Curriculum Vitae
Thomas E Bachman

Personal Data:

Family name:	Bachman
First name:	Thomas E
Date of birth:	March 8, 1947
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Education and Professional Studies:

Degree: MSc Healthcare Administration, University of Colorado at Denver; 1997. Emphasis: healthcare economics, comparative health systems.

Degree: BSc Engineering, University of California at Los Angeles; 1969. Emphasis: biomedical engineering.

Selected Certifications: Community Needs Assessment Trainer, UCLA Health Policy Center, 2008; Internal Organization Assessor, Baldridge Organizational Excellence Program 2006

Academic Experience

from 2017: Czech Technical University in Prague, Faculty of Biomedical Engineering: lectures on medical devices in intensive care, adoption/assimilation of medical technology, research management, clinical study planning and management. Advisor to PhD candidates.

2002 – 2008: California State University, San Bernardino, School of Business and Public Administration: Instructor. upper division and graduate courses, emphasis on management, management tools, planning and international marketing.

Consultancy (current):

Commercial: Strategic and tactical market development support with emphasis on clinical research.

Polish Neonatal Society: scientific advisor to the Noninvasive Respiratory Study Group

Other Professional Experience:

Market development including analysis (assessment of scientific evidence, medical economics and clinical awareness) as well as development and implementation of educational programs (seminars, monographs, publications, conferences).

Clinical research support associated with more than 20 multicenter randomized outcomes trials, multicenter retrospective reviews and multicenter system validations, included: developing clinical protocols, site recruitment, monitoring clinical results, DSMB, biostatistical analysis, editing/focusing publication manuscripts and regulatory coordination.

Community hospital leadership including community needs/awareness assessments, grants and donations to support community out-reach programs, telemedicine program, technology improvements and facilities.

Selected Publications (peer reviewed)

Automatic oxygen control for reducing extremes of oxygen saturation: a randomised controlled trial. Nair V, Kannan Loganathan P, Lal MK, Pringleton H, **Bachman TE**, Brodlie M, Dixon P. Arch Dis Child Fetal Neonatal Ed. 2023 Mar;108(2):136-14

Randomised control trial of oxygen assist module in preterm infants on high-flow nasal cannula support. Nair V, Kannan Loganathan P, Lal MK, **Bachman TE**, Fantl R. Arch Dis Child Fetal Neonatal Ed. 2023 Jul 14:fetalneonatal-2023-325661.

Wilinska M, Bachman TE, Piwowarczyk P, Kostuch M, Tousty J, Berła K, Hajdar R, Skrzypek M. Routine use of automated FiO_2 control in Poland: prospective registry and survey. Front Pediatr. 2023 Aug 31;11:1213310.

Automated Oxygen Delivery in Neonatal Intensive Care. Nair V, Loganathan P, Lal MK, **Bachman T** Front Pediatr. 2022 Jun 22;10:915312.

Thresholds for oximetry alarms and target range in the NICU: an observational assessment based on likely oxygen tension and maturity. **Bachman TE**, Iyer NP, Newth CJL, Ross PA, Khemani RG. BMC Pediatr. 2020 Jun 27;20(1):317.

Optimal Target Range of Closed-Loop Inspired Oxygen Support in Preterm Infants: A Randomized Cross-Over Study. van den Heuvel MEN, van Zanten HA, **Bachman TE**, Te Pas AB, van Kaam AH, Onland W. J Pediatr. 2018 Jun;197:36-41.

Automated versus Manual Oxygen Control with Different Saturation Targets and Modes of Respiratory Support in Preterm Infants. van Kaam AH, Hummler HD, Wilinska M, Swietlinski J, Lal MK, te Pas AB, Lista G, Gupta S, Fajardo CA, Onland W, Waitz M, Warakomska M, Cavigioli F, Bancalari E, Claure N, **Bachman TE**. J Pediatr. 2015 Sep;167(3):545-50.

High-Frequency Oscillatory Ventilation in Pediatric Acute Lung Injury: A Multicenter International Experience. Rettig JS, Smallwood CD, Walsh BK, Rimensberger PC, **Bachman TE**, Bollen CW, Duval EL, Gebistorf F, Markhorst DG, Tinnevelt M, Todd M, Zurakowski D, Arnold JH.Crit Care Med. 2015 Dec;43(12):2660-7.

Automated FiO2-SpO2 control system in neonates requiring respiratory support: a comparison of a standard to a narrow SpO2 control range. Wilinska M, **Bachman T**, Swietlinski J, Kostro M, Twardoch-Drozd M. BMC Pediatr. 2014 May 28;14:130.

Impact of the shift to neonatal noninvasive ventilation in Poland: a population study. Wilinska M, **Bachman T**, Swietlinski J, Gajewska E, Meller J, Helwich E, Kornacka M, Szczapa J, Lauterbach R, Wilinski G, Zachara MR. Pediatr Crit Care Med. 2014 Feb;15(2):155-61.

A multicenter randomized controlled trial comparing effectiveness of two nasal continuous positive airway pressure devices in very-low-birth-weight infants. Bober K, Świetliński J, Zejda J, Kornacka K, Pawlik D, Behrendt J, Gajewska E, Czyżewska M, Korbal P, Witalis J, Walas W, Wilińska M, Turzańska A, Zieliński G, Czeszyńska B, **Bachman T**. Pediatr Crit Care Med. 2012 Mar;13(2):191-6.

Multicenter crossover study of automated control of inspired oxygen in ventilated preterm infants. Claure N, Bancalari E, D'Ugard C, Nelin L, Stein M, Ramanathan R, Hernandez R, Donn SM, Becker M, **Bachman T**. Pediatrics. 2011 Jan;127(1):76-83.

Factors affecting outcomes in very low birth weight infants treated electively with nasal continuous positive airway pressure. Swietlinski J, **Bachman T**, Gajewska E, Bober K, Helwich E, Lauterbach R, Maruszewski B, Szczapa J, Skrzypek M; Polish Noninvasive Respiratory Study Group. J Perinatol. 2010 Feb;30(2):112-7.

Factors effecting adoption of new neonatal and pediatric respiratory technologies. **Bachman TE**, Marks NE, Rimensberger PC. Intensive Care Med. 2008 Jan;34(1):174-8.

Intraventricular hemorrhage and high-frequency ventilation: a meta-analysis of prospective clinical trials. Clark RH, Dykes FD, **Bachman TE**, Ashurst JT. Pediatrics. 1996 Dec;98(6 Pt 1):1058-61.

Selected Papers and Invited Lecturers

Association of severe hyperoxemic events and excess mortality in Pediatric critical care: an observational study. **Thomas E Bachman**, Christopher JL Newth, Patrick A Ross, Nimesh Patel, Anoopindar Bhalla. presented at 16th European Conference on Pediatric Ventilation, Montreux Switzerland, May 2023.

Comparison of the relative effectiveness of automated FiO2 systems in neonates of different stability.: individual patient analysis. **Bachman TE.** presented at 16th European Conference on Pediatric Ventilation, Montreux Switzerland, May 2023.

Selecting the optimum target range for closed loop FiO2-SpO2 control: a synthesis of clinical trials. **Thomas Bachman**, Maria van den Heuvel, Wes Onland, Anton van Kaam , Maria Wilinska. presented at 14th European Conference on Pediatric Ventilation, Montreux Switzerland, May 2016.

It is too early to declare early or late rescue high-frequency oscillatory ventilation dead. Rimensberger PC, **Bachman TE**. JAMA Pediatr. 2014 Sep;168(9):862-3. (letter)

Latest evidence on SpO2 targeting in preterm infants. presentation at Polish National Neonatal Conference. Poznan 2014.

Time required for effective FiO2 titration in preterm infants; a comparison. Wilinska M**, Bachman T**, Swietlinski J. Respiratory Therapy. 2012 Oct-Nov;7(5):69-71.

Report on the application of continuous and biphasic noninvasive ventilation in 11,330 neonates: indications and outcomes. Skrzypek M**, Bachman T**, Swietlinski J. Respiratory Therapy. 2012 Oct-Nov;7(5):65-8.

Improving intra-hospital transport of ventilated patients: a proposed quality improvement project. **Bachman T**. Respiratory Therapy. 2010 Dec-Jan. 5(6):23-4

Noise in the NICU: still asking questions. **Bachman T**. Neonatal Intensive Care, 2006 Jan-Feb;19(1)21-3.

Trends in expected outcomes in preterm infants treated with the 3100A HFOV: an updated meta Analysis. **Bachman T,** Ashurst J. Respiratory Therapy, 2006 Oct-Nov 1(6)39:44.

Improved Pulmonary outcomes with HFOV: a Meta-Analysis of the 3100A Trials, Null D **, Bachman T**, Ashurst J. Neonatal Intensive Care. 2002 Oct; 15(6):10-4

Assessment of the relative Benefit of HFOV in Preterm Infants of Differing Severity and Maturity: A Logistical Regression Meta-Analysis, presented at 4th European Conference on Pediatric Ventilation, Ovifat Belgium, October 2001