

# CURRICULUM VITAE

**Name:** Robert Schall

**Work Address:** Department of Mathematical Statistics and Actuarial Science  
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Bloemfontein 9300  
South Africa

**Date of Birth:** 22 July 1958

**Marital Status:** Married

**Nationality:** German

**Home Language:** German

**Other Languages:** English, Afrikaans, Dutch (reading ability)

## Academic Qualifications

1986: **PhD** in Mathematical Statistics, *University of Cape Town*.

1984: **Diplom-Mathematiker**, *University of Karlsruhe, Germany*.

1983: **BSc (Hons)** in Mathematical Statistics, *University of Cape Town*.

## Accreditation

2013: Institute of Certificated and Chartered Statisticians of South Africa  
(ICCSSA): **Chartered Statistician (Biometrics)**

## Present Occupation

**Professor (part-time)**, Statistical Consultation Unit, Department of  
Mathematical Statistics and Actuarial Science, University of the Free State  
(UFS)

## Previous Positions

### University of the Free State, Bloemfontein:

- 2014 – 2018: **Professor**, Statistical Consultation Unit, Department of Mathematical Statistics and Actuarial Science
- 2009 – 2014: **Professor and Chairman**, Department of Mathematical Statistics and Actuarial Science
- 2006 – 2008: **Professor (part-time)**, Department of Mathematical Statistics and Actuarial Science
- 1993 – 1997: **Associate Professor and Head**, Division (from 1995: Department) of Biostatistics
- 1991 – 1997 : **Director (Biometry)**, FARMOVS Research Centre

### ClinData (later: Quintiles, IQVIA), Bloemfontein:

- 1997 – 2020: **Director of Biostatistics; General Manager**

### SA Medical Research Council, Institute for Biostatistics, Cape Town:

- 1987 – 1990: **Biometrician**

### Messerschmitt-Bölkow-Blohm GmbH, Munich, Germany:

- 1984 – 1987: **Mathematician.**

## Publications (detailed list attached below)

<b>Peer-reviewed scientific articles:</b>	144
<b>Other articles in peer-reviewed journals:</b>	12
<b>Chapters in books:</b>	22

## Foundation for Research Development (FRD) Rating

- 1997 – 2000: **B**
- 1993 – 1996: **P (President's Award)**

## Major Professional Achievements

- 1997: **Co-founder** (with Herman Luus and Theo Erasmus): **ClinData** (later: **Quintiles ClinData**).
- 1995: **Founder and first Head: Department of Biostatistics**, Faculty of Medicine, *University of the Orange Free State*.
- 1993: **President's Award of the Foundation for Research Development**.

## Postgraduate Students

- 2020: **Colleen Sinclair (PhD)**. Thesis: Functional testing and epidemiology of injuries in elite netball players in the Free State region. (Co-promotor)
- 2019: **Wynand Nel (PhD)**. Thesis: The value of Brain-Computer Interface measurements in computer usability testing when using ambiguous search queries: A randomized, controlled cross-over study. (Co-promotor)
- 2018: **Chandré Teise (MSc)**. Mini-thesis: Statistical inference for ectoparasiticide efficacy in animal trials. (Co-supervisor)
- 2017: **Petrus Iyambo (PhD)**. Thesis: Fiducial inference based on order statistics in location-scale and log-location-scale families.
- 2016: **Ntima Mabanza (PhD)**. Thesis: Determining the usability of educational interface agents on adult computer literacy training: A South African perspective. (Co-promotor)
- 2014: **Divan Burger (PhD)**. Thesis: Bayesian Nonlinear Models for the bactericidal activity of tuberculosis drugs.  
**Michael von Maltitz (PhD)**. Thesis: Extending the reach of sequential regression multiple imputation. (Co-promotor)  
**Edward Muller (MSc)**. Mini-thesis: Statistical treatment of drug concentrations below detection limit in pharmacokinetic studies.
- 2012: **Linda van der Merwe (PhD)**. Thesis: An analysis of the field of statistics education with special reference to computer-assisted teaching and learning. (Co-promotor)  
**Louwrens Potgieter (MSc) (with distinction)**. Thesis: Assessing a brain-computer interface by evoking the auditory cortex through binaural beats. (Co-supervisor)  
**Paulinah Makopela (MCom)**. Mini-thesis: Socio-economic Impact of Antiretroviral Treatment (ART) on Labour Market Outcomes. (Co-supervisor)
- 2011: **Dianne Weatherall (MSc) (with distinction)**. Thesis: Cross-validation of rain rules for interrupted one-day cricket matches.

- Ruaan van Zyl (MSc) (with distinction).** Mini-thesis: Least-squares estimation based on order statistics in some location-scale families.
- 2010: **Roland Klopper (MSc).** Mini-thesis: Baseline adjustment in thorough QT trials.
- 2009: **Alex Brink (MSc).** Mini-thesis: Overview of missing data methods in clinical trials.
- Paul Malan (MSc).** Mini-thesis: Aspects of the statistical analysis of immunotherapy clinical trials.
- Divan Burger (MSc) (with distinction).** Mini-thesis: Statistical analysis of replicate design cross-over studies.
- 2007: **Euodia Bezuidenhoudt (MSc).** Mini-thesis: Accuracy and precision of  $AUC_t$  and  $AUC_\infty$  as characteristics of relative bioavailability in bioequivalence Studies.
- Mauritz Bezuidenhoudt (MSc) (with distinction).** Mini-thesis: The empirical coverage of Student's t confidence interval.
- Illze Crous (MSc).** Mini-thesis: Review of non-parametric methods for the assessment of bioequivalence.
- 2004: **Sharon Rossouw (MMedSc) (with distinction).** Thesis: Profile of clinical trial biostatisticians and university courses to train them in South Africa. (Co-supervisor)
- 2003: **Perpetual Chikobvu (PhD).** Thesis: Randomised placebo-controlled trial to evaluate the effectiveness of Vitamin A on mother-to-child transmission of HIV-1 in Bloemfontein.
- 1998: **Mariette Nel (MMedSc).** Thesis: Assessment of different methods of determining confidence intervals for the difference of binomial proportions.
- 1997: **Linda Potgieter (PhD).** Thesis: Comparison of the sensitivity and power of absorption rate characteristics in steady-state bioequivalence studies.
- 1996: **Ronelle Goosen (MMedSc).** Thesis: A simulation study to determine sample sizes for the assessment of individual bioequivalence.
- Frank Müller (MMedSc) (with distinction).** Thesis: The influence of grapefruit and guava juice, in relation to time of administration, on the pharmacokinetics and pharmacodynamics of nifedipine in male volunteers.
- 1995: **Helena Nel (MMedSc).** Thesis: Statistical analysis of dose-proportionality studies.
- 1993: **Theo Erasmus (MMedSc).** Thesis: Statistical analysis of safety data in clinical trials.

# List of Scientific Publications

## Theses

1. BLU-Schätzung im linearen Model mit unbekanntem Varianzkomponenten. Unpublished *Diplomarbeit*. University of Karlsruhe, Germany, 1984
2. Outliers and influence under arbitrary variance. Unpublished PhD thesis: University of Cape Town, South Africa, 1986

## Peer-reviewed scientific articles

1. Schall R, Dunne TT (1986). Transformation and reparametrization for best linear unbiased estimation of a linear model with arbitrary known variance. *Communications in Statistics*, B15, 905—916
2. Schall R, Dunne TT (1987). Additional variables and adjusted estimates with arbitrary known variance-covariance structure. *Communications in Statistics*, A16, 1253—1263
3. Schall R, Dunne TT (1987). A note on the chisquaredness of quadratic forms. *Sankhya, Ser. A*, 49, 415—418
4. Schall R, Dunne TT (1987). On outliers and influence in the general multivariate normal linear model. In: *Proceedings of the Second International Tampere Conference in Statistics*. Pukkila T, Puntanen S (eds). Tampere: University of Tampere, 665—678
5. Cohen JC, Schall R (1988). Reassessing the effects of simple carbohydrates on the serum triglyceride responses to fat meals. *American Journal of Clinical Nutrition*, 48, 1031—1034
6. Schall R, Dunne TT (1988). A unified approach to outliers in the general linear model. *Sankhya, Ser. B*, 50, 157—167
7. Schall R (1989). A note on variable selection in linear models. *South African Statistical Journal*, 23, 183—194
8. Noakes TD, Myburgh C, Schall R (1990). Peak treadmill running velocity during the VO<sub>2</sub>max test predicts running performance. *Journal of Sports Science*, 8, 35—45 (doi.org/10.1080/02640419008732129)
9. Padayachee GN, Schall R (1990). Short term predictions of the prevalence of human immunodeficiency virus infection among the black population in South Africa. *South African Medical Journal*, 77, 329—333
10. Schall R, Zucchini W (1990). Model selection and the estimation of odds ratios in the presence of extraneous factors. *Statistics in Medicine*, 9, 1131—1141
11. Schall R (1990) On the maximum size of the AIDS epidemic among the heterosexual black population of South Africa. *South African Medical Journal*, 78, 507—510

12. Van der Spuy ZM, Sohnius U, Pienaar C and Schall R (1990). Gonadotropin and estradiol secretion during the week of placebo therapy in oral contraceptive pill users. *Contraception*, 42, 597—609
13. Schall R, Dunne TT (1990). Influential variables in linear regression. *Technometrics*, 32, 323—330
14. Schall R, Dunne TT (1990). Diagnostics for regression-ARMA time series. In: *Directions in Robust Statistics: Part II*. Stahel W, Weisberg S (eds). New York: Springer, 205—221
15. Fincham JE, Gouws E, Woodroof CW, Van Wyk MJ, Kruger M, Smuts CM, van Jaarsveld PJ, Taljaard JJF, Schall R, Strauss JA de W, Benadé AJS (1991). Chronic effects of fish oil and a therapeutic diet in nonhuman primates. *Arteriosclerosis and Thrombosis*, 11, 719—732
16. Schall R, Gonin R (1991). Diagnostics for nonlinear  $L_p$ -norm estimation. *Computational Statistics and Data Analysis*, 11, 189—198
17. Schall R (1991). Estimation in generalized linear models with random effects. *Biometrika*, 78, 719—727
18. Noakes TD, Myburgh KH, Du Plessis J, Lang L, Lambert M, Van der Riet, Schall R (1991). Metabolic rate, non percent dehydration, predicts rectal temperature in marathon runners. *Medicine and Science in Sports and Exercise*, 23, 443—449
19. Schall R, Luus HG (1992). Comparison of absorption rates in bioequivalence studies of immediate release drug formulations. *International Journal of Clinical Pharmacology, Therapy and Toxicology*, 30, 153—159
20. Schall R, Dunne TT (1992). A note on the relationship between parameter collinearity and local influence. *Biometrika*, 79, 399—404
21. Schall R, Groenewoud G, Hundt HKL, Müller FO, Oelofsen MJ, Ungerer MJ, Wessels PH, Hogendoorn CYA (1992). Pharmacokinetic profile of aprotinin (Trasylol®) in female patients undergoing primary elective hysterectomy. *Drug Investigation*, 4, 292—299
22. Schall R (1992). Estimating treatment effects when subjects learn from the pre-test. *South African Statistical Journal*, 26, 61—77
23. Smuts CM, Kruger M, Van Jaarsveld PJ, Fincham JE, Schall R, Van der Merwe KJ, Benadé AJS (1992). The influence of fish oil supplementation on plasma lipoproteins and arterial lipids in vervet monkeys with established atherosclerosis. *Prostaglandins Leukotrienes and Essential Fatty Acids*, 47, 129—138
24. Moodley D, Noakes TD, Bosch AN, Hawley JA, Schall R, Dennis SC (1992). Oxidation of exogenous carbohydrate during prolonged exercise: the effect of carbohydrate type and concentration. *European Journal of Applied Physiology*, 64, 328—334
25. Müller FO, Schall R, Groenewoud G, Hundt HKL, Van der Merwe JC, Van Dyk M (1993). The effect of benzbromarone on allopurinol/oxypurinol kinetics in patients with gout. *European Journal of Clinical Pharmacology*, 44, 69—72

26. Crome P, Müller FO, Wijayawardhana P, Groenewoud G, Hundt HKL, Leighton G, Luus HG, Schall R, Van Dyk M (1993). Single dose and steady-state pharmacokinetic profiles of nifedipine GITS tablets in healthy elderly and young volunteers. *Drug Investigation*, 5, 193—199
27. Müller FO, Henry J, Schall R, Groenewoud G, Hundt HKL, Luus HG, Van Dyk M (1993). Single dose and steady-state pharmacokinetic profiles of nifedipine coat-core tablets in healthy elderly and young volunteers. *Drug Investigation*, 5, 243—249
28. Cronje HS, Kruger JAVH, Bam RH, Muir AR, Müller FO, Schall R, Goldberg N, Wende LM (1993). Die effektiwiteit van Poly-Gynedron® in die behandeling van vaginitis. *Geneeskunde*, 22—33
29. Schall R, Middle MV, Müller FO, Du Plessis JP (1993). Theophylline dose-concentration relationship of a 12-hourly Nuelin SA regimen supplemented with nocturnal Nuelin Liquid in healthy volunteers. *Chronobiology International*, 10, 224—233
30. Middle MV, Müller FO, Schall R, Le Roux FPJ, Du Plessis JP (1993). Double-blind randomised cross-over trial of nocturnal theophylline supplementation of a twice-daily sustained release theophylline tablet formulation. *Chronobiology International*, 10, 277—289
31. Schall R, Luus HG (1993). On population and individual bioequivalence. *Statistics in Medicine*, 12, 1109—1124
32. Hundt HKL, Schall R, Luus HG, Müller FO (1993). Considerable cost savings through the analysis of pooled plasma samples in bioequivalence studies that fail to show bioequivalence. *International Journal of Clinical Pharmacology, Therapy and Toxicology*, 31, 331—336
33. Groenewoud G, Schall R, Hundt HKL, Müller FO, Van Dyk M (1993). Steady-state pharmacokinetics of phentermine extended-release capsules. *International Journal of Clinical Pharmacology, Therapy and Toxicology*, 31, 368—372
34. De la Rey N, Schall R, Luus HG, Meyer BH, Müller FO (1993). Assessing the risk of ovulation in interaction studies of drugs and oral contraceptives. *International Journal of Clinical Pharmacology, Therapy and Toxicology*, 31, 435—439
35. Conradie C, Schall R, Marx JD (1993). Echocardiographic study of left atrial thrombi in mitral stenosis. *Clinical Cardiology*, 16, 729—731
36. Pieters H, Roodt JP, Badenhorst PN, van Wyk V, Schall R, Lötter MG, Hundt HKL, Nel CJC (1993). Antithrombotic activity of Bay u3405, a thromboxane A<sub>2</sub>-antagonist, in patients with Dacron aortic grafts: a random controlled clinical trial. *Thrombosis and Haemostasis*, 70, 903—908
37. Schall R, Müller FO, Hundt HKL, Groenewoud G, Oelofsen MJ, Ungerer MJ, Wessels PH, Schumann F (1994). Pharmacokinetic profile of high doses of aprotinin in patients undergoing primary elective hysterectomy. A meta-analysis of two clinical trials. *Drug Investigation*, 7, 200-208
38. Furman S, Berkowicz L, Dippenaar J, Hellenberg DA, Montanus MS, Steinberg A, Schall R (1994). Cefetamet pivoxil vs cefaclor in the treatment of acute otitis media in children. *Drugs*, 47 (Suppl 3), 21—26

39. Schall R, Luus HG, Steijnans VW, Hauschke D (1994). Choice of characteristics and their bioequivalence ranges for comparison of absorption rates of immediate-release drug formulations. *International Journal of Clinical Pharmacology and Therapeutics*, 32, 323—328
40. Hauschke D, Steijnans VW, Diletti E, Schall R, Luus HG, Elze M, Blume H (1994). Presentation of the intrasubject coefficient of variation for sample size planning in bioequivalence studies. *International Journal of Clinical Pharmacology and Therapeutics*, 32, 376—378
41. Van der Meyden CH, Kruger AJ, Müller FO, Rabie W, Schall R (1994). Acute oral loading of carbamazepine-SR and phenytoin in a double-blind randomized study of patients at risk of seizures. *Epilepsia*, 35, 189—194
42. Schall R, Müller FO, Groenewoud G, Hundt HKL, Van Dyk M (1994). Relative bioavailability of four controlled-release nifedipine products. *Biopharmaceutics and Drug Disposition*, 15, 493—503
43. Schall R, Müller FO, Groenewoud G, Mogilnicka EM, van Dyk M (1994). Single-dose and steady-state pharmacokinetic and pharmacodynamic profiles of nisoldipine coat-core tablets in healthy young, and healthy elderly, and elderly hypertensive volunteers. *Drug Investigation*, 8, 21—30
44. Schall R, Müller FO, Groenewoud G, Hundt HKL, Luus HG, van Dyk M, van Schalkwyk AMC (1994). Investigation of a possible pharmacokinetic interaction between nisoldipine and quinidine in healthy volunteers. *Drug Investigation*, 8, 162—170
45. Swart MJ, Gordon PC, Hayse-Gregson PB, Dyer RA, Swanepoel AL, Buckels NJ, Schall R, Odell JA (1994). High dose aprotinin in cardiac surgery - a prospective, randomised study. *Anaesthesia and Intensive Care*, 22, 529—533
46. Schall R, Hundt HKL, Luus HG (1994). Pharmacokinetic characteristics for extent of absorption and clearance in drug/drug interaction studies. *International Journal of Clinical Pharmacology and Therapeutics*, 32, 633—637
47. Groenewoud G, Hundt HKL, Luus HG, Müller FO, Schall R (1994). Absolute bioavailability of a new high dose methylprednisolone tablet formulation. *International Journal of Clinical Pharmacology and Therapeutics*, 32, 652—654
48. Otto AC, Ninham E, Pretorius PH, Wagner L, du Toit DJR, Schall R (1994). Difference between splenic volume measured at necropsy and that measured in vivo by radionuclide tomography. *Clinical Nuclear Medicine*, 19, 979—980
49. Gagiano CA, Hart GAD, Bodemer W, Schall R (1994). Moclobemide twice daily in the treatment of major depressive episode: a double-blind, multicentre comparison with three times daily dosage schedules. *Clinical Neuropharmacology*, 17, S1—S8
50. Slabber M, Barnard HC, Kuyl JM, Dannhauser A, Schall R (1994). Effects of a low-insulin-response, energy-restricted diet on weight loss and plasma insulin concentrations in hyperinsulinemic obese females. *American Journal of Clinical Nutrition*, 60, 48—53
51. De Wet EH, Schall R, Oosthuizen JMC (1994). Basale sekresie van endogene opioïede na intraveneuse naloksoon (Letter). *South African Medical Journal*, 84, 51

52. Middle MV, Müller FO, Schall R, Hundt HKL, Mogilnicka EM, Beneke PC (1995). Effect of pantoprazole on ovulation suppression by a low-dose hormonal contraceptive. *Clinical Drug Investigation*, 54—56
53. Meyer BH, Scholtz HE, Schall R, Müller FO, Hundt HKL, Maree JS (1995). The effect of fasting on total serum bilirubin concentrations. *British Journal of Clinical Pharmacology*, 39, 169—171
54. Middle MV, Müller FO, Schall R, Groenewoud G, Hundt HKL, Huber R, Bliesath H, Steinijans VW (1995). No influence of pantoprazole on the pharmacokinetics of phenytoin. *International Journal of Clinical Pharmacology and Therapeutics*, 33, 304—307
55. Duursema L, Müller FO, Schall R, Middle MV, Hundt HKL, Groenewoud G, Steinijans VW, Bliesath H (1995). Lack of effect of pantoprazole on the pharmacokinetics and pharmacodynamics of warfarin. *British Journal of Clinical Pharmacology*, 39, 700—703
56. Steinijans VW, Sauter R, Hauschke D, Diletti E, Schall R, Luus HG, Elze M, Blume H, Hoffmann C, Franke G, Siegmund W (1995). Reference tables for the intrasubject coefficient of variation in bioequivalence studies. *International Journal of Clinical Pharmacology and Therapeutics*, 33, 427—430
57. Schall R (1995). Assessment of individual and population bioequivalence using the probability that bioavailabilities are similar. *Biometrics*, 51, 615—626
58. Conradie C, Schall R, Marx JD (1995). Left atrial size - a risk factor for left atrial thrombi in mitral stenosis. *Clinical Cardiology*, 18, 518—520
59. Steinijans VW, Hauschke D, Schall R (1995). International harmonization of regulatory bioequivalence requirements for average bioequivalence and current issues in individual bioequivalence. *Drug Information Journal*, 29, 1055—1062
60. Schall R, Müller FO, Duursema L, Groenewoud G, Hundt HKL, Middle MV, Mogilnicka EM, Swart KJ (1995). Relative bioavailability of rifampicin, isoniazid and ethambutol from a combination tablet vs. concomitant administration of a capsule containing rifampicin and a tablet containing isoniazid and ethambutol. *Arzneimittelforschung/Drug Research*, 45, 1236—1239
61. Schall R, Müller FO, Hundt HKL, Ritter W, Duursema L, Groenewoud G, Middle MV (1995). No pharmacokinetic or pharmacodynamic interaction between rivastatin and warfarin. *Journal of Clinical Pharmacology*, 35, 306—313
62. Müller FO, Schall R, de Vaal AC, Groenewoud G, Hundt HKL, Middle MV (1995). The influence of meloxicam on furosemide pharmacokinetics and pharmacodynamics in healthy volunteers. *European Journal of Clinical Pharmacology*, 48, 247—251
63. Gagiano CA, Müller FGM, de Kock RF, Schall R (1995). Moclobemide in continuation treatment of major depressive episodes - an open follow-up study over six months. *Journal of Clinical Psychopharmacology*, 15, S46—S50
64. Gagiano CA, Müller FGM, Berk M, Joubert PM, Brown RGCW, Schall R (1995). Moclobemide twice daily in the treatment of major depressive episode - a double-blind, multicenter comparison with 3 times daily dosage schedules. *Journal of Clinical Psychopharmacology*, 15, S4—S9

65. Browning NG, Long MA, Barry R, Nel CJC, Schall R, Monk E (1995). Ruptured abdominal aortic aneurysms - prognostic indicators and complications affecting mortality. A local experience. *South African Journal of Surgery*, 33, 21—25
66. Schall R, Müller FO, Hundt HKL, Duursema L, Groenewoud G, Middle MV (1996). Study of the effect of miglitol on the pharmacokinetics and pharmacodynamics of warfarin. *Arzneimittelforschung/Drug Research*, 46, 41—46
67. Müller FO, Schall R, Mogilnicka EM, Groenewoud G, Hundt HKL, Luus HG, Middle MV, Swart KJ, de Vaal AC (1996). Relative bioavailability of four clomipramine hydrochloride tablet products. *Biopharmaceutics and Drug Disposition*, 17, 81—90
68. Luus HG, Müller FO, Groenewoud G, Hundt HKL, Schall R, van Dyk M (1996). Effect of ipsapirone HCl on plasma glucose and pharmacokinetics of ipsapirone in type I diabetics. *Clinical Drug Investigation*, 11, 159—166
69. Schall R, Williams RL (1996). Towards a practical strategy for assessing individual bioequivalence. *Journal of Pharmacokinetics and Biopharmaceutics*, 24, 133—149
70. Müller FO, Schall R, Hundt HKL, Joubert A, Middle MV, Muir AR, Duursema L, Groenewoud G, Swart KJ (1996). Bioavailability of two selegiline hydrochloride tablet products. *Arzneimittelforschung/Drug Research*, 46, 1037-1040
71. Müller FO, Schall R, Hundt HKL, Groenewoud G, Ungerer MJ, Cronje HS, Schumann F (1996). Pharmacokinetic profile of aprotinin in two patients with chronic renal failure (Letter). *British Journal of Clinical Pharmacology*, 41, 619—620
72. Müller FO, Claasen JP, Schall R, Mogilnicka EM, Vos J du T, Groenewoud G, Middle MV, Stulting AA (1996). The efficacy of two bupivacaine hydrochloride injection products. *South African Medical Journal*, 86, 667—669
73. Swanepoel CR, Moosa MR, Rowland GF, Meyers AM, Botha BP, Smart AJ, Goodman R, Schall R, Keogh HJ, Merrifield EH (1996). Clinical experience with Replotin, a locally produced recombinant human erythropoietin, in the treatment of anaemia of chronic renal failure in South Africa. *South African Medical Journal*, 86, 1266—1269
74. Schall R, Müller FR, Müller FO, Luus HG (1997). Bioequivalence of controlled-release calcium antagonists. *Clinical Pharmacokinetics*, 32, 75—89
75. Richardt D, Rosmarin C, Havlik I, Schall R (1997). No effect of miglitol on the pharmacokinetics of phenytoin in healthy males. *Clinical Drug Investigation*, 13, 171 – 174
76. Müller FO, Terblanché J, Schall R, van Zyl Smit R, Tucker T, Marais K, Groenewoud G, Porchet HC, Weiner M, Hawarden D (1997). Pharmacokinetics of triptorelin after intravenous bolus administration in healthy males and in males with renal or hepatic insufficiency. *British Journal of Clinical Pharmacology*, 44, 335—341 (doi.org/10.1046/j.1365-2125.1997.t01-1-00592.x)

77. Müller FO, Middle MV, Schall R, Terblanché J, Hundt HKL, Groenewoud G (1997). An evaluation of the interaction of meloxicam with frusemide in patients with compensated chronic cardiac failure. *British Journal of Clinical Pharmacology*, 44, 393—398
78. Sirgel FA, Both FJ, Parkin DP, van de Wal BW, Schall R, Donald PR, Mitchison DA (1997). The early bactericidal activity of ciprofloxacin in patients with pulmonary tuberculosis. *American Journal of Respiratory and Critical Care Medicine*, 156, 901—905
79. Jacobs P, Wood L, Schall R (1998). Cost effectiveness of G:CSF in chemotherapy and transplant-related neutropenia. *Hematology*, 3, 487 – 493 (doi.org/10.1080/10245332.1998.11746423)
80. Stillings M, Havlik I, Chetty M, Clinton C, Schall R, Moodley I, Muir N, Little S (2000). Comparison of the pharmacokinetic profiles of soluble aspirin and solid paracetamol tablets in fed and fasted volunteers. *Current Medical Research and Opinion*, 16, 115 – 124
81. Opie LH, Schall R (2002). Evidence-based evaluation of calcium channel blockers for hypertension. Equality of mortality and cardiovascular risk relative to conventional therapy. *Journal of the American College of Cardiology*, 39, 315 – 322
82. Schug BS, Brendel E, Chantraine E, Wolf D, Martin W, Schall R, Blume HH (2002). The effect of food on the pharmacokinetics of nifedipine in two slow release formulations: pronounced lag-time after a high fat breakfast. *British Journal of Clinical Pharmacology*, 53, 582 – 588
83. Potgieter GE, Groenewoud G, Jordaan PJ, Hundt HKL, Schall R, Kummer M, Sewarte-Ross G (2002). Pharmacokinetics of pipamperone from three different tablet formulations. *Arzneimittelforschung/Drug Research*, 52, 430 – 434
84. Nel M, Schall R, Nel DG, Joubert G (2002). A comparison of approximate confidence interval methods for the difference between two independent binomial proportions. *South African Statistical Journal*, 36, 77 – 95
85. The Zimbabwe, Bangladesh, South Africa (ZIMBASA) Dysentery Study Group (2002). A multicentre, randomised, double blind clinical trial of short course vs. standard course oral ciprofloxacin for *Shigella dysenteriae* type 1 dysentery in children. *The Pediatric Infectious Disease Journal*, 21, 1136–1141
86. Coetzee A, Blaine EM, Labadarios D, Schall R, Haus M (2002). Effect of 1% and 2% propofol on blood lipids during long-term sedation. *South African Medical Journal*, 92, 911 – 916
87. Heyns CF, Simonin M-P, Groscurin P, Schall R, Porchet HC for the South African Triptorelin Study Group (2003). Comparative efficacy of triptorelin pamoate and leuprolide acetate in men with advanced prostate cancer. *British Journal of Urology International*, 92, 226 – 231 (doi.org/10.1046/j.1464-410X.2003.04308.x)
88. Opie LH, Schall R (2004). Old hypertensives and new diabetes. *Journal of Hypertension*, 22, 1453 – 1458
89. Clark J, Schall R (2007). Assessment of combined symptom and medication scores for rhinoconjunctivitis immunotherapy clinical trials. *Allergy*, 62, 1023 – 1028 (doi.org/10.1111/j.1398-9995.2007.01469.x)

90. Van Zyl JM, Schall R (2010). Weighted estimation of the location parameter of a symmetric stable distribution. *South African Statistical Journal*, 44, 1 – 16
91. Schall R, Ring A (2010). Statistical characterization of QT prolongation. *Journal of Biopharmaceutical Statistics*, 20, 543 – 562  
(doi.org/10.1080/10543400903581978)
92. Schall R, Endrenyi L, Ring A (2010). Residuals and outliers in replicate design crossover studies. *Journal of Biopharmaceutical Statistics*, 20, 835 – 849  
(doi.org/10.1080/10543401003618876)
93. Rossouw S, Joubert G, Schall R (2010). Profile of clinical trial biostatisticians and university courses to train them in South Africa. *South African Statistical Journal*, 44, 209 – 234
94. Schall R, Ring A (2011). Mixed models for data from thorough QT studies: Part 1. Assessment of marginal QT prolongation. *Pharmaceutical Statistics*, 10, 265 – 276 (doi.org/10.1002/pst.463)
95. Schall R (2011). Mixed models for data from thorough QT studies: Part 2. One-step assessment of conditional QT prolongation. *Pharmaceutical Statistics*, 10, 293 – 301 (doi.org/10.1002/pst.465)
96. Janse van Rensburg E, Tait K, Watt A, Schall R (2011). Comparative Evaluation of the Roche Cobas AmpliPrep/Cobas TaqMan HIV-1 Version 2 Test using the TaqMan 48 Analyzer (CAP/CTM-48 v2) and the Abbott Real Time HIV-1 Assay. *Journal of Clinical Microbiology*, 49, 377–379 (doi.org/10.1128/JCM.01285-10)
97. Schall R, Luus HG (2011). Comparative evaluation of ectoparasiticide efficacy: Non-inferiority and superiority assessment. *Veterinary Parasitology*, 178, 173 – 179 (doi.org/10.1016/j.vetpar.2010.12.028)
98. Van Zyl JM, Schall R (2012). Weighted least-squares rank regression for estimation of parameters with specific reference to the Weibull and Gumbel distribution. *Communications in Statistics - Simulation and Computation*, 41, 1654 – 1666 (doi.org/10.1080/03610918.2011.611315)
99. Verster A, de Waal D, Schall R, Prins C (2012). A truncated Pareto model for estimation of under recovery of large diamonds in diamond mining. *Mathematical Geosciences*, 44, 91 – 100 (doi.org/10.1007/s11004-011-9374-1)
100. Schall R (2012). The empirical coverage of confidence intervals: Point estimates and confidence intervals for confidence levels. *Biometrical Journal*, 54, 537 – 551 (doi.org/10.1002/bimj.201100134)
101. Van Heerden N, Steyn HJH, Schall R (2012). Soil removal efficacy of catholyte on polyamide 6,6 fabric. *Chinese Business Review*, 11, 682 – 689.
102. Schall R, Weatherall D (2013). Accuracy and fairness of rain rules for interrupted one-day cricket matches. *Journal of Applied Statistics*, 40, 2462 – 2479 (doi.org/10.1080/02664763.2013.818623)
103. Cronjé N, Steyn HJH, Schall R (2013). A comparison of the influence of catholyte vs phosphate detergent on the mechanical properties of polyamide 6,6 woven fabric. *Journal of Family Ecology and Consumer Sciences*, 41, 1 – 11  
(http://hdl.handle.net/10520/EJC140363)

104. Joubert H, Viljoen M, Schall R (2013). Performance of first-year accounting students: does time perspective matter? *Acta Academica*, 45, 242 – 267
105. Ring A, Morris TBS, Hohl K, Schall R (2014). Indirect bioequivalence assessment using network meta-analyses. *European Journal of Clinical Pharmacology*, 70, 947 – 955 (doi.org/10.1007/s00228-014-1691-0)
106. Burger DA, Schall R (2015). A Bayesian non-linear mixed effects regression model for the characterization of early bactericidal activity of tuberculosis drugs. *Journal of Biopharmaceutical Statistics*, 25, 1247–1271 (doi.org/10.1080/10543406.2014.971170)
107. Dawson R, Diacon AH, Everitt D, van Niekerk C, Donald PR, Burger DA, Schall R, Spigelman M, Conradie A, Eisenach K, Venter A, Ive P, Page-Shipp L, Variava E, Reither K, Ntinginya NE, Pym A, von Groote-Bidlingmaier F, Mendel CM (2015). The anti-tuberculosis activity of the combination of moxifloxacin, pretomanid (PA-824) and pyrazinamide during the first eight weeks of therapy: a Phase 2b open label, partially randomized trial of efficacy, tolerability and safety in patients with drug-susceptible and drug-resistant pulmonary tuberculosis. *The Lancet*, 385, 1738 – 1747 (doi.org/10.1016/S0140-6736(14)62002-X)
108. Diacon AH, Dawson R, von Groote-Bidlingmaier F, Symons G, Venter A, Donald PR, van Niekerk C, Everitt D, Hutchings, J, Burger DA, Schall R, Mendel CM (2015). Bactericidal activity of pyrazinamide and clofazimine alone and in combinations with pretomanide and bedaquiline. *American Journal of Respiratory and Critical Care Medicine*, 191, 943 – 953 (doi.org/10.1164/rccm.201410-1801OC)
109. Vermaas JF, Hugo CJ, Steyn HJH, Schall R (2015). The efficacy of anolyte as an environmentally friendly disinfectant on *Escheria coli* and *Staphylococcus aureus* contaminated cotton, polyester/cotton and polyester. *Journal of Family Ecology and Consumer Sciences*, 43, 26 – 32 (http://hdl.handle.net/10520/EJC175940)
110. Schoeman R, Coetzee D, Schall R (2015). Positional tackle and collision rates in Super Rugby. *International Journal of Performance Analysis in Sport*, 15, 1022 – 1036 (doi.org/10.1080/24748668.2015.11868848)
111. Le Roux E, Coetzee D, Jansen van Rensburg C, Schall R (2016). Physiological demands of simulated elite karate kumite matches. *African Journal for Physical Activity and Health Sciences*, 22, 833 – 852 (http://hdl.handle.net/10520/EJC196010)
112. Naicker M, Coetzee D, Schall R (2016). Morphological and skill-related fitness components as potential predictors of injuries in elite female field hockey players. *South African Journal of Research in Sport, Physical Education and Recreation*, 38, 127 – 141 (http://hdl.handle.net/10520/EJC199887)
113. Heathfield LJ, Prins AM, Schall R (2016). Comparison of footprint ridge density between two South African ethnic groups. *Journal of Forensic Investigation*, 4(1): 4
114. Schall R, Burger DA, Luus HG (2016). Accuracy and precision of alternative estimators of ectoparasiticide efficacy. *Veterinary Parasitology*, 223, 50 – 56 (doi.org/10.1016/j.vetpar.2016.04.013)

115. Van der Merwe L, Schall R (2016). Evidence for change: The affective impact of computer-assisted teaching and learning in statistics. *Journal for New Generation Sciences*, 14, 124 – 139
116. Turecek P, Romeder-Finger S, Apostol C, Bauer A, Crocker-Buque A, Burger D, Schall R, Gritsch H (2016). A world-wide survey and field study in clinical hemostasis laboratories to evaluate FVIII:C activity assay variability of ADYNOVATE and OBIZUR in comparison to ADVATE. *Haemophilia*, 22, 957 – 965 (doi.org/10.1111/hae.13001)
117. Schall R, Burger DA, Erasmus TP (2016). Effect of uncertainty in total parasite infestation on accuracy and precision of estimates of ectoparasiticide efficacy. *Veterinary Parasitology*, 230, 6 – 8 (doi.org/10.1016/j.vetpar.2016.10.017)
118. Le Roux E, Coetzee D, Jansen van Rensburg C, Schall R (2016). Time-motion analysis of simulated elite Karate kumite matches. *African Journal for Physical Activity and Health Sciences*, 22, 1080 – 1093 (<http://hdl.handle.net/10520/EJC200065>)
119. Van Tol JJ, Dzene AR, le Roux PAL, Schall R (2016). Pedotransfer functions to predict Atterberg limits for South African soils using measured and morphological properties. *Soil Use and Management*, 32, 635 – 643 (doi.org/10.1111/sum.12303)
120. Schoeman R, Coetzee D, Schall R (2017). Analysis of Super Rugby from 2011 to 2015. *International Journal of Performance Analysis in Sport*, 17, 190 – 201 (doi.org/10.1080/24748668.2017.1314122)
121. Seiphethheng K, Steyn HJH, Schall R (2017). Anolyte as an alternative bleach for stained cotton fabrics. *Journal of Consumer Sciences*, 2, 12 – 23
122. Tfwala CM, van Rensburg LD, Schall R, Mosia SM, Dlamini P (2017). Precipitation intensity-duration-frequency curves and their uncertainties for Ghaap plateau. *Climate Risk Management*, 16, 1 – 9 (doi.org/10.1016/j.crm.2017.04.004)
123. Schoeman R, Coetzee D, Schall R (2017). Comparisons of performance indicators between the Super Rugby and Currie Cup competition during the 2014 season. *South African Journal of Research in Sport, Physical Education and Recreation*, 39, 135 – 144
124. Van der Merwe I, Steyn HJH, Hugo C, Schall R (2017). The physical fibre properties of *Gonometa postica* after degumming the cocoons with different methods. *Journal of Family Ecology and Consumer Sciences*, 45, 1 – 11
125. Seedat RY, Schall R (2018). Age of diagnosis, incidence and prevalence of recurrent respiratory papillomatosis – a South African perspective. *Clinical Otolaryngology*, 43, 533 – 537 (doi.org/10.1111/coa.13016)
126. Burger DA, Schall R (2018). Robust fit of Bayesian mixed effects regression models with application to colony forming unit count in tuberculosis research. *Statistics in Medicine*, 37, 544 – 556 (doi.org/10.1002/sim.7529)
127. Burger DA, Schall R, Chen D-G (2018). Robust Bayesian nonlinear mixed effects modeling of time to positivity in tuberculosis trials. *Pharmaceutical Statistics*, 17, 615 – 628 (doi.org/10.1002/pst.1877)

128. Tfwala CM, van Rensburg LD, Schall R, Dlamini P (2018). Drought dynamics and interannual rainfall variability on the Ghaap plateau, South Africa, 1918 – 2014. *Physics and Chemistry of the Earth*, 170, 1–7 (doi.org/10.1016/j.pce.2018.09.003)
129. Burger DA, Schall R, Jacobs R, Chen D-G (2019). A generalized Bayesian nonlinear mixed effects regression model for zero inflated longitudinal count data in tuberculosis trials. *Pharmaceutical Statistics*, 18, 420 – 432 (doi.org: 10.1002/pst.1933)
130. Tfwala CM, van Rensburg LD, Schall R, Zietsman PC, Dlamini P (2019). Whole tree water use: Effects of tree morphology and environmental factors. *Ecological Indicators*, 102, 366 – 373 (doi.org/10.1016/j.ecolind.2019.02.054)
131. Bester C, Coetzee D, Schall R, Blair M (2019). Physical demands on elite lead rugby union referees. *International Journal of Performance Analysis in Sport*, 19, 258 – 273 (doi.org/10.1080/24748668.2019.1593097)
132. Schoeman R, Schall R (2019). Comparison of match-related performance indicators between major professional rugby competitions. *International Journal of Sports Science & Coaching*, 14, 344 – 354 (doi.org/10.1177/1747954119848419)
133. Ring A, Lang B, Kazaroho C, Labes D, Schall R, Schütz H (2019). Sample size determination in bioequivalence studies using statistical assurance. *British Journal of Clinical Pharmacology*, 85, 2369 – 2377 (doi.org/10.1111/bcp.14055)
134. Schoeman R, Schall R (2019). Team performance indicators as predictors of final log position and team success in Aviva Premiership, Guinness Pro 14, French Top 14 and Super Rugby. *International Journal of Performance Analysis in Sport*, 19, 763 – 777 (doi.org/10.1080/24748668.2019.1655337)
135. Cronjé N, Steyn HJH, Schall R (2020). Catholyte as an environmentally friendly detergent: Effect on the colourfastness of black dyed textiles. *The Journal of the Textile Institute*, 111, 1462 – 1469 (doi.org/10.1080/00405000.2019.1703489)
136. Sinclair C, Coetzee FF, Schall R (2020). Physical and physiological profile of U18, U19, U21 and senior elite netball players. *South African Journal of Sports Medicine*, 32, 1 – 7 (doi.org/10.17159/2078-516X/2020/v32i1a6545)
137. Burger DA, Schall R, Ferreira J, Chen D-G (2020). A robust Bayesian mixed effects approach for zero inflated and highly skewed longitudinal count data emanating from the zero inflated discrete Weibull distribution. *Statistics in Medicine*, 39, 1275 – 1291 (doi.org/10.1002/sim.8475)
138. Shaw ML, Schall R, Coetzee FF, Kraak WJ (2020). Time-motion analysis of elite under-19 female netball players using GPS. *South African Journal of Research in Sport, Physical Education and Recreation*, 42, 57 – 60
139. Sinclair C, Coetzee FF, Schall R (2020). Epidemiology of injuries among U18, U19, U21 and senior elite netball players. *South African Journal of Sports Medicine*, 32, 1 – 6 (doi.org/10.17159/2078-516X/2020/v32i1a7577)
140. Verster AM, Liang JE, Rostal MK, Kemp A, Brand AF, Anyamba A, Cordel C, Schall R, Zwiegers H, Paweska JT, Karesh WB, van Huyssteen CW (2020). Selected wetland soil properties correlate to Rift Valley fever livestock mortalities

reported in 2009-10 in central South Africa. *PLoS ONE*, 15(5): e0232481  
(doi.org/10.1371/journal.pone.0232481)

141. Pretorius J, Koen M, Schall R (2020). Using intentional humour in a higher-education classroom: Connecting with, and building on Lovorn and Holaway (2015). *The European Journal of Humour Research*, 8, 146 – 165  
(doi.org/10.7592/EJHR2020.8.2.Pretorius)
142. De Milander M, Van de Vyer V, Hattingh EJ, Schall R (2020). Association of attention deficit and hyperactivity disorder (ADHD) symptoms with visual functioning difficulties in Grade 1 learners. *South African Journal of Child Health*, in press
143. De Milander M, Schall R, de Bruin E, Smuts-Craft M (2020). Prevalence of ADHD symptoms and their association with learning-related skills in Grade 1 children in South Africa. *South African Journal of Education*, 40, Art #1732, 7 pages (doi.org/10.15700/saje.v40n3a1732)
144. Botha C, Coetzee D, Schall R (2020). Incidence of match injuries of South African junior netball players. *South African Journal of Research in Sport, Physical Education and Recreation*, in press

#### **Other articles in peer-reviewed journals**

1. Schall R, Dunne TT (1989). Discussion of a paper by A.G. Bruce and R.D. Martin. *Journal of the Royal Statistical Society, Ser. B*, 51, 415
2. Schall R (1990). Statistical analysis of HIV prevalence (Letter). *South African Medical Journal*, 77, 52
3. Schall R, Padayachee GN, Yach D (1990). The case for HIV surveillance in South Africa (Editorial). *South African Medical Journal*, 77, 324—325
4. Schall R, Padayachee N (1990). Doomsday forecasts of the AIDS epidemic (Opinion). *South African Medical Journal*, 78, 503
5. Schall R, Bradshaw D (1991). Statistics in medical publications (Letter). *South African Medical Journal*, 79, 109
6. Schall R (1991). Doomsday forecasts of the AIDS epidemic – whither Durban? (Author reply to letter to the editor). *South African Medical Journal*, 79, 566
7. Schall R (1997). Assessment of individual and population bioequivalence using the probability that bioavailabilities are similar (Author reply to letter to the editor). *Biometrics*, 53, 383—384
8. Schall R (2001). Review of: *Design and Analysis of Bioavailability and Bioequivalence Studies, Second Edition*, by Shein-Chung Chow and Jen-Pei Liu, Marcel Dekker, New York, 2000. *Controlled Clinical Trials*, 22, 402 – 404
9. Schall R (2004). Review of: *Testing Statistical Hypotheses of Equivalence*, by Stefan Wellek, Chapman & Hall/CRC, Boca Raton, 2003. *Clinical Trials*, 1, 139 – 140
10. Schall R (2010). Review of: *Design and Analysis of Bioavailability and Bioequivalence Studies, Third Edition*, by Shein-Chung Chow and Jen-Pei Liu,

Chapman & Hall / CRC, Boca Raton, 2009. *Journal of the American Statistical Association*, 105, 445

11. Schall R, Endrenyi L (2010). Bioequivalence: tried and tested (Editorial). *Cardiovascular Journal of Africa*, 21, 69 – 71
12. Ring A, Schall R, Day S, Loke YK (2017). Statistical reporting of clinical pharmacology research (Editorial). *British Journal of Clinical Pharmacology*, 83, 1159 – 1162 (doi.org/10.1111/bcp.13254)

### Chapters in books

1. Schall R, Dunne TT (1989). Perturbation scheme specific residuals. *Proceedings of the Business and Economics Statistics Section, American Statistical Association*
2. Joubert G, Schall R (1991). Some statistical concepts. In: *Child Health For All*. Kibel MA, Wagstaff LA (eds). Cape Town: Oxford University Press, 380—385
3. Joubert G, Schall R (1995). Some statistical concepts. In: *Child Health For All, 2nd Edition*. Kibel MA, Wagstaff LA (eds). Cape Town: Oxford University Press, 428—433
4. Schall R (1995). A unified view of individual, population, and average bioequivalence. In: *BIO-International 2. Bioavailability, bioequivalence and pharmacokinetic studies*. Blume HH, Midha KK (eds). Stuttgart: Medpharm Scientific Publishers, 91—106
5. Schall R (1996). Individual bioequivalence: Update on scientific and regulatory progress. In: *Bioavailability, bioequivalence and pharmacokinetic studies*. Midha KK, Nagai T (eds), Tokyo: Business Center for Academic Societies Japan, 119—123
6. Schall R, Harris S (1998). Analysis of patient data. In: *Introduction to Clinical Trials*. Karlberg J, Tsang K (eds), Hong Kong: Clinical Trials Centre, The University of Hong Kong, 134—140
7. Schall R, Harris S (1998). Analysis plan and sets. In: *Introduction to Clinical Trials*. Karlberg J, Tsang K (eds), Hong Kong: Clinical Trials Centre, The University of Hong Kong, 330—334
8. Schall R, Harris S (1998). Missing values and outliers. In: *Introduction to Clinical Trials*. Karlberg J, Tsang K (eds), Hong Kong: Clinical Trials Centre, The University of Hong Kong, 335—336
9. Schall R (1998). When and why are statistical trial decisions needed: the role of the statistician. In: *Introduction to Clinical Trials*. Karlberg J, Tsang K (eds), Hong Kong: Clinical Trials Centre, The University of Hong Kong, 216—219
10. Schall R, Luus HG, Erasmus TP (1998). Type of comparison. In: *Introduction to Clinical Trials*. Karlberg J, Tsang K (eds), Hong Kong: Clinical Trials Centre, The University of Hong Kong, 258—266

11. Erasmus TP, Schall R (1998). Subgroups, interactions and covariates. In: *Introduction to Clinical Trials*. Karlberg J, Tsang K (eds), Hong Kong: Clinical Trials Centre, The University of Hong Kong, 362—364
12. Erasmus TP, Schall R (1998). Evaluation of safety and tolerability: Scope. In: *Introduction to Clinical Trials*. Karlberg J, Tsang K (eds), Hong Kong: Clinical Trials Centre, The University of Hong Kong, 373—374
13. Erasmus TP, Schall R (1998). Evaluation of safety and tolerability: Variables and data collection. In: *Introduction to Clinical Trials*. Karlberg J, Tsang K (eds), Hong Kong: Clinical Trials Centre, The University of Hong Kong, 375—377
14. Erasmus TP, Schall R (1998). Evaluation of safety and tolerability: Subjects and presentation of data. In: *Introduction to Clinical Trials*. Karlberg J, Tsang K (eds), Hong Kong: Clinical Trials Centre, The University of Hong Kong, 378—384
15. Hauschke D, Schall R, Luus HG (2000). Statistical significance. In: *Encyclopedia of Biopharmaceutical Statistics*. Chow S-C (ed), New York: Marcel Dekker, 493 – 497
16. Chikobvu P, Joubert G, Steinberg H, van der Ryst E, Schall R (2003). Follow-up in longitudinal studies in the presence of HIV/AIDS: The Bloemfontein vitamin A trial. A case study. *Bulletin of the International Statistical Institute 54<sup>th</sup> Session Proceedings*, LX, 128 – 131
17. Hauschke D, Schall R, Luus HG (2003). Statistical significance. In: *Encyclopedia of Biopharmaceutical Statistics. 2<sup>nd</sup> Edition*. Chow S-C (ed), New York: Marcel Dekker, 954 – 958
18. Ring A, Schall R (2015). Cardiovascular toxicity, especially QT/QTc prolongation. In: *Statistical Methods for Evaluating Safety in Medical Product Development*. Gould AL (ed). Hoboken, NJ: Wiley
19. Nkalai T, de Wet L and Schall R (2015). Comparing the sensor glove and questionnaire as measures of computer anxiety. In: *Proceedings of the 2nd International Conference on Physiological Computing Systems*, ISBN 978-989-758-085-7, 93 – 103 (doi.org/10.5220/0005229800930103)
20. Ring A, Scharpenberg M, Grill S, Schall R, Brannath W (2018). Equivalence tests in subgroup analyses. In: *New Frontiers of Biostatistics and Bioinformatics*, ICOSA Book Series in Statistics. Zao Y, Chen DG (eds). Cham: Springer, 201 – 238 (doi.org/10.1007/978-3-319-99389-8\_10)
21. Nel W, de Wet L, Schall R (2019). The effect of search engine, search term and occasion on brain-computer interface metrics for emotions when ambiguous search queries are used. In: *Proceedings of the 3rd International Conference on Computer-Human Interaction Research and Applications (CHIRA 2019)*. Silva HP, Ramirez AJ, Holzinger A, Helfert M, Constantine L (eds). ISBN: 978-989-758-376-6, 28 – 39 (chira.scitevents.org)
22. Nel W, de Wet L, Schall R (2020). Randomised Controlled Trial of the Usability of Major Search Engines (Google, Yahoo! and Bing) when Using Ambiguous Search Queries. In: *Proceedings of the 4th International Conference on Computer-Human Interaction Research and Applications (CHIRA 2020)*, in press (chira.scitevents.org)