

Publications & Manuscripts

AUTHORSHIP

- 2016 with Joachim Siegert, Fred Wonka, Christoph Schindler, Marcelo Gama de Abreu, Thea Koch, Ute Morgenstern and Hermann Theilen: Assessing the eligibility of a non-invasive continuous blood pressure measurement technique for application during total intravenous anaesthesia. In: BME/BMT 61, No. 3, pp. 369–379. <http://www.degruyter.com/view/j/bmte.ahead-of-print/bmt-2015-0001/bmt-2015-0001.xml?format=INT>.
- with Isabela Henriques, Gisele A. Padilha, Caio Wierzchon, Paulo J. B. Miranda, Isalira P. Ramos, Nazareth Rocha, Fernanda F. Cruz, Raquel S. Santos, Milena V. de Oliveira, Sergio A. Souza, Regina C. Goldenberg, Ronir R. Luiz, Paolo Pelosi, Marcelo Gama de Abreu, Pedro L. Silva and Patricia R. M. Rocco: Comparison between Variable and Conventional Volume-Controlled Ventilation on Cardiorespiratory Parameters in Experimental Emphysema. In: Front Physiol 7, p. 277. <https://doi.org/10.3389/fphys.2016.00277>.
- with T. Kiss, P. L. Silva, L. Moraes, R. S. Santos, N. S. Felix, C. L. Santos, M. M. Morales, V. L. Capelozzi, M. Kasper, P. Pelosi, M. Gama de Abreu and P. R. M. Rocco: Comparison of different degrees of variability in tidal volume to prevent deterioration of respiratory system elastance in experimental acute lung inflammation. In: Br. J. Anaesth. 116, No. 5, pp. 708–715. <http://bja.oxfordjournals.org/content/116/5/708>.
- with Paolo Pelosi and Marcelo Gama de Abreu: Variable ventilation from bench to bedside. In: Crit Care 20, No. 1, p. 62.
- 2014 with Peter M. Spieth, Andreas Güldner, Thea Koch and Marcelo Gama de Abreu: A new adaptive controller for volume-controlled mechanical ventilation in small animals. In: Experimental Lung Research 40, No. 4, pp. 186–197. <http://informahealthcare.com/doi/abs/10.3109/01902148.2014.900156> [bibtex: huhle_new_2014].
- 2012 with M Burghardt, S Zaunseder, N Wessel, T Koch, H Malberg and A R Heller: Effects of awareness and nociception on heart rate variability during general anaesthesia. In: Physiol. Meas. 33, No. 2, pp. 207–217. <http://iopscience.iop.org/0967-3334/33/2/207>.
- 2009 Therapy documentation and determination of specific cardiovascular parameters of patients during acute hypertensive crisis. MSc thesis, Institute of Biomedical Engineering, Dresden University of Technology, Dresden.

BOOK CHAPTERS

- 2016 with P. Pelosi and M. G. de Abreu: Variable Ventilation from Bench to Bedside. In: Vincent, Prof Jean-Louis (ed.): Annual Update in Intensive Care and Emergency Medicine 2016. Springer International Publishing (= Annual Update in Intensive Care and Emergency Medicine), pp. 281–298. http://link.springer.com/chapter/10.1007/978-3-319-27349-5_23 [DOI: 10.1007/978-3-319-27349-5_23].

CONFERENCE CONTRIBUTIONS

- 2016 with Davide D'Antini, Jacob Herrmann, Moritz Herzog, Thomas Bluth and Marcos F. Vidal Melo: End-expiratory airway pressure on respiratory system mechanics and incidence of tidal hyperinflation during open abdominal surgery. In: ATS 2016 International Conference. San Francisco.
- 2015 with Joachim Siegert, Fred Wonka, Ute Morgenstern, Marcelo Gama de Abreu and Hermann Theilen: Bland-Altman analysis of differences to assess the eligibility of non-invasive continuous blood pressure monitors for perioperative application. In: Abstracts BMT 2015 49. DGBMT Jahrestagung, Lübeck, vol. 60 (S1). Lübeck, Germany: Walter de Gruyter (= Biomedical Engineering/Biomedizinische Technik), p. S128. <http://conference.vde.com/bmt-2015/Pages/BMT2015.aspx>.
- with Andreas Güldner, Hannes Krause, Sarah Kerber, Peter M. Spieth, Thea Koch and Marcelo Gama de Abreu: Effects of periodic tidal volume variation on gas exchange in experimental acute respiratory distress syndrome. In: Abstracts BMT 2015 49. DGBMT Jahrestagung, Lübeck, vol. 60 (S1). Lübeck, Germany: Walter de Gruyter (= Biomedical Engineering/Biomedizinische Technik), p. S300. <http://conference.vde.com/bmt-2015/Pages/BMT2015.aspx>.
- with Joachim Siegert, Marcelo Gama de Abreu and Hermann Theilen: Perioperative, kontinuierliche, nicht-invasive Blutdruckmessung mittels „vascular-unloading-Technik“ verglichen mit unmittelbarer invasiver Blutdruckmessung. In: Deutscher Anaesthesie Kongress DAC. Düsseldorf, Germany.
- with Joachim Siegert, Fred Wonka, Marcelo Gama de Abreu, Christoph Schindler and Hermann Theilen: Reliability of a non-invasive continuous arterial pressure measurement device during perioperative total intra-vascular anaesthesia. In: Euroanaesthesia 2015. Berlin, Germany. <http://www.esahq.org/euroanaesthesia>.
- with Joachim Siegert, Marcelo Gama de Abreu, Thea Koch, Ute Morgenstern and Hermann Theilen: Reliability of non-invasive continuous arterial pressure measurement devices during total invasive anaesthesia. In: ATS 2015 International Conference. Denver, CO, USA. <http://conference.thoracic.org/2015/>.
- 2014 with Andreas Güldner, Paolo Pelosi, Thea Koch and Marcelo Gama de Abreu: Effects of tidal volume periodicity on cyclic lung mechanics during variable ventilation. San Diego, CA, USA. <http://conference.thoracic.org/2014/>.
- with Andreas Güldner, Alessandro Beda, Sarah Kerber, Thea Koch and Marcelo Gama de Abreu: Frequenzspezifisches Übertragungsverhalten während der Variablen Volumen-kontrollierten Beatmung im Großtiermodell des ARDS. In: 5. Dresdner Medizintechnik Symposium: Biomedizinische Technik – Von der Grundlagenforschung zum Transfer, vol. 2. Dresden, Germany (= Reports on Biomedical Engineering), p. 51.
- 2013 with Andreas Güldner, Peter M Spieth and Marcelo Gama de Abreu: Characterization of Respiratory Patterns During Assisted Mechanical Ventilation in Experimental ARDS. In: Jahrestagung der DGBMT 2013. Graz, Austria.
- with Peter M. Spieth and Marcelo Gama de Abreu: Entwicklung und Evaluazion eines adaptiven Reglers zur Applikation von Tidalvolumina in der Beatmung von Kleintieren. In: AUTOMED: Automatisierungstechnische Verfahren für die Medizin, vol. 1. Dresden, Germany (= Reports on Biomedical Engineering), p. 30. <http://d-nb.info/1051107172>.
- with Peter M Spieth, Thomas Bluth, Andreas Güldner, Thea Koch and Marcelo Gama de Abreu: A new adaptive controller for accurate tidal volume delivery during controlled mechanical ventilation of small animals. Philadelphia, PA, USA. <http://conference.thoracic.org/2013/>.

- 2012 with Peter M. Spieth, Thea Koch and Marcelo Gama de Abreu: Adaptive control system for volume-controlled ventilation in small animals. In: Jahrestagung der DGBMT 2012. Jena, Germany. <http://www.degruyter.com/view/j/bmte.2012.57.issue-s1-0/bmt-2012-4463/bmt-2012-4463.xml?format=INT>.
- with Peter M. Spieth, Thea Koch and Marcelo Gama de Abreu: Closed-loop tidal volume targeted mechanical ventilation of small animals using a new adaptive control system. In: Dresdner Beiträge zur Medizintechnik, vol. 14. Dresden, Germany: TUDpress.
- with Sebastian Zaunseder, Alexander Suhrbier, Andreas Witing and Hagen Malberg: Vergleich nicht-invasiver, kontinuierlicher Blutdruckmesstechnik. In: AUTOMED - Automatisierungstechnische Verfahren für die Medizin. Aachen.
- 2011 with Sebastian Zaunseder and Hagen Malberg: Assessing the usability of ECG by ensemble decision trees. In: Computing in Cardiology 2011. Hangzhou.
- with Hagen Malberg, Sebastian Zaunseder, Alexander Suhrbier and Niels Wessel: Vergleich kontinuierlicher nichtinvasiver Blutdruckmessgeräte bei Kipptischuntersuchungen. In: 35. Wissenschaftliche Kongress der Deutschen Hochdruckliga e.V. Köln.
- 2010 with Fred Wonka, Hans Dietrich, Joachim Siegert, Christoph Schindler, Hagen Malberg and Ute Morgenstern: Blood Pressure Measurement: Evaluation of CNAP Monitor 500 against Riva-Rocci/Korotkoff. In: 34. Wissenschaftliche Kongress der Deutschen Hochdruckliga e.V. Berlin.
- with Hans Dietrich, Evgeny Idelevich, Joachim Siegert, Christoph Schindler, Ute Morgenstern and Hagen Malberg: Measurement of continuous non-invasive blood pressure during vasoactive treatment in patients with acute hypertensive crisis. In: Biosignal 2010. Berlin.
- with Hans Dietrich, Evgeny Idelevich, Joachim Siegert, Christoph Schindler, Ute Morgenstern and Hagen Malberg: Measurement of continuous non-invasive blood pressure during vasoactive treatment in patients with acute hypertensive crisis. In: 3. Dresdner Medizintechnik Symposium. Dresden, Germany.

CO-AUTHORSHIP

- 2016 with Andreas Güldner, Anja Braune, Lorenzo Ball, Pedro L. Silva, Cynthia Samary, Angelo Insorsi, Ines Rentzsch, Claudia Becker, Liane Oehme, Michael Andreeff, Marcos F. Vidal Melo, Tilo Winkler, Paolo Pelosi, Patricia R. M. Rocco, Jörg Kotzerke and Marcelo Gama de Abreu: Comparative Effects of Volutrauma and Atelectrauma on Lung Inflammation in Experimental Acute Respiratory Distress Syndrome. In: Crit. Care Med. 44, No. 9, pp. e854-e865. <http://content.wkhealth.com/linkback/openurl?sid=WKPTLP:landingpage&an=00003246-201609000-00041>.
- with Cynthia S. Samary, Lillian Moraes, Cintia L. Santos, Raquel S. Santos, Debora S. Ornellas, Nathane S. Felix, Vera L. Capelozzi, Alberto Schanaider, Paolo Pelosi, Marcelo Gama de Abreu, Patricia R. M. Rocco and Pedro L. Silva: Lung Functional and Biologic Responses to Variable Ventilation in Experimental Pulmonary and Extrapulmonary Acute Respiratory Distress Syndrome. In: Crit. Care Med.
- with Raquel F. de Magalhães, Cynthia S. Samary, Raquel S. Santos, Milena V. de Oliveira, Nazareth N. Rocha, Cintia L. Santos, Jamil Kitoko, Carlos A. M. Silva, Caroline L. Hildebrandt, Cassiano F. Goncalves-de Albuquerque, Adriana R. Silva, Hugo C. Faria-Neto, Vanessa Martins, Vera L. Capelozzi, Marcelo M. Morales, Priscilla Olsen, Paolo Pelosi, Marcelo Gama de Abreu,

Patricia R. M. Rocco and Pedro L. Silva: Variable ventilation improves pulmonary function and reduces lung damage without increasing bacterial translocation in a rat model of experimental pneumonia. In: *Respir. Res.* 17, No. 1, p. 158.

2015 with Andreas Güldner, Thomas Kiss, Thomas Bluth, Christopher Uhlig, Anja Braune, Nadja Carvalho, Theresa Quast, Ines Rentzsch, Peter Spieth, Torsten Richter, Felipe Saddy, Patricia R. M. Rocco, Michael Kasper, Thea Koch, Paolo Pelosi and Marcelo Gama de Abreu: Effects of Ultraprotective Ventilation, Extracorporeal Carbon Dioxide Removal, and Spontaneous Breathing on Lung Morphofunction and Inflammation in Experimental Severe Acute Respiratory Distress Syndrome. In: *Anesthesiology* 122, No. 3, pp. 631–646.

with Peter M. Spieth, Pedro L. Silva, Cristiane S. N. B. Garcia, Debora S. Ornellas, Cynthia S. Samary, Lillian Moraes, Maira Bentes, Marcelo M. Morales, Michael Kasper, Andreas Güldner, Thea Koch, Paolo Pelosi, Marcelo Gama de Abreu and Patricia R. M. Rocco: Modulation of Stress versus Time Product during Mechanical Ventilation Influences Inflammation as Well as Alveolar Epithelial and Endothelial Response in Rats. In: *Anesthesiology* 122, No. 1, pp. 106–116.

2014 with Alessandro Beda, Andreas Güldner, Alysson R. Carvalho, Walter Araujo Zin, Nadja C. Carvalho, Antonio Giannella-Neto, Thea Koch and Marcelo Gama de Abreu: Liquid- and air-filled catheters without balloon as an alternative to the air-filled balloon catheter for measurement of esophageal pressure. In: *PLoS ONE* 9, No. 9, p. e103057.

2013 with C. Schranz, A. Riedlinger, A. Braune, M. Gama de Abreu, E. Koch and K. Möller: Selection Criteria for Competing Models of Respiratory Mechanics. In: *Biomed Tech (Berl)*.

with Peter M. Spieth, Andreas Güldner, Alessandro Beda, Thomas Bluth, Dierk Schreiter, Max Raggaller, Birgit Gottschlich, Thomas Kiss, Samir Jaber, Paolo Pelosi, Thea Koch and Marcelo Gama de Abreu: Short-term effects of noisy pressure support ventilation in patients with acute hypoxemic respiratory failure. In: *Crit Care* 17, No. 5, p. R261 [bibtex: spieth_shortterm_2013].