

Curriculum Vitae

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PIETER ROUSSEAU FOURIE

DATE OF BIRTH 11th June 1953

ADDRESS 7 Buffalo Street
Vygeboom
7550
SOUTH AFRICA
Work: +27-21-9811200/8084249
Fax: +27-21-9811206
Cellular telephone: +27-825511845



QUALIFICATIONS B.Sc. Engineering (Electrical), 1976
M.B.Ch.B. (University Stellenbosch), 1983: MP 0272590
Professional Engineer. (Electronic) 1988: No.880595
Ph.D. (University Stellenbosch), 1989
M.MED. (PAEDIATRICS) (University Stellenbosch) 1993.

PRESENT OCCUPATION

1. Paediatrician: Cape Gate Mediclinic Private Hospital, Brackenfell, Cape Town, South Africa
2. Head: Biomedical Engineering Research Group (BERG), Department of Mechanical & Mechatronic Engineering, Faculty of Engineering, Stellenbosch University.
3. Extra-ordinary associate professor: Department Anesthesiology and Critical Care; University Stellenbosch, Faculty of Health Sciences. Supporting the Department with research and development of innovative concepts and ideas

MARITAL STATUS Married to Louise (B.Sc. Domestic Science; Diploma Hospital Dietetics): without her I would be completely lost.

CHILDREN Chris (10 June 1991): married to Christine.
Julie (10 December 1992): fourth year MBChB
Hanja (11 June 1997): second year B. Music.

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- PROFESSIONAL MEMBERSHIP**
- (i) Institute for Electronic and Electrical Engineers (*IEEE*): *Member*
 - (ii) South African Board for Professional Engineers: *Professional Engineer.*
 - (iii) South African Institute for Electrical Engineers (*SAIEE*): *Fellow*
 - (iv) Health Professional Council of South Africa
 - (v) Paediatric Society of South Africa

GENERAL

- Sport: Marathon running – Two Oceans (56 km) 1987; Comrades (89km) 1987. Now training again to run the Comrades in 2018.
Squash: social
- Music: Transverse flute - grade III, University of South Africa. Piano-Grade III, UNISA.
- Art: Oil painting – First prize, South Africa Art Society (Belleville, South Africa), 1984.
- Religion: Dutch Reformed Church – active member.
- Health: Deaf R ear, otherwise excellent.

EXPERIENCE

- 1970 Matriculation. (Mathematics*).
- 1971 Military Service South Africa. Navy Gordon's Bay. Completed Officer's training. Underwent training as an engineer midshipman as well as astronavigation course – passed examinations as best student.
- 1972 – 1975 B.Sc. Eng. (Electrical) University Stellenbosch
Class representative 1974, 1975.
Council for Scientific and Industrial Research bursary (Institute for Defense Research).
- 1976 Biochemistry I. Advanced Electromagnetic Transmission C. MBChB I.

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- 1977 – 1978 National Institute for Defense Research Engineer. Research entailed computer aided design of microwave systems as well as certain classified projects. Five scientific reports were produced during this period of which three were classified:
- (i) The Design and Manufacture of a Waveguide Microwave Gunn Oscillator
 - (ii) Computer Aided Design of a Gunn Oscillator.
- 1979 – 1983 MBChB II-VI , University Stellenbosch
- 1980 – 1981 Part-time Lecturer in the Department of Electrical Engineering, University Stellenbosch
- 1980 – 1981 Chairman University of Stellenbosch Clinic Organization (USKOR) Bishop Lavis Clinic.
- 1982 Chairman (USKOR).
1984. Houseman. 2 Military Hospital Wynberg.South Africa
- 1985 – 1990
- (i) Lecturer: Medical Physiology and Biochemistry (University Stellenbosch)
 - (ii) Part-time service (20 hours/week) rendered to Tygerberg Hospital, Cape Town, ICU Unit.
 - (iii) Research work in collaboration with Prof. A.R. Coetzee (Department Anaesthesiology) on the effect of anaesthetic drugs on the myocardium. The work entailed large animal experimentation under general anaesthesia. Operating sophisticated electronic equipment and the development of mathematical as well as statistical programs for data obtained were part of the responsibilities involved.
- MBChB VI: Research projects: completed 5 Honors (Physiology) – Dr C.J. Coetzee.
M.Sc. (Physiology) – F.A. Strydom.

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M. Engineering (Medical Electronics): 1988 – 1994.

- 1987-1988 Part time lecturer in Medical Physiology: Dept. Of Health Sciences: University Western Cape.
- 1986 – 1988 Ph.D.: Right ventricular function with reference to pulmonary hypertension. Promoter: Prof. A.R. Coetzee.
- 1987 – 1994 Bio-engineering Society of South Africa:
Chairman Southern Branch (1987 - 1991).
Secretary (1992 - 1994).
- 1989 - 1990 Student physician on campus, Medical School (1400 students).
- 1990 Acting director of the Buro of Bio- Engineering (University of Stellenbosch).
Projects:
(i) Albatros: a low cost wheelchair (in production).
(ii) Infantec: an apnoea monitor (in production).
(iii) Biovent: ventilatory monitoring system (prototype).
- 1989 – 1995 Head: University Stellenbosch Tygerberg Medical Campus, : Student Private Organization (1400 students).
- 1991 – 1993 Registrar: Department of Paediatrics, Tygerberg Hospital
- 1993 – 1995 External examiner: University Cape Town.
(i) M.Eng. 1 candidate.
(ii) Electronic engineering (76 students).
- 1994 – 1995 Ph.D.: Co-promoter: M. Blankenberg;
- 1990 – 1995 Consultant to the Buro of Bio-engineering, University Stellenbosch
- 1992 – 1995 Co-director: Paediatric Pulmonary Unit. University Stellenbosch

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- 1994 – 1995 Limited private practice: N1 City Hospital (Cape Town and Durbanville Hospital).
- 1994-1995 (June) Associate professor: Department of Medical Physiology and Biochemistry
- 1995 – 1997 Director research (part time) : Rand Medical Corporation, Baltimore, U.S.A.
- 1995 – 1997 Paediatrician: Private Practice, Durbanville Hospital and N1 City Hospital.
- 1995-1997 Director/CEO: Biomedical Systems Pty. Ltd., Cape Town
- 1996 – 1998 Medical Director; Harwill Industries (Pty.) Ltd., Cape Town. Responsible for the Research and Development program for Harwill Medical and Biomedical Systems products including:
- Biosurf: exogenous surfactant.
Biocompact: transport incubator.
Biotemp: infrared thermometer.
Stac: handheld jet ventilator.
Whistlewatch: peak flow whistle monitor.
Luca Dummy: medicine pacifier.
Safsy: safety syringe.
Safblade: safety scalpel.
Opticope: disposable laryngoscope + blade
Cervitula: disposable PAP smear spatula
Infantwatch: infant monitoring system.
- (i) The program included clinical validation, design and development of each product according to ISO 9001, EN46001 standards and FDA/CE regulatory standards. An additional 12 products were developed.

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- (ii) Also acted as the registered professional engineer responsible for maintaining the safety regulations according to Government specifications for all the electrical and mechanical instruments at the Philippi plant.

1998-2002

Founder and Chairman: Mushroom Biomedical Systems (Pty) Ltd., South Africa. Mushroom had acquired the Harmed company and entered the international market with the OptiScope, WhistleWatch, Luca Eezimed, Safblade and Cervitula. Signed distribution contract exceeded R8 million per annum 2001. Mushroom embarked on an aggressive marketing drive that included an extensive distribution network throughout Europe, USA, the Pacific Rim as well as Asia. During late 2002 the company was closed down due to the investors decision to withdraw. The Luca Eezimed, Whistlewatch as well as Optiscope are presently being commercialized by international companies.

2003-2004

Manager: Division Research Development & Support, Faculty of Health Sciences, University Stellenbosch, South Africa: May 2003 to June 2004

The (part time: 20 hours per week) responsibilities of the manager included the development of a business plan for 2004 to 2008, to support the Strategic Plan of the Faculty. Focussing on the local needs of the community and South Africa as a whole, the Faculty of Health Sciences devised a Strategic Plan that would focus mainly on its core research values as they reflect the mission of the Faculty of Health Sciences. The business plan detailed a project management plan with deliverables, milestones and a five year budget that defines variances as well as projected turnover and income statements.

The development of strategic cores, to support the research focus of the faculty included the following: (i) optimizing the present research laboratory facilities

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(pathology, biochemical, genetics, P3 viral laboratory, animal research facility), (ii) increasing pharmaceutical trial studies, (iii) development of a biotechnology research platform, (iv) expanding the present intellectual property program and (v) the identification and sourcing of young researchers.

International grant funding was central to the business plan of the division and a concerted effort, that included an increase in NIH funding applications, FP6 collaboration research programs as well as the development of centers of excellence, was launched during 2003.

As the manager I was also responsible for the regulatory control within the faculty that included: (i) the management of the Ethical Committees , as per the Geneva Convention, (ii) ISO and FDA regulatory issues including GLP and GCP guidelines and training courses and (iii) Biohazard and other high risk issues .

I resigned as of July 2004 as it became impossible to run a full time paediatric practice in a busy private hospital and at the same time render an effective service to the Faculty.

RESEARCH INTERESTS (1994 - 1996)

Cardiopulmonary interaction, Modeling and evaluation of cardio-respiratory response during exercise.

Co-workers: E.Terblanche, J. Wessels.

Acute pulmonary hypertension, Co-workers: Prof. Lehot and Dr. C. Girard (Lyon, France).

Fetal Physiology, Modeling of placental fetal interaction with reference to cardiovascular response and gas exchange. Co-workers: M. Blankenberg, Prof. H. Odendaal.

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Surfactant, Manufacturing of a synthetic surfactant.
Co-workers: Dr. J. Smith.

Peak flow meter; development of a simple peak flow
whistle to monitor asthma. Co-workers: J. Smith,
J. Wessels

Mobile incubator: Development of a lightweight mobile
incubator. Co-workers: Dr. G. Theron, Dr. C. Piek, and
J. Wessels.

INH pharmacokinetics, computation and pharmacokinetic
modeling of INH. Co-workers: Dr. D. Parkin.

Image plate: A CCD image plate for real time X-ray
imaging. Co-workers: J. Wessels, F. Schlier.

Lifelight; Ultraviolet irradiation of blood to induce
tolerance. Co-workers: Prof. Don du Toit, Dr. R.
Cooper, J. Wessels, Trident Systems (USA).

RESEARCH INTERESTS: 2002-2004

1. Applications of the Emzaloid drug platform in pain therapeutics and rapid TB diagnostics
2. A novel laryngoscope blade used to deliver oxygen to the trachea during intubations
3. Emax,t a novel quantitative parameter to calculate contractility in vivo
4. Nebulizing of bronchodilators via a nasal prong

EXPERIENCE IN INTERNATIONAL RELATIONS AND FUNDING

1. Successfully negotiated research funding of R100,000

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for the Lifelight at the Faculty Health Sciences,
University Stellenbosch 1996-1997

2. Successfully negotiated R34 million Swiss funding for Mushroom Biomedical Systems (Pty) Ltd. during 1999 to 2001.
3. Acted as the broker between Shimoda Biotech and Abraxis (USA) in a 15 million dollar deal that has taken diclofinac IV to the market with a projected \$750 million.
4. See previous role in the acquisition of NIH/Bill Gates and Rockefeller funding: played a strategic role in securing these funds (R27 million during 2003/2004) on behalf of the faculty of Health Sciences.
5. M-CAM: (see www.m-cam.com an international player in the intellectual property financing and development field.) Contributing to its future position in South Africa. Contact: Dr David Martin: founder M-CAM.
6. Intimately involved in developing intellectual property for a number of companies e.g. Lifelight Inc. (USA), Mushroom Biomedical Systems AG (Suisse), Harwill Medical (Pty) Ltd. 1996 to 2002 and Marpe Holdings Lcc (USA) 2016-.

AWARDS

(a significant contribution was made to obtaining some of the awards)

- | | |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1982 | First prize for best research project: Identification of the Asthmatic child. A comparative study of the effects and interaction of exercise, nebulized water and histamine on the airways. |
| 1989 | Francie van Zyl silver medal for the best research paper |

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presented at the Academical Year Day, Tygerberg: The end-systolic pressure length relationship of the heart.

- 1997 South African Buro of Standards Design Institute Awards for the Biocare transport incubator and the Whistlewatch peak flow monitor.
1998. Technology Top 100: Standard Bank Award for Harwill Medical
1998. Harwill Medical listed as an EN 46001 and an ISO 9001 Company by DQS (Germany)
1998. South African Buro of Standards Design Institute Award for Development for the Whistlewatch.
- 1998 South African Buro of Standards Design Institute Award for the Optiscope.
1998. Runner-up: Nomination as Individual for the South African National Science and Technology Forum Award 1998
1998. South African Buro of Standards Design Institute Award for the Cervitula.
1998. WhistleWatch: Nominated as the most innovative medical technology in the USA medical distribution market.
- 2002 Mushroom Biomedical Systems (Pty.) Ltd. listed as an EN 46001 / ISO 9001 Company by DQS (Germany)
- 2002- Listed in "Who's who of Southern Africa"

PATENTS

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Biosurf:	exogenous surfactant; SA patent.
Whistlewatch:	peak flow monitor; Full registration
Optiscope:	laryngoscope + blade; PCT status.
Cervitula:	disposable PAP smear spatula; Final
Infantwatch:	infant monitoring system; PCT status.
Radical Waters:	applications in 3 medical fields: final
CompuWatch:	lung function monitor: preliminary patent
Oxyblade:	innovative laryngoscope blade: pending
PANDA:	Preliminary patent
IR guided needle:	IR guided needle for vascular access

NB; some of these patents have expired since 2002 and more than 8 new intellectual properties will be patented in the near future.

CONTINUOUS TRAINING

1. Continuous Medical Training (CPD)
2000-; Accredited Professional Health Council of South Africa
2. Resuscitation and Emergency Medicine for Neonates and Critically Ill Children
January 30 to February 1, 2001. Hippocrates Association, Feldkirch, Austria
3. Clinical Trials for Medical Devices
May 17-18, 2000 Management Forum, London
4. Safety Issues and Risk Management of Medical Devices
November 12, 2001 Management Forum, London

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5. Management and Treatment of Asthma in Children
January 28-30, 2004. Hippocrates Association, Feldkirch, Austria.
6. March 2007-2011: Advanced Paediatric Life Support Certification.
7. October 2010-2013: Advanced Neonatal Life Support
8. December 2009 to 15 January 2010; NICU Nijmegen, the Netherlands
9. Professional Engineer. Continuous training 1988-
10. Good Clinical Practice certificate: March 2016-2018
11. Paediatric Advanced Life Support: October 2017-2020
12. Advanced Neonatal Life Support: October 2017-2020

INTERNATIONAL MEDICAL PRACTICE

1. November-December 1986: Turtleford; Canada; Obstetrics and General Medicine.
2. December 1988: Malawi; Nkhoma Hospital; Surgery, Obstetrics and General Medicine.
3. November-December 1989: Edam; Canada; Obstetrics and Medicine
4. November-December 2002: Zevenaar; The Netherlands; Paediatrics & Neonatology.
5. November 2003-January 2004: Zevenaar; The Netherlands; Paediatrics & Neonatology.
6. April 2006: Weert; The Netherlands; Paediatrics & Neonatology.
7. July-August 2006: Zevenaar; The Netherlands; Paediatrics & Neonatology.
8. June 2008: Delfzijl; The Netherlands; Paediatrics & Neonatology.
9. February 2009: Zevenaar; The Netherlands; Paediatrics & Neonatology.

COMMUNITY SERVICE

1. 1997-2000: Medical & Engineering Service: Global Careers: Madagascar.
2. 2000-2001: Paediatrics: Durbanville Community Clinic.
3. 2000-2004 & 2006-2012: Ten fifteen Trust: Community projects here and in Madagascar.
4. 2008-: Innovation4life: Strategic support to students
5. 2014- : Daniel and Friend Fund: CEO, Board Member.

EDITORIAL BOARD MEMBER

Journal of Mucosal Immunology Research

Los Angeles, CA, USA

Ph: +1-702-508-2676

Fax: +1-650-618-1414

Journal Global Health Innovation

Cape Town, WC, South Africa

Ph: +27-214066541

ACTIVITIES (PAST & PRESENT)

1. Medical advisor to Diacoustic (Pty) Ltd. (www.diacoustic.co.za) till 2012
2. Advisor to Innovus (see www.sun.ac.za)
3. Director and founder: Innovation4life (www.innovation4life.com)
4. Non-executive director: Unistel Pty (Ltd) (www.unistelmedical.co.za)
5. M-CAM: representative for Africa (see: www.M-CAM.com)

6. **Advisory Capacity**

1. Astra Zeneca , South Africa on Nexiam till 2011
2. Pharma Co, South Africa on Novolac till 2011
3. Editor: Journal of Mucosal Immunology Research

7. **Present Research Interests.**

1. Guided Catheter
2. Diagnostic and Drug Monitoring for ADHD
3. Artificial Intelligence: application in medicine (Seeingswans) 2012-21015
4. Regional blood flow catheter
5. Intravascular oxygenation catheter
6. The extraction of realtime information (apply Fourier analysis) for video streaming.
7. A method to determine and quantitate crying spells of an infant.
8. Quantifying gastro-esophageal reflux in an infant with an impedance device that is attached to the chest wall.
9. Measuring pH and temperature of milk using a nano-sensor.
10. A wrist warn monitoring device in children with autism and ADHD.
11. Developing a valve that will prevent air escaping from the milk bottle and then being swallowed by the infant causing cramping.
12. Developing a teat for a infant feeding bottle that is a more ergonomic.

13. Monitoring temperature heart rate in an infant applying a wifi ear probe.
14. The delivery of nebulized medications via a nasal catheter
15. An EEG monitoring for infants hidden in a head cap
16. Innovative electronic stethoscope
17. Applying nano-technology in the field of diabetes and bacteriology
18. Development of an innovative infant feeding bottle.
19. Immune modulation in children with atypical immune deficiencies
20. Applying NIRS in monitoring regression of spinal TB or tumors.
21. Developing an innovative Bilirubin monitor
22. Therapeutic manipulation of the gut micro-biome and T-cell populations
23. Music as a therapeutic intervention to improve speech in children with autism,

PUBLICATIONS

1. Fourie P.R., Badenhorst E., Coetzee A.R. Pressure-transducers in the clinical and research practice. A short critical revue. S.Afr. Med. J. 1987: 71, 651 - 654.
2. Coetzee A.R., Fourie P.R., Badenhorst E. The response of the heart to acute hypertension during halothane, enflurane and isoflurane. Anaesth. Analg. 1987: 66; 1219 - 1226.
3. Coetzee A.R., Fourie P.R., Badenhorst E. The effect of halothane, enflurane and isoflurane on the end-systolic pressure length relationship. Can. Anaesth. Soc. J 1987: 34: 351 - 357.
4. Coetzee A.R., Fourie P.R., Badenhorst E., Els D. The oxygen balance in the normal dog myocardium with increasing concentrations of inhalation anaesthetics. SAMJ 1988: 73, 303 - 306.

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5. Fourie P.R., Joubert J.R. Determination of airways hyperactivity in asthmatic children. A comparison between exercise, nebulized water and histamine. *Pediatric Pulmonology* 1988; 4, 2 - 7.
6. Coetzee A.R., Fourie P.R., Badenhorst E. The load independence of the end-systolic pressure-length relationship. *S.Afr. Med. J.* 1989; 76: 191 - 194.
7. Coetzee A., Fourie P., Badenhorst E. Effect of N₂O on LV function, arterial elastance and ventricular arterial coupling. *Anaesth. Analg.* 1989; 69: 313 - 332.
8. Coetzee A., Fourie P., Coetzee J., Badenhorst E., Rebel A., Bolliger C., Uebel R., Wium C., Lombard C. Effect of various propofol plasma concentrations on segmental myocardial contractility and LV after load. *Anaesth. & Analg.* 1989; 69: 473 - 483.
9. Coetzee A., Fourie P., Badenhorst E. The effect of halothane, enflurane and isoflurane on the circulation. *S.Afr. Med. J.* 1989; 76: 417 - 421.
10. Coetzee A., Roussouw G., Fourie P., Lochner A. Preservation of myocardial function and biochemistry of blood and oxygenated crystalloid cardioplegic solutions during cardiac arrest. *Annals of thoracic Surgery.* 1990; 50: 230 - 237.
11. Coetzee A., Fourie P. Limited coronary flow reserve and inotropic intervention during stable halothane anaesthesia. A case for myocardial hibernation? *Anesth. Analg.* 1990; 71: 327 - 333.
12. Coetzee A., Bolliger C., Fourie P. The effect of PGE1 on acute pulmonary artery hypertension during oleic acid induced respiratory dysfunction. *Chest* 1991;99:1501 - 1506.
13. Coetzee A., Fourie P., Rebel A. Effect of halothane on arterial elastance, systolic and diastolic cardiac function. *Cardiovascular Journal of South Africa* 1990; 1: 132 - 136.
14. Coetzee A., Fourie P. Post-systolic shortening as an index of regional myocardial ischaemia in an experimental model. *J. Thorac Cardiovasc Anaesthesia* 1991; 5: 546 -550.
15. Coetzee A., Fourie P. Acute Colloid administration increases ischaemia on the myocardium supplied by a stenotic coronary artery. *Anaesthesia and Analgesia* 1992; 74: 206 - 211.

16. Fourie P., Coetzee A. Modelling the cardiovascular system. Trans SAIEEE 1992; 83:38-44
17. Fourie P., Coetzee A., Rebel A., Bolliger C. The pulmonary arterial compliance: Its role in right ventricular/ vascular coupling during acute pulmonary hypertension. Cardiovascular Research 1992; 26: 839-844
18. Coetzee N., Coetzee A., Fourie P. Derivation of the end-systolic pressure-volume relationship of the left ventricle from aortic pressure and flow parameters. Cardiovasc. J. SA. 1992; 3: 236 - 241.
19. Bolliger C.T., Fourie P.R., Kotze D., Joubert J.R. The assessment of the severity of asthma on admission. Thorax 1992; 47: 943 - 947.
20. Moolman J., Coetzee A., Fourie P, Weich, H.F.H. The effect of lignocaine on segmental myocardial function in the open chested pig under general anaesthesia. Cardiovasc. J. S.A. 1993; 4: 7 - 12.
21. Vos R., Goslett N., Van Hoogstraten E., Fourie P. Albatros: An innovative low-cost wheelchair. Disability and Rehabilitation 1993; 15: 44 - 46.
22. Fourie P., Coetzee A. Effect of compliance on a time-domain estimate of the characteristic impedance of the pulmonary artery during acute pulmonary hypertension. Medical & Biol. Eng. & Comp. 1993; 31 (5): 468 -474.
23. Coetzee A., Fourie P. Left ventricular/vascular coupling during halothane anaesthesia. Cardiovasc. J. S.A., 1993; 4: 53 - 55.
24. Fourie P., Coetzee A., Bolliger C., Lombard C. Pulmonary artery compliance: Its role in right ventricular function during acute pulmonary hypertension. Appl. Cardiopulmonary Pathophysiology, 1994; 5: 101 - 110.
25. Girard C., Fagnoli J.M., Fourie P.R., Maitresse B, Arvieux C.C. Comparison between acute hypoxia-induced and mechanically induced pulmonary artery hypertension on the hemodynamics, myocardial contractility and regional blood flow in dogs. Fund am Clin Pharmacol 1995; 9(6): 554 - 561.
26. Terblanche E., Wessels J., Fourie P. Assessment of a peak flow whistle in non-asthmatic

- children. Paediatr.Pulmonol.1999; 27: 428-431
27. Fourie P. Monitoring asthma is essential. International Hospital Management. 2002; 1:89
 28. Fourie P. Perfect cut: disposable laryngoscope blade. International Hospital Management. 2002: 1:87
 29. Cloete, G., Fourie, P. R., Scheffer, C., Development and Testing of an Artificial Arterial and Venous Pulse Oximeter., 35th Annual International Conference of the IEEE EMBS Osaka, Japan, 3 - 7 July, 2013.
 30. Goussard, P., Gie, R., Andronikou, S., Fourie, P.R., A correctable cause of lung collapse in an adolescent with severe scoliosis causing compression of the bronchial tree. BMJ Case Rep 2013 15
 31. Schwartz, C., Scheffer, C., Fourie, P., Coetzee, A. R., An Impedance-guided intra-arterial catheter., 35th Annual International Conference of the IEEE EMBS Osaka, Japan, 3 - 7, 2013.
 32. Elson, W., Scheffer, C., Fourie P., Coetzee A., Development of a Intravenous Oxygenator using Microbubbles, IEEE Proceedings, November 2014
 33. Fourie P., Immune Modulation in Children in South Africa, a Practical Approach., 4th International Conference and Exhibition on Immunology, September 2015, Volume 5.
 34. Coetzee,A., Fourie,P., Thoughts on Intra-Aorta Balloon Pump, J. Cardiothor. Vasc. Anesth., Editorial. December 2015
 35. Fourie P, Immune Modulation, A South African Perspective. Journal of Clinical & Cellular Immunity. J Clin Cell Immunol 7:414. doi: 10.4172/2155-9899.1000414
 36. Heunis, C.M., van der Merwe, J.O., Fourie, P.R., Investigating Event-Related Potentials to Aid in the Implementation of Alternative MCA-Stroke Neuro-rehabilitation, Journal of Neuroscience Methods, Submitted.
 37. van der Merwe, T., van der Merwe, J., Fourie, P.R., Development of a Near Infrared Guided Needle. Trans. IEEE, submitted

PAPERS AND POSTERS

1. Fourie P.R., Joubert J.R. Identification of the asthmatic child. A comparative study between exercise, nebulized water and histamine inhalation. National Lung Congress, Bloemfontein, 1983.
2. Fourie P.R., Badenhorst E., Coetzee A.R. Myocardial oxygen delivery/consumption. A comparative study between Halothane, Ethrane, Isoflurane. Academical Year Day, Tygerberg, 1986.
3. Fourie P.R., Badenhorst E., Rebel A., Coetzee A.R. Influence of arterial compliance on right ventricular function. Academical Year day, Tygerberg, 1987.
4. Coetzee A., Fourie P., Badenhorst E. A comparison of the cardiovascular effects of halothane, enflurane and isoflurane. Anaesthesiology Congress, Bloemfontein, 1987
5. Coetzee A., Fourie P., Badenhorst E. Response of the heart to acute hypertension during halothane, enflurane and isoflurane anaesthesia. Anaesthesiology Congress, Bloemfontein, 1987.
6. Fourie P.R. Cardiovascular System (invited speaker). MRC Summer School on the use of computers in biomedical research, Tygerberg, 1988.
7. Fourie P.R., Bolliger C., Badenhorst E., Rebel A., Coetzee A.R. Right ventricular function. Bio-engineering Congress, Cape Town, 1988.
8. Fourie P.R., Badenhorst E., Coetzee A.R. Does the homeometric autoregulation (Anrep) really exist? Physiology Congress, Cape Town, 1988.
9. Fourie P.R., Badenhorst E., Bolliger C., Rebel A., Coetzee A.R. Optimal right ventricular function*. Physiology Congress, Cape Town, 1988.
10. Coetzee A., Fourie P., Bolliger C., Badenhorst E. Acute pulmonary hypertension. The effect of vascular compliance and right ventricle function. Critical Care Congress, Johannesburg, 1988.
11. Coetzee A., Fourie P., Rebel A., Bolliger C., Badenhorst E. Clinical indices of LV afterload. Critical Care Congress, Johannesburg, 1988.

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12. Coetzee A., Fourie P.R., Badenhorst E. Effect of propofol on the circulation. Bi-annual Congress for University Anaesthesiologists, Medunsa, 1988.
13. Coetzee A., Fourie P.R., Badenhorst E. Effect of N₂O on the circulation. Bi-annual Congress for University Anaesthesiologists, Medunsa, 1988.
14. Coetzee A., Fourie P.R., Badenhorst E. Clinical indices of LV after load. Bi-annual Congress for University Anaesthesiologists, Medunsa, 1988.
15. Coetzee A., Fourie P., Badenhorst E. Acute pulmonary hypertension. Annual Congress of the S.A. Critical Care Society, Johannesburg, 1988.
16. Coetzee A., Fourie P., Badenhorst E. Various indices of LV after load. Annual Congress for the S.A. Critical Care Society, Johannesburg, 1988.
17. Coetzee A., Fourie P., Badenhorst E. Response of the heart to mechanical hypertension. World Federation of Anaesthesiologist Meeting, Washington, 1988.
18. Coetzee A., Fourie P., Badenhorst E. Effect of N₂O on the circulation. World Federation of Anaesthesiologists Meeting, Washington, 1988.
19. Coetzee A., Fourie P., Badenhorst E. Clinical indices of LV after load. 16th Cardiac Congress, Cape Town, 1988.
20. Coetzee A., Fourie P., Badenhorst E. Response of the RV during acute pulmonary hypertension. 16th Cardiac Congress, Cape Town, 1988.
21. Van Eeden S.F., Fourie P. Septicaemia community acquired pneumonia (SCAP): evidence of acute right ventricular decompensation. S.A. Pulmonology Society Congress, Knysna, October 1988.
22. Bolliger C.T., Fourie P.R., Joubert J.R. Criteria for assessment of severity of asthma on hospital admission. S.A. Pulmonology Society Congress, Knysna, October 1988.
23. Coetzee A., Fourie P., Badenhorst E., Rebel A. Response of the RV during acute pulmonary hypertension. S.A. Pulmonology Society Congress, Knysna, October 1988.

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