VOLUME 2, ISSUE

# Louisiana Lung Cancer Study Newsletter

## Who Dat? : Meet the Lung Cancer Team

"Researching the Researchers"

First, we would like to say hello and introduce ourselves to you. We are the Louisiana Lung Cancer Study Team. This is an exciting time to be a part of lung cancer research, so we invite you to review our newsletter with research highlights, events, and the following introductions:

**Diptasri Mandal, PhD** (*pictured above*) is the Principal Investigator of the Genetic Epidemiology of Lung Cancer Study and an Associate Professor in the Department of Genetics at LSUHSC-NO.

Jessica Chambliss, MS, CRC (*pictured right*) is the newest member of the team as a Research Associate and a proud cancer survivor.

**Matthew Haskins** (*pictured right*) was our Summer 2011 and 2012 Student Intern and 1st place winner in the 2012 Summer Research Symposium at LSUHSC-NO.

**Angelle Bencaz, MSPH** (*pictured right*) is also a Research Associate. This year marks her fourth year with the Lung Cancer Study.

#### Department of Genetics



Left to Right: Jessica Chambliss, Matthew Haskins (featured with award), and Angelle Bencaz

We appreciate everyone who has participated in the study and give a big thank you to all our collaborators. Thank you for your support as we work towards a better future in lung cancer research!



# Lung Cancer Study Updates

In our last newsletter, we mentioned our collective efforts in lung cancer research with the Genetic Epidemiology of Lung Cancer Consortium (GELCC)\* and the new discoveries being diligently made. Genes not only determine your eye color, but also your susceptibility to cancer. As you may recall, in our preliminary study, we identified the RGS17 gene as playing a role in the risk of developing lung cancer in families with more than one case of lung cancer even when smoking exposures are low. (Fact: 10% to 15% of lung cancer cases have at least one first-degree relative with lung cancer, and 25% of cases have at least one first- or second-degree affected relative.) In reality, there is more than one gene responsible for lung cancer which means that two families with lung cancer may not carry the same gene. We are utilizing current state-of-the-art technologies to better understand the role of RGS17 in familial aggregation. We are also working on identifying other genes that may work

independently or with RGS17 as the genetic basis of susceptibility to lung cancer risk. Eventually, identification of the specific genes will contribute to better diagnoses, preventions, and treatments. We still have a long way to go for the future of personalized medicine, but one of the most vital steps is the participation or families of individuals diagnosed with lung cancer, along with keeping in touch with those families over time.

\*Please refer to the last page for a list of the GELCC members.

# **CLSUHealth**NewOrleans

JANUARY 2013

### **Local Events**

March 9, 2013: Fight for Air Walk in Lafayette. Contact June Arton at 337-280-6247 or visit www.lung.org/get-involved/in-your -community

March 16, 2013: Free to Breath Run Walk in Lake Charles. Visit www.freetobreathe.com/register.html



Want to learn about even more events? Go to Lungcancer.org and click on the state for event listings.

## **National Events**

June 2, 2013: 26th Annual National Cancer Survivors Day. Visit ncsdf.org November 1–30: National Lung Cancer Awareness Month. November, 2013: National Shine a Light on Lung Cancer Vigil.

Visit lungcancerallance.org/shinealightonlungcancer



### True-Or-False Trivia: Test Your Lung Cancer Knowledge

Many myths surround the topic of lung cancer. See if you can figure out fact from fiction by answering the questions below.

#### TRIVIA QUESTIONS:



I. Lung cancer occurs in those who have never smoked	TRUE	or	FALSE
2. Smoking "light" or low-tar cigarettes decreases the chances of cancer	TRUE	or	FALSE
3. Coughing up blood is the first sign of lung cancer	TRUE	or	FALSE
4. The color of the lung cancer awareness ribbon is red	TRUE	or	FALSE
5. Genetic testing for lung cancer is available	TRUE	or	FALSE

#### ANSWERS:

- I. TRUE: You can get lung cancer without ever touching a cigarette. Experts say I out of 5 people with lung cancer are non-smokers and the National Cancer Institute agrees. The Lung Cancer Alliance reports that 60% of those diagnosed have never smoked or had quit. On the flip side, not every smoker will get lung cancer. Furthermore, 15% of smokers develop a lung cancer that links a genetic component to risk.
- 2. FALSE: The National Cancer Institute has determined that neither type of cigarette reduces the harmful effects of smoking. The tar exposure from "light" cigarettes can be just the same amount as a "regular" or "full-flavored" cigarette. Essentially, there is no such thing as a "safe" cigarette. (www.cancer.gov)
- **3.** FALSE: Few symptoms are in the early stages, maybe none at all, and vary. Some common early symptoms are shortness of breath, feeling extremely tired, and constant coughing for 3 weeks or more. When in doubt, give your doctor a shout!
- **4.** FALSE: The official lung cancer color is pearl or white with the ribbon being an international sign for awareness. Clear has also been regarded as a lung cancer color.
- 5. FALSE: As we mentioned earlier, there is more than one gene responsible for lung cancer and two families with lung cancer may not carry the same gene. Though Direct-to-Consumer (DTC) genetic testing is available, *buyers beware*: In order for a test to be accurate, it must cover all of the genetic markers associated with the occurrence of the disease. Because not all of the genes have been identified yet, there is no guarantee that genetic testing specific to your family's gene is available.

### **Famous Fights with Lung Cancer**

Lung cancer doesn't discriminate. 6. George Harrison, Singer, Here are just a few celebrities that have battled with lung cancer:

#### I.\*\* Dana Reeves, Actress, Singer, Late Wife of "Superman" Actor Christopher Reeves



2. Walt Disney, Animator, Creator of "Mickey Mouse"

3. Claude Monet. Painter, Father of Impressionist Art



4. Desi Arnaz, Musician, Actor of "I Love Lucy"

5. Nat King Cole, Singer, Leading Jazz Pianist

Lead Guitarist of "The Beatles"

#### 7. Duke Ellington,

Grammy Award Winning Big Band Leader, Pianist, Composer



8. Sherman Hemsley, Actor, "George Jefferson" of "The Jeffersons"

9.\*\*Donna Summer. Grammy Award Winning Singer, "Disco Queen"





10.\*\*Gabby Wilson, Age 11, Spokesperson of the "Anyone Can Get Lung Cancer" Campaign

\*\*Known non-smokers who have been diagnosed with lung cancer, proving that it's not a "smoker's disease", nor has it ever been one.

#### Lung Cancer Detection has Gone to the Dogs

Foundation (© Schillerhöhe Hospital)

In a hospital in Germany, Dr. Rainer Ehmann and his colleagues performed a recent study proving again why dog is

said to be man's best friend. The findings, published in the August 2011 issue of European Respiratory Journal, "Canine scent detection in the Image courtesy of the European Lung diagnosis of lung

cancer: Re-visiting a puzzling phenomenon" showed how trained dogs could detect lung cancer by sniffing people's bottled breath. Has the laboratory gone to the Labradors? These "sniffer dogs" correctly identified 372 out of 400 samples without lung cancer (93%), and 71 out of 100 samples with lung cancer (71%).

The researchers believe that dogs can detect volatile organic compounds ("VOCs") linked to lung cancer. They don't know

which VOC exactly breath (our has over 3,000 VOCs). Interesting? Yes! But "hold your don't breath" to see a sniffing dog at your next appointment. Bottom line: Our

canine friend can detect lung cancer....that, and those silent whistles. (Side note: The researchers had to do a "doggiedo-over" due to the pooches' ability to memorize a person's breath samples.) You can read this article in its entirety at http://erj.ersjournals.com.

### How Can You Help the Lung Cancer **Study?**

You can participate if you have been diagnosed with lung cancer and have at least one relative that has been diagnosed with lung cancer, or if you belong to a family in which two or more members have been diagnosed with lung cancer. Furthermore, to understand the effects of any lung cancer susceptibility gene we identify, we need participants without lung cancer ("controls") from the same population. Therefore, we even welcome participation from spouses of lung cancer cases as controls if they do not have a family history of lung cancer.

Since genes may interact with environmental exposures such as smoking to increase the risk of lung cancer, we collect environmental and smoking history questionnaires. We also collect biological samples (blood and saliva) from participants to better understand why some people are at a higher risk than others.

If you know someone who has been diagnosed with lung cancer, please share with them our research information. Participation from "controls" who are 60 years of age or older and current or former smokers is equally appreciated. We are fully compliant with HIPAA, and all information will remain strictly confidential. Finding a cure will help your future generations by establishing early prevention strategies.

To get in touch, please use our toll-free number 1-888-720-7757 or email us at LungCaStudy@lsuhsc.edu. You can also visit our website at http://www.medschool.lsu.edu/ lungcancer



#### VOLUME 2, ISSUE I

#### JANUARY 2013

### The Louisiana Lung Cancer Study Newsletter

### The Lung Cancer Study is part of a national network known as the Genetic Epidemiology of Lung Cancer Consortium, established in 1997, that includes the following members:

University of Toledo Medical Center

National Human Genome Research Institute, National

LSU Health Sciences Center—New Orleans

- Dartmouth-Hitchcock Norris
  Cotton Cancer Center
- Karmanos Cancer Center
- Mayo Clinic and Foundation
- Medical College of Wisconsin
- Our local network of collaborators:
- Abbeville General Hospital
- Abrom Kaplan Memorial Hospital
- Acadia—St. Landry Hospital
- Acadian Medical Center
- American Legion Hospital
- Bunkie General Hospital
- Dauterive Hospital
- Doctor's Hospital of Opelousas
- Earl K. Long Hospital
- Franklin Foundation Hospital
- Iberia Medical Center
- Lady of the Sea General Hospital

- Lafayette General Medical Center
- LSU Lallie Kemp Regional Medical Center
- Interim LSU Hospital—New Orleans
- Mercy Regional Medical Center
- Opelousas General Hospital

Institute of Health

University of Cincinnati

•

•

- Our Lady of Lourdes Medical Center
- Pointe Coupe General Hospital
- Prevost Memorial Hospital
- Regional Medical Center of Acadiana
- River Parishes Hospital
- St. Charles Parish Hospital
- St. Helena Parish Hospital

- St. James Parish Hospital
- St. Landry Extended Care
- St. Martin Hospital
- Savoy Medical Center
- Southpark Community Hospital
- Teche Regional Medical Center
- Thibodaux Cancer Care Hospital
- University Medical Center—Lafayette
- Washington—St. Tammy Medical Center
- Reliapath LLC
- Patricia Andrews of the Louisiana Tumor Registry

**LSUHealthNewOrleans** HEALTH SCIENCES CENTER

> School of Medicine Department of Genetics 533 Bolivar Street New Orleans, LA 70112

