Check for updates

COMMENT

ECI biocommentary—February 2020

Michael Wagner 101

Pediatric Research (2020) 87:431; https://doi.org/10.1038/s41390-019-0642-y



I graduated with an MD in 2014 from the Medical University of Vienna, Austria. Community service helped me with the decision to study medicine as it gave me an idea of how valuable it is to work within that field. To understand how different healthcare systems care for their patients, I completed elective rotations at hospitals in Cape Town, South Africa and Munich, Germany. Since 2014, I am a neonatal fellow at the Department of Pediatrics, Comprehensive Center for Pediatrics at the Medical University of Vienna, Austria.

After volunteering within the Pediatric Simulation Training Center as a student instructor, I became interested in pursuing a career in Pediatrics. I soon realized that the shortage of resources was leading to a lack of simulation-based training for medical students.

To improve simulation-based training for medical students, I implemented student peer-teaching for pediatric simulation training at the Medical University of Vienna. The student peer-teaching program resulted in a significant increase of medical students attending high-fidelity simulation training. The student peer-teaching was also my first research project, which ignited my enthusiasm to pursue a research career in medical simulation and patient safety.

I started my Ph.D. under the supervision of Prof. Olischar with a focus on pediatric and neonatal simulation, resuscitation, and patient safety. I aim to defend my Ph.D. in 2019. I am closely cooperating with Associate Prof. Schmölzer from the Centre for Studies of Asphyxia and Resuscitation in Edmonton, Canada to examine various aspects of neonatal resuscitation. Furthermore, I am interested in examining how resuscitation teaching during simulation and in the delivery room can be improved. Additionally, we are investigating biometric data (i.e. heart rate, gaze

behavior, cortisol measurements) to evaluate the impact of stress, (visual) attention, workload, and team work. I am also dedicated to implement new and innovative technology, such as 3D-printing, virtual/augmented reality, and artificial intelligence to augment the individualized training experience and translation to the delivery room. We are currently building a Comprehensive Center for Pediatrics Innovation Lab in Vienna, which would not be possible without the tremendous support of the head of the Center and the Division of Neonatology, Prof. Berger, and our local simulation team.

I am a founding member and the current chair of "Netzwerk Kindersimulation", a network dedicated to develop standards for simulation-based training and education within the Germanspeaking region in Europe. The Network currently has 155 members and 45 associated institutions.

I have several international collaborations with a focus on pediatric simulation, resuscitation, and patient safety. I am a honorary research fellow at the University of Alberta, Edmonton, Canada and at Yale University, New Haven, USA. My work was been awarded with the "Patient Safety Award", the "Best Poster Award (IPSSW, Vienna, Austria)", the "Young Investigator Award (MProve, Southampton, UK)", the "Research Price of the German Society for Neonatology and Pediatric Intensive Care", the "Pediatrics Section Research Award (IMSH, San Antonio, USA)", along with funding from various international funding agencies.

Throughout my career, I have always emphasized collaborations and networking with local and international experts, which helped me to continuously develop my research projects to improve the care of neonatal and pediatric patients. Furthermore, it is very important to have strong support of family, friends, mentors, and colleagues to stay focused and to dedicate the time and effort that is necessary for combining clinics, research, and private life. Therefore, I am very thankful that I had and still have this support.

ADDITIONAL INFORMATION

Competing interests: The author declares no competing interests.

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Correspondence: Michael Wagner (michael.b.wagner@meduniwien.ac.at)

Received: 9 October 2019 Accepted: 16 October 2019

Published online: 28 October 2019

¹Division of Neonatology, Pediatric Intensive Care and Neuropediatrics, Department of Pediatrics, Comprehensive Center for Pediatrics, Medical University of Vienna, Vienna, Austria