Eleventh Annual Nemacolin International Asthma Conference
An Interactive Forum on Patient Care, Therapy and Research

Friday through Sunday, October 28-30, 2016
Nemacolin Woodlands Conference Center
Farmington, Pennsylvania

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

In collaboration with
Cleveland Clinic
Cleveland, Ohio

Allegheny Health Network
**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:

- Explore the prenatal and postnatal origins of asthma.
- Examine the small airway pathology in asthma versus other lung diseases.
- Review small airway physiology and treatment.
- Update steroid safety in children and adults with asthma.
- Discuss the mechanisms and treatment of chronic cough in asthma and chronic rhinosinusitis.
- Examine the gut and lung microbiome related to asthma.
- Review the science of adherence in asthma treatment.
- Update the relationship between allergy and 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 Directors

Deborah Gentile, MD
Associate Professor of Medicine
Temple University School of Medicine
Director of Research
Division of Allergy, Asthma and Immunology
Allegheny Health Network
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

Giovanni Piedimonte, MD, FAAP, FCCP
Conference Co-Founder
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
Conference Co-Founder
Professor of Pediatrics,
Director, Division of Allergy and Immunology
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

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
Oscar Swineford Jr Professor of Medicine
Head, Asthma and Allergic Diseases Center
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

Maria G. Belvisi BSc, PhD FBPhS, FERS
Head, Respiratory Pharmacology Group, Pharmacology and Toxicology Section, NHLI
Imperial College London
London, United Kingdom

Sergejs Berdnikovs, PhD
Research Assistant Professor of Medicine
Division of Allergy and Immunology
Northwestern University Feinberg School of Medicine
Chicago, Illinois

Tyra Bryant-Stephens, MD
Director and Founder, The Community Asthma Prevention Program
The Children’s Hospital of Philadelphia
Professor of Pediatrics
The Perelman School of Medicine at the University of Pennsylvania
Philadelphia, Pennsylvania

Leonardo M. Fabbri, MD, FERS
Professor of Medicine
Department of Metabolic Medicine
University of Modena & Reggio Emilia
Sant’Agostino Estense Hospital
Modena, Italy
**Faculty (cont.)**

**Fernando Holguin, MD, MPH**  
Associate Professor  
Pulmonary Sciences  
University of Colorado  
Boulder, Colorado

**Christine Johnson, PhD, MPH**  
Senior Staff Epidemiologist  
Department Chair  
Department of Public Health Sciences  
Henry Ford Hospital and Health System  
Detroit, Michigan

**Alison Morris, MD, MS**  
Professor of Medicine  
Vice Chair for Clinical Research,  
Department of Medicine UPMC  
Chair of Translational Pulmonary and Critical Care  
Medicine  
Director, University of Pittsburgh Center for Medicine and the Microbiome  
University of Pittsburgh School of Medicine  
Pittsburgh, Pennsylvania

**Dennis R. Ownby, MD**  
Professor of Pediatrics  
Augusta University  
Augusta, Georgia

**Robert Schleimer, PhD**  
The Roy and Elaine Patterson Professor  
Chief, Allergy-Immunology  
Northwestern Feinberg School of Medicine  
Chicago, Illinois

**Faculty (cont.)**

**Jaclyn Smith, FRCP, PhD**  
Professor of Respiratory Medicine/Honorary Consultant  
Centre for Respiratory and Allergy, University of  
Manchester, University Hospital of South Manchester,  
Manchester, United Kingdom

**Donata Vercelli, MD**  
Professor of Cellular and Molecular Medicine  
Director, Arizona Center for the Biology of Complex Diseases  
Associate Director, Asthma and Airway Disease Research Center  
University of Arizona  
Tucson, Arizona

**Andrew G. Weinstein MD**  
Associate Clinical Professor Pediatrics  
Sidney Kimmel Medical College-Thomas Jefferson University  
President, Asthma Management Systems LLC  
Philadelphia, Pennsylvania

**Samuel Yousem, MD**  
Vice Chairman of Anatomic Pathology Services  
Director of the Division of Anatomic Pathology,  
Co-Director of the Community Pathology Division  
UPMC  
Pittsburgh, Pennsylvania

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_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)._
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker/Details</th>
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<tbody>
<tr>
<td>8:00 a.m.</td>
<td>Registration/Continental Breakfast (Visit Exhibits)</td>
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<tr>
<td>8:45 a.m.</td>
<td>Welcome Remarks</td>
<td>David P. Skoner, MD</td>
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<tr>
<td>9:00 a.m.</td>
<td>Update on Corticosteroid Safety in Children</td>
<td>David P. Skoner, MD</td>
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<td>9:30 a.m.</td>
<td>Precision severe asthma management: The How, When and Where?</td>
<td>Reynold A. Panettieri, Jr., MD</td>
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<td>10:00 a.m.</td>
<td>Discussion Led by Chief Discussant Thomas A. E. Platts-Mills, MD, PhD, FRS</td>
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<td>10:20 a.m.</td>
<td>Fellows Abstract Presentations</td>
<td>Moderators, Reynold A. Panettieri Jr., MD, Director of Conference Fellows Program</td>
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<tr>
<td>11:20 a.m.</td>
<td>Break and Refreshments (Visit Exhibits)</td>
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<tr>
<td>11:35 a.m.</td>
<td>Symposium on Origins of Asthma</td>
<td>Giovanni Piedimonte, MD</td>
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<tr>
<td>11:35 a.m.</td>
<td>Philip Fireman, MD Lecture</td>
<td>Epigenetic mechanisms of asthma inception</td>
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<td>11:55 a.m.</td>
<td>Fetal programming by viruses</td>
<td>Giovanni Piedimonte, MD</td>
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<tr>
<td>12:15 p.m.</td>
<td>Discussion Led by Chief Discussant Thomas A. E. Platts-Mills, MD, PhD, FRS</td>
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<tr>
<td>12:35 p.m.</td>
<td>Industry sponsored lunch or lunch on your own (Not for credit)</td>
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<tr>
<td>1:35 p.m.</td>
<td>Systems biology of asthma</td>
<td>Sergejs Berdnikovs, PhD</td>
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<td>1:55 p.m.</td>
<td>PRO/CON Debate Environmental Allergens are the Major Cause of Childhood Asthma</td>
<td>PRO: Dennis Ownby, MD, CON: Giovanni Piedimonte, MD</td>
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<tr>
<td>2:40 p.m.</td>
<td>Adjournment</td>
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# 11th Annual Nemacolin International Asthma Conference

**Saturday, October 29, 2016**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:00 a.m.</td>
<td>Optional Industry Lecture and Breakfast</td>
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<tr>
<td>8:00 a.m.</td>
<td>Registration/Continental Breakfast (Visit Exhibits)</td>
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<tr>
<td>8:30 a.m.</td>
<td>Opening Remarks</td>
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<td></td>
<td><strong>David P. Skoner, MD</strong></td>
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<tr>
<td>8:45 a.m.</td>
<td>Opening Remarks and Introductions</td>
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<td><strong>Sally E. Wenzel, MD &amp; Paul O’Byrne, MB, FRCP(C), FRSC</strong></td>
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<tr>
<td>9:00 a.m.</td>
<td>Regulation of Extraintestinal Immunity by the Gut Microbiome</td>
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<td><strong>Jay Kolls, MD</strong></td>
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**Symposium on Small Airways**  
**Symposium Chair: Sally Wenzel, MD**

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<th>Time</th>
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<tr>
<td>9:20 a.m.</td>
<td>Gilbert Friday Memorial Lecture</td>
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<tr>
<td></td>
<td>Reduced FEF25-75 in asthma. What does it mean and what are the</td>
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<td></td>
<td>clinical implications?</td>
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<td><strong>Fernando Holguin, MD</strong></td>
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<tr>
<td>10:00 a.m.</td>
<td>Keynote Lecture</td>
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<td>Pathologic Approach to Small Airways Disease</td>
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<td><strong>Samuel Yousem, MD</strong></td>
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<td>10:40 a.m.</td>
<td>Discussion Led by Chief Discussant Thomas A. E. Platts-Mills, MD, PhD, FRSC</td>
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<tr>
<td>11:00 a.m.</td>
<td>Break (Visit Exhibits)</td>
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**Symposium on Chronic Cough**  
**Symposium Chair: Paul O’Byrne, MB, FRCP(C), FRSC**

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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>11:20 a.m.</td>
<td>Chronic Cough in Asthma</td>
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<td><strong>Jaclyn Smith, FRCP, PhD</strong></td>
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<td>11:40 a.m.</td>
<td>Mechanisms of Chronic Cough</td>
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<td><strong>Maria G. Belvisi, BSc, PhD, FBPhS, FERS</strong></td>
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<tr>
<td>12:00 p.m.</td>
<td>Mechanisms of Pathogenesis of Chronic Rhinosinusitis</td>
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<td><strong>Robert P Schleimer, MD</strong></td>
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<tr>
<td>12:20 p.m.</td>
<td>Discussion Led by Chief Discussant Thomas A. E. Platts-Mills, MD, PhD, FRSC</td>
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<tr>
<td>12:40 p.m.</td>
<td><strong>Industry sponsored lunch or lunch on your own (Not for credit)</strong></td>
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<tr>
<td>1:40 p.m.</td>
<td><strong>PRO/CON Debate</strong></td>
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<td>Animal Models are Required for the Development of New Drugs for Asthma</td>
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<td></td>
<td><strong>PRO: Maria G. Belvisi, BSc, PhD, FBPhS, FERS</strong></td>
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<td><strong>CON: Sally Wenzel, MD</strong></td>
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Saturday, October 29, 2016 (cont.)

**Symposium on the Science of Adherence**  
**Symposium Chair: Deborah Gentile, MD**

2:25 p.m.  Impact of Health Literacy and Socioeconomic Status on Asthma Disparities  
**Tyra Bryant-Stephens, MD**

2:45 p.m.  A Telehealth Program to Improve Adherence to Inhaled Corticosteroid Therapy  
**Andrew G Weinstein, MD**

3:05 p.m.  Update on Local Pediatric Asthma Prevalence and Control  
**Deborah Gentile, MD**

3:25 p.m.  Discussion  
*Led by Chief Discussant Thomas A. E. Platts-Mills, MD, PhD, FRS*

3:45 p.m.  Closing Remarks

4:00 p.m.  Adjournment

7:00 p.m.  Conference dinner for registrants, faculty and guests – Costume Optional!

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11th Annual Nemacolin International Asthma Conference  
Sunday, October 30, 2016

7:30 a.m.  Registration/Continental Breakfast (Visit Exhibits)

8:00 a.m.  Opening Remarks and Introduction  
**Deborah Gentile, MD**

**Symposium on Gut and Lung Microbiome**  
**Symposium Chair: Jay Kolls, MD**

8:10 a.m.  The Early Life Gut Microbiome: The Link between Asthma-Related Risk Factors and Disease?  
**Christine Cole Johnson, PhD, MPH**

8:30 a.m.  How Gut Microbes Alter the Risks of RSV Infections and Asthma in Mice and Men  
**Dennis R. Ownby MD**

8:50 a.m.  Discussion  
*Led by Chief Discussant Thomas A. E. Platts-Mills, MD, PhD, FRS*

9:10 a.m.  Break (Visit Exhibits)

9:40 a.m.  COPD: Influence of the micro- and mycobiomes  
**Alison Morris, MD**

10:00 a.m.  Importance of concomitant chronic diseases in severe exacerbations of asthma and COPD  
**Leonard M. Fabbri, MD, FERS**

10:20 a.m.  Discussion  
*Led by Chief Discussant Thomas A. E. Platts-Mills, MD, PhD, FRS*

10:40 a.m.  **David P. Skoner, MD, Medical Survivor**

11:20 a.m.  Closing Remarks/Adjournment  
**Giovanni Piedimonte, MD**
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 13.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate 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 13.5 AMA PRA Category 1 Credits™.

Credit Breakdown
Friday, October 28  5.0 AMA PRA Category 1 Credits™
Saturday, October 29  5.75 AMA PRA Category 1 Credits™
Sunday, October 30  2.75 AMA PRA Category 1 Credits™

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 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/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 27, 2016. After this date, reservations will be accepted on space availability and at the prevailing rate.
Activities

Nemacolin Asthma Conference Dinner
Saturday Evening, 7:00-10:00 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. Please RSVP on the registration form. Tickets will be with your registration packet. Halloween costumes encouraged but optional!

Maci’s Mile

Maci’s TEAMS is pleased to announce the 2nd Maci’s Mile, held during the weekend of the annual Nemacolin International Asthma Conference. The race is a one mile run/walk hosted by Maci’s TEAMS, a non-profit organization whose mission is to keep children on commonly-used allergy and asthma medications safe by educating parents, patients and healthcare practitioners about proper diagnosis, medication doses and side effects. Please visit their website (www.macisteamso.org) to view a special video about their mission. The goal of the race is to raise awareness about the need for medication safety education and to raise funds for the creation of online safety-related CME courses for health care practitioners and patient education.

Race Information

General Information
Maci’s Mile will be a one-mile walk/run through the zoo at Nemacolin Woodlands Resort on Friday, October 28th. Runners will start at 4:00 PM and walkers will start five minutes after the runners at 4:05 PM.

Registration and Fees
Participants can sign up at the Maci’s TEAMS exhibit booth or at the race. There will be no fee to enter, but participants will be encouraged to make an optional donation to Maci’s TEAMS.
Additional Information
For additional information, contact the Continuing Medical Education office by calling 412.359.4952 or by e-mail: rmiglior@wpahs.org.

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

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, 2016. 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, 2016**
(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
412.359.8218 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.
Eleventh Annual Nemacolin International Asthma Conference

Registration Form

PLEASE INDICATE: __________ # Adults attending Saturday Dinner @ $45.00

_________ # Children attending Saturday Dinner @ $15.00

NAME

DEGREE

AFFILIATION

ADDRESS

________________________

CITY

STATE

ZIP

TELEPHONE (_______)

E-MAIL ADDRESS

☐ If you require assistance with hearing, vision or mobility to make this conference accessible to you, please check this box and contact the CME office at 412.359.4952 at least two weeks prior to the conference date.

METHOD OF PAYMENT: ☐ Credit Card

☐ Check

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