



COAST Staff: Front Row: Chris Tisler, Kathy Roberg, Krista Hanson, Tressa Pappas, and Rochelle Grabher. Middle Row: Douglas DaSilva, Lisa Salazar and Melissa Burger. Back Row: Rob Lemanske, Jim Gern, Kris Burmiester, Kate Shanovich, Tuomas Jartti, Beth Anderson, Nicholas Hallett, and Nick Christenson.

Over the years, we have told you much about what we have learned. If you would like a refresher of what we have learned, please visit our website and you can view our published articles and presentations on the Publications link. Or, you can use the Newsletter link and look back at previous newsletters to refresh your memory. We wanted to take the time and tell you something about what we don't know!

## That is .....

1. We do not know fully understand why children go on to have asthma later in life.

- Do children with asthma have more or less illnesses with Rhinovirus or RV (the common cold)?
- Is it the differences that we have seen in their Cytokine profiles? Cytokines are what is used to allow one cell to communicate to another cell. These cells or proteins regulate our immune system response.
- Is it because the child is a boy or a girl? Is it the differences that are seen between boys and girls and their body's reaction to RV or cytokine differences or both?
- Can we predict the child who will go on to have Exercise - Induced Asthma or who will develop asthma in their adolescents or is it something different from these reasons?

From these questions, we developed the grant proposal for COAST III (8 Years to 13 Years of age).

The purpose of continuing COAST (COAST III) is to learn more about how viruses are related to asthma, especially as children grow into teenage years or puberty. This study will last for five years, and we will want to see your child one time each year (for a total of five visits) during the study period. Each visit will last about 1½ hours. This annual visit will involve completing questionnaires, your child will do breathing tests, provide a sample of mucus from his/her nose and throat at age 9, 10 and 13, put some numbing medicine on their arm and then volunteer a blood sample (equal to about three tablespoons of blood), and a doctor will examine your child. Allergy skin testing will also be done at ages 9 and 13. We will keep the samples of nasal mucus and blood in a tissue bank in order to use these samples for future testing about asthma and allergies.

There will be several smaller studies that some COAST subjects will be invited to complete. If you are invited to do these studies, you will be given more information about the study at that time. You may ask questions about these studies at any time. These smaller studies will help us learn more about how our lungs work through imaging observation, observation of colds during the RV cold seasons (This is usually during September and April.) and lastly testing of the lungs and their sensitivity to a medicine.

## What else do we need to learn about asthma . . . .

1. How much of the common cold virus or Rhinovirus do people with asthma and people without asthma have in their system during a virus season? You may also hear this being talked about as "What is the carriage rate of Rhinovirus?".
2. When someone is sick with the cold ...
  - How sick do they get? Are there no symptoms, moderate symptoms or severe symptoms?
  - How do the children with asthma differ from the children without asthma when they have RV or common cold?
  - Is their cold due to Rhinovirus or is it other virus(es) like (influenza or para influenza)?
3. When someone is sick with the cold what is the order that the viruses come in. For example, is it Rhinovirus than para influenza or is it influenza than Rhinovirus? You may also hear this being talked about as "What is the chronological carriage rate of the viruses?".
4. Most importantly, we do not fully understand how a virus affects people with asthma and people without asthma.
5. What are the differences between the genes of people with and people without asthma?

From these questions, Drs. Gern and Lemanske thought the COAST birth co-hort would be interested in participating in the RhinoGen study.

The purpose of this research study is to learn more about how genes are linked to colds caused by viruses in children with asthma and children who do not have asthma. We will also study how colds can make asthma worse. We will also ask questions about the things in your home and school that could make a cold or asthma worse. The information gained from your child in this study will be added to the knowledge that we have already gotten by studying your child in the COAST project.

## RhinoGen LOGO contest

We would like to have our COAST children help us design a logo for a new study, RhinoGen. This study will help us learn more about how genes are linked to colds and how colds make asthma worse. The winning logo will win a stuffed Rhinovirus toy and a gift card to Culver's.

Please submit your child's design logos to the RhinoGen study by August 27, 2007 to:

RhinoGEN Study  
H4/444 CSC  
600 Highland Ave  
Madison, WI 53792.

The winning logo will be on display August 31, 2007 on our website at <http://coast.medicine.wisc.edu> and in the following COAST Newsletter.

## COAST COMINGS and GOINGS ...

**Douglas DaSilva, study and lab coordinator:** Douglas will be spending the next year working for COAST in London, England at the Imperial College with Dr. Sebastian Johnston. He will return to Madison after his time in London. Tally-ho!!

**Rochelle Grabher, study coordinator:** Rochelle will be returning to school through the UW - Oshkosh Long Distance program and will be earning her a Bachelor of Science degree in Nursing. We wish her the best of luck and Congratulations!!

**Krista Hanson, study coordinator:** Krista will be returning to school at Yale and will be earning a degree as a Physician's Assistant. We wish her the best of luck and Congratulations!! Go Bulldogs!

**Nicholas Hallett, COAST Student:** Nick will be graduating from the UW - Madison with a Bachelor of Science in Microbiology this May 2007. After graduation, Nick will be

traveling to Tema, Ghana, Africa from June to July. He is traveling with the Global Volunteer Network. He will be responsible for teaching basic science to elementary age children. When he returns to the states, he will work for COAST as a Lab and Study coordinator. He plans to attend Medical School in the future.

**Michael Possin, COAST Student:** Mike will be graduating from the UW - Madison with a Bachelor of Science degree in Biology, May 2007. After graduation, Mike plans to attend Medical School. We are looking forward to having him help the COAST staff this summer as a Full Time COAST employee.

**Kate Shanovich, COAST Student:** This summer, Kate traveled to Madagascar, South Africa from May to June. She traveled with Habitat for Humanity. She will be responsible for helping in the construction of houses. Kate will be graduating from the UW - Madison with a Bachelor of Arts in Spanish and Portuguese this coming December 2007.

Congratulations to our COAST family for their accomplishments!!!