryder N, Vlahakis E, Read P, Cooper DA. Population-level effectiveness of rapid, targeted, high-coverage roll-out of HIV pre-exposure prophylaxis in men who have sex with men: the EPIC-NSW prospective cohort study. Lancet HIV 2018;**5**(11):e629-e637
- 25. Kaida A, Dietrich JJ, Laher F, Beksinka M, Jaggernath M, Bardsley M, Smith P, Cotton L, Chitneni P, Closson K, **Lewis DA**, Smit J, Ndung'u T, Brockman M, Gray G. A high burden of asymptomatic genital tract infections undermines the syndromic management approach among adolescents and young adults in South Africa: implications for HIV prevention efforts. BMC Infect. Dis. 2018;**18**:499
- 26. Rametse CL, Adefuye AO, Olivier AJ, Curry L, Gamieldien H, Burgers WA, **Lewis DA**, Williamson A, Katz AA, Passmore JS. Inflammatory cytokine profiles of semen influence cytokine responses of cervicovaginal epithelial cells. Front. Immunol. 2018;**9**:2721

- 27. Venter JME, Mahlangu P, Müller E, **Lewis DA**, Rebe K, Struthers H, McIntyre J, Kularatne R. Comparison of an in-house real-time duplex PCR assay with commercial HOLOGIC[®] APTIMA assays for the detection of *Neisseria gonorrhoeae* and *Chlamydia trachomatis* in urine and extra-genital specimens. BMC Infect. Dis. 2019:19(1):6
- 28. Müller EE, Mahlangu MP, **Lewis DA**, Kularatne RS. Macrolide and fluoroquinolone resistance-associated mutations in *Mycoplasma genitalium* in Johannesburg, South Africa 2007-2014. BMC Infect. Dis. 2019;**19**:148
- 29. McManus H, Callandar D, Donovan B, Russell D, O'Connor CC, Davies SC, **Lewis DA**, Hellard ME, Chen M, Petoumenos K, Varma R, Cogle A, Boyd MA, Vlahakis E, Gruhlich AE, Pollard J, Medland NA, Fairley CK, Guy RJ. Early initiation of antiretroviral therapy for people newly diagnosed with HIV infection in Australia: trends and predictors, 2004-2015. Med J Aust 2019;**210**:269-275
- 30. Dabee S, Barnabas SL, Lennard KS, Jaumdally SZ, Gamieldien H, Balle C, Happel AU, Murugan BD, Williamson A, Mkhize N, Dietrich J, **Lewis DA**, Chiodi F, Hope TJ, Shattock R, Gray G, Bekker L, Jaspan HB, Passmore JS. Defining characteristics of genital health in South African adolescent girls and young women at high risk for HIV infection. PLoS ONE 2019;14:e0213975
- 31. Rietmeijer CA, Mungati M, Kilmarx PH, Tippett Barr B, Gonese E, Kularatne RS, **Lewis DA**, Klausner JD, Rodgers L, Handsfield HH. Serological Markers for Syphilis Among Persons Presenting with Syndromes Associated with Sexually Transmitted Infections Results from the Zimbabwe STI Etiology Study. Sex. Transm. Dis. 2019;**46**:579-583
- 32. Lennard K, Dabee S, Barnabas S, Havyarimana E, Blakney A, Jaumdally SZ, Botha G, Mkhize NN, Bekker L, **Lewis DA**, Gray G, Mulder N, Passmore J, Jaspan H. Vaginal microbiota varies by geographical location in South African women. South African Journal for Science and Technology 2019;38(1)
- 33. Rietmeijer CA, Mungati M, Kilmarx PH, Tippett Barr B, Gonese E, Kularatne RS, **Lewis DA**, Klausner JD, Rodgers L, Handsfield HH. Performance of a dual human immunodeficiency virus/syphilis rapid test compared to conventional serological testing for syphilis and HIV in a laboratory setting results of the Zimbabwe STI Etiology Study. Sex. Transm. Dis 2019;**46**:584-587
- 34. **Lewis DA**. New treatment options for *Neisseria gonorrhoeae* in the era of emerging antimicrobial resistance. Sex. Health 2019;16:449-456
- 35. **Lewis DA**. Disentangling the tangled web of *Neisseria gonorrhoeae* transmission: how important are oro-pharyngeal infections? Sex. Transm. Infect. 2019;**95**:365-396
- 36. Gray CM, O'Hagan KL, Lorenzo-Redondo R, Olivier AJ, Amu S, Chigorimbo-Tsikiwa N, Harryparsad R, Sebaa S, Maziya L, Dietrich J, Otwombe K, Martinson N, Ferrian S, Mkhize NN, **Lewis DA**, Lang D, Carias AM, Jaspan HB, Wilson DPK, McGilvray M, Cianci GC, Anderson MR, Dinh MH, Williamson AL, Passmore JS, Chiodi F, Hope TJ. Impact of chemokine C-C ligand 27, foreskin anatomy and sexually transmitted infections

- on HIV-1 target cell availability in adolescent South African males. Mucosal Immunology 2020;**13**:118-127
- 37. Murray D, Mao L, Wong T-H, Chen T, Mackie B, Kao S-C, Haque AH, Dabbhadatta J, Prihaswan P, Stackpool G, Brooks M, Brown G, **Lewis D**. High levels of engagement with testing for HIV and sexually transmissible infection among gay Asian men in Sydney and Melbourne: an observational study. Sexual Health 2020;**17**:121-128.
- 38. Ooi C, Kong FYS, **Lewis DA**, Hocking JS. Prevalence of sexually transmissible infections and HIV in men attending sex-on-premises venues in Australia: a systematic review and meta-analysis of observational studies. Sexual Health 2020;**17**:135-148
- 39. Chitneni P, Beksinska M, Dietrich JJ, Jaggernath M, Closson K, Smith P, **Lewis D**, Matthews LT, Smit J, Ndung'u T, Brockman M, Gray G, Kaida A. Partner notification and treatment practices among South African adolescents and young adults diagnosed with a sexually transmitted infection via laboratory-based screening. Int. J. STD AIDS 2020;**31**:627-636
- 40. Lau A, King FYS, Fairley CK, Templeton DJ, Amin J, Boyd MA, Bradshaw C, Chen MY, Donovan B, Khaw C, **Lewis DA**, McNulty A, Regan DG, Ratnayake M, Hocking JS. Factors associated with early resumption of condomless anal sex among men who have sex with men after rectal chlamydia treatment. Sex. Transm. Dis. 2020;47:389-394
- 41. Richardson D, Chan H, Bopage R, **Lewis DA**, Sawleshwarkar S, Chung C, Kok J. HIV-1 subtype variability and transmitted drug resistance in a culturally diverse population in Western Sydney, New South Wales, Australia. Sexual Health 2020;**17**:377-380
- 42. Dabee S, Mkhize NN, Jaspan HB, **Lewis DA**, Gumbi PP, Jo-Ann S. Passmore JS. Initiation of antiretroviral therapy differentially influences genital and systemic immune activation in HIV-infected women. AIDS Res. Hum. Retrovir. 2020;**36**:821-830
- 43. Richardson D, **Lewis DA**, Jeoffreys NJ, Couldwell DL. Mycoplasma genitalium co-infection in men with symptomatic gonococcal urethritis. Sex. Transm. Infect. 2021;97:363-367
- 44. Ogunbodede OT, Zablotska-Manos I, **Lewis DA**. Potential and demonstrated impacts of the COVID-19 pandemic on sexually transmissible infections. Curr. Opin. Infect. Dis. 2021;**34**:56-61 (+ re-published in Curr. Opin. HIV AIDS 2021;**16**:115-120)
- 45. Hughes Y, **Lewis DA**. HSV associated proctitis presenting without perianal lesions: why testing and empirical treatment may be important. BMJ Case Rep 2021;**14**:e237247
- 46. Chow EPF, Williamson DA, Hocking JS, Law MG, Maddaford K, Bradshaw CS, McNulty A, Templeton DJ, Moore R, Murray GL, Danielewski JA, Wigan R, Chen MY, Guy RJ, Zhang L, Donovan B, Grulich AE, Kaldor JM, Whiley DM, Cornelisse VJ, Howden BP, Lewis DA, Read TRH, Fairley CK. Antiseptic mouthwash for gonorrhoea prevention (OMEGA): a randomised, double-blind, parallel-group, multicentre trial. Lancet Infect. Dis. 2021;21:647-656

- 47. Armstrong BH, Limnios A, Lewis DA, Hogan T, Kundu R, Ray S, Shoushtari M, El Nasser J, Driscoll T, Lahra MM. Is gentamicin a viable therapeutic option for treating resistant Neisseria gonorrhoeae in NSW? Commun Dis Intell (2018) 2021;Feb 26;45.
- 48. Herbert SE, Puhr R, Petoumenos K, **Lewis DA**, Varma R, Couldwell DL, Law M, Templeton D. Characteristics of heterosexually-acquired compared to homosexually-acquired HIV and implications for clinical practice: results from the Australian HIV observational database. AIDS Care 2021 pre-pub; DOI: 10.1080/09540121.2021.1884181.
- 49. Bavinton BR, Vaccher S, Jin F, Prestage GP, Holt M, Zablotska-Manos IB, Guy R, Amin J, Templeton DJ, Yeung B, Hammoud MA, **Lewis D**, Baker D, Dharan N, McNulty AM, Grulich AE. High levels of prevention-effective adherence to HIV pre-exposure prophylaxis (PrEP): An analysis of sub-study data from the EPIC-NSW trial. J. Acquir. Immune. Defic. Syndr. 2021;87(4):1040-1047
- 50. Ubrihien AJ, Gwynne K, **Lewis DA**. Enabling culturally safe sexual health services in western Sydney: a protocol to improve STI treatment outcomes for Aboriginal young people. Pilot Feasibility Stud. 2021;7:106
- 51. Seth-Smith HMB, Bénard A, Bruisten SM, Versteeg B, Herrmann B, Kok J, Carter I, Peuchant O, Bébéar C, **Lewis DA**, Puerta T, Kese D, Balla E, Zákoucká H, Rob F, Morré SA, de Barbeyrac B, Galán JC, de Vries HJC, Thomson NR, Goldenberger D, Egli A. Ongoing evolution of Chlamydia trachomatis lymphogranuloma venereum: exploring the genomic diversity of circulating strains. Microbial Genomics 2021;7:000599
- 52. Lau A, Kong FYS, Fairley CK, Templeton DJ, Amin J, Philips S, Law M, Chen MY, Bradshaw CS, Donovan B, McNulty A Boyd MA, Timms P, Chow EPF, Regan DG, Khaw C, **Lewis DA**, Kaldor J, Ratnayake M, Carvhalo N, Hocking JS. Azithromycin or doxycycline for asymptomatic rectal *Chlamydia trachomatis*. N. Engl. J. Med. 2021;384:2418-2427
- 53. Grulich AE, Jin F, Bavinton BR, Yeung B, Hammoud MA, Amin J, Cabrera G, Clackett S, Ogilvie E, Vaccher S, Vickers T, McNulty A, Smith DJ, Dharan NJ, Selvey C, Power C, Price K, Zablotska I, Baker DA, Bloch M, Brown K, Carmody C, Carr A, Chaniseff D, Doong N, Finlayson R, **Lewis DA**, Lusk J, Martin S, Ooi C, Read P, Ryder N, Smith D, Soo CTM, Templeton DJ, Vlahakis E, Guy R. Long-term protection from HIV infection with oral HIV pre-exposure prophylaxis in gay and bisexual men: findings from the expanded and extended EPIC-NSW prospective implementation study. Lancet HIV 2021;8:e486-494
- 54. Ooi C, Donovan B, **Lewis DA.** Cross-sectional study of sexual behaviour and health of gay and bisexual men in suburban Sydney, New South Wales, Australia: contrasts between sex venue and clinic attendees. Sex. Health May 2021;**18**(3):248-253
- 55. Power M, Dong K, Walsh J, **Lewis D**, Richardson D. Barriers to targeted HIV testing in a culturally diverse urban setting in Australia: should we adopt routine HIV testing in priority settings. Sex. Health 2021 Jul 16. doi: 10.1071/SH20189. Online ahead of print.

B. Research Letters

- 1. Seth-Smith HM, Galán JC, Goldenberger D, **Lewis DA**, Peuchant O, Bébéar C, de Barbeyrac B, Bénard A, Carter I, Kok J, Bruisten SM, Versteeg B, Morré SA, Thomson NR, Egli A, de Vries HJ. Concern regarding the alleged spread of hypervirulent lymphogranuloma venereum Chlamydia trachomatis strain in Europe. Euro. Surv. 2017;22(15):pii30511
- 2. Gunaratnam P, McManus H, Watchirs-Smith L, McGregor S, Callander D, Brown G, Lobo R, O'Connor CC, Hellard M, Medland N, **Lewis D**, Palmer C, Law M, Gray R, Donovan B, Guy R. People born in non-English speaking countries are less likely to start HIV treatment early in Australia: A national cohort analysis, 2014-15. J. Acquir. Immun. Def. Syndr. 2018;77:e31-e34
- 3. Power M, Lewis DA, Richardson D. On-demand HIV pre-exposure prophylaxis: what are the healthcare workers' barriers to delivery in a culturally and linguistically diverse population? Sex. Transm. Infect. 2020;96:549
- 4. Hutchinson J, **Lewis D**, Law M, Bavinton B, Puhr R, Petoumenos K. Clinical characteristics of overseas born men who have sex with men (MSM) in the AHOD cohort and implications for clinical practice. Sex. Transm. Infect. 2020;**96**:469-470
- 5. Richardson D, Jaricha T, Power M, **Lewis D**. Team-huddles in sexual health clinics improve communication, clinic capacity & flow and team relationships. Sex. Transm. Infect. 2020;**96**:312
- 6. Richardson D Kumar P, Jaricha T, Walsh J, **Lewis DA**. Primary syphilis in men causes painful anogenital lesions and serology isn't always helpful. Sex. Transm. Infect. 2020;**96**:620
- 7. Richardson D, Shapiro J, **Lewis DA**, Zablotska I. Inconsistent HIV pre-exposure prophylaxis use and HIV transmission in men who have sex with men (MSM). J. Int. AIDS Soc. 2020;**23**:e25579
- 8. Richardson D, Pinto-Sander N, Kumar P, Jaricha T, Walsh J, **Lewis D**. How would sexual health clinicians manage first attendance of men who have sex with men with anogenital ulcers? Int. J. STD AIDS 2021;32:382-383
- 9. Shapiro J, Hoskins F, Bopage R, Chung C, Power M, Lewis DA, Richardson D. A pilot study: the influence of staff attitudes and beliefs on managing contacts of sexually transmitted infections. J. Pub Health 2021;43(1):e120.