

# Curriculum Vitae

## **1. Personal details:**

Name MARCEL WERNER BRÜSSOW  
ID 5503225062080  
Age 48  
Gender Male  
Marital status Married- beautiful wife and 3 children

## **2. Education:**

Primary 1967 - Auckland Park Primary School. Johannesburg.  
Secondary 1972 - Linden High School Johannesburg  
(Biology, Arithmetic, Mathematics, Science, Afrikaans, English)  
Military service 1973 -Physical training instructor (P.T.I.) SA Navy  
Tertiary: University of the Free State (UFS). Bloemfontein  
Pre graduate: 1979 – B.Sc. (Physical Education)  
Physical Education 1, 2 & 3; Chemistry 1, Physics 1, Mathematics 1, Biochemistry 2, Physiology 2 & 3.  
Post graduate 1981 – B.Sc Hons. (Physiology – Faculty of Nature Sciences  
1983 – M Med Sc. (Cum Laude) (Faculty of Health Sciences)  
1990 - PhD. (Physiology –Faculty of Health Sciences)

## **3. Employment:**

1978-2004: Faculty of Health Sciences, Faculty of Humanities. UFS, Bloemfontein  
*Part-time*  
1978 Part-time lecturer (tennis methodology) as a pre-graduate student in the Department of Physical Education  
*Full-time*  
1979 Assistant Professional Officer (Research) Dept Internal Medicine  
1981 Professional Officer (Research) Dept Internal Medicine  
1982 Senior Professional officer (Research) Dept Internal Medicine  
1983 First professional Officer (Research) Dept Internal Medicine  
1989 -1998 Senior Researcher: Dept Internal Medicine and Human Physiology  
Part time lecturer in the Department of Human Physiology at a pre-graduate level  
1999 - 2003 Senior lecturer: School for Sport, Biogenetics' and Leisure Sciences  
2002 – 2004 Senior lecturer: Department of Human Movement Science

#### **4. Areas of competence and assigned teaching responsibility**

- Lecturer, Moderator and Examiner in Physiology and Exercise Physiology at pre- & post graduate levels.
- Initiated the Elective for the BLS program: Exercise & Nutrition
- Head of the domain: Exercise Science & Nutrition
- Compiled the syllabus for the domain: Exercise Science & Nutrition
- *Field of specialization:*
  - Lung growth and development
  - Intermediary metabolism
  - Inter-organ homeostasis during strenuous physical activity
  - Synchronization of Exercise and Nutrition Sciences
  - Dietary manipulation of the Macronutrient metabolism in vivo
  - Structural and metabolic responses and adaptations in skeletal muscle tissue following high intensity and endurance training
  - Amino acids and homeostasis

#### **5. Number of thesis/dissertations/research reports supervised**

3

#### **6. Teaching experience**

1983 -1998	Act as a part time lecturer in the Department of Human Physiology at a pre- and post graduate level. Faculty of Health Sciences
1999 - 2003	Senior lecturer: School for Sport, Biokinetics and Leisure Sciences, Faculty Humanities Lecture the following modules: Pregraduate level in the program in Applied Leisure Sciences OEF 112 Sport Science; OET 214: Sport Science; OEF 313 Sport Science; MIL 306 Miology; HEO 305 Homeostasis; BMA 322 Metabolic assessment
2003 – 2004	Senior lecturer: Department of Human Movement Science, Faculty Humanities UFS. Postgraduate level in the program in Human Movement Sciences: MBW 601: Research Project MBW 603: Exercise program prescription MBW: 618: Exercise & nutrition MBW: 708: Exercise & nutrition MBW: 791: Dissertation

#### **7. Other work experience**

Director and Main Shareholder: Nutricel Science (Pty) Ltd

#### **8. Professional membership**

None

#### **9. Conferences attended**

Refer to 10.

#### **10. Papers presented**

*International level*

1983 Brüssow MW, Weich DJV. Lung growth and Development. Symposium in Japan

Brüssow MW, Weich DJV. The effect of experimentally induced asthma on the development of the lung parenchyma in the rat Symposium on Chronic Obstructive Lung Disease Israel

*National level*

- 1980 Brüssow MW. Die invloed van verskillende impregneermiddels op die krimpings van histologiese snitte. Academic research day, Faculty of Health Sciences.
- 1983 Brüssow MW. Die invloed van asma op longontwikkeling / Effect of asthma on lung development. ICI research day. JHB
- 1984 Brüssow MW, Weich DJV, Lung development. SA Pulmonology Congress. Rustenburg.
- 1986 Brüssow MW. Die invloed van 'n meganiese en/of chemiese geïnduseerde lugwegobstruksie op groei van die respiratoriese membraan by rotte / Effect of mechanical and/or chemical -induced airway obstruction on growth of the respiratory membrane in rats. Academic research day Faculty of Health Sciences
1992. Brüssow MW, Weich DJV. Respiratory dysfunction alters postnatal development of the respiratory membrane in rats National Pulmonology Congress, Bloemfontein
- 2000 Brüssow MW. Carbohydrate loading. CPD lecture: South African Sport Medicine Association (SASMA). Bloemfontein
- Brüssow MW. Intermediary metabolism: Carbohydrate and Fat metabolism. CPD lecture: SASMA. Bloemfontein
- Brüssow MW. Creatine metabolism: Forum lecture for the Faculty of Health Sciences.
2001. Brüssow MW. Aerobic and anaerobic power systems. Workshop: FSSSI (Free State Sport Science Institute). (Full morning session). Bloemfontein
- Brüssow MW. Nutrition and Exercise Performance. Workshop: FSSSI. (Full session). Bloemfontein

- 2002 Brüssow MW. The glycolytic and lipolytic power systems Symposium: ASA (Athletics South Africa). Bloemfontein.  
Served on Panel discussions for ASA.
- 2004 Brüssow MW. Analysis of Sport Specific Demands. Symposium:  
CESSS for SYRAC, Department of Education, Free State Province. Bloemfontein
- Brüssow MW. Nutritional physiology and alteration of body composition. Multidisciplinary and Infection control indaba, Free Sate Region. Bloemfontein

## **11. Publications**

- 1983 Brüssow MW. 'n Morfometriese ondersoek na die invloed van eksperimenteel-gëinduseerde asma op alveolêre ontwikkeling / *A morphometric analysis of the influence of experimentally induced asthma on pulmonary alveolar development*. M Med Sc thesis, UFS, Bloemfontein.
- 1990 Weich DJV, Bester FCJ, Brüssow MW. Die long en veroudering / *The lung and ageing* CME 8: 7.
- 1991 Brüssow MW. A morphometric analysis of the influence of serotonin vapor inhalation on growth of the respiratory membrane in rats. Thesis. UFS. Bloemfontein.
- 1994 Brüssow MW. Effect of amino acid supplementation on exercise performance. RSA Patent 94/5197.
2004. Brüssow MW. The use of a combination of amino acids to reduce exercise induced fatigue. Patent pending - 2004/3464
- Brüssow MW. Amino acid and fatty acid combination to reduce exercise induced fatigue – Patent pending - 2004/3467
- Brüssow MW. Source of carbohydrate and/or citrate to reduce exercise induced fatigue. Patent pending - 2004/3463
- Brüssow MW. Generation of new revenue value: Intellectual capital an unexploited strategic resource in educational institutions – (in preparation).
- 2004 In review (patent attorneys):

Brüssow MW. Use of amino acids in mood disorders (depression)  
 Brüssow MW. Use of amino acids in cholesterol metabolism  
 Brüssow MW. Use of amino acids in immunity (immune stimulant)  
 Brüssow MW. Use of amino acids in wound healing  
 Brüssow MW. Use of amino acids in diabetes (tonic for diabetics)  
 Brüssow MW. Use of amino acids in asthma

## **12. Other research activities**

2004 Post graduate students: Various activities within the field of Exercise Physiology.

Brüssow MW. Role of amino acids on muscle glycogen super-compensation. Considering registering for thesis in Exercise & Sport Sciences, Faculty of Humanities / Human Physiology Faculty of Health Sciences, UFS. Bloemfontein

## **13. Consultation**

2003-2004. Consultant for the FSSSI (Free State Sport Science Institute) Provincial Government, Free State Province. Bloemfontein.

BIONIC SPORT NUTRITION (Pty) Ltd

## **14. Professional growth activities**

2003-2004 Workshops on OBET. UFS. Bloemfontein  
 - Assessing Students Learning  
 - Designing Modules and Learning Material

## **15. Institutional services performed**

1982 Represented the UFS at the ICI-research day for South African Universities in Johannesburg; Runner-up for a paper presented.

*A morphometric analysis of the influence of experimentally induced asthma on pulmonary alveolar development.*

1983 Represented the UOFS at the "STAR EXPO" exhibition for modern technology. Morphometry. Johannesburg

1997-1998 Represented the UOFS and Free State Province: Sport Information and Science Institute of South Africa (SISA).

2003-2004 Served on the Steering-, Science & Advisory-, and Management Committees of CESSS (Sport Plan, UFS).

## **16. Awards, honors and recognitions**

1983 Merit bursary awarded for research: South African Medical Research Council (SAMRC).

Attended a joint Israeli-South African symposium on chronic obstructive lung disease on behalf of the SAMRC. Israel

1987-1988. Served on the Cardiovascular & Lung Research Committee of the South African Medical Research Council. (SAMRC).

2001 Represent Swimming South Africa: Panel discussion for national coaches on nutritional aspects for swimmers. Bloemfontein.

Invitation on behalf of the Free State Academy of Sport and the UFS (via Dean of the Faculty of Humanities). Brief the National chairman of the Sports Commission and the chairman of the Sport Information and Science Institute of South Africa (SISA) on performance enhancement. *Title: High performance: An innovative South African vs. the Australian Model.*

2003 Represented the Centre for Sport Science & Sport Medicine (CESSS) as quest speaker for the Alumni Trust.

### **17. Professionally related community activities**

1998-2004 Recommendations on exercise-nutrition practices: Individuals and various sport teams participating in different sporting codes at a provincial and national level.

2003 – 2004 Consultant for the Free State Sport Science Institute (FSSSI). High Performance testing laboratory.

Book: Exercise and Sport Science for Secondary Education

Book in progress –Racing Pigeons: Nominate the winner.

### **18. Additional information**

1981. Served as a member on the Board for the Aviculture Society of Southern Africa for two years.

1985 Initiated the Bloemfontein Parrot Breeders Association and served as a member on the Board.

2003 Started a Company: Nutricel Science (Pty) Ltd to commercialize IP and patents.

Weaknesses: Perfectionist, diplomacy, style, workaholic.

Strengths: Entrepreneurial activity, quality control.

**References:**

Prof JMC Oosthuizen. Former Head of the Department of Human Physiology, UFS. Bloemfontein. Tel 051-4366600

Prof FPJ le Roux. Former Vice-Dean of the Faculty of Health Sciences, UFS. Bloemfontein 0828217273

Prof DFM Strauss. Former Dean of the Faculty of Humanities, UFS. Bloemfontein. Tel 051-4367943 or 0828195421