

## CURRICULUM VITAE

|                                  |  |
|----------------------------------|--|
| Name                             | <b>SIMMA Burkhard</b>  |
| Born                             | 12.11.1957; Bregenz, Austria   |
| Citizen                          | Austrian<br>Married, 2 children  |
| 1976 - 1983<br>1983              | Medical School, Innsbruck<br>Graduation, Medical Doctor  |
| <u>Residency</u><br>1983-1986    | District Hospital Feldkirch, Dornbirn,<br>Austria  |
| 1986 - 1990                      | Children´s Hospital, University of<br>Innsbruck, Innsbruck, Austria  |
| <u>Consultant</u><br>1990 - 1992 | Neonatal and Pediatric Intensive Care<br>Children´s Hospital, Zürich, Switzerland<br>(Director: PD Dr. S. Fanconi)   |
| 1992 – 2000                      | Consultant Neonatal and Pediatric<br>Intensive Care and Director Neonatal<br>Emergency Transport System Children<br>Hospital, University of Innsbruck, Austria |
| 1992-1995                        | Co-Director Neonatal Intensive Care<br>Unit, Innsbruck   |
| 1994                             | Specialist in Intensive Care Medicine  |
| 1995                             | Sabbatical in Australia<br>Pediatric Intensive Care Unit, Royal<br>Alexandra Hospital for Children, Sydney<br>Royal Children´s Hospital, Melbourne             |
| 1996 - 2000                      | Director Pediatric Intensive Care Unit,<br>Children´s Hospital, Innsbruck  |
| 11.10.1999                       | Professor in Pediatrics  |
| Since 1.5.2000                   | Head of Children´s Hospital, University<br>Teaching Hospital, Landeskrankenhaus<br>Feldkirch, Feldkirch, Austria   |

## **Research interest:**

High Frequency Oscillation  
Head Injury and Hypertonic Saline  
Lung Function in Infants  
Stroke in Children

## **Memberships**

|            |   |
|------------|---|
| since 1990 | European Society of Neonatal and Pediatric Intensive Care Medicine (ESPNIC) |
| since 1995 | American Thoracic Society (ATS)   |
| since 2000 | Österreichische Gesellschaft für Kinder- und Jugendheilkunde (ÖGKJ)         |

## **Teaching Activities**

|                 |  |
|-----------------|--|
| since 1.10.1986 | Lectures in General Pediatrics   |
| since 1.10.1993 | Lectures in Pediatric Intensive Care Medicine, both Medical University Innsbruck |

## **Grants**

|           |  |
|-----------|--|
| 1990      | Erwin Schrödinger Stipendium<br>"Aspiration in intubated children"<br>€ 50.000.-                               |
| 1991      | Federal Ministry of Research<br>€ 20.000.-   |
| 1994      | Austrian National Bank<br>"High frequency Oscillation"<br>€ 70.000.-   |
| 1996      | Austrian National Bank<br>"Endothelin and Pulmonary Hypertension in High- Frequency Oscillation"<br>€ 50.000.- |
| 2002-2010 | State Government of Vorarlberg<br>6 grants<br>€ 55.000.-   |
| 2006-2008 | European Fund for Regional Development - (EFRE)  |

VIVIT (Vorarlberg Institute for Vascular  
Investigation and Treatment)  
Constitution of a competence center for  
biomedical research  
Max. € 1.340.850.-

## Publications

I. Original articles (57 peer-reviewed article, accessed pubmed Januray 30th, 2011)  
(most relevant)

1. Simma B, Spehler D, Burger R, Uehlinger J, Ghelfi D, Dangel P, Hof E, Fanconi S. Tracheostomy in children. *Eur J Pediatr* 1994;153:291-6
2. Simma B, Luz G, Trawöger R, Hörmann C, Klima G, Kreczy A, Baum M. Comparison of different high-frequency ventilation modes in surfactant-deficient rabbits. *Pediatr Pulmonol* 1996;22:263-70
3. Simma B, Fritz M, Trawöger R, Geiger R, Fink C, Hammerer I. Changes in left ventricular function in shocked newborns. *Intensive Care Med* 1997;23:982-6
4. Simma B, Burger R, Falk M, Sacher P, Fanconi S. Fluid resuscitation in severe head injury: Ringer's lactate versus hypertonic saline: a prospective, randomised, and controlled study in children. *Crit Care Med* 1998;26:1265-70
5. Ellemunter H, Simma B, Trawöger R, Maurer H. Use of interosseous lines in preterm and full-term newborn infants. *Arch Dis Child Fetal and Neonatal Edition* 1999;80:F74-5
6. Burger R, Fanconi S, Simma B. Paralysis of ventilated newborn babies does not influence resistance of the total respiratory system. *Eur Respir J* 1999;14:357-62
7. Simma B, Fritz M, Fink C, Hammerer I. Conventional ventilation versus high-frequency oscillation: hemodynamic effects in newborn babies. *Crit Care Med* 2000;28:227-31
8. Simma B, Gülberg V, Schobel P, Trawöger R, Ulmer H, Gerbes AL, Putz G. High frequency oscillatory ventilation does not decrease endothelin release in lung-lavaged rabbits. *Scand J Clin Lab Inv* 2000;60:213-20
9. Simma B, Skladal D, Falk M. Predicting survival in infants ventilated with high-frequency oscillation. *Wien Klin Wochenschr* 2000;112:804-810
10. Simma B, Burger R, Falk M, Sacher P, Torresani T, Fanconi S. Release of antidiuretic hormone is appropriate in response to hyovolemia and/or sodium load in children with severe head injury: a trial of lactated ringer's solution versus hypertonic saline. *Anesth Analg* 2001;92:641-5
11. Simma B, Tscharr A, Hejazi N, Krasznai L, Fae P. Neurologic outcome after decompressive craniectomy in children. *Intensive Care Med* 2002;28:1000
12. Frühwirth M, Janecke AR, Muller T, Carlton VE, Kronenberg F, Offner F, Knisely AS, Geleff S, Song EJ, Simma B, Konigsrainer A, Margreiter R, Van Der Hagen CB, Eiklid K, Aagenaes O, Bull L, Ellemunter H. Evidence for genetic heterogeneity in lymphedema-cholestasis syndrome. *J Pediatr* 2003;14:441-7
13. Möller JC, Schaible T, Roll C et al, and Simma B as a member of the Surfactant ARDS Study Group. Treatment with bovine surfactant in severe

- acute respiratory distress syndrome in children. A randomized multicenter study. *Intensive Care Med* 2003;29:437-46.
14. Mann C, Sepp N, Simma B. Congenital cutaneous mastocytosis *J Pediatr* 2004;145:135
  15. Skladal D, Horak E, Frühwirth M, Maurer H, Simma B. Successful treatment of ARDS and severe pulmonary hypertension in a child with *Bordetella pertussis* infection. *Wien Klin Wochenschr* 2004;116:760-2
  16. Biebl A, Hartmann G, Bernhard C, Bechter E, Luckner-Hornischer A, Frühwirth M, Heuberger S, Offner F, Barbieri V, Simma B. Vaccine strategies of meningococcal disease: results of a 10-year population-based study. *Eur J Pediatr* 2005;164:735-40
  17. Huemer M, Vonblon K, Fodinger M, Krumpholz R, Hubmann M, Ulmer H, Simma B. Total homocysteine, folate, and cobalamin, and their relation to genetic polymorphisms, lifestyle and body mass index in healthy children and adolescents. *Pediatr Res* 2006;60:764-9
  18. Moffatt MF, Kabesch M, Liang L, Dixon AL, Strachan D, Heath S, Depner M, von Berg A, Bufe A, Rietschel E, Heinzmann A, Simma B, Frischer T, Willis-Owen SA, Wong KC, Illig T, Vogelberg C, Weiland SK, von Mutius E, Abecasis GR, Farrall M, Gut IG, Lathrop GM, Cookson WO. Genetic variants regulating *ORMDL3* expression contribute to the risk of childhood asthma. *Nature* 2007;448:470-3
  19. Simma B, Martin G, Müller T, Huemer M. Risk factors for pediatric stroke: consequences for therapy and quality of life. *Pediatr Neurol* 2007;37:121-6
  20. Moritz B, Fritz M, Mann C, Simma B., Simma B. Nasal continuous positive airway pressure (n-CPAP) does not change cardiac output in preterm babies. *Am J Perinatol* 2008;25:105-9
  21. Seick-Barbarini D, Haslinger V, Schmidt K, Patch AM, Müller G, Simma B. Neonatal diabetes mellitus due to pancreas agenesis: a new case report and review of the literature. *Pediatr Diab* 2009;10:487-91
  22. Rüdiger M, Küster H, Herting E, Berger A, Müller C, Urlesberger B, Simma B, Poets C, Wauer RR, Tschirch E. Variations of Apgar Score of Very Low Birth Weight Infants in different Neonatal Intensive Care Units. *Acta Paediatr* 2009;98:1433-6
  23. Biebl A, Muendlein A, Kazakbaeva Z, Heuberger S, Sonderegger G, Drexel H, Lau S, Nickel R, Kabesch M, Simma B. CD14 C-159T and toll-like receptor 4 Asp299Gly polymorphisms in surviving meningococcal disease patients. *PLoS One* 2009;7:e7374
  24. vanKaam AH, Riemensberger PC, Borensztajn D, DeJaegere AP. (including Simma B as a member of the NeVent survey group). Ventilation practices in the neonatal intensive care unit: a cross-sectional study. *J Pediatr* 2010;157:35-7
  25. Höliner I, Simma B, Reiter A, Sass JO, Zschocke J, Huemer M. Compliance to clinical guidelines determines outcome in glutaric aciduria type I in the era of newborn screening. *Klin Padiatr.* 2010;222:35-7
  26. Michel S, Liang L, Depner M, Klopp N, Ruether A, Kumar A, Schedel M, Vogelberg C, von Mutius E, von Berg A, Bufe A, Rietschel E, Heinzmann

- A, Laub O, Simma B, Frischer T, Genuneit J, Gut IG, Schreiber S, Lathrop M, Illig T, Kabesch M. Unifying candidate gene and GAWAS Approaches in Asthma . PLoS One. 2010;5:e13894.
27. Huemer M, Simma B, Mayr D, Mühl A, Rami B, Schober E, Ulmer H, Zanier U, Bodamer OA. Low Levels of Asymmetric Dimethylarginine in Children with Diabetes Mellitus Type I Compared to Healthy Children. J Pediatr 2010;