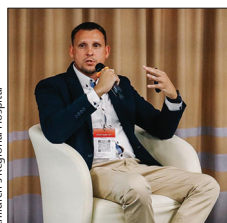




Profile

Alex Mazulov—battling bronchiectasis in wartime Ukraine



Children's Regional Hospital

For more on **Child-BEAR Net** see <https://www.improvebe.org/>

For the **Child-BEAR Net** respiratory exacerbation definitions see *Eur Respir J* 2022; 60: 2200300

For more on **quality standards** for managing bronchiectasis see *Breathe* 2022; 18: 220144

For the **Child-BEAR Net** priorities roadmap see *ERJ Open Res* 2021; 7: 00122–02021

It is in the threatening and tense scenario of war that paediatric respiratory medicine expert Alex Mazulov currently finds himself and his family every day, with air raid warning sirens screaming multiple times a day and his hospital—Children's Regional Hospital, Vinnytsia, Ukraine—in a state of constant tension and reorganised so that the most vulnerable patients are sheltered in the basement. "We can still see friends occasionally, but normal life—going to a bar or restaurant—is not possible for now", explains Mazulov.

Mazulov was born and raised in the Vinnytsia region he has always called home, and describes his neonatologist mother Tatiana as his hero. "She actually went into medicine quite late, so qualified only a few years before me", he says. "She encouraged me to be a paediatrician—she told me child patients are always smiling and never tell lies!"

After medical studies at Vinnytsia's National Pirogov Medical University, he spent 4 years as a general paediatrician at Zhmerynka Regional Hospital, Zhmerynka, before returning to what would be his permanent base at the Children's Regional Hospital. He combined his residency with a clinical fellowship, completing his PhD at the same university as his medical studies, researching the impact of surfactant protein B in children with different respiratory diseases.

He specialised in respiratory medicine after being inspired by mentor Alex Katilov. "It wasn't any specific condition that got me interested, more the discipline as a whole", explains Mazulov. As a respiratory physician in Ukraine, he deals with infections (such as pneumonia) and chronic conditions (such as asthma, allergies, and bronchiectasis).

Ukraine's asthma prevalence has steadily increased and is now similar to most European countries. From 2006, Mazulov began working on multiple research studies on the use of inhaled corticosteroids and long-acting muscarinic antagonists, establishing that both were efficacious and appropriate for long-term treatment of paediatric asthma. He also completed research on the prevention of respiratory syncytial virus in preterm neonates, and studies into a range of antimicrobial resistant infections. His extensive experience also extends to allergology, including establishing the efficacy of specific immunotherapy for allergic rhinitis.

Currently, Mazulov's focus is on non-cystic fibrosis paediatric bronchiectasis, and his team is part of large international collaborations. "The interest in bronchiectasis began in 2019 when I went to the University Hospital Graz, Austria, and spent time in the Department of Professor Ernst Eber", explains Mazulov. "Through this I was introduced to many experts in this area, including Professor

Anne B Chang in Australia." In 2021, Chang invited him to join the international Children's Bronchiectasis Education, Advocacy and Research Network (Child-BEAR Net), dedicated to unravelling the mysteries of childhood bronchiectasis. "So many questions need answers", explains Mazulov. "First—what is the true prevalence of bronchiectasis among children? Current estimates vary from 1 to 735 per 100 000 population—but we lack good data on children in different countries."

Another substantial achievement of Child-BEAR Net was the development of an international consensus of quality standards for managing children and adolescents with bronchiectasis; and the creation of a road map of priorities for patients and parents of children with bronchiectasis. Child-BEAR Net has already developed clear definitions for respiratory exacerbations in clinical trials and published this work. "We need it as each exacerbation in child bronchiectasis not only damages the lungs, it adds further damage. It is a cumulative effect", explains Mazulov.

The collaboration wants its work to lead to new treatments for this debilitating disease, for which they are creating a registry of paediatric patients with bronchiectasis that will pull together genetic and phenotype data to help guide treatment decisions. "There are new treatments for adults in non-CF bronchiectasis, but not yet approved for children, where there have only been new therapies for CF", explains Mazulov.

His latest project is joining the ERS CONNECT collaboration which is examining the potential of e-health and m-health technologies in respiratory medicine. "Every day we are using more devices, more applications. The potential is almost limitless", explains Mazulov. "Everything from monitoring critical data from patients with chronic lung conditions to enable home management to using artificial intelligence modelling to help diagnose bronchiectasis. We are entering a very exciting time for these technologies."

In other profiles for *The Lancet Respiratory Medicine*, some space would be reserved for the researcher's hobbies and activities outside of work. But with Russia's ongoing invasion of Ukraine, Mazulov tries not to appear too down as he shakes his head about the possibility of such a normal life. But he is determined to stay positive, hoping for the war to end soon. He talks of his love for his wife Oksana and children Ian and Alex Jr, describing them as his rocks. In these, the most testing of times, the simplest of activities—such as walking their French bulldog Boston—are providing incredible pleasure and relief.

Tony Kirby