



# The Urgent Need for a Pediatric Interventional Pulmonology Journal

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## Introduction

Dear Friends and Colleagues,

With great pleasure and excitement, we present you the inaugural issue of *Pediatric Interventional Pulmonology*. As the field of interventional pulmonology continues to evolve, we find ourselves at the intersection of technological innovation and clinical expertise to address the specific needs of pediatric patients.

*Pediatric Interventional Pulmonology* emerges to address a significant gap in the literature: the dedicated exploration of interventional pulmonary procedures and therapies specifically designed for children.

Pediatric pulmonary conditions can be complex, often requiring specialized, minimally invasive interventions differing significantly from adult procedures. The pediatric population presents unique anatomical and physiological challenges, making developing and refining techniques tailored to their needs essential. From diagnostic bronchoscopy to advanced airway procedures, pediatric interventional pulmonology holds the key to improve outcomes for children with respiratory disorders.

Historically, much of the advancement in interventional pulmonology has been driven by adult practice, leaving pediatric specialists to adapt and modify existing tools and techniques. By focusing our efforts on pediatric-specific procedures, we can provide tailored interventions that address their clinical needs and consider their long-term growth and development.

## Applications and Advancements in the Field

The potential applications of interventional pulmonology in pediatrics are vast and expanding. For a long time, foreign body removal was the only intervention performed. However, as time passed, pediatric interventional pulmonology began to offer life-changing and life-saving solutions. Procedures such as airway dilation, cryotherapy, laser ablation of obstructive lesions, balloon bronchoplasty, and

endobronchial stents are advancing rapidly. These minimally invasive techniques enable clinicians to effectively manage complex respiratory conditions in children, reducing the recovery times while minimizing physical and psychological impacts associated with more invasive surgical procedures.

Furthermore, the integration of technologies like endobronchial ultrasound, 3D imaging, virtual bronchoscopy, robotics, and navigation promises to revolutionize pediatric interventional pulmonology. These innovations promise to enhance precision, reduce complications, and improve recovery times, transforming the way how we care for the youngest patients.

## A personal journey and the need for structured education

I believe that we all share a similar journey in interventional pulmonology. The lack of a clear, structured educational pathway has often meant adapting adult-focused techniques to meet pediatric needs. Many physicians who perform pediatric interventional pulmonology initially train alongside adult pulmonologists. Unfortunately, these techniques are designed primarily for adult patients and often do not fully translate to the uniqueness of the pediatric population. Besides training with and observing our adult colleagues, we attend numerous international courses, seeking to adapt adult-focused interventions for our pediatric practice.

It was not until recently, when a dedicated group of pediatric interventional pulmonologists gathered in 2024 in Düsseldorf, that I genuinely felt the momentum shifting. Under the leadership of Dr. Dirk Schramm, the first Hands-On Course in Advanced Pediatric Interventional Pulmonology was a success. This course provided the focused, practical training that had long been missing from our field, offering hope for a more structured and comprehensive educational pathway for future specialists.

## The Need for a Dedicated Journal

Despite the rapid growth in adult interventional pulmonology, pediatric-focused research has often needed to catch up, partly due to the smaller patient population and the unique technical challenges of pediatric care. *Pediatric Interventional Pulmonology*

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aims to fill this gap by providing a specialized platform for sharing best practices, innovative ideas and techniques, dissemination of research, and collaboration among clinicians, researchers, and industry experts.

This journal will serve as a repository for cutting-edge research, clinical reviews, and technological innovations directly relevant to pediatric interventional pulmonology. We encourage submissions from a various disciplines, including pulmonology, otolaryngology, cardiothoracic surgery, anesthesiology, and pediatric surgery, to foster a collaborative, multidisciplinary approach to care.

## Conclusion

The launch of *Pediatric Interventional Pulmonology* marks the beginning of an essential and meaningful journey. It reflects the growing importance of inter-

ventional pulmonology in pediatric care and is a call to action for continued innovation, research, and collaboration. Together, through the contributions of our authors, reviewers and readers, we will advance the frontiers of pediatric pulmonary care, which will significantly impact the lives of children with respiratory disorders worldwide.

We look forward to the valuable contributions shaping the future of this rapidly evolving discipline. Together, we can advance pediatric pulmonary care and ensure every child receives the best possible treatment.

Warm regards,

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Editor-in-Chief

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