CURRICULUM VITAE

KRISTYNA KOLDOVA, PhD

PERSONAL DATA:

Family / Birth name: Koldová / Buzková First name: Kristýna Date of birth: August 30th, 1990 Place of birth: Prague, Czech Republic Nationality: Czech

Citizenship: Czech Republic, EU

CONTACTS:

Office address: Czech Technical University in Prague

Faculty of Biomedical Engineering

nam. Sitna 3105

272 01 Kladno Czech Republic, EU

Phone: +420 728 848 785

E-mail: kristyna.koldova@cvut.cz

EDUCATION:

PhD, Czech Technical University in Prague, Faculty of Biomedical Engineering; thesis: "Possibilities of using electrical impedance tomography to monitor the lungs during capnoperitoneum"; 2023

M.Eng. (Ing.), summa cum laude; Czech Technical University in Prague, Faculty of Biomedical Engineering; thesis: "The Effect of the Electrode Belt Size upon the Evaluation of the Regional Distribution of Ventilation Using Electrical Impedance Tomography"; 2015

BSc. (Bc.), summa cum laude; Czech Technical University in Prague, Faculty of Biomedical Engineering; thesis: "Measuring Lung Resistivity of Extremely Preterm Neonates with Bronchopulmonary Dysplasia Using Electrical Impedance Tomography"; 2013

APPOINTMENTS:

2023 – present Academic Researcher and Lecturer, Czech Technical University in Prague, Faculty of Biomedical Engineering

2014 – 2023 PhD Student and Lecturer, Czech Technical University in Prague, Faculty of Biomedical Engineering

2016 – 2018 Medical Device Regulatory Affairs Specialist, Valeant Pharmaceuticals

2015 – 2016 Regulatory Affairs Specialist, State Institute for Drug Control

RESEARCH COOPERATION:

2015 – 2023

Examination of the lungs during laparoscopic surgery using electrical impedance tomography

Department of Anesthesia and Critical Care, Military University Hospital in Prague

2013 – 2014

Study of the lungs in premature neonates using electrical impedance tomography

Department of Gynaecology, Obstetrics and Neonatology, First Faculty of Medicine, Charles University and General University Hospital in Prague

PROFESSIONAL MEMBERSHIP:

Member: Non-conventional Ventilatory Team, Prague, Czech Republic (since 2014)

LANGUAGES:

English level C1, Certificate in Advanced English (CAE), 2010

PUBLICATIONS:

- Koldová, K.; Blažková, T. EFFECT OF ELECTRODE BELT USED FOR LUNG MONITORING WITH ELECTRICAL IMPEDANCE TOMOGRAPHY ON TIDAL VOLUME IN HEALTHY SUBJECTS. Lékař a technika – Clinician and Technology. 2024, 54(3), 77-81. ISSN 2336-5552.
- Koldova, K.; Rara, A.; Muller, M.; Tyll, T.; Roubik, K. Cranial Electrode Belt Position Improves Diagnostic Possibilities of Electrical Impedance Tomography during Laparoscopic Surgery with Capnoperitoneum. Sensors 2023, 23, 8644. doi:10.3390/s23208644.
- K. Koldova, D. Slajfercik. The effect of frame rate and calibration on lung monitoring with electrical impedance tomography. Lékař a technika Clinician and Technology. 2020, 49(4), pp. 107-111. doi:10.14311/CTJ.2019.4.01.
- K. Buzkova, A. Rara, M. Muller, K. Roubik, T. Tyll. Ultrasound detection of diaphragm position in the region for lung monitoring by electrical impedance tomography during laparoscopy. Biomedical Papers, 2018, 162.1: 43-46. doi:10.5507/bp.2018.005.
- K. Buzkova, D. Albrechtova. Effect of Electrode Gel Application Between Patient's Skin and Electrode Belt on Electrical Impedance Tomography of the Thorax. In: World Congress on Medical Physics and Biomedical Engineering 2018. IFMBE Proceedings, vol 68/1. Springer, Singapore. doi:10.1007/978-981-10-9035-6_15.
- K. Buzkova, M. Skopek. The Effect of fluid accumulation in stomach on electrical impedance tomography image of lungs. Lékař a technika – Clinician and Technology. 2017, 47(1), pp. 11-14.
- K. Buzkova, K. Roubik. The effect of electrode belt size selection upon evaluation of the distribution of ventilation using electrical impedance tomography. In: 2015 E-Health and Bioengineering Conference (EHB). IEEE, 2015. p. 1-4. doi:10.1109/EHB.2015.7391453.
- K. Buzkova, J. Suchomel. Use of electrical impedance tomography for quantitative evaluation of disability level of bronchopulmonary dysplasia. 2013 E-Health and Bioengineering Conference (EHB), pp. 1-4. doi:10.1109/EHB.2013.6707307.
- K. Buzkova, J. Suchomel. Measuring of Lung Resistivity of Extremely Pre-term Neonates with Bronchopulmonary Dysplasia Using Electrical Impedance Tomography. 17th International Student Conference on Electrical Engineering POSTER 2013, May 16, 2013, Faculty of Electrical Engineering, CTU Prague.