

Scientific Outputs 2008

International Conferences 2008

1. Alberts F, Gelderblom WCA, Van Zyl WH. Biological degradation of Aflatoxin B₁. PAEMS 2008, Cape Town International Convention Centre, 3-5 November 2008 (Poster).
2. Abel S, Kew MC, Gelderblom WCA. The effect of specific n-6/n-3 poly-unsaturated fatty acid dietary ratios on oxidative status and hepatocarcinogenesis. PAEMS 2008, Cape Town International Convention Centre, 3-5 November 2008 (Poster).
3. Abrahams C, Abel S, Gelderblom WCA, de Kock M. Dietary Modulation of Colon Mucosa PUFA Content Alters Membrane Susceptibility to Lipid Peroxidation. PAEMS 2008, Cape Town International Convention Centre, 3-5 November 2008 (Poster).
4. Abrahams S, Gamielidien K, de Kock M, Joubert E, Gelderblom WCA. The effect of rooibos and honeybush herbal teas on the expression of phase I and II enzymes of carcinogen metabolism. PAEMS 2008, Cape Town International Convention Centre, 3-5 November (Poster).
5. Burger H-M, Lombard MJ, Shephard GS, Van der Westhuizen L, Gelderblom WCA. The use of a validated dietary assessment tool in a human mycotoxin exposure study: a case for mycotoxin exposure in the former Transkei region, South Africa. PAEMS 2008, Cape Town International Convention Centre, 3-5 November (Poster).
6. Gamielidien K, Joubert E, van der Merwe D, Abrahams S, de Kock M, Gelderblom, WCA. Characterization of the major antimutagenic and antioxidant principles of unfermented rooibos (*Aspalathus linearis*) and honeybush (*Cyclopia intermedia*) herbal teas. PAEMS 2008, Cape Town International Convention Centre, 3-5 November (Oral).
7. Gamielidien K, Maritz GS, Gelderblom WCA. Anti-mutagenic effects of South African Herbal teas, Rooibos and Honeybush against 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK) and N-oxide, 4 (methylnitrosamino)-1-(3-pyridyl)-1-butanol (NNAL) PAEMS 2008, Cape Town International Convention Centre, 3-5 November (Poster).
8. Gelderblom WCA. Health promoting properties of rooibos and honeybush herbal tea. Conference on the commercialisation of plant based medicines: practical case studies. Geneva, Switzerland, 24-26 September 2008 (Invited Speaker).
9. Gelderblom WCA. Perspective on risk assessment paradigms of genotoxic and nongenotoxic carcinogenic mycotoxins. 6th Pan African Environmental Mutagen Society Conference (PAEMS), Cape Town, 2 - 5 November 2008. (Oral) (Invited Speaker).
10. Hon GM, Hassan MS, Van Rensburg SJ, Abel S, Marais DW, Van Jaarsveld P, Smuts CM, Erasmus RT and Matsha T. Erythrocyte membrane fatty acids in patients with multiple sclerosis, 7th International Conference of the Society for Free Radical Research - Africa 28th African Health Science Congress, Mauritius, 14-17 July 2008 (Poster).
11. Imrie G, Vismer HF, Marasas WFO, Rheeder JP. Viability of toxigenic, plant

- pathogenic and medically important fungi. PAEMS 2008, Cape Town International Convention Centre, 3-5 November 2008 (Poster).
12. Katerere DR, Stockenström S, Thembo K, Balducci G, Shephard GS. Investigation of patulin contamination in apple juice sold in retail outlets in Italy and South Africa. 122nd AOAC International Annual Meeting and Exposition, Dallas, Texas, USA, 21-24 September 2008 (Poster).
 13. Katerere DR, Stockenström S, Balducci G, Shephard GS. Determination of patulin in apple juice: comparative evaluation of four analytical methods. 6th PAEMS Conference, 2 – 5 Nov 2008, Cape Town (Poster).
 14. Katerere DR Antimicrobial activity of stilbenoids and flavonoids from three species of African Combretaceae. World Congress of Medicinal and Aromatic Plants (WoCMAP) at the CTICC, 9-13 November 2008.
 15. Magcwebeba TU, Gamieldien K, Joubert E, Swart P, Gelderblom WCA. Investigating the chemopreventive activity of selected South African herbal teas, rooibos (*Aspalathus linearis*) and Honeybush (*Cyclopia spp.*) in normal and cancer human skin cells. PAEMS 2008, Cape Town International Convention Centre, 3-5 November (Poster).
 16. Marnewick JL, Gelderblom WCA. Rooibos and honeybush – unique South African herbal beverages with chemopreventive activities. 6th Pan African Environmental Mutagen Society Conference (PAEMS), Cape Town, 2 - 5 November 2008 (Oral).
 17. Meela MM, Gelderblom WCA, Gamieldien K, Katerere DR. The anti-proliferative effects of aqueous and organic extracts of *Sutherlandia frutescens* in human liver, colon and oesophageal cancer cell lines. 6th Pan African Environmental Mutagen Society Conference (PAEMS), Cape Town, 2 - 5 November 2008 (Poster).
 18. Moses LM, Vismar HF, Marasas WFO, Wingfield BD. Real-time PCR analyses of fumonisin biosynthetic *fum* genes in *Fusarium verticillioides* MRC 826 subcultures. PAEMS 2008, CTICC, Cape Town, South Africa, 3-5 November 2008 (Poster).
 19. Riedel S, Abel S, Humpf H.-U. and Gelderblom WCA. Dietary modulation of lipid metabolism in fumonisin b1 induced pre-neoplastic lesions in rat liver. South Africa. PAEMS 2008, Cape Town International Convention Centre, 3-5 November 2008 (Poster).
 20. Samodien S, Gamieldien K, Abel S, Joubert E, de Kock M, Gelderblom WCA. A comparative study on the anti-proliferative effects of rooibos (*Aspalathus linearis*), honeybush (*Cyclopia spp*) herbal teas and green (*Camellia sinensis*) tea in human liver and colon cancers. PAEMS 2008, Cape Town International Convention Centre, 3-5 November (Poster).
 21. Schuhr I, Abel S and Gelderblom WCA. The antioxidant potential of oleic acid (C18:1n-9) and effect on cell survival in carcinogenesis. South Africa. PAEMS 2008,

- Cape Town International Convention Centre, 3-5 November 2008 (Poster) won the Bronze Award (3rd place).
22. Shephard, GS. The potential of mycotoxins as chemical warfare agents. Promoting Biosafety and Biosecurity within the Life Sciences: An International Workshop in East Africa, Kampala, Uganda, 11-12 March 2008 (Invited Speaker).
 23. Shephard, GS. Mycotoxin Problems in the Food Chain: A Comparison of Developing and Developed Worlds. International Union of Microbiological Societies XII International Congress of Mycology, Istanbul, Turkey, 5-9 August 2008 (Invited Plenary).
 24. Shephard GS. Mycotoxin problems in the food chain: A comparison of developing and developed worlds. 6th Pan African Environmental Mutagen Society Conference (PAEMS), Cape Town, 2 - 5 November 2008 (Oral).
 25. Shephard GS, Dorner JW, Krska R, Lombaert GA, Malone B, Maragos C, Sabino M, Solfrizzo M, Trucksess M, Van Egmond HP, Ware GW, Whitaker TB. General referee report: Mycotoxins. 122nd AOAC International Annual Meeting and Exposition, Dallas, Texas, USA, 21-24 September 2008 (Poster).
 26. Shephard GS. Sampling methods for mycotoxin analysis. ISM Workshop-Training Course "Detection techniques for mycotoxins and toxigenic fungi in the food chain", Bari, Italy, 29 September - 3 October 2008 (Oral).
 27. Shephard GS. Determination of fumonisins in maize by HPLC. ISM Workshop-Training Course "Detection techniques for mycotoxins and toxigenic fungi in the food chain", Bari, Italy, 29 September - 3 October 2008 (Oral).
 28. Shephard GS. Prevention strategies and HACCP plans for mycotoxins in food safety. ISM Workshop-Training Course "Detection techniques for mycotoxins and toxigenic fungi in the food chain", Bari, Italy, 29 September - 3 October 2008 (Oral).
 29. Shephard GS. Africa: A world of myco-contradictions. World Mycotoxin Forum: The Fifth Conference, Noordwijk, The Netherlands, 17-18 November 2008 (Invited oral plenary).
 29. Sissing L., Gamielien K, and Gelderblom W.C.A. Anti-proliferative and pro-apoptotic effects of South African herbal teas. PAEMS 2008, Cape Town International Convention Centre, 3-5 November (Poster).
 30. Somdyala NIM, Bradshaw D, Gelderblom WCA (2008) UICC World Cancer Control Congress in Geneva, Switzerland on 27-31 August 2008 where I presented a poster entitled "Cancer incidence in the rural region of the Eastern Cape Province, South Africa. Authors:
 31. Thembo KM, Vismar HF, Nyazema NZ, Katerere DR. Antifungal activity of weedy plant extracts. PAEMS 2008, CTICC, Cape Town, South Africa, 3-5 November 2008 (Poster).

32. Van der Merwe JD, Joubert E, Gelderblom WCA, De Beer D, Manley M. Liver metabolism of 2',3,4,4',6'-pentahydroxy-3-C- β -D-glucopyranosyldihydrochalcone: glucuronidation and sulphation (2008). XXIV International Conference on polyphenols. Polyphenols Communications, 2: 817-818 (Poster).
33. Van der Westhuizen L, Gong YY, Shephard GS, Rheeder JP, Burger H-M, Gelderblom WCA, Wild CP. Reducing Toxic Contamination of Staple Foods in Developing Countries by Simple Intervention Programmes. Presentation at the Molecular Epidemiology Unit, Leeds Institute of Genetics, Health and Therapeutics, Faculty of Medicine and Health, University of Leeds, UK, 13 October 2008.
34. Van der Westhuizen L, Gong YY, Shephard GS, Rheeder JP, Burger H-M, Gelderblom WCA, Wild CP. Reducing Fumonisin Contamination of Maize Staple Foods by Simple Intervention Procedures in a Rural Area of South Africa. PAEMS 2008, Cape Town International Convention Centre, 3-5 November 2008 (Poster).
35. Van der Westhuizen L, Gong YY, Shephard GS, Rheeder JP, Burger H-M, Wild CP. Reducing fumonisin contamination of maize staple foods by simple intervention procedures in a rural area of South Africa. World Mycotoxin Forum: The Fifth Conference, Noordwijk, The Netherlands, 17-18 November 2008 (Poster).
36. Van Zyl J, Sewram V, Volkwyn Y, Shephard GS, Abnet CC. Determination of FB₁ exposure in a population at risk of liver cancer. 6th Pan African Environmental Mutagen Society Conference (PAEMS), Cape Town, 2 - 5 November 2008 (Poster).
37. Vismar HF. A contemporary morphological and molecular analysis of *Sporothrix schenckii*. 7th National Conference of the Society of Indian Human and Animal Mycology (SIHAM), Seth GS Medical College and KEM Hospital, Parel, India, 4-6 February, 2008 (Invited Speaker).
38. Vismar HF, Marasas WFO. Mycotoxins: aspects concerning commercial, organic and genetically modified foods. PAEMS 2008, Cape Town International Convention Centre, Cape Town, South Africa, 3-5 November 2008 (Oral).
39. Volkwyn Y, Van der Westhuizen L, Shephard GS, Rheeder JP, Gouse M, Pray CE. Fumonisin levels in transgenic and conventional maize from rural areas in Kwazulu-Natal, South Africa. PAEMS 2008, Cape Town International Convention Centre, 3-5 November 2008 (Poster).
40. Volkwyn Y, Van der Westhuizen L, Shephard GS, Rheeder JP, Gouse M, Pray CE. Fumonisin levels in transgenic and conventional maize from rural areas in Kwazulu-Natal, South Africa. World Mycotoxin Forum – The fifth Conference, Noordwijk, the Netherlands, 17-18 November 2008 (Poster).
41. Windvogel SL, Maritz GS, Gamielien K, Gelderblom WCA. Maternal nicotine exposure and neonatal lung development: investigating the modulating effect of rooibos (*Aspalathus linearis*) on oxidative status of rat lung. PAEMS 2008 Conference, Cape

Town International Convention Centre, Cape Town, 3-5 November (Poster).

National Conferences 2008

1. Abel S, Kew MC, Gelderblom WCA. Fatty Acids as Chemopreventive Tools in Hepatocellular Carcinoma. Emperor's Palace, Johannesburg, South Africa, 20-22 August 2008.
2. Abel, S. Omega-3 PUFA and Cancer Prevention, Master Class on Diet Health and Development: What is the Evidence? 22nd Biannual Congress of the Nutrition Society and the 10th Biannual Congress of the Association of Dietetics in South Africa. 28 Sept-02 October 2008. University of Pretoria (Oral).
3. Abrahams, C. Effect of dietary n-6/n-3 ratios on cellular oxidative status. Master Class on Diet Health and Development: What is the Evidence? 22nd Biannual Congress of the Nutrition Society and the 10th Biannual Congress of the Association of Dietetics in South Africa. 28 Sept-02 October 2008. University of Pretoria (Oral).
4. Burger H-M, Lombard MJ, Charlton KE, Steyn NP, Nel JL, Gelderblom WCA. "Diet and other risk factors associated with oesophageal cancer in the former Transkei" Emperor's Palace, Johannesburg, South Africa, 20-22 August 2008.
5. Burger H-M, Lombard MJ, Steyn NP, Gelderblom WCA. Nutrient intakes and food security of a rural population living in the Eastern Cape Province, Nutrition Congress 2008, University of Pretoria, Hatfield Campus, Pretoria, 28 September – 2 October 2008 (Oral).
6. Burger H-M, Lombard MJ, Shephard GS, Van der Westhuizen L, Gelderblom WCA. The use of a validated dietary assessment tool in a human mycotoxin exposure study. Nutrition Congress 2008, University of Pretoria, Hatfield Campus, Pretoria, 28 September – 2 October 2008 (Poster).
7. Burger H-M. Nutrition and Cancer An overview. Master Class on Diet Health and Development: What is the Evidence? 22nd Biannual Congress of the Nutrition Society and the 10th Biannual Congress of the Association of Dietetics in South Africa. 28 Sept-02 October 2008. University of Pretoria (Oral).
8. De Beer WZ, De Meyer EM, Vismer HF, Wingfield MJ. Speciation of the human pathogen, *Sporothrix schenckii*. 20th Biennial Congress of the South African Genetics Society, Sanlam Auditorium, UP Conference Centre, University of Pretoria, Pretoria, 27-29 March 2008. (Oral)
9. Gamielidien K, Joubert E, Sissing LG, Marnewick JL, Samodien S, de Kock M, Gelderblom WCA. Chemopreventive properties of South African herbal teas, rooibos and honeybush, utilising different cell cultures and site specific rat experimental models. Cancer Research in Action Conference. Emperors Palace, Johannesburg. 20-22 August 2008 (Poster)

10. Gamieldien K. Therapeutic properties of South African herbal teas. Master Class on Diet Health and Development: What is the Evidence? 22nd Biannual Congress of the Nutrition Society and the 10th Biannual Congress of the Association of Dietetics in South Africa. 28 Sept-02 October 2008. University of Pretoria (Oral).
11. Gelderblom WCA, Burger HM, Abel S, Gamieldien K. Antioxidant supplements: The good the bad and the unnecessary. Indigenous plant use forum, Graaff-Reinet, 7 to 10 July 2008 (Oral).
12. Gelderblom WCA, Gamieldien K, Sissing L, Van der Merwe JD, Joubert E. Health promoting properties of rooibos and honeybush herbal teas. Cancer Research in Action Conference. Emperors Palace, Johannesburg. 20-22 August 2008 (Oral).
13. Gelderblom WCA, E Joubert, H Burger and S Abel. Plant flavonoids as dietary supplements. Potential risk in cancer chemoprevention. Master Class on Diet Health and Development: What is the Evidence? 22nd Biannual Congress of the Nutrition Society and the 10th Biannual Congress of the Association of Dietetics in South Africa. 28 Sept-02 October 2008. University of Pretoria (Oral).
14. Hon GM, Hassan MS, Van Rensburg SJ, Abel S, Marais DW, Van Jaarsveld P, Smuts CM, Erasmus RT and Matsha T. Erythrocyte membrane fatty acids in patients with multiple sclerosis, 48th Annual Congress of the Federation of South African Societies of Pathology, Cape Sun Hotel, Strand Street, Cape Town, 19-21 July 2008 (Poster).
15. Katerere DR, Gamieldien K, Sissing L, Meela M, Ntuli SB, Gelderblom WCA. "Cancer-bush"/*Sutherlandia frutescens* – anti-cancer drug of the future? Cancer Research in Action Conference. Emperors Palace, Johannesburg. 20-22 August 2008 (Oral).
16. Katerere DR, Gray AI, Nash RJ, Waigh RG. Antimicrobial activity of stilbenoids and flavonoids from three species of African Combretaceae. Oral lecture presented at the World Congress of Medicinal and Aromatic Plants (WoCMAP), 9 – 13 Nov 2008. Cape Town.
17. Lombard MJ, Burger HM, Steyn NP. A critical appraisal of different methods used to validate the RAPP dietary assessment tool, Nutrition Congress 2008, University of Pretoria, Hatfield Campus, Pretoria, 28 September – 2 October 2008 (Oral).
18. Lombard MJ, Burger H-M, Steyn NP. Comparison of different statistical methods to determine the outcome of validation studies, Nutrition Congress 2008, University of Pretoria, Hatfield Campus, Pretoria, 28 September – 2 October 2008 (Poster).
19. Lombard, MJ. Most common problems associated with diet and cancer epidemiology. Master Class on Diet Health and Development: What is the Evidence? 22nd Biannual Congress of the Nutrition Society and the 10th Biannual Congress of the Association of Dietetics in South Africa. 28 Sept-02 October 2008. University of Pretoria (Oral).

20. Shephard GS, Vleggaar R, Tenza K, Van der Westhuizen L, Sewram V, Gelderblom WCA. Identification and natural occurrence of 3-*epi*-fumonisin B₃, a new fumonisin mycotoxin analogue. Chromatography - Mass Spectrometry 2008, Bela Bela, 12-15 October 2008 (Oral)
21. Sissing L. Investigations into the cancer modulating properties of South African herbal teas inn oesophageal carcinogenesis. Master Class on Diet Health and Development: What is the Evidence? 22nd Biannual Congress of the Nutrition Society and the 10th Biannual Congress of the Association of Dietetics in South Africa. 28 Sept-02 October 2008. University of Pretoria (Oral).
22. Somdyala NIM, Bradshaw D, Gelderblom WCA. A population-based cancer registry in the Eastern Cape Province. Cancer Research in Action Conference. Emperors Palace, Johannesburg. 20-22 August 2008 (Oral).
23. Van der Merwe JD, Joubert E, Gelderblom WCA, Manley M. Liver metabolism of the major phenolic compound in rooibos (*Aspalathus linearis*): glucuronidation, South African Society of Biochemistry and Molecular Biology (SASBMB) meeting as part of Bio-08 conference, Grahamstown, South Africa, 23-24 January 2008 (Poster).
24. Van der Westhuizen L, Gong YY, Shephard GS, Rheeder JP, Burger H-M, Gelderblom WCA, Wild CP. Reducing Fumonisin Contamination of Maize Staple Foods by Simple Intervention Procedures in a Rural Area of South Africa. Chromatography - Mass Spectrometry 2008, Bela Bela, North West Province, 12-15 October 2008. (Poster)
25. Van Zyl J, Sewram V, Volkwyn Y, Shephard GS, Abnet CC. Determination of FB₁ exposure in a population at risk of liver cancer. Chromatography - Mass Spectrometry 2008, Bela Bela, 12-15 October 2008 (Poster).
26. Volkwyn Y, Van der Westhuizen L, Shephard GS, Rheeder JP, Gouse M, Pray CE. Fumonisin levels in transgenic and conventional maize from rural areas in Kwazulu-Natal, South Africa. Chromatography - Mass Spectrometry 2008, Bela Bela, 12-15 October 2008. (Poster)
27. Windvogel SL, Joubert L, Marnewick J, Gelderblom WCA. An investigation into the effects of chronic exposure to rooibos and honeybush on the antioxidant activity in rat liver and kidney: A 90-day study. Indigenous Plant Usage Forum Conference, Graaff Reinet, 7-10 July 2008. (Poster)

Seminars at PROMEC

- Prof N Steyn, *Chronic of Diseases of Lifestyle Research Unit, Medical Research Council*: Dietary interventions in the preparation of chronic diseases: What works? 12 December 2007.
- Dr Havana Chikoto, *Regulatory and Technical Manager: South African AIDS Vaccine Initiative (SAAVI)*: A vaccine against HIV: Possibility or pipe dream? 12 February

2008.

- Prof M Blockman, *UCT, Pharmacology Dept*: Conflict of interest in medicine and science. 12 September 2008.
- Ms Oluwaseyi Aboyade, *Department of Botany, University of Fort Hare*: Preliminary studies on the activity of *Solanum aculeastrum*. 28 November 2008.

Training

- Mr S Ngobeni, Mpumalanga Department of Agriculture and Land Administration received training on mycotoxin analysis.
- Dr DR Katerere was nominated for entry into the Management Development Programme (MDP) at University of Stellenbosch Business School (USB) as part of the accelerated development programme.
- Dr K Gamielien received training on Cell Transfection by Prof. Anne Louw (Department of Biochemistry, University of Stellenbosch) 27th to 31st October 2008.

PAUSET

- PROMEC Unit displays research activities at the MRC Open day, Cape Town, 16th -17th October 2008 (Oral).

Awards

- Prof V Sewram won the Victor Ngu Award for the best Oral Presentation at the AORTIC 2007 conference.
- Ms L van der Westhuizen has been awarded an International Cancer Technology Transfer (ICRETT) Fellowship by the International Union Against Cancer.
- Ms H-M Burger won second prize for her poster (silver award), “The use of a validated dietary assessment tool in a human mycotoxin exposure study: a case for mycotoxin exposure in the former Transkei region, South Africa” at the PAEMS 2008, Cape Town International Convention Centre, 3-5 November 2008.
- Ms L Moses won first prize for her poster (gold award), “Real-time PCR analyses of fumonisin biosynthetic *fum* genes in *Fusarium verticillioides* MRC 826 subcultures” at the PAEMS 2008, Cape Town International Convention Centre, Cape Town, South Africa, 3-5 November 2008.
- Ms I Schuhr won third prize for her poster (bronze award), “The antioxidant potential of oleic acid and effect on cell survival in carcinogenesis.” at the PAEMS 2008 Conference, Cape Town International Convention Centre, 3-5 November. 2008

Lay Publications

1. Gelderblom WCA. Rooibos functional food ingredient. Food and Beverage Reporter, March 2008
2. Joubert E, Gelderblom W, Louw A. (2008) The promise of honeybush. South African Vegetables and Fruit. No 123, pp 22-23.

