

BIostatistics Unit: RESEARCH OUTPUTS 2007

1. PUBLICATIONS

1.1 INDEXED JOURNALS - INTERNATIONAL (FIRST AUTHOR)

1.2 INDEXED JOURNALS - INTERNATIONAL (CO-AUTHOR)

1. Van Vuuren B, Zinzen E, van Heerden HJ, **Becker PJ**, Meeusen R. Work and Family Support Systems and the Prevalence of Lower Back Problems in a South African Steel Industry. *J Occup Rehabil.* 2007 Sep;17(3):409-21.
2. Reyneke JP, Bryant RS, Suuronen R and **Becker PJ**. Postoperative skeletal stability following clockwise and counter-clockwise rotation of the maxillomandibular complex compared to conventional orthognathic treatment. *B J Oral Max Surg* 2007; 45(1): 56-64.
3. Naidoo D, Boon JM, Mieny CJ, **Becker PJ**, van Schoor AN. Relation of the external branch of the superior laryngeal nerve to the superior pole of the thyroid gland: An anatomical study. *Clin Anat* 2007; 20(5): 516-520.
4. Goddard A, Leisewitz A, Christopher M, Duncan N, and **Becker P**. Prognostic usefulness of blood leukocyte changes in canine parvoviral enteritis. *JVIM* 2007; *accepted 07-045R1*.
5. Van Vuuren B, Van Heerden HJ, **Becker PJ**, Zinzen E, Meeusen R. Lower Back Problems and Work-Related Risks in a South African Manganese Factory. *J Occup Rehabil.* 2007 Jun;17(2):199-211.
6. Van Aswegen H, Eales CJ, Richards GA, Goosen J, **Becker P**, Mudzi W. The effect of penetrating trunk trauma on the recovery of adult survivors: A pilot study. *Physio theory Prac J;* 2007. (*Accepted, publish April 2008*).
7. Shisana O, **Connolly C**, Rehle T, Mehtar S, Dana P. HIV Risk Exposure among South African children in public health facilities. *AIDS Care, Oct 2007. Accepted.*
8. Kilmarx PH, Blanchard K, Chaikummao S, Friedland BA, Srivirojana N, **Connolly C**, Witwatwongwana P, Supawitkul , Mock PA, Chaowanachan, T, Tappero J. A randomised placebo-controlled trial to assess the safety and acceptability of use of Carraguard ® vaginal gel by heterosexual couples in Thailand. *Sexually Transmitted Diseases, March 2008 35(3):226-232.*
9. Bollen LJM, Blanchard K, Kilmarx PH, Chaikummao S, **Connolly C**, Wasinrapee P, Srivirojana N, Achalapong J, Tappero J, McNicholl JM. No increase in cervicovaginal proinflammatory cytokines after Carraguard use in a placebo-controlled randomized clinical trial. *J Acquir Immune Defic Syndr.* 2008 Feb 1: 47(2): 253-257].

10. Colvin M, **Connolly C**, Madurai L. The epidemiology of HIV in South African workplaces. *AIDS*. 2007 Jul;21 Suppl 3:S13-9.
11. Taliep SM, **Galal U**, Vaughan CL. The position of the head and centre of mass during the front foot off-drive in skilled and less-skilled cricket batsmen. *Sports Biomechanics*. 2007;6:(3):345-360.
12. Plüddeman A, Parry CDH, Flisher AJ, **Jordaan E**. Heroin users in Cape Town, South Africa: Injecting practices, HIV-related risk behaviour, and other health consequences. *Jnl of Psychoactive Drugs*. Accepted.
13. Noakes TD, Borresen J, Hew-Butler T, Lambert MI, **Jordaan E**. Semmelweis and the aetiology of puerperal sepsis 160 years on: an historical review. *Epidemiol Infect*. 2008 Jan;136(1):1-9.
14. Harrison V, Fawcus S, **Jordaan E**. Magnesium supplementation and perinatal hypoxia: Outcome of a parallel group randomised trial in pregnancy. *BJOG*. 2007 Aug;114(8):994-1002.
15. Haines LM, **Kabera G**, Ndlovu P, O'Brien TE. D-optimal designs for logistic regression in two variables. *mODa 8 - Advances in Model-Oriented Design and Analysis*, 91-98. Eds J Lopez-Fidalgo, J M Rodriguez-Diaz, B Torsney. *Physica-Verlag, Heidelberg*, 2007. Accepted.
16. Seier JV, Mdhluli M, Collop T, Davids, **Laubscher R**. Voluntary consumption of substances of unknown palatability by vervet monkeys: a refinement. *J Med Primatol*. 37 (2008) 88-92.
17. Nannan N, Timaeus IM, **Laubscher R**, Bradshaw D. Levels and differentials in childhood mortality in South Africa, 1977-1998. *J Biosoc Sci*. 2007 July;39(4):613-632.
18. Colvin M, Chopra M, Doherty R, Jackson D, **Levin J**, Willumsen J, Goga A, Moodley P. Operational effectiveness of single-dose nevirapine in preventing mother-to-child transmission of HIV. *Bull World Health Organ*. 2007 Jun;85(6):466-473.
19. Dunkle KL, Jewkes R, Nduna M, Jama N, **Levin J**, Sikweyiya J, Goga A, Moodley P. Transactional sex with casual and main partners among young South African men in the rural Eastern Cape: Prevalence, predictors, and associations with gender-based violence. *Soc Sci Med*. 2007 Sep;65(6):1235-48.
20. Mathee A, Rollin H, **Levin J**, Naik I. Lead in paint: three decades later and still a hazard for African children? *Environ Health Perspect*. 2007 Mar;115(3):321-2.

21. Jackson DJ, Chopra M, Doherty TM, Colvin MS, **Levin JB**, Willumsen JF, Goga AE, Moodley P; for the Good Start Study Group. Operational effectiveness and 36 week HIV-free survival in the South African programme to prevent mother-to-child transmission of HIV-1. *AIDS*. 2007 Feb 19;21(4):509-16.
22. Rollin HB, Matthee A, **Levin J**, Theodoru P, Tassell H, Naik I. Examining the association between blood manganese and lead levels in schoolchildren in four selected regions of South Africa. *Environ Res*. 2007 Feb;103(2):160-7.
23. Dyer RA, Piercy JL, Reed AR, **Lombard C**, Schoeman L, James MF. Hemodynamic changes associated with spinal anesthesia for cesarean delivery in severe preeclampsia. *Anesthesiology*. *Accepted*.
24. Zwarenstein M, Bheekie A, **Lombard C**, Swingler G, Ehrlich R, Eccles M, Sladden M, Pather S, Grimshaw J, Oxman AD. Educational outreach to general practitioners reduces children's asthma symptoms: a cluster randomised controlled trial. *Implement Sci*. 2007 Sep 24;2(1):30.
25. Matthews S, Abrahams N, Martin LJ, **Lombard C**, Vetten L. Intimate Femicide-Suicide in South Africa. *Bulletin of the World Health Organization*. BLT/2007/043786. *Accepted*.
26. Dennison CR, Peer N, **Lombard CJ**, Kepe L, Levitt N, Steyn K, Hill MN. Cardiovascular Risk and Comorbid conditions among Black South Africans with hypertension in public and primary care settings: The HiHi Study. *Ethnicity & Disease, Vol.17, Summer 2007*.
27. Flisher AJ, Myer L, Marais A, **Lombard C**, Reddy P. Prevalence and correlates of partner violence among South African adolescents. *J Child Psychol Psychiatry*. 2007 Jun;48(6):619-27.
28. Den Boon S, Schalk Van Lill SWP, Borgdorff MW, Enarson DA, Verver S, Bateman ED, Irusen E, **Lombard CJ**, White NW, De Villiers C, Beyers N. High Prevalence of Tuberculosis in Previously Treated Patients, Cape Town, South Africa. *Emerg Infect Dis. Vol 13, No.8, August 2007*.
29. Den Boon S, Verver S, Marais BJ, Enarson DA, **Lombard CJ**, Bateman ED, Irusen E, Jithoo A, Gie RP, Borgdorff MW, Beyers N. Association between passive smoking and infection with Mycobacterium tuberculosis in children. *Pediatrics*. 2007 Apr;119(4):734-9.
30. Liang H, Flisher AJ, **Lombard CJ**. Bullying, violence, and risk behaviour in South African school students. *Child Abuse & Neglect* 31(2007) 161-171.

31. Zar HJ, Cotton MF, Strauss S, Karpakis J, Hussey G, Schaaf S, Rabie H, **Lombard CJ**. The effect of isoniazid prophylaxis on mortality and TB incidence in HIV-infected children – a randomized controlled trial. *BMJ*. 2007 Jan 20;334(7585):136.
32. Diacon AH, Patientia RF, Venter A, van Helden PD, Smith PJ, McIlleron H, **Maritz JS**, Donald PR. Early bactericidal activity of high-dose rifampin in patients with pulmonary tuberculosis evidenced by positive sputum smears. *Antimicrob Agents Chemother*. 2007 Aug;51(8):2994-6. Epub 2007 May 21.
33. Westaway MS, **Olorunju SA**, Rai LC. Which personal quality of life domains affect the happiness of older South Africans? *Qual Life Res*. 2007 Oct;16(8):1425-38. Epub 2007 Aug 14.
34. Burger HM, Abel S, Snijman PW, **Swanevelder S**, Gelderblom WC. Altered lipid parameters in hepatic subcellular membrane fractions induced by fumonisin B₁. *Lipids*. 2007 Apr; 42(3):249-61. Epub 2007 Feb 9.
35. Snijman PW, **Swanevelder S**, Joubert E, Green IR, Wentzel CA, Gelderblom. The antimutagenic activity of the major flavonoids of rooibos (*Aspalathus linearis*), some dose-response effects on mutagen activation-flavonoid interactions. *Mutat Res*. 2007 Jul 28;631(2):111-23. Epub 2007 Apr 21.
36. Savitz J, **van der Merwe L**, Ramesar R. Dysthymic and Anxiety-Related Personality Traits in Bipolar Spectrum Illness. *J Affect Disord*. 2008 Jan 11 [Epub ahead of print].
37. Langerak NG, Lamberts RP, Fieggen AG, Peter JC, **van der Merwe L**, Peacock WJ, Vaughan CL. A Prospective Study of Gait in Diplegic Cerebral Palsy Patients Twenty Years after Selective Dorsal Rhizotomy. *Journal of Neurosurgery*. Accepted.
38. Savitz J, **van der Merwe L**, Ramesar R. Hypomanic, Cyclothymic and Hostile Personality Traits in Bipolar Spectrum Illness: A Family Based Study. *J Psychiatr Res*. 2007. Dec 12. [Epub ahead of print]
39. Lubbe S, Tikly M, **van der Merwe L**, Hodkinson B and Ramsay M. Interleukin-1 receptor antagonist gene polymorphisms are associated with disease severity in black South Africans with rheumatoid arthritis. *Joint Bone Spine*. Accepted.
40. Savitz JB, **van der Merwe L**, Stein DJ, Solms M, Ramesar RS. Neuropsychological Task Performance in Bipolar Spectrum Illness: Genetics, Alcohol Abuse, Medication and Childhood Trauma. *Bipolar Disorders - An International Journal of Psychiatry and Neurosciences*. 2007. Accepted.

41. Taliep M. S., St Clair Gibson A., Gray J., **van der Merwe L**, Vaughan C. L., Noakes T. D, Kellaway L. A., John. L. R. Event-related potentials, reaction time and response selection of skilled and less-skilled cricket batsmen. *Perception*. 2008. **37**(1) 96 – 105.
42. Evans J, Collins M, Jennings C, **van der Merwe L**, Söderström I, Olsson T, Levitt NS, Lambert EV, Goedecke JH. The association of interleukin-18 genotype and serum levels with metabolic risk factors for cardiovascular disease. *Eur J Endocrinol*. 2007 Nov;157(5):633-40.
43. September AV, Posthumus M, **van der Merwe L**, Schwellnus M, Noakes TD, Collins M. The COL12A1 and COL14A1 Genes and Achilles Tendon Injuries. *Int J Sports Med*. 2007 Oct 25; [Epub ahead of print]
44. Bardien S, Abrahams F, Soodyall H, **van der Merwe L**, Greenberg J, Brink T, Carr J. A South African mixed ancestry family with Huntington disease-like 2: clinical and genetic features. *Mov Disord*. 2007 Oct 31;22(14):2083-9.
45. Micklesfield LK, Norris S, Nelson D, Lambert E, **van der Merwe L**, Pettifor J. Comparisons of Body Size, Composition and Whole Body Bone Mass Between North American and South African Children. *J Bone Miner Res*. 2007 Dec;22(12):1869-77.
46. Savitz J, **van der Merwe L**, Solms M, Ramesar R. A linkage and family-based association analysis of a potential neurocognitive endophenotype of bipolar disorder. *Neuromolecular Med*. 2007;9(2):101-16.
47. Revera M, **van der Merwe L**, Heradien M, Goosen A, Corfield VA, Brink PA, Moolman-Smook JC. Troponin T and β -Myosin mutations have distinct cardiac functional effects in hypertrophic cardiomyopathy patients without hypertrophy. *Cardiovasc Res*. 2007 Nov 20; [Epub ahead of print]
48. Savitz JB, **van der Merwe L**, Newman TK, Solms M, Stein DJ, Ramesar RS. The relationship between childhood abuse and dissociation. Is it influenced by catechol-O-methyltransferase (COMT) activity? *Int J Neuropsychopharmacol*. 2007 Jul 3;:1-13 [Epub ahead of print]
49. Babb C, **van der Merwe L**, Beyers N, Pheiffer C, Walzl G, Duncan K, van Helden P, Hoal EG. Vitamin D receptor gene polymorphisms and sputum conversion time in pulmonary tuberculosis patients. *Tuberculosis (Edinb)*. 2007 Jul;87(4):295-302. Epub 2007 Apr 20.
50. Hemmings SMJ, Kinnear CJ, **van der Merwe L**, Lochner C, Corfield VA, Moolman-Smook JC, Stein DJ. Investigating the role of the brain-derived neurotrophic factor (BDNF) val66met variant in obsessive-compulsive disorder (OCD). *World J Biol Psychiatry*. 2007 Mar 12;:1-9 [Epub ahead of print]

51. Fincham JE, **van der Merwe L**, Adams VJ, Markus MB, van Stuijvenberg ME, Dhansay MA. Ascaris, co-infection and allergy: the importance of analysis based on immunological variables rather than egg excretion. *Trans R Soc Trop Med Hyg.* 2007. **101(7)**: 680-682.
52. O'Connor CM, **van der Merwe L**, Langran S, O'Sullivan M, Nolan P, Vaughan CL, O'Malley M J. Design of Surface Electrode Array for Measuring Conduction Velocity in the Human Genioglossus Muscle. *IEEE Transactions on Biomedical Engineering.*2007. **54(2)**:335–339.
53. Savitz J, **van der Merwe L**, Solms M, Ramesar R. Neurocognitive function in an extended Afrikaner-ancestry family with affective illness. *J Psychiatry Neurosci.* 2007 Mar;**32(2)**:116-20.
54. Savitz J, **van der Merwe L**, Solms M, Ramesar R. Lateralization of hand skill in bipolar affective disorder. *Genes Brain Behav.* 2007 Feb **13**.
55. Ekpebegh CO, Coetzee EJ, **van der Merwe L**, Levitt NS. A 10-year retrospective analysis of pregnancy outcome in pregestational Type 2 diabetes: comparison of insulin and oral glucose-lowering agents. *Diabet Med.* 2007 Mar;**24(3)**:253-8.
56. Volmink J, Siegfried N, **van der Merwe L**, Brocklehurst P. Antiretrovirals for reducing the risk of mother-to-child transmission of HIV infection. *Cochrane Database Syst Rev.* 2007 Jan 24 :(**1**):CD003510.
57. Savitz J, **van der Merwe L**, Stein DJ, Solms M, Ramesar R. Genotype and Childhood Sexual Trauma Moderate Neurocognitive Performance: A Possible Role for Brain-Derived Neurotrophic Factor and Apolipoprotein E Variants. *Biol Psychiatry.* 2007 Sep **1**;**62(5)**:391-9. Epub 2007 Jan 8.

1.3 INDEXED JOURNALS - NATIONAL (FIRST AUTHOR)

1.4 INDEXED JOURNALS - NATIONAL (CO-AUTHOR)

1. Grant CC, Steenkamp B, Gauche L, **Becker PJ**, Ker J, Roos JL, and Viljoen M. Dysrhythmogenic potential in acute admissions to psychiatric hospitals and clinics. *Cardiovasc J S Afr* 2007; **18(3)**: 140-144.
2. Mistry PP, **Becker P**, Van Marle J. A prospective comparison of secondary interventions and mortality in open and endovascular infrarenal abdominal aortic aneurysm repair. *S Afr J Surg* 2007; **45(2)**: 39-42.
3. Motilall SR, Tsatsa LDR, and **Becker PJ**. Trial of self-expandable metallic stents in the palliation of tracheo-oesophageal fistula in carcinoma of the oesophagus. *SAJS* 2007; **45(1)**: 24-27.

4. Raal FJ, Schamroth C, Patel J, **Becker P**. A multi-centre, open-label, observational local study to evaluate the low-density lipoprotein cholesterol (LDL-C) lowering effect of ezetimibe as prescribed in daily routine practice in SA population. *Cardiovascular J SA*; 2007.
5. Hennessy A, Maree C, **Becker P**. The effects of Developmentally Supportive Positioning (DSP) on preterm infants' stress levels. *Health SA Gesondheid. Vol 12, No.1 – 2007*.
6. **Connolly C**, Simbayi LC, **Shanmugam R**, Nqeketo A. Male circumcision and its relationship to HIV infection in South Africa: Results from a national survey in 2002. *SAMJ. Accepted*.
7. Faber M. Van Jaarsveld PJ, **Laubscher R**. The contribution of dark-green leafy vegetables to total micro-nutrient intake of two- to five-year-old children in rural setting. *Water SA. Vol.33. No.3 (Special Edition) 2007*.
8. Groenewald P, Vos T, Norman R, **Laubscher R**, van Walbeek C, Saloojee Y, Sitas F, Bradshaw and the South African Comparative Risk Assessment Collaborating Group. *S Afr Med J. 2007 Aug;97:674-681*.
9. Norman R, Gaziano T, **Laubscher R**, Steyn K, Bradshaw D and the South African Comparative Risk Assessment Collaborating Group. Estimating the burden of disease attributable to high blood pressure in South African in 2000. *S Afr Med J. 2007 Aug;97:692-698*.
10. Van der Merwe JP, Kruger TF, **Lombard CJ**. Gamete intrafallopian transfer versus super-ovulation with intrauterine insemination for the treatment of infertility. *SA Journal of Obs. & Gyn. Accepted*
11. Norman R, Mathee A, Barnes B, **van der Merwe L**, Bradshaw D; South African Comparative Risk Assessment Collaborating Group. Estimating the burden of disease attributable to lead exposure in South Africa in 2000. *S Afr Med J. 2007 Aug;97(8 Pt 2):773-80*.
12. Revera M, **van der Merwe L**, Heradien M, Goosen A, Corfield VA, Brink PA, Moolman-Smook JC. Long-term follow-up of R403WMYH7 and R92WTNNT2 HCM families: mutations determine left ventricular dimensions but not wall thickness during disease progression. *Cardiovasc J Afr. 2007 May-Jun;18(3):146-53*.
13. Jones ES, Owen EP, Davidson JS, **van Der Merwe L**, Rayner BL. Association of the R563Q mutation of the epithelial sodium channel beta-subunit with hypertension in 18 kindreds. *Cardiovasc J Afr. 2007 May-Jun;18(3 Suppl):S17*.
14. Burger EH, **van der Merwe L**, Volmink J. Errors in the completion of the death notification form. *SAMJ. 2007. Nov 2007, Vol 97, No 11*.

1.5 NON-INDEXED PUBLICATIONS

Odendaal, W., Van Niekerk, A., Seedat, M., Jordaan, E., Kallis, J. & De Villiers, P. (2007). *Social Capital Child Survival Project*, Unpublished. Available: <http://www.mrc.ac.za/crime/social.htm>

1.6 PUBLICATIONS – ACKNOWLEDGEMENTS

Coovadia HM, Rollins NC, Bland RM, Little K, Coutsoydis A, Bennish ML, Newell ML. Mother-to-child transmission of HIV-1 infection during exclusive breastfeeding in the first 6 months of life: an intervention cohort study. *Lancet*. 2007 Mar 31;369(9567):1107-16.

2. CONGRESS PAPERS

2.1 INVITED PLENARY PRESENTATIONS – INTERNATIONAL

2.2 INTERNATIONAL PAPER AND POSTER PRESENTATIONS

54th Annual Meeting Of The American College Of Sports Medicine (ACSM), New Orleans, Louisiana May30 – June 2, 2007. Van Vuuren B, **Becker PJ**, Zinzen E, van Heerden HJ, and Meeusen R. Development and preliminary validation of the concise back screening instrument (CBSI) to quantify risk of lower back problems in industry.

16th International Conference on Safe Communities, Tehran, Iran, 11-13 June 2007.

Van Niekerk, A., Odendaal, W., Seedat, M., **Jordaan, E.** & Bulbulia, S. (2007). *A home visitation programme to reduce risks for unintentional childhood injuries in low-income neighbourhoods: A replication study.*

Nutrition Society of Australia and New Zealand, Auckland, NZ, 5 - 7 December 2007. KE Charlton, K Steyn, NS Levitt N Peer, D Jonathan, T Gogela, **N Gwebushe, CJ Lombard**. Modification of the sodium, potassium, calcium and magnesium content of commonly consumed foods reduces blood pressure in hypertensive South Africans.

Public Health Nutrition in Australia: new priorities. University of Queensland, Brisbane, 29-30 November 2007. Charlton KE, Jooste P, Steyn K, Levitt NS, Nel JH, **N Gwebushe, CJ Lombard** . *Messages to lower salt intake do not compromise iodine intake: an example from a country which has mandatory iodine fortification.*

European Respiratory Society Annual Congress 2007. Jithoo A, Bateman E, White N, **Lombard C**, Beyers N, Burney P, Vollmer W, and Buist S. Risk factors for COPD in South Africa: Results from the BOLD study.

38th Union World Conference on Lung Health of the International Union Against Tuberculosis and Lung Disease. Cape Town 8-12 November 2007. Fairall L, Zwarenstein M, **Lombard C**, Bateman E, Mayers P, Bheekie A, English R, Stein J, Lewin S, Tsibolane Y, Shai-Mhatu P. Effectiveness of educational outreach on the quality of primary care for HIV and TB: cluster randomised trial.

38th Union World Conference on Lung Health of the International Union Against Tuberculosis and Lung Disease. Cape Town 8-12 November 2007. Morrison J, Dunbar R, **Lombard C**, Bester D, van Zyl S, Beyers N. Time-to-event analysis of household incidence of tuberculosis in two high-incidence communities.

The American Public Health Association 13th Annual Meeting, 3-7 November 2007. D Jackson D, **Matizirofa L**. Development of Indicator Scores Using Items from the WHO Safe Motherhood Needs Assessment to Examine Utilization of Maternal Health Services in South Africa.

World Congress of Nephrology Conference , April 2007 held in Rio-de Janeiro, Brazil. Inferior Vena Cava Diameter and Collapsibility index in Haemodysis patients correlates with Left ventricular geometrical adaptations. James Chabu, Saraladadevi Naicker, P.Manga, G. Norton, **S.Olorunju**.

61st Annual American Academy of Cerebral Palsy and Developmental Medicine (AACPD), Vancouver, 10-13 October. NG Langerak, RP Lamberts, AG Fieggen, JC Peter, **L van der Merwe**, CL Vaughan. Gait parameters of cerebral palsy patients before and 1, 3, 10 and 20 years after selective dorsal rhizotomy.

4th International Conference on Children's Bone Health. Montreal. Site-specific differences in bone mass between SA children of different ethnic groups. Micklesfield LK, Norris SA, Nelson DA, Lambert EV, **van der Merwe L**, Pettifor JM.

39th European Society of Human Genetics Conference, Nice France, June 16-19 2007. September AV, Cook J, Handley C, **van der Merwe L**, Schwellnus M, Collins M. The association of a polymorphism within the COL5A1 gene an Achilles tendon injury in a second Caucasian population.

10th South African Society of Human Genetics conference, Bloemfontein March 2007. Oral. September AV, Cook J, Handley C, **van der Merwe L**, Schwellnus M, Collins M. The association of a polymorphism within the COL5A1 gene an Achilles tendon injury in a second Caucasian population.

2.3 INVITED PLENARY PRESENTATIONS - NATIONAL

Business and AIDS in South Africa, June 21-23.
Epidemiology of HIV in the Work Place, Mark Colvin, **Cathy Connolly**.

2.4 NATIONAL PAPER AND POSTER PRESENTATIONS

University Of Pretoria – Faculty Day August 2007. Crafford MJA, Viljoen M and **Becker PJ**. Problems experienced by biology/life science educators in Government schools in Tswane North.

University Of Pretoria – Faculty Day August 2007. Linton W, Urquhart T, Halkas A, Lewis H, **Becker P**, and Green GJ. Predicting asthma control in children – using exhaled nitric oxide (FENO).

South African Statistical Association 50th Annual Conference, 1-2 November 2007, Johannesburg. **Cathy Connolly** and J S Bagaratee. Statistical methods for constructing gestational age-related reference intervals and centile charts.

South African AIDS Conference, Durban June 2007. **Connolly C**, Leickness C, **Shanmugan R**, Mqeketo. Male circumcision and its relationship to HIV infection in South Africa. Results from a national survey in 2002.

South African Statistical Association 50th Annual Conference, 1-2 November 2007, Johannesburg. **N Gwebushe**. My experience in promoting biostatistics as a career at the National Science Week, Bergville, KwaZulu-Natal.

The Western Cape Provincial Department's Social Cluster meeting, Tygerberg Hospital, Cape Town, 16 May 2007. Odendaal, W., Van Niekerk, A. & **Jordaan, E.** (2007). Social Capital Child Survival Project.

Western Cape Provincial Department of Health funder report meeting, Medical Research Council, Cape Town, 04 May 2007. Odendaal, W., Van Niekerk, A. & **Jordaan, E.** (2007). Social Capital Child Survival Project.

South African Statistical Association 50th Annual Conference, 1-2 November 2007, Johannesburg. **MG Kabera**, P Ndlovu, and LM Haines. D-optimal designs for the binary two-variable logistic model with interaction.

Congress of the South African Association for Laboratory Animal Science, Cape Town, September 2007. Stereotyped behaviour in association with different housing conditions and enrichment: how effective is the system at the primate unit for the wellbeing of monkeys? Van Heerden JCM, Seier JV, van der Bergh N, Benjamin L, Jacobs J and **Laubscher R**.

South African AIDS Conference, Durban June 2007. **R Laubscher**, De Bradshaw, D Bourne, R Dorrington Rapid surveillance of AIDS mortality in South Africa: The latest...

Combined Congress of SA Thoracic Society Allergy Society of SA and SA Cystic Fibrosis Association 2 – 5 March 2007 Cape Town International Convention Centre.

Jithoo, A; Bateman E, Beyers N; White N; **Lombard C**; Irusen E; Chinn S; Burney P. Risk factors for respiratory symptoms: a community survey.

Cannabis smoking as a risk factor for tuberculosis disease and infection.

Jithoo, A; Bateman E, White, N; **Lombard C**; Enarson D; Burney, P; Irusen, E; Beyers, N.

SA Association for Child and Adolescent Psychiatry and Allied Professions, 16th Biennial Conference, Cape Town "Included and Visible" Development for a New Millennium" 11 – 14 September 2007. Wegener L, Flisher A, Chikobvu P, **Lombard C**, King G. Leisure Boredom and high school dropout.

South African Statistical Association 50th Annual Conference, 1-2 November 2007, Johannesburg. **MG Kabera**, P Ndlovu, and LM Haines. **Connolly C**, Leickness C, **Shanmugan R**, Mqeketo. Male circumcision and its relationship to HIV infection in South Africa. Results from a national survey in 2002.

South African Statistical Association 50th Annual Conference, 1-2 November 2007, Johannesburg. **T Motsima**. Analyzing anthropometry when ages are not in exact months.

3. LAY PUBLICATIONS

3.1 LAY PUBLICATIONS (written documents of programmes for non-scientific audiences, includes press, radio, TV)

Newspaper article: Ria Laubscher

Aids sees plunge in growth rate in SA's population. Argus, Wednesday, July 4, 2007.

4. BOOKS

4.1 AUTHOR

4.2 EDITOR

4.3 CHAPTER

5. RESEARCH PROPOSALS/PROTOCOLS (approved for submission by Protocol Committee or Programme Leader)

5.1 SUCCESSFUL

EU Contract

Sero Prevalence Study, KAP and risk Assessment

To provide a comprehensive disaggregated sub-sector HIV sero-prevalence report for tertiary institutions in South Africa ii) a comprehensive sub-sector level analysis report; iii) a HIV sero-prevalence and a disaggregated KAPB report for each of the 23 participating institutions ; and iv) a risk analysis assessment report of the HE sector.

PI Mark Colvin, Maromi, South Africa

Co PI: Warren Parker and Kevin Kelly, CADRE

Statistical Consultant: **Cathy Connolly**, Biostatistics Unit MRC

NIH Grant:

To improve the health of children with *M.tb*/HIV co-infection by accurately identifying those infected with *M. tb.* with specific aim: Assess the agreement between the TST and IGRAs in HIV-infected and uninfected children ≤ 5 years of age

PI: Mandalakas A, Case Western Reserve University, Ohio, USA

Co-PI: Hesselning A, Desmond Tutu TB Centre, Univ, of Stellenbosch

Statistical Consultant: **Lombard CJ**, Biostatistics Unit , MRC.

STRETCH RCT: A cluster randomized controlled trial of an educational and organisational intervention to expand antiretroviral treatment access in public-sector primary care clinics in South Africa: the STRETCH (Streamlining Tasks and Roles to Expand Treatment and Care for HIV) trial - study protocol.

Investigators: Lara Fairall*, Max Bachmann, **Carl Lombard**, Merrick Zwarenstein, Cloete van Vuuren, Dewald Steyn, Ruth Cornick, Andrew Boule, Simon Lewin, Jo Stein, Kerry Uebel, Gill Faris, Pat Mayers, Eric Bateman, Portia Shai-Mahtu, Ronald Chapman. * Principal Investigator, Knowledge Translation Unit, University of Cape Town Lung Institute, University of Cape Town (Partially funded but invited to submit to UK MRC for further funding)

5.2 OUTCOME PENDING

Cathy Connolly

CADRE - HIV prevalence survey in Tertiary Institutions. EU project.

Lombard CJ

Statistical advisor to SA-Promise partners

PROMISE-PEP: A phase III randomised double blind placebo-controlled trial of efficacy and safety of infant peri-exposure prophylaxis with lamivudine to prevent HIV-1 transmission by breastfeeding . A study by the PROMISE RESEARCH CONSORTIUM

Sponsor: Agence National de Recherche sur le SIDA (ANRS), Paris, France
Funding sources: ANRS, Paris, France, EDCTP. (Partially funded)

Lize van der Merwe

NIH Grant proposal –

Generating new knowledge to improve the management of HIV and TB in children with a particular focus on central nervous system involvement. PI: Prof Ben Marais. Submitted to NIH.

6. RESEARCH TECHNICAL REPORTS/MANUALS

NAMIBIA: HIV/AIDS Community Survey Report: Rundu, Walvis Bay, Keetmanshoop and Oshakati 2007. Windhoek: NawaLife Trust.

Parker, W. & **Connolly, C.** (2007).

Reports

Namibia HIV/AIDS KAP Research, Baseline & mid-term results from the Household Surveys, Community Assessment findings, 2007. CADRE.

Concurrent Sexual Partnerships Amongst Young Adults in South Africa. CADRE

Social Capital Child Survival Project 2006.

W Odendaal, A van Niekerk, M Seedat, **E Jordaan**, J Kallis and P De Villiers. April 2007.

A Toxicity Study of HV10TA Consumption. Final Report. August 31, 2007.

Dr JV Seier, Ms CG Chauke, Dr MA Dhansay, Mrs **JA Laubscher**.

Collaborative e-learning pilot project: www.afroaidsinfo.org

Hendra van Zyl, Karin Ferreira, Pieter Visser, Elmarie van Wyk, Nolwazi Mbananga, **Sonja Swanevelder**, Sakhele Vanda, Dumisani Wambi.

7. TEACHING AND SUPERVISION FOR POST-GRADUATE STUDENTS

7.1 PhD/MD: PROMOTER/CO-PROMOTOR (indicate in brackets if completed this year)

Carl Lombard

Co-supervisor: PhD student – Yogan Kisten, UCT

S.Olorunju.

Co-Supervisor: M.Sc Student – Tshaudi Motsima – University of Free State.

7.2 MSc (or equivalent): PROMOTER CO-PROMOTER (indicate in brackets if completed this year)

Lize van der Merwe

Examiner: MSc by thesis, Wits University

Examiner MSc by thesis, US.

7.3 Examiner

Internal: UNISA

Becker P

External: WITS
UP
MEDUNSA

Carl Lombard

External Examiner, Statistical Sciences, University of Cape Town
External Examiner, Dept of Statistics, University of KZN, Pietermaritzburg
Examiner – MSc Dissertation, University of Fort Hare
Examiner – MSc Dissertation, University of Cape Town

Cathy Connolly

External Examiner: Department of Telehealth, UKZN 2007.

Sonja Swanevelder

External Examiner: Dept of Statistics, University of the Western Cape

7.4 LECTURES (EXTERNAL) INVITED SPEAKER, ETC.**Ria Laubscher**

Lecture at Actuarial Science Department, UCT

Gaetan Kabera

Oral Presentation: D-optimal Design for Drug Interaction, 23 August, 2007,
Kigali Institute of Science and Technology, Kigali-Rwanda

Carl Lombard

UCT Statistical Sciences Seminar Series: Design and Monitoring of
Randomised Controlled Trials.

Carl Lombard

Invited as reviewer for PhD Protocol of John Joska from HIV/neuropsychiatry
Program, Grootte Schuur with promoter Prof Alan Flisher from UCT.

Lize van der Merwe.

Series of 2 invited lectures for Paul van Helden's MRC Centre for Molecular
and Cellular Biology, Faculty of Health Sciences, Stellenbosch University on
Exploratory Biostatistics, March and April 2007.

Lize van der Merwe.

Lecture on "HuGE Reviews" at the African Contributors' Meeting of the South
African Cochrane Collaboration. May 2007.

7.5 COURSES TAUGHT**Becker P**

Informal: Research and experimental design

- 1) School for Healthcare Sciences, UP
- 2) Healthcare Sciences, TUT – March 2007/2008
- 3) Anatomy TNM-800 – May 2007/2008
- 4) E L'Abbe – May 2007
- 5) Aimee Stewart – June 2007

Formal: Survival Analysis (STA4174) on Unisa Hons/Masters programs.

Connolly C, Shanmugam R, Kabera G.

Health Sciences, University of KwaZulu-Natal. 3 different groups replicated.

Gaetan Kabera

Lecture: Introduction to inferential statistics (point and interval estimation, hypothesis testing, analysis of variance), July - August, 2007. (Kigali Institute of Science and Technology, Kigali-Rwanda).

Lize van der Merwe, Cathy Connolly, Steve Olorunju, Ria Laubscher, Esmé Jordaan, Tshaudi Motsima, Rebecca Shanmugam.

Introduction to Biostatistics for MRC Interns and new researchers, Durban: February 2007.

Steve Olorunju, Esmé Jordaan, Ria Laubscher, Tshaudi Motsima, Cathy Connolly, Rebecca Shanmugam, Piet Becker.

Introduction to Biostatistics for MRC Interns and new researchers, Pretoria: February 2007.

National Science week

N Gwebushe and **R Shanmugan** facilitated the exposition of Biostatistics to school children and teachers at the 2007 National Science week hosted by the MRC in the rural site of Bergville in KZN. Maths and science pupils from 19 schools were handled by means of posters and lectures.

Lize van der Merwe

1. Teach Exploratory Biostatistics to Interns and others at MRC Durban Campus (two days). February 2007.
2. Help teach Course in Experimental Epidemiology, Centre for International Health, Bergen University, Norway. March 2007.
3. Invited lecture on “HuGE Reviews” at the African Contributors’ Meeting of the South African Cochrane Collaboration. May 2007.
4. Help teach RAP (Reviewers for Africa) review completion programme at SA Cochrane Centre. June 2007.
5. Help teach Winter School Course in Clinical field trial methodology and Good Clinical Research Practice at School of Public Health, UWC. June-July 2007.
6. Help teach RAP (Reviewers for Africa) protocol development programme at SA Cochrane Centre. September 2007.
7. Organise and help teach Workshop on Statistical Genetics by Prof Heather Cordell of Newcastle University, UK at MRC, Parow. October 2007.
8. Help teach Short Course in Clinical Skills Methods at Health Sciences, University of Stellenbosch. October 2007.

8. REVIEWING AND EDITING OF MANUSCRIPTS/BOOKS (JOURNAL PEER REVIEW SYSTEM)

8.1 INTERNATIONAL BOOK/JOURNAL REVIEWS

Carl Lombard

The International Journal of Tuberculosis and Lung Disease.
BMC Neurology
BMC Women's Health
BMC Psychiatry
BMC Infectious Diseases

Cathy Connolly

The International Journal of Tuberculosis and Lung Disease.

Lize van der Merwe

BMC Cancer
BMC Genetics

8.2 NATIONAL JOURNAL MANUSCRIPT REVIEWS

Piet Becker

Cardiovascular Journal of South Africa

Carl Lombard

Cardiovascular Journal of South Africa

Cathy Connolly

HSRC Report
MRC Protocol Review

Steve Olorunju

Cardiovascular Journal of South Africa

Lize van der Merwe

South African Statistical Journal

8.3 EDITORIAL COMMITTEES APPOINTMENTS

9. ELECTED OFFICERS OF PROFESSIONAL SOCIETIES
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9.1 INTERNATIONAL

9.2 NATIONAL

10. COMMITTEES (JOB RELATED)

10.1 INTERNATIONAL

10.2 NATIONAL

Becker P

Member of Pharma-Ethics: Ethics committee for clinical trials

Medical Aid Forum: Medical Research Council

Values Continuity Group: Medical Research Council

10.3 PREPARATION OF COMMITTEE REPORTS

11. LINKAGES AND PARTNERSHIPS WITH RESEARCH OR PUBLIC HEALTH

11.1 ORGANISATIONS – INTERNATIONAL

Carl Lombard attended the Promise PEP meeting in Montpellier, France. Protocol Planning meet of PROMISE-PEP a phase III trial on ART prophylaxis in babies of HIV⁺ mothers. Potential funding by EDCTP in Montpellier, France.

Carl Lombard invited as international expert to collaborate in SPIRIT: In collaboration with developers of the CONSORT Statement (**CON**solidated **S**tandards **O**f **R**eporting **T**rials), the SPIRIT Steering Committee have launched an international initiative, the SPIRIT initiative (**S**tandard **P**rotocol **I**tems for **R**andomized **T**rials), that aims to develop evidence-based guidelines to improve the content of randomized trial protocols.

Lize van der Merwe was invited to University of Bergen, Norway to assist with a postgraduate training course in Experimental Epidemiology: Field trials of health interventions. 16 March – 1 April 2007

Collaborator: Halvor Sommerfelt, Centre for International Health, University of Bergen, Norway

Project: Capacity building and research in sub-Saharan Africa to promote survival among HIV-exposed infants

Sub-Saharan Africa (SSA) has the world's highest prevalence of HIV infection, which contributes substantially to the high childhood mortality in the region. WHO recommends that mothers of HIV-exposed infants, who can hygienically prepare formula feeds, exclusively formula feed their infants. However, formula feeding in disadvantaged communities carries substantial health risks for infants who face increased rates of diarrhea and pneumonia. The aim of this project is to increase capacity of researchers from SSA in the conduct of randomised clinical trials (RCT). The RCT research aims to improve survival opportunities of HIV-exposed infants.

11.2 ORGANISATIONS – NATIONAL

Cathy Connolly
CADRE
HSRC
SASA

Carl Lombard, Esme Jordaan, Lize van der Merwe, Ria Laubscher, Sonja Swanevelder, Nomonde Gwebushe, Ushma Galal, Lyness Matizirofa, Piet Becker, Steve Olorunju, Tshaudi Motsima
SASA

12. AWARDS, PRIZES AND HONORARY MEMBERSHIPS

12.1 INTERNATIONAL RECOGNITION

12.2 NATIONAL RECOGNITION

Piet Becker

March 2007 – February 2010

Appointed as Honorary Professor, School of Therapeutic Sciences, University of Witwatersrand.

Cathy Connolly, Rebecca Shanmugam, Gaetan Kabera

CADRE
HSRC
SASA

Carl Lombard was appointed as extra-ordinary Professor in the Department of Paediatrics and Child Health, University of Stellenbosch, September 2007.

Lize van der Merwe

Jan 2008 – December 2010

Appointed as extra-ordinary Professor, Department of Statistics, Faculty of Natural Sciences, University of the Western Cape.

13. IMPLEMENTATION (Describe instances where your research has influenced policy and practice)

Newspaper article: The Star, July 9, 2007.

Babies to no longer wait for ARVs.

“HIV-positive babies have a “significantly” better chance of survival if they get antiretroviral treatment immediately rather than waiting until they are ill, South African researchers have found. ...”

Policy Brief : January 2007

Change the package, save a life: A child’s right to be safe from paraffin poisoning.

14. WORKSHOPS, SEMINARS, CONFERENCES, SYMPOSIUMS, COURSES ATTENDED

Carl Lombard

Invited to attend the Microbicide Safety Symposium hosted by CAPRISA, 28 May 2007 at University of KZN.

Cathy Connolly attended the FDA/Industry Statistics Meeting, Washington DC in September 2007.

Ria Laubscher

Food Consumption, NIVS – 8 October 2007

Ria Laubscher

Public Health Nutrition Symposium 2007 – 16 March 2007

Lize van der Merwe

USA: 8 – 18 June 2007

1. Summer Workshop on Genetic Epidemiology on Genetic Epidemiology of Complex Traits, St Louis, USA.
2. FBAT/PBAT course – Harvard School of Public Health, Boston, USA.

Lize van der Merwe attended a Statistical Genetics course at the University of Cape Town from 25 – 28 September 2007.

Organisation – Workshop on Statistical Genetics

Dr Lize van der Merwe organised a workshop for statisticians on analysis of genetic data in October 2007. The Workshop was presented jointly by Professor Heather Cordell, University of Newcastle and Lize van der Merwe, Biostatistics Unit, MRC.

Leontime Alkema, Department of Statistics, University of Washington presented a seminar in the Cape Town office on Bayesian melding a method she has looked at in estimating HIV incidence from prevalence surveys.

Submitted articles:

1. Kebert M, Jackson MA, **Becker PJ**. Measurement of soft tissue profile changes as a result of placement of orthodontic brackets. *SADJ* 2007; *Submitted*.
2. Den Boon S, Verver S, Borgdorff MW, **Lombard CJ**, Beyers N. Actively detected tuberculosis patients are less infectious and have worse treatment outcomes than passively detected TB patients. *Submitted*.
3. Den Boon S, Williams BG, Verver S, Borgdorff MW, **Lombard CJ**, Irusen E, Bateman ED, Enarson DE, Nagelkerke NJD. Familial aggregation of tuberculin reactivity: a study among siblings in South Africa. *Submitted*.
4. Niehaus DJH, Koen L, **Galal U**, Dhansay K, Oosthuizen PP, **Jordaan E**, Emsley RA. Crisis discharges and readmission risk in acute psychiatric inpatients. *BMC Psych*. *Submitted*.
5. Otwombe N, Kirton A, **Galal U**. Intention to treat analysis in the SA E-publications. *SAFPJ*. *Submitted*.
6. Bheekie A, Zwarenstein M, Swingler G, Ehrlich R, Adams J, Pather S, Eccles M, Grimshaw J, Sladden M, **Lombard C**, **Laubscher R**. South African general practitioners accept evidence-based asthma key messages: qualitative study. *Implementation Science*. *Submitted*.
7. Abel S, De Kock M, Smuts CM, van Schalkwyk DJ, **Swanevelder S**, Kew MC, Gelderblom WCA. Altered Lipid profiles and Oxidative Status in Human Hepatocellular Carcinoma. Prostaglandins, Leukotrienes and Essential Fatty Acids. *Lipids*. *Submitted*.
8. Gelderblom WCA, Marasas WFO, Lebepe-Mazur S, **Swanevelder S**, Abel S. Cancer initiating properties of Fumonisin B₁ in a short-term rat liver carcinogenesis assay. *Toxicology*.
9. Marnewick J, Van der Westhuizen FH, Joubert E, **Swanevelder S**, Swart P, Gelderblom WCA. Chemoprotective properties of rooibos (*Aspalathus linearis*), honeybush (*Cyclopia intermedia*), green and black (*Camellia sinensis*) teas against cancer promotion induced by Fumonisin B₁ in rat liver. *Food & Chemical Toxicology*.