Twelfth Annual Nemacolin International Asthma Conference

An Interactive Forum on Patient Care, Therapy, and Research

Thursday, November 9 – Saturday, November 11, 2017Nemacolin Woodlands Conference Center
Farmington, Pennsylvania



SPONSORED BY

Department of Medicine Division of Allergy, Asthma, and Immunology Allegheny General Hospital Allegheny Health Network Pittsburgh, Pennsylvania



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 Nemacolin 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 Objectives

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

At the conclusion, participants should have the ability to:

- Discuss emerging technologies to improve asthma outcomes.
- Describe the relationship between climate change and pollen allergy.
- Review the development of novel bronchodilators in asthma.
- Discuss the current and future roles of precision medicine for asthma.
- Describe the immunology of different forms of food allergy.
- Review the novel mechanisms of virus-induced airway dysfunction.
- Discuss novel anti-viral targets and strategies to prevent and treat asthma.
- Update steroid safety in children with asthma.
- Review pre- and early- life influences/interventions to reduce the burden of asthma.
- Describe gene and environment interactions in the origin of asthma.
- Discuss upper and lower airway relationships in asthma.
- Review the role of allergen immunotherapy in adult and childhood asthma.

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

Professor & Chair, Cleveland Clinic Pediatric Institute Physician-in-Chief, Cleveland Clinic Children's Hospital President, Cleveland Clinic Children's Hospital for Rehabilitation

Cleveland Clinic

Cleveland, Ohio

David P. Skoner, MD

Professor of Pediatrics

West Virginia University School of Medicine

Morgantown, West Virginia

Conference Directors

Deborah Gentile, MD

Director of Clinical Research

Division of Allergy, Asthma and Immunology

Pediatric Alliance, Pittsburgh, Pennsylvania

Adjunct Professor

School of Pharmacy

Duquesne University

Pittsburgh, Pennsylvania

Giovanni Piedimonte, MD, FAAP, FCCP

Professor & Chair, Cleveland Clinic Pediatric Institute

Physician-in-Chief, Cleveland Clinic Children's Hospital

President, Cleveland Clinic Children's Hospital for Rehabilitation

Cleveland Clinic

Cleveland, Ohio

David P. Skoner, MD

Professor of Pediatrics

West Virginia University School of Medicine

Morgantown, West Virginia

Sally E. Wenzel, MD

Professor of Medicine

Director, University of Pittsburgh Asthma Institute

@UPMC/UPSOM

Subsection Chief of Allergy Pulmonary, Allergy and

Critical Care Medicine

Pittsburgh, Pennsylvania

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

Dean and Vice President,

Faculty of Health Sciences,

Michael G DeGroote School of Medicine,

McMaster University

Hamilton, Ontario, Canada

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

Philadelphia, Pennsylvania

Chief Discussant

Thomas A. E. Platts-Mills, MD, PhD, FRS

Professor of Medicine and Microbiology

University of Virginia

Charlottesville, Virginia

Symposium Chair

Jay K. Kolls, MD

Director, Richard King Mellon Foundation Institute for

Pediatric Research

Professor of Pediatrics

University of Pittsburgh School of Medicine

Vice Chair for Translational Research

Department of Pediatrics

Children's Hospital of Pittsburgh of UPMC

Pittsburgh, Pennsylvania

Faculty

Leonard Bielory, MD

Professor of Medicine

Thomas Jefferson University Kimmel School of Medicine

Philadelphia, Pennsylvania

Professor, Center of Environmental Prediction

Rutgers University

New Brunswick, New Jersey

Paul B. van Cauwenberge, MD, PhD, FRCP, FACAAI

Emeritus Professor of Otorhinolaryngology, Ghent University

(Belgium)

President, University College Ghent, Belgium

Honorary Vice-chancellor and President, Ghent University and University Hospital, Belgium

Veronica Combs

Executive Director

Institute for Healthy Air, Water and Soil

Louisville, Kentucky

Jennifer Padden Elliott, PharmD

Associate Professor of Pharmacy Practice

Duquesne University School of Pharmacy

Pittsburgh, Pennsylvania

Peter G. Gibson, MBBS, FRACP

Director, Centre for Severe Asthma

Professor University of Newcastle

Senior Staff Specialist, John Hunter Hospital

Newcastle, Australia

Terri J Harford, PhD

Post Doctoral Fellow, Pediatric Research Center

Cleveland Clinic Childrens

Cleveland, Ohio

Faculty (cont.)

Andrei I. Ivanov, PhD

Professor

Department of Human and Molecular Genetics

Virginia Commonwealth University

Richmond, Virginia

Eli O. Meltzer, MD

Clinical Professor of Pediatrics, Division of Allergy & Immunology University of California, San Diego

La Jolla, California

Parameswaran Nair, MD, PhD, FRCP, FRCPC

Frederick E. Hargreave Teva Innovation Chair in Airway Diseases Professor of Medicine, McMaster University

Staff Respirologist, St. Joseph's Healthcare

Hamilton, Ontario, Canada

Carole Ober, PhD

Blum-Riese Professor and Chair

Department of Human Genetics

University of Chicago

Chicago, Illinois

Sathyamangla V. Naga Prasad, PhD, FAHA

Staff/Professor of Molecular Cardiology

Lerner Research Institute

Associate Professor of Molecular Medicine

Cleveland Clinic Lerner College of Medicine

Cleveland Clinic

Cleveland, Ohio

Benjamin Raby, MD, MPH

Director, BWH Pulmonary Genetics Center

Associate Professor of Medicine

Channing Division of Network Medicine and the Division of

Pulmonary and Critical Care Medicine

Department of Medicine

Brigham and Women's Hospital

Harvard Medical School

Boston, Massachusetts

Fariba Rezaee, MD, FAAP

Assistant Professor of Pediatrics, Cleveland Clinic College of

Medicine/Case Western Reserve University

Staff Physician, Center for Pediatric Pulmonary Medicine

Director, Pediatric Pulmonary Research

Cleveland Clinic Children's

Cleveland, Ohio

Anne I. Sperling, PhD

Professor

Section of Pulmonary and Critical Care

Department of Medicine

Director, Respiratory Biology Training Program

University of Chicago

Chicago, Illinois

Stanley J. Szefler, MD

Director Pediatric Asthma Research Program and Research

Medical Director

The Breathing Institute, Children's Hospital

Colorado and Professor of Pediatrics

University of Colorado School of Medicine

Erkka Valovirta, Prof

Department of Lung Diseases and Clinical Allergology

Univeristy of Turku

Pediatric Allergist

Terveystalo Turku, Finland

Prof. J. Christian Virchow, MD, FRCP, FCCP, FAAAAI

Head, Department of Pneumology and Intensive Care Medicine University Medical Center

University of Rostock, Germany

In accordance with the Accreditation Council for Continuing Medical Education (ACCME) and the policy of Allegheny General Hospital, presenters must disclose all relevant financial relationships, which, in the context of their presentation(s), could be perceived as a real or apparent conflict of interest, (e.g., ownership of stock, honoraria or consulting fees). Any identifiable conflicts will be resolved prior to the activity. Any such relationships will be disclosed to the learner prior to the presentation(s).

12th Annual Nemacolin International Asthma Conference

Thursday, November 9, 2017

1:00 p.m. Registration/Visit Exhibits

1:30 p.m. Welcome Remarks and Introduction

Deborah Gentile, MD and David Skoner, MD

Symposium: Update on Local Asthma Outcomes and Overview of Emerging

Technologies to Improve Outcomes Moderator: Deborah Gentile, MD

1:40 p.m. An Update on Asthma Surveillance and Tracking in Pittsburgh

School Children

Deborah Gentile, MD

2:10 p.m. Implementation of a Multi-Disciplinary Approach to Improve Asthma

Outcomes in the School Setting Jennifer Padden Elliot, PharmD

2:40 p.m. Break/Visit Exhibits

3:00 p.m. Keynote Lecture:

Relationship Between Climate Change and Pollen Allergy and Development of

New Technology to Provide Personalized Medicine Alerts of Allergy and

Asthma Triggers **Leonard Bielory, MD**

3:45 p.m. AIR Louisville: A Data Driven Community Collaboration to Reduce the

Burden of Asthma **Veronica Combs**

4:15 p.m. Discussion

Chief Discussant Thomas A. E. Platts-Mills, MD, PhD, FRS

4:30 p.m. Closing Remarks/Adjournment

Deborah Gentile, MD

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19th Annual	Nemacolin l	nternational <i>l</i>	Acthma Con	foronco

7:00 a.m. Sponsored Breakfast and Lecture

Registration, Continental Breakfast, Visit Exhibits 8:00 a.m.

8:30 a.m. Welcome Remarks and Conference Overview

David Skoner, MD and Sally Wenzel, MD

8:50 a.m. Targeting Molecular Mechanisms to Develop Novel Bronchodilators in Asthma

Reynold J. Panetierri Jr., MD

Is Precision Medicine Meeting its Promise? 9:10 a.m.

Sally Wenzel, MD

Discussion 9:30 a.m.

Chief Discussant Thomas A. E. Platts-Mills, MD, PhD, FRS

Symposium: Precision Medicine for Asthma and Allergy

Moderator: Jay Kolls, MD

The Functional Consequences of Asthma Susceptibility Variants on 9:45 a.m.

Chromosome 17a

Benjamin Raby, MD, MPH

10:05 a.m. Inflammatory Endotyping in Severe Asthma

Parameswaran Nair, MD, PhD, FRCP, FRCPC

10:25 a.m. Break/Visit Exhibits

10:40 a.m. Will Personalized Medicine Approaches Be Useful In Mild/Moderate Asthma?

Stanley J. Szefler, MD

11:00 a.m. Understanding the Causes and the Immunology of Different Forms

of Food Allergy

Thomas A. E. Platts-Mills, MD, PhD, FRS

11:30 a.m. Discussion

Chief Discussant Thomas A. E. Platts-Mills, MD, PhD, FRS

11:45 a.m. Sponsored Lunch and Lecture or Lunch on Your Own (not for credit)

Eli O. Meltzer, MD

Symposium: Novel Anti-viral Targets and Strategies to Prevent and Treat Asthma

Moderator: Sally Wenzel, MD

12:35 p.m. Gilbert Friday Memorial Lecture

Novel Mechanisms of Virus-Induced Airway Dysfunction

Giovanni Piedimonte, MD, FAAP, FCCP

Airway Epithelial Barrier Function in Health and Disease 1:00 p.m.

Fariba Rezaee, MD, FAAP

Molecular Engines that Build and Break Epithelial Barriers

Andrei I. Ivanov, PhD

1:45 p.m. Asthma Predisposition and RSV Infection Modulate TRPV1 Function in

Children's Airways

Terri J. Harford, PhD

Insights into Beta-Adrenergic Receptor Dysfunction in Asthma

Sathyamangla V. Naga Prasad, PhD, FAHA

Discussion 2:30 p.m.

Chief Discussant Thomas A. E. Platts-Mills, MD, PhD, FRS

2:45 p.m. Closing Remarks/Adjournment

Sally Wenzel, MD

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12th Annua	ii Nemacoii	n international	Asthma	.onterence

7:00 a.m. Sponsored Breakfast and Lecture

Reynold J. Panetierri Jr., MD

8:00 a.m. Registration, Continental Breakfast, Visit Exhibits

8:20 a.m. Welcome Remarks and Conference Overview Giovanni Piedimonte, MD, FAAP, FCCP

Symposium: Pre and Early Life Influence/Interventions to Reduce the Burden of Asthma Moderator: Jay Kolls, MD

8:30 a.m. Environmental Effects on Immunity and Atopy/Asthma Risk: Lessons from Amish

and Hutterite Farm Children

Anne I. Sperling, PhD

8:50 a.m. Genes, Environment, and the Origins of Asthma

Carole Ober, PhD

9:10 a.m. Phil Fireman Lecture

Impact on Maternal and Childhood Asthma Outcomes

Peter G. Gibson, MBBS, FRACP

9:40 a.m. Discussion

Chief Discussant Thomas A. E. Platts-Mills, MD, PhD, FRS

9:50 a.m. Break/Visit Exhibits

10:00 a.m. Steroid Safety in Children

David Skoner, MD

10:20 a.m. Medical Survivor: Pediatrics Case

David Skoner, MD

William J. Doyle Memorial Lecture: Upper and Lower Airway Interactions

Moderator: David Skoner, MD

11:00 a.m. William J. Doyle Memorial Lecture

Eli O. Meltzer, MD

11:30 a.m. Role of AIT in the Treatment of House-Dust Mite Allergic Asthma

Prof. J. Christian Virchow, MD

11:50 a.m. Discussion

Chief Discussant Thomas A. E. Platts-Mills, MD, PhD, FRS

12:00 p.m. Sponsored Lunch and Lecture or Lunch on Your Own (Not for Credit)

Targeting Exacerbations in Moderate to Severe Persistent Allergic Asthma

Russell Settipane, MD

Co-director of the Asthma and Allergy Center, Providence, RI

1:00 p.m. GAP Asthma Prevention Trial – Results from 5 Year Trial

Erkka Valovirta, Prof.

1:25 p.m. Discussion

Chief Discussant Thomas A. E. Platts-Mills, MD, PhD, FRS

1:35 p.m. Fellows' Presentations

Modertor: Dr. Panettieri

2:35 p.m. Closing Remarks/Adjournment

Giovanni Piedimonte, MD, FAAP, FCCP

6:00 p.m. Conference dinner for registrants, faculty and guests

Grand Ballroom

Accreditation

Physicians



Allegheny General Hospital is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Allegheny General Hospital designates this live activity for a maximum of 11.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit comensurate with the extent of their participation in the activity.

Nurses

For the purpose of recertification, the American Nurses Credentialing Center accepts *AMA PRA Category 1 Credits*™ issued by organizations accredited by the ACCME

Designation of credits for non-physicians

Allegheny General Hospital certifies participation in this educational activity, which has been designated for a maximum of 11.5 AMA PRA Category 1 Credits™.

Credit Breakdown

Thursday, November 9 2.5 AMA PRA Category 1 Credits™ 4.0 AMA PRA Category 1 Credits™ 5.0 AMA PRA Category 1 Credits™ 5.0 AMA PRA Category 1 Credits™

Additional Information

For additional information, contact the Continuing Medical Education office by calling **412-359-3396** or by e-mail: **julia.ryan@ahn.org**.

Location, Directions, and Accommodations

Nemacolin Woodlands Conference Center Farmington, Pennsylvania

For directions to Nemacolin Woodlands, please visit their Web site at **www.nemacolin.com**.

A block of rooms has been reserved at Nemacolin Woodlands at the special conference rate of \$159.00 + tax single/double occupancy for a lodge room and \$209.00 + tax single/double for chateau room. 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 of \$20.00 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 Woodlands is pleased to offer the following:

- 15% discount on merchandise purchases in the Nemacolin Retail Shoppes.
- 10% discount on all resort activities, including golf, spa, and shooting, excluding the Wild Side.

Reservations may be made by calling **1-800-422-2736** or **724-329-8555** (ask for reservations). Please be sure to mention you are with the Allegheny General Hospital Asthma Conference to take advantage of the special conference room rate. The room block is limited; therefore, make reservations as soon as possible! The deadline for making reservations at the above rates is September 25, 2017. After this date, reservations will be accepted on space availability and at the prevailing rate.

Activities

Nemacolin Asthma Conference Dinner Saturday Evening, 6 – 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 \$45.00 per person; cost per guest is \$45.00 per person. There is also special pricing for children ages 5–11 years of \$15.00 per child. RSVP on the registration form. Tickets will be with your registration packet.

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 24, 2017**. After this date, refunds will not be made. Fees will not be refunded for failure to attend.

Allegheny General Hospital 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, lunch, and break refreshments.

Fee: \$425 Physicians

\$200 Residents*, Fellows*, Nurses and Other Health Care Professionals (* must include verification letter from Chief of Service)

Deadline: October 24, 2017

(After this date, registrations will be taken on a space available basis.)

To Register: Telephone registrations are not accepted. To register online or to download a brochure please visit **www.aghcme.org**; select Course Schedule from the left menu and scroll down to locate the conference. To mail or fax your registration, please complete the registration form and return it with the registration fee to:

Continuing Medical Education Allegheny General Hospital 320 East North Avenue Pittsburgh, Pennsylvania 15212-4772 **412.359.4952**

412.359.4952 412.359.8218 Fax

The preferred method of payment is VISA, MasterCard, American Express, or Discover; however, checks will be accepted made payable to *Allegheny General Hospital CME*.

Twelfth Annual Nemacolin International Asthma Conference

Registration Form	# Adults at	ttending Saturday Dinn	or @ \$45.00
PLEASE INDICATE.			
-	# Children	attending Saturday Dir	ıner @ \$15.00
NAME			
DEGREE			
AFFILIATION			
ADDRESS			
CITY		STATE	ZIP
TELEPHONE ()	EMAIL ADDRESS	
accessible to you,		sion or mobility to mak and contact the CME o ce date.	
METHOD OF PAYME	NT: 🖵 Credit Card		
CREDIT CARD TYPE:	☐ Visa ☐ MasterCard ☐ American Express ☐ Discover		
TOTAL AMOUNT			
CREDIT CARD #			
EXP. DATE			
NAME ON CARD			
SIGNATURE*			

^{*} By signing this form, I authorize Allegheny General Hospital to charge my credit card for the above amount. My signature also indicates that I will not dispute this charge in the future through my credit card company.

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Please visit the Nemacolin Asthma Conference website at www.ahn.org/nemacolin-asthma for conference updates.