

# AIR PASSAGES

THE NEWSLETTER OF THE AMERICAN RESPIRATORY ALLIANCE OF WESTERN PENNSYLVANIA

JANUARY 2011



AMERICAN RESPIRATORY ALLIANCE  
OF WESTERN PENNSYLVANIA

*We're All About Breathing®*

## ***Some of Pittsburgh's Finest Restaurants Help Raise Money for the American Respiratory Alliance***

It was a September evening to remember. Top chefs from some of the finest restaurants in the Pittsburgh region grilled, smoked, baked, chopped, and chilled exquisite dishes for a sellout crowd of 1,200 people and a culinary competition that raised over \$164,000 for the American Respiratory Alliance.

Together with Title Sponsor Mosaic Consulting and Presenting Sponsors McCormick & Schmick's Seafood Restaurant and SouthSide Works, this event featured mouthwatering taste treats that exemplified the name of the event—*Savor Pittsburgh*.

With the Pittsburgh skyline just beyond, the band (No Bad JuJu) played while guests dined on amazing appetizers like Seared Tuna Martini, Short Rib Tostados, and Tomato Fondue; enticing entrees like Pepper Pork Mignon, Five Spiced Duck Breast, and Salumi; and delectable desserts like Snickers Bar Pate, Bango Blue Beignets, and Organic Lemon and Lavender Ice Cream.

A panel of fifteen celebrity judges had the very difficult task of choosing winners in four categories: Best Appetizer, Best Entrée, Best Dessert, and Dish of the Year. The guests voted for People's Choice. Winning Best

Appetizer was SAVOY Restaurant and Lounge with a fantastic Shrimp Satay. Winner of Best Entrée was Tusca Global Tapas with their Pepper Pork Mignon, Sweet Potato Gnocchi with Apple Crème Fraiche. Winner of Best Dessert was Tree Tops Restaurant's Firefly Farms Goat Cheese Torte in a Pecan Praline Shell. This dessert, made by Executive Chef Mark Henry, also took home the top prize of Dish of the Year. The guests chose McCormick & Schmick's Seafood Restaurant located in Pittsburgh's SouthSide Works as winner of the People's Choice award.

*Savor Pittsburgh* is the original idea of Executive Chef Ricky Kirsop and his wife Michelle who have two children with asthma. They kindly offered this event to the American Respiratory Alliance two years ago as a fundraiser, and it has quickly become one of Pittsburgh's finest, most sought after events. ~



### OUR MISSION

*Dedicated  
to the  
prevention  
and control  
of lung disease  
through education,  
training,  
direct services,  
research funding,  
and advocacy.*

*Air Passages* is published by the American Respiratory Alliance of Western Pennsylvania. Your comments and suggestions are welcome.

**1-800-220-1990**

**[www.healthylungs.org](http://www.healthylungs.org)**

Cranberry Professional Park  
201 Smith Drive, Suite E  
Cranberry Township, PA 16066

A copy of the official registration and financial information may be obtained from the Pennsylvania Department of State by calling toll-free, within Pennsylvania, 1-800-732-0999. Registration does not imply endorsement.

## Spotlight On Research

The Respiratory Alliance has a commitment to fund research projects with the following attributes: located in western Pennsylvania; research that will lead, in a reasonably short time frame, to improvements in the care outcomes and quality of life of those who suffer from lung diseases; provide seed money that will enable young researchers to develop hypotheses and data that can be used to apply for large national grants.

*This year, the Respiratory Alliance was able to fund three research projects.*

### *Children's Hospital of Pittsburgh: Establishment of a Difficult to Treat Asthma Clinic*

Nationally, over nine million children under eighteen have ever been diagnosed with asthma. Significant racial and economic differences exist leading to adverse outcomes for black children. Although only five to ten percent of all children with asthma are classified as severe, they are understudied, and most of what is known about severe asthma comes from adults. Children with severe asthma are responsible for a substantially larger fraction of overall morbidity and mortality.

Studies call for additional interventions and "novel strategies" to target children with severe asthma.

Much of the morbidity experienced by children with asthma appears to result from underuse of prescribed medications, especially corticosteroids.

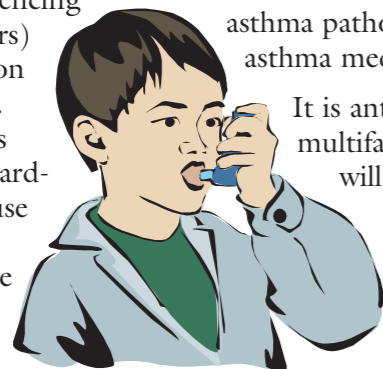
The Difficult to Treat Asthma Clinic will establish a multifaceted approach to increasing adherence to the use of controller medicines.

Using a questionnaire developed by Merck, patients at risk of noncompliance, or experiencing barriers (financial or others) to adherence to medication regimes will be identified. Both children and parents will receive education regarding the need for regular use of controller medication, and will monitor adherence by both measuring eNO (exhaled Nitric Oxide)

and checking on the rate of prescription refills. Nitric Oxide is a product of inflammation in the lungs. While studies have shown that treatment based on eNO levels has not resulted in significant improvement in outcomes, or use of less medications, it is clear that regular use of inhaled corticosteroids (the mainstay of persistent asthma) leads to a dramatic drop in eNO levels.

In the Difficult to Treat Asthma Clinic, measurement of eNO levels will not be used to guide therapy, but to help both measure and promote regular use of controller therapy. Checking eNO levels at each clinic visit will show whether patients are compliant or not, and may also motivate them to adhere to their individual medication regimen.

Other clinic interventions include a thorough asthma workup, completion of the Asthma Control Test (ACT), an in-depth history including ER visits, hospitalizations, school absences, and pharmacy refills. Spirometry testing will be performed. Patients will receive a written asthma action plan, and extensive teaching by an asthma nurse educator on all aspects of asthma pathophysiology, asthma medications, etc.



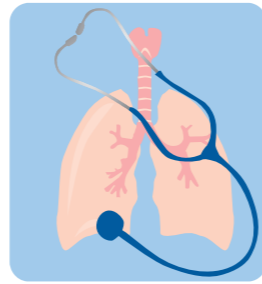
It is anticipated that this multifaceted approach will improve adherence to controller medicines and reduce morbidity. While initially targeted to the

difficult to treat asthmatic children, this approach should be easily adopted to less severe asthmatic children, and help develop useful tools that can be applied more broadly.

### *UPMC: Pilot Study of the In-Check Dial to Improve Inhaler Compliance and Technique in the Asthma Clinic*

Studies show that between thirty and eighty percent of patients with asthma do not demonstrate correct inhaler technique. Each of the different types of inhaler available today for the delivery of asthma medication has a specific inspiratory flow required for the effective delivery of the optimal dose of medication. These differing flow patterns for different inhalers are confusing to patients, and probably contribute to their difficulty in using these types of devices. Indeed, studies have shown that patients using one type of inhaler will demonstrate adequate technique more often than those using two or more types of inhalers. While few practitioners check their patients' inhaler technique, the NAEPP (National Asthma Education and Prevention Program) guidelines state that assessing inhaler technique should be a pre-requisite to adjusting asthma therapy.

The In-Check Dial is a tool that can simulate different resistances and measure inspiratory flow. It allows practitioners to check inhaler techniques specific to each type of inhaler, and to determine if a patient has enough inspiratory flow



to receive optimum benefit from the medication.

Forty patients are being enrolled in the pilot study, divided randomly into two control groups. The "Usual Care" group will receive usual teaching on the use of inhalers. The other group (the "In-Check" group) will be taught using the "Usual Care" group method, but, in addition, will use the In-Check method to simulate the resistance and measure the inspiratory flow for their specific inhaler.

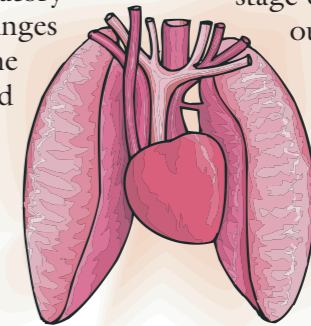
Because improper inhaler technique leads to worsening asthma symptoms, the anticipated benefits of this study are that 1) using the In-Check Dial will improve inhaler technique, and 2) will result in improved asthma control and quality of life as measured by the ACQ (Asthma Control Questionnaire) and the AQLQ (Asthma Quality of Life Questionnaire).

### *UPMC: Identification of Master Transcriptional Regulators to Cure Pulmonary Hypertension*

Pulmonary hypertension is a lethal lung disease characterized by increased pulmonary vascular resistance, elevated mean pulmonary artery pressure, and right heart failure. Medications are useful in managing the disease, but, eventually, as the disease progresses, only transplantation offers a potential solution.

In a previous study, also funded by the American Respiratory Alliance, expression changes in candidate genes, some of the changes identified in the blood cells were identified as potentially useful as biomarkers to measure or predict response to treatment. In the current follow-up study, transcriptional

regulators known as microRNAs are being investigated to determine their role in propagating these changes in gene expression. Because preliminary studies in both heart and lung diseases have both shown that blood cell changes are highly predictive of clinical outcomes, this follow-up study will extend the initial findings to identify, in the short term, new biomarkers that can be translated to the bedside, and, in the long term, uncover regulatory mechanisms that may reverse the disease process. At this stage of the study, forty-nine out of over 900 known microRNAs have been documented to regulate changes in expression of 417 genes in pulmonary hypertension. ~



## The 2010 Black And Gold Extravaganza



On Sunday, October 24, 2010, Keller Williams Realty Pittsburgh West held its 4th Annual Black and Gold Extravaganza at Jay's Sports Bar Southpointe in Canonsburg, PA.

Over 300 Steelers fans gathered to party and watch the Pittsburgh Steelers play a nail-biter against the Miami Dolphins.

Pre-game entertainment included trivia games, silent and chinese auctions, and lots of great free

food and drinks.

L.C. Greenwood was on hand to mingle with the fans, and the super-charged party atmosphere turned to pandemonium when the Steelers beat the Dolphins by one point.

Presented by Philips Respironics, and supported by more than thirty individual sponsors, the event benefits KW Cares, and for the second consecutive year, the Respiratory Alliance.

The ARA received a check for \$9,500, which, at Keller Williams' request, will be earmarked for COPD (Chronic Obstructive Pulmonary Disease) programs and services.

Many thanks to Keller Williams Realty Pittsburgh West, Philips



Respironics, other sponsors, and the planning committee members for a wonderful and very successful afternoon. ~

## Children's Lung Health Programs

Programs for children make up a significant part of the work of the Respiratory Alliance. Programs such as the School Asthma Initiative (SAI), Asthma TLC (Team Leaders in the Community), Camp Huff-n-Puff, smaller educational initiatives, and tobacco awareness make up 39% of the Respiratory Alliance's total annual budget.

SAI (School Asthma Initiative) is a comprehensive school-based program that provides asthma education to students with asthma, school staff and faculty, school nurses, and the entire student body. Recently, another element was added to address asthma management beyond high school and the transition to self-management.

Asthma TLC is a five-year-old program focused on improving asthma outcomes in the minority community by combining school-based and community-based education, so that disease management skills learned in schools are reinforced through community asthma education events. Education is also provided to staff of social services and community support agencies, as well as after school program staffs.

Camp Huff-n-Puff, now in its 27th year, continues to provide children with asthma with education and a

real camp experience, while around the clock medical supervision is on hand to monitor the campers' health and manage unexpected asthma flare-ups.

In August 2010, fifty-four children attended camp, 80% on scholarships, made possible by you, our loyal friends who support our scholarship fund. Thanks to the outreach efforts of the Asthma TLC staff, 22% of the campers came from the Asthma TLC program.

Throughout the year, other individual educational events are planned and carried out. On July 21 and 22, 2010, the Respiratory Alliance partnered with The Jerome Bettis "Bus Stops Here" Foundation and Children's Hospital to conduct an asthma awareness and education camp at Heinz Field. Former Steelers Deshea Townsend and Jerome Bettis were on hand to lead the children in drills, and talked about achieving your goals in spite of asthma.

Other asthma programs include special educational events for school staff and faculty (October 16, 2010) at the UPMC Sports Performance Center on the South Side (Steelers training site facility), at Giant Eagle pharmacies, and the upcoming Asthma Goes to the Theatre family programs.

Through the ARA contacts and partnerships



with the local school, medical, and hospital communities, as well as participation in statewide networks, we are able to assess developing issues and trends, identify unmet needs, and develop programs to meet those needs.

The ARA's youth tobacco awareness program No Butts About School reaches more than 11,000 students each year. It is the most comprehensive and widely used school-based tobacco education program in western Pennsylvania. Going well beyond the basic "what's in a cigarette" information and the impact of tobacco use on health, No Butts About School also studies the stealth marketing and advertising techniques used to ensnare young people into this deadly habit.

For more information on any of the ARA's programs, please call 1-800-220-1990, or visit [www.healthylungs.org](http://www.healthylungs.org). ~

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