

17th Annual International Asthma Conference At NemaCOLin

An Interactive Forum on Patient Care, Therapy, and Research

Friday, October 21st - Sunday, October 23rd, 2022
Hybrid Conference – Live at NemaCOLin Conference
Center Farmington, Pennsylvania



SPONSORED BY:



Conference Overview

Despite significant advances in our understanding of the pathophysiology and treatment of asthma, and the availability of national and international guidelines on the diagnosis and treatment of asthma, recent surveys show that asthma control and morbidity have not improved. Research is being conducted to address many of these issues. This conference will bring the latest research developments in this rapidly changing field to health care professionals practicing, researching, and teaching asthma care.

Asthma exists in diverse environments and populations and varies in severity by time and patient. Moreover, based on the results of recent research, asthma is being viewed less as a disease and more as a syndrome with multiple phenotypes and endotypes. The resultant heterogeneity forms the basis for the education and discussion embedded in the Nemaclin International Asthma Conference, which takes pride in being one of the only conferences in the world dedicated exclusively to asthma. Its purpose is to create a highly interactive educational environment, including the world's best asthma researchers, teachers, and clinicians, to critique cutting-edge research and translate key research findings into clinical pearls that will benefit patients with asthma.

Intended Audience and Conference Objectives

This conference is intended for primary care physicians, pediatricians, pulmonologists, allergists, physician assistants, nurse practitioners, ENTs, and asthma specialists.

Target Audience:

- All practicing allergists/immunologists and pulmonologists
- Fellows in allergy/immunology and pulmonary training programs
- Primary care physicians who care for asthma patients
- Allied health professionals with interest in asthma

Learning Objectives:

At the conclusion, participants should have the ability to:

- Summarize health equity challenges in asthma
- Discuss interactions between health equity, COVID-19 and asthma
- Describe strategies to achieve health equity in asthma
- Evaluate the role that multiple environmental factors play in clinically relevant disease, including pollution, vaping and viruses
- Determine underlying mechanisms by which certain environmental factors adversely impact the airways
- Identify the interactions of SARS-CoV2 with asthmatic human airways which may explain its acute and long-term impacts
- Discuss the biology and role of epithelial derived cytokines (alarmins) in asthma pathogenesis.
- Describe the role of anti-alarmin monoclonal antibodies in the management of severe asthma.
- Discuss the immune response to respiratory viruses like RSV and SARS-CoV-2.
- Discuss the durability of anti-viral immune responses.
- Discuss the impact of new COVID-19 variants.
- Describe early asthma and various patterns in children, including a COPD-like pattern.
- Summarize and discuss the results of a long-term study in urban children with asthma.
- Describe the results of a recent study of a biologic therapy in inner city children with asthma.
- Describe the mechanisms and management of early and severe asthma in children.
- Discuss the concept of medication response and remission in children with asthma.
- Describe the dissemination and implementation of research with a school-based asthma program.

Intended Outcome

To positively impact the morbidity and cost of asthma by providing health care practitioners with recommendations on the care of patients with asthma that are based on the most up-to-date research conducted by the world's leading asthma experts.

Conference Co-Founders

Giovanni Piedimonte, MD, FAAP, FCCP

Vice President for Research and Institutional Official of
Tulane University
Professor of Pediatrics,
Biochemistry and Molecular Biology
Tulane University School of Medicine
New Orleans, Louisiana

David P. Skoner, MD

Professor of Pediatrics
West Virginia University School of Medicine
Morgantown, West Virginia

Conference Directors

Deborah Gentile, MD

Director of Allergy, Asthma, and Immunology
East Suburban Pediatrics
Murrysville, Pennsylvania

Paul O'Byrne, MB, FRCP(C), FRSC

Dean and Vice President, Faculty of Health Sciences,
Michael G DeGroot School of Medicine,
Distinguished University Professor
McMaster University
Hamilton, Ontario, Canada

Giovanni Piedimonte, MD, FAAP, FCCP

Vice President for Research and Institutional Official of
Tulane University
Professor of Pediatrics,
Biochemistry and Molecular Biology
Tulane University School of Medicine
New Orleans, Louisiana

David P. Skoner, MD

Professor of Pediatrics
West Virginia University School of Medicine
Morgantown, West Virginia

Sally E. Wenzel Morganroth, MD

Professor of Medicine and Immunology
Chair, Department of Environmental and Occupational
Health Graduate School of Public Health
Director, University of Pittsburgh Asthma Institute at UPMC
Rachel Carson Chair in Environmental Health
Pittsburgh, Pennsylvania

Fellows Program Director

Reynold A. Panettieri Jr., MD

Professor of Medicine, Robert Wood Johnson Medical School
Vice Chancellor, Clinical & Translational Science
Director, Rutgers Institute for Translational Medicine & Science
Emeritus Professor of Medicine, University of Pennsylvania Child
Health Institute of New Jersey
Rutgers, The State University of New Jersey
New Brunswick, New Jersey

Chief Discussant

Jay K. Kolls, MD

Professor of Medicine and Pediatrics
John W Deming Endowed Chair in Internal Medicine
Director, Center for Translational Research in Infection
and Inflammation Tulane School of Medicine
New Orleans, Louisiana

Speaker

CANADA

Gail Gauvreau, PhD

Professor, Department of Medicine
McMaster University
Hamilton, Ontario, Canada

Jeremy Hirota, PhD

Canada Research Chair in Respiratory Mucosal Immunology Affiliate Professor of
Medicine – UBC
Assistant Professor of Medicine – McMaster University
School of Biomedical Engineering – McMaster University
Adjunct Professor of Biology – University of Waterloo
Hamilton, Ontario, Canada

Richard Leigh, MBChB, PhD, FRCPC, FCAHS

Professor of Medicine
Cumming School of Medicine, University of Calgary
Calgary, Alberta, Canada

Paul O'Byrne, MB, FRCP(C), FRSC

Dean and Vice
President, Faculty of
Health Sciences,
Michael G DeGroot School of Medicine,
Distinguished University Professor
McMaster University
Hamilton, Ontario, Canada

Roma Sehmi, PhD

McMaster University
Department of Medicine
Hamilton, Ontario, Canada

FRANCE

Antoine Beurnier, MD

Department of Physiology – Pulmonary Function Testing, Bicêtre Hospital
Assistance Publique - Hôpitaux de Paris
Paris, France

SWEDEN

Erik Melén, MD, PhD

Professor of Pediatrics
Karolinska Institutet and Sachsska Children's Hospital
Stockholm, Sweden

UNITED KINGDOM

Professor Sir Stephen T. Holgate CBE, FMedSci

MRC Clinical Professor of Immunopharmacology
UKRI Clean Air Champion and Special Advisor to the RCP on Air Quality
Faculty of Medicine
Clinical and Experimental Sciences
Southampton General Hospital
Southampton, Hampshire, United Kingdom

Clare Lloyd, PhD, FRSB, FMedSci

Professor of Respiratory Immunology Head, Respiratory Sciences Division
Vice Dean (Institutional Affairs)
National Heart and Lung Institute Sir Alexander Fleming Building
Faculty of Medicine
Imperial College
South Kensington, London, United Kingdom

Sejal Saglani, MD, FRCPC

Professor of Pediatric Respiratory Medicine
Head of Inflammation, Repair & Development Section National Heart &
Lung Institute
Imperial College London
London, England, United Kingdom

UNITED STATES

Saif Al Qatarneh, MD

Assistant Professor
Pediatric Pulmonary
WVU Medicine Children's Hospital
Morgantown, West Virginia

Matthew C. Altman, MD

Associate Scientist, Benaroya Research Institute
Associate Professor of Medicine, University of Washington
Seattle, Washington

William C. Anderson III, MD

Associate Professor, Pediatric Allergy & Immunology
Director, Multidisciplinary Asthma Clinic (MAC)
Co-Director, CHCO IMproving Pediatric to Adult Care Transition (ImPACT) Program Associate Program Director,
Allergy & Immunology Fellowship
Children's Hospital Colorado
Aurora, Colorado

Tyra Bryant-Stephens, MD

Director and Founder, Community Asthma Prevention Program Sr Director,
Center for Health Equity
Associate Professor of Pediatrics
Children's Hospital of Philadelphia
Philadelphia, Pennsylvania

Laura E. Crotty Alexander, MD

Associate Professor of Medicine, Division of Pulmonary
Critical Care & Sleep
University of California at San Diego
Section Chief of Pulmonary Critical Care Medicine
VA San Diego Healthcare System
San Diego, California

Deborah Gentile, MD

Director of Allergy, Asthma and Immunology
East Suburban Pediatrics
Murrysville, Pennsylvania

James E. Gern, MD

Chief, Division of Allergy, Immunology and Rheumatology
Vice Chair of Research
Department of Pediatrics
School of Medicine and Public Health
University of Wisconsin
Madison, Wisconsin

Bonnie Gunn, PhD

Assistant Professor
Paul G. Allen School of Global Health College of Veterinary Medicine
Washington State University
Pullman, Washington

Daniel J. Jackson, MD

Professor of Pediatrics and Medicine
Allergy & Immunology
University of Wisconsin School of Medicine and Public Health
Madison, Wisconsin

Jay K. Kolls, MD

Professor of Medicine and Pediatrics
John W Deming Endowed Chair in Internal Medicine
Director, Center for Translational Research in Infection and
Inflammation Tulane School of Medicine
New Orleans, Louisiana

Jordan M. Lee

Graduate Student, Joint Graduate Program in Toxicology
Department of Pharmacology & Toxicology
Rutgers, The State University of New Jersey
New Brunswick, New Jersey

Callum Lewandrowski, DO

Pediatric and Internal Medicine Resident PGY-4
WVU Medicine Children's Hospital
Morgantown, West Virginia

Andrew H. Liu, MD

Director, Airway Inflammation, Resilience & the Environment (AIRE) Program
Professor, Breathing Institute, Pediatric Pulmonary & Sleep Medicine
Children's Hospital Colorado
University of Colorado School of Medicine
Aurora, Colorado

Stephanie Lovinsky-Desir, MD, MS

Assistant Professor of Pediatrics
Chief of Pediatric Pulmonology
Columbia University Irving Medical Center
New York, New York

Fernando D. Martinez, MD

Regents' Professor
Director, Asthma & Airway Disease Research Center
Swift-McNear Professor of Pediatrics
Tucson, Arizona

Tesfaye B. Mersha, PhD

Professor
Cincinnati Children's Hospital Medical Center
Department of Pediatrics
University of Cincinnati
Cincinnati, Ohio

Elizabeth B. Norton, PhD, MPH

Assistant Professor
Department of Immunology & Microbiology
Tulane University
New Orleans, Louisiana

Reynold A. Panettieri Jr., MD

Professor of Medicine, Robert Wood Johnson Medical School
Vice Chancellor, Clinical & Translational Science
Director, Rutgers Institute for Translational Medicine & Science
Emeritus Professor of Medicine, University of Pennsylvania Child
Health Institute of New Jersey
Rutgers, The State University of New Jersey
New Brunswick, New Jersey

Brian P. Peppers, DO, PhD

Assistant Professor
WVU Medicine Children's Hospital
Division of Allergy and Immunology
Morgantown, West Virginia

Giovanni Piedimonte, MD, FAAP, FCCP

Vice President for Research and Institutional Official of
Tulane University
Professor of Pediatrics, Biochemistry and Molecular Biology
Tulane University School of Medicine
New Orleans, Louisiana

Jamie Rice, RRT, RRT-ACCS, AE-C

Pediatric Respiratory Clinical Specialist
Respiratory Therapy
WVU Medicine Children's Hospital
Morgantown, West Virginia

UNITED STATES (continued)

John S. Schieffelin, MD, MSPH

Associate Professor of Pediatrics and
Internal Medicine Sections of Infectious Disease
Tulane University School of Medicine
New Orleans, Louisiana

David P. Skoner, MD

Professor of Pediatrics
West Virginia University School of Medicine
Morgantown, West Virginia

Stanley J. Szeffler, MD

Professor of Pediatrics
University of Colorado School of Medicine
Aurora, Colorado

Sally E. Wenzel Morganroth, MD

Professor of Medicine and Immunology
Chair, Department of Environmental and
Occupational Health Graduate School of
Public Health
Director, University of Pittsburgh Asthma
Institute at UPMC Rachel Carson Chair in
Environmental Health
Pittsburgh, Pennsylvania

Joanna Woo, B.S.

PhD Candidate - Joint Program in Toxicology
Department of Pharmacology & Toxicology
Rutgers, The State University of New Jersey
New Brunswick, New Jersey

Disclosure:

It is the policy of the WVU School of Medicine Office of CME to ensure balance, independence, objectivity, and scientific rigor in all its educational activities. All faculty/authors/planners participating in our programs are expected to disclose any relevant relationships they may have with commercial companies. Final disclosure information is available on the conference website at <https://www.asthma-nemacolin.com>

Thursday, October 20th

5:00 p.m. *Conference Onsite Registration and Welcome Reception (Attendees & Guests Welcome)*

Friday, October 21st

7:00 a.m. *Registration, Breakfast, Visit Exhibits*

7:45 a.m. **Welcome Remarks and Conference Overview**
David P. Skoner, MD

Symposium: Update on Childhood Asthma
Moderator: **David P. Skoner, MD and Stanley J. Szefler, MD**

8:00 a.m. URECA: A Long Term Study in Urban Asthma
James E. Gern MD

8:20 a.m. Mepolizumab Therapy in Urban Children with Eosinophilic Asthma
Daniel J. Jackson, MD

8:40 a.m. The Transcriptome in Asthma as Part of the Mepolizumab Study
Matthew C. Altman, MD

9:00 a.m. Asthma During Childhood and the Early Origins of COPD
Fernando D. Martinez, MD

9:20 a.m. *Discussion*

10:00 a.m. *Break, Visit Exhibits*

Symposium: Sound the Alarmins in Asthma
Moderator: **Paul O'Byrne MB, FRCP(C), FRSC**

10:15 a.m. Thymic Stromal Lymphopoietin (TSLP) and Asthma
Gail Gauvreau, PhD

10:35 a.m. Interleukin 25 and Asthma
Roma Sehmi, PhD

10:55 a.m. **William J. Doyle Memorial Lecture**
Interleukin 33 and Asthma
Clare Lloyd, PhD, FRSB, FMedSci

11:15 a.m. Anti-alarmins in Asthma Management
Richard Leigh, MBChB, PhD, FRCPC, FCAHS

11:35 a.m. **Gil Friday Keynote Lecture**
Can You Believe It? SMART Therapy in the US!
Reynold A. Panettieri, Jr., MD

11:55 a.m. *Discussion*

12:35 p.m. *Lunch*

1:35 p.m. **Pro-Con Debate**
Anti IL-5 Approaches Are Effective Treatments for Severe Asthma in Kids
PRO: Matthew C. Altman, MD
CON: Daniel J. Jackson, MD

- 2:15 p.m. **Pro-Con Debate**
Murine Models Are Useful in Studying Asthma Pathogenesis
PRO: Clare Lloyd, PhD, FRSB, FMedSci
CON: Richard Leigh, MBChB, PhD, FRCPC, FCAHS
- 2:55 p.m. *Break, Visit Exhibits*
- 3:10 p.m. ***Phil Fireman Keynote Lecture***
The Advances in Asthma Management in the Past 30 Years
Sir Stephen Holgate, KBE, MD, FAAAAI, FMedSci
- 3:50 p.m. Asthma Powerhouse Roundtable
David P. Skoner, MD
- 4:30 p.m. *Fellows Oral Presentations:*
Joanna Woo, B.S.
Jordan M. Lee,
Saif Al Qatameh, MD & Jamie Rice, RRT, RRT-ACCS, AE-C
Callum Lewandrowski, DO & Brian P. Peppers, DO, PhD
Moderator: **Reynold A. Panettieri, Jr., MD**
- 6:30 p.m. **Faculty Dinner:** *RSVP Required; Conference Faculty (Speakers) Only*

Saturday, October 22nd

- 7:15 a.m. *Registration, Breakfast, Visit Exhibits*
- 8:10 a.m. **Welcome Remarks and Conference Overview**
David P. Skoner, MD
- Symposium: Severe Asthma in Children**
Moderator: **David P. Skoner, MD and Stanley J. Szefler, MD**
- 8:15 a.m. Management of Severe Asthma in Children
William C. Anderson III, MD
- 8:35 a.m. Management of Early Asthma in Children – What is Known and Not Known?
Andrew H. Liu, MD
- 8:55 a.m. Concept of Medication Response and Remission
Stanley J. Szefler, MD
- 9:15 a.m. Mechanisms of Severe Asthma in Children
Sejal Saglani, MD, FRCPCH
- 9:35 a.m. *Discussion*
- 10:15 a.m. *Break, Visit Exhibits*
- Symposium: Asthma Disparities and Health Equity**
Moderator: **Deborah Gentile, MD**
- 10:30 a.m. Root Causes of Health Inequity in Asthma
Stephanie Lovinsky-Desir, MD, MS
- 10:50 a.m. Health Inequity in COVID-19 and Asthma
Tesfaye B. Mersha, PhD
- 11:10 a.m. Strategies to Achieve Health Equity in Asthma
Tyra Bryant-Stephens, MD
- 11:30 a.m. *Discussion*
- 12:00 p.m. Are Intranasal Vaccines a Viable Option for Respiratory Infections
Jay K. Kolls, MD
- 12:30 p.m. *Visit Exhibits/End of Day*
- 6:30 p.m. **Farewell Dinner: RSVP Required; Faculty, Attendees and Guests**

Sunday, October 23rd

7:00 a.m.	<i>Registration, Breakfast, Visit Exhibits</i>
7:55 a.m.	Welcome Remarks and Conference Overview Giovanni Piedimonte, MD, FAAP, FCCP
	Symposium: The Immune Response to Respiratory Viruses: New Clinical Insights Moderator: Giovanni Piedimonte, MD, FAAP, FCCP
8:00 a.m.	Epidemiology of COVID-19 and Its Variants John Schieffelin, MD
8:20 a.m.	Humoral Immunity Following Maternal Infection and Immunization Against SARS-CoV-2 Bronwyn Gunn, MD
8:40 a.m.	Cell-mediated Response to Respiratory Viruses Elizabeth Norton, MD
9:00 a.m.	Prenatal Exposure to Respiratory Viruses Giovanni Piedimonte, MD, FAAP, FCCP
9:20 a.m.	<i>Discussion</i>
10:00 a.m.	<i>Break, Visit Exhibits</i>
	Symposium: Asthma and the Air we Breathe Moderator: Sally E. Wenzel Morganroth, MD
10:15 a.m.	Covid, Type-2 Inflammation and Asthma: Friends or Foes Antoine Beurnier, MD
10:35 a.m.	Revisiting Historical Cannabis Exposure Science in a Post-legalization Era – Is There a Need? Jeremy Hirota, PhD
10:55 a.m.	E-cigarette Vapor Interactions with the Airways: The Good, The Bad, and The Immunomodulated Laura Crotty-Alexander, MD
11:15 a.m.	Gene-Environment Interactions and Asthma: Role of Epigenetics Erik Melén, MD, PhD
11:35 a.m.	<i>Discussion</i>
12:15 p.m.	Closing Remarks and Adjournment Sally E. Wenzel Morganroth, MD

Accreditation

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the WVU School of Medicine and Maci's TEAMS. The WVU School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The WVU Office of CME designates this live activity for a maximum of 16 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Non-Physicians

West Virginia University Office of Continuing Education will confirm participation in this educational activity.

Location, Directions, and Accommodations

Nemacolin Conference Center Farmington, Pennsylvania

For directions to Nemacolin, please visit their website at www.nemacolin.com.

A block of rooms has been reserved at Nemacolin at the special conference rate at \$599.00 + tax single/ double for chateau room and \$649.00 + tax townhouse. There is no additional charge for children seventeen (17) years of age and under when sharing the same room as the parents and using existing bedding.

A resort fee per room/per night will also apply. This fee includes valet parking, on-property shuttle service, fitness center access (not inclusive of wet areas) wireless internet, local and toll-free calls, pool access, in-room coffee, newspaper, art tours, tennis, hiking, trail access, and marina access.

In addition, Nemacolin is pleased to offer the following:

- 10% discount on merchandise purchases in the Nemacolin Retail Shoppes.
- 10% discount on all resort activities, including golf, spa.

Activities

Welcome Reception & Conference On-site Registration

Thursday Evening 5p.m. – 7:30p.m.

Please join us and get to know one another. All faculty, attendees and guests are welcome.

Farewell Dinner

Saturday Evening, 6:30p.m. – 9 p.m.

Please join us for an opportunity to meet with fellow registrants, faculty, and guests. We promise you a fun-filled evening. Cost per conference registrant is \$55.00 per person. There is also special pricing for children ages 4–11 years of \$30.00 per child. Children 3 and under are complimentary. RSVP required.

Refund Policy

A refund of the registration fee, less a \$75 processing fee, will be made when a written request or a telephone request followed by a written confirmation is received prior to October 14, 2022. After this date, refunds will not be made. Fees will not be refunded for failure to attend.

West Virginia University reserves the right to cancel or postpone any conference because of unforeseen circumstances or insufficient enrollment. In the event of such cancellation, full tuition will be refunded.

Registration Information

The registration fee includes course materials and break refreshments.

Fee:

\$475 Physicians

\$200 Nurses, Physician Assistants and Other Health Care Professionals

\$0 Registration Fee for Fellows in Training when a letter from their program director is submitted. See website for more information.

To Register:

Please go to <https://www.asthma-nemacolin.com>

The preferred method of payment is by VISA, MasterCard, American Express or Discover.

Additional Information

- Visit Website to View Complete Conference Information (including CME) and Register: <https://www.asthma-nemacolin.com>
- For questions, contact Jessica Bolton at jbolton@macisteam.org or 412.736.8912.