Eight New Lung Cancer Research Awards into Early Detection and More Effective Treatments Bring Total to 100

New LUNGevity awards are enabling promising research into finding lung cancer earlier, managing treatment more effectively, and preventing the disease in high-risk populations.

Eight exceptional researchers have received 2013 LUNGevity Lung Cancer Research Awards for Translational Research. This new group of researchers is focusing on targeted chemoprevention, more accurate and earlier detection and diagnosis, making radiotherapy and chemoradiotherapy more effective, targeting KRAS-mutant lung cancer, and understanding resistance to next-generation EGFR inhibitors. They join a community of brilliant LUNGevity-funded scientists across the country, who are working to help people with lung cancer live longer and better. continued on page 5

Taking a Swing at Lung Cancer

Washington, DC, area luminaries gathered at the Army Navy Country Club on May 13 for the 2nd annual Breathe Deep DC Golf Classic. Thanks and Congratulations to Event Chairs Bob Filippone and Steve Ubl, Honor- ary Chair Mike Oxley, and the entire committee, on a successful outing. Special thanks as well to the Honorary Committee members: Speaker John A. Boehner; Senator Richard Burr; and Representatives Sanford D. Bishop, Jr., James E. Clyburn, John Dingell, Gene Green, Ed Pastor, Erik Paulsen, John Shimkus, Albio Sires, and John Yarmuth for their involvement in a fun day of golf and raising awareness and funds for lung cancer research.
REFLECTIONS FROM THE PRESIDENT’S DESK

This Fall at LUNGevity we are continuing to fund impactful research and planning for a season of coast-to-coast grassroots events, galas, and our inaugural regional lung cancer survivorship conference!

We received many excellent proposals for our 2013 Career Development, Early Detection, and Targeted Therapeutics translational research awards and are thrilled to be able to fund eight of them.

Our first regional HOPE Summit survivorship conference will take place this November in Columbus, Ohio, at OSU. This conference follows our annual national HOPE Summit in May, which brings together over 100 lung cancer survivors and caregivers.

None of this investment in research and support programs would be possible without the commitment of our dedicated donors. In this issue, we highlight several of them, as they explain what motivates them to donate their time, talent and treasure for LUNGevity programs.

As always, thank you for your support. Please join us at one of our 33 Fall events!

Andrea Ferris

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Participate in the LifeLine Support Mentor Program

LifeLine Support Mentors are lung cancer survivors or co-survivors (family members and caregivers) who have walked the lung cancer journey and have come out the other side. They volunteer to mentor and offer encouragement, advice, experience and hope to those newly diagnosed and anyone needing additional support through a one-on-one personal connection by email or telephone.

Being a mentor means helping to make the road less bumpy. It means that no one ever has to go through lung cancer alone. Become a LifeLine mentor today. If you are not ready to volunteer, please spread the word about this free service for those impacted by lung cancer and the opportunity for survivors and their caregivers to pay it forward.

If you would like to be matched with a mentor, you can submit a request online at www.LUNGevity.org/LifeLine, by email to Hope@LUNGevity.org, or by phone at 817.501.9313.

“I so wish that I knew of LifeLine when I first started this challenging journey almost five years ago. I now have two newly-diagnosed contacts—two very different and rewarding experiences. Please tell others about this program, whether you choose to participate now or later.”

ALLAN MITCHELL, Non-small cell lung cancer survivor since 2009

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LUNGevity Foundation is a 501(c)(3) nonprofit organization.
The high level of engagement and energy at LUNGevity’s annual HOPE Summit, our national survivorship conference, clearly demonstrate its value for those living with lung cancer. Over 80 survivors attended this year, along with caregivers, inspirational speakers and other advocates, for a total of 120 participants.

Designed for people living with lung cancer at all stages of the disease, the HOPE Summit featured educational sessions, inspirational speakers, and media opportunities. Most importantly, the weekend offered the chance to make once-in-a-lifetime connections with people from across the country who have had a lung cancer diagnosis. Recognizing that people at various points from diagnosis may have different questions and needs, the Summit also offered two program tracks from which to choose.

The 2014 Survivor HOPE Summit is already being planned, so mark your calendars for May 2-4, 2014. For more information, please contact us at: HOPE@LUNGevity.org or 817-501-9313.

And, recognizing that some survivors may not want to travel for a full weekend away, the first Regional HOPE Summit will be held in Columbus, Ohio, this Fall. The Regional HOPE Summit at Ohio State University begins Friday, November 8, with a reception, and is followed by the conference on Saturday, November 9, and the Breathe Deep Columbus walk on Sunday, November 10. For more information, go to: www.LUNGevity.org/regionalsummit.

Special thanks to photographer Randy Elles for the use of his wonderful images from the HOPE Summit.
LUNGevity Grant Advances Breakthrough in Lung Cancer Subtypes

In 2005, Dr. Charles Powell, then a faculty member at Columbia University Medical Center, thought that part of the reason that non-small cell lung cancer (NSCLC) patients had low survival rates might be because different subtypes of NSCLC were all being treated the same way. He believed that understanding these subtypes could improve the effectiveness of how lung adenocarcinoma patients are treated.

In preliminary studies, he had found that lung adenocarcinoma, the most common type of NSCLC, could be grouped into three subtypes: slow-growing, moderately-growing, and fast-growing. He hypothesized that tumors within each of these three subtypes would have characteristics that could be used as targets for personalized therapy.

A two-year research grant from LUNGevity Foundation and the American Thoracic Society (ATS) allowed Dr. Powell and his research team to continue this groundbreaking work and study the key steps that these adenocarcinoma tumor cells go through as they become more invasive. One of the major findings was that tumor cells lose a specific protein receptor, TGFBR2, as they become more aggressive.

The important TGFBR2 finding led to Dr. Powell’s first major federal research grant, which allowed him to develop a powerful new tool to study the complex protein, cell and tissue interactions involved in lung adenocarcinoma. This tool, an animal model of lung adenocarcinoma that is very similar to the human disease, continues to be a major area of focus for Dr. Powell’s laboratory and is now also being used by several other research teams.

Equally important, the idea of lung adenocarcinoma subtypes gained acceptance within the scientific community. As data from Dr. Powell’s lab and other research teams began to show similar results, a multidisciplinary panel of experts, including Dr. Powell, was convened to discuss lung adenocarcinoma classification options. Ultimately the panel issued formal recommendations to reclassify lung adenocarcinoma into three subtypes of tumors used for diagnosing and treating the disease.

Today, as Chief of the Division of Pulmonary, Critical Care and Sleep Medicine at Mount Sinai Medical Center in New York, Dr. Powell leverages cutting-edge technologies and innovative collaborations to study other aspects of lung cancer, such as how smoking tobacco contributes to developing lung cancer. So far, his team has found that lung inflammation associated with chronic obstructive pulmonary disease (COPD) may be an important step in the development of lung cancer. A new animal model based on this could lead to new preventive, diagnostic and treatment options.

“I am very optimistic that the lung cancer community has accepted the concept that there are different subtypes of lung cancer disease,” says Dr. Powell. “The more we learn about lung cancer subtypes and how the disease develops, the better our chances of creating effective targeted therapies that save lives.”

Have a question about a specific lung cancer medical term or process? Want to understand the latest advances associated with lung cancer research, explained in clear terms a person without medical training can understand? Submit your question to the medical experts at GRACE through Ask the Experts at: www.LUNGevity.org/AskTheExperts.
2013 LUNGevity Lung Cancer Research Awardees

LUNGevity is proud to introduce the eight exceptional scientists whose important translational research will help advance detection and treatment of lung cancer and get them to patients as quickly as possible. The awards fall into three major categories.

**Early Detection Research Awards**
support research projects directed at new approaches to improve clinical methods for the detection of primary lung tumors. 2013 Early Detection Awardees include:

- **Feng Jiang, MD, PhD**  
  University of Maryland School of Medicine  
  “Sputum biomarkers for the early detection of lung cancer”  
  Dr. Jiang is identifying sputum biomarkers that could improve the process of detecting early stage lung cancer by contributing to development of a non-invasive test that complements low-dose computed tomography (CT) scans and improves the accuracy of diagnosis.

- **Ignacio I. Wistuba, MD**  
  University of Texas MD Anderson Cancer Center  
  “Identification of biomarkers for the detection and treatment of small cell lung cancer”  
  Dr. Wistuba and his colleague Dr. Humam Kadara are identifying biomarkers that could ultimately lead to the first test to detect small cell lung cancer in its earliest and most treatable stages.

**Targeted Therapeutics Research Awards** support the discovery and validation of biomarkers or novel targeted therapeutics that will make a difference in the clinical treatment and survival of patients. 2013 Targeted Therapeutics Awardees include:

- **Balazs Halmos, MD**  
  Columbia University Medical Center  
  “Identification of predictive biomarkers of chemoradiotherapy in lung cancer”  
  Dr. Halmos is working on a way to increase the effectiveness of radiation and chemotherapy that could also lead to personalized non-small cell lung cancer (NSCLC) treatments, especially for the third of all lung cancer patients with locally advanced lung cancer.

- **Lecia V. Sequist, MD**  
  Massachusetts General Hospital  
  “Determining mechanisms of resistance to next-generation EGFR inhibitors”  
  Dr. Sequist will develop models that explain how NSCLC patients can acquire drug resistance to targeted therapies after a period of initial successful treatment, leading to the development of new treatments to help patients overcome the drug resistance.

- **Frank J. Slack, PhD**  
  Yale University  
  “Targeting KRAS mutations in lung cancer”  
  Dr. Slack is studying the KRAS-variant, a recently discovered KRAS mutation found in over 20% of NSCLC patients, which has been shown to predict a patient’s response to cancer treatment. His research aims to confirm the role of the KRAS-variant to direct cancer therapy for lung cancer patients and as a potential future target for therapy.

**2013 Career Development Awards** support future research leaders who will keep the field of lung cancer research vibrant with new ideas. 2013 Career Development Awards were made to:

- **Timothy Burns, MD, PhD**  
  University of Pittsburgh Cancer Institute  
  “Targeting KRAS-mutant NSCLC through inhibition of mTOR and Hsp90”  
  Dr. Burns is working on targeted therapy for NSCLC patients with mutations in a gene called KRAS, using a new class of drugs.

- **David Kozono, MD, PhD**  
  Dana-Farber Cancer Institute  
  “Biomarkers for NSCLC radiosensitization by proteasome inhibition”  
  Dr. Kozono is studying which genetic types of lung cancer are the most resistant to radiation, and which of these may be best treated with a combination of radiation and bortezomib, a drug already FDA-approved for another type of cancer.

- **Meredith Tennis, PhD**  
  University of Colorado Denver  
  “Biomarkers for targeted lung cancer chemoprevention”  
  Dr. Tennis aims to identify biomarkers that signal whether a patient is likely to benefit from iloprost and pioglitazone, two drugs that have demonstrated promise in reducing NSCLC risk, and determine whether they work in a clinical trial setting.

Special thanks to Genentech and our other donors for supporting the LUNGevity Scientific Research Program.
“I found out about LUNGevity in 2010 when I was on Facebook and saw that my friend’s dad had passed away from lung cancer. I started donating money to the Breathe Deep Dallas/Fort Worth walk then. At the same time, my cousin Wills was diagnosed with cancer, and he also passed away. I just kept giving every month from then on. It was very easy to set up.

Lung cancer is an unbelievably horrible thing. There are so many different types and we don’t know how to cure it. I feel like to donate to LUNGevity to help find a cure is a wonderful thing.”

**JACOB SIMS, Sustaining Donor since 2010**

“My mom, Sarah, passed away from adenocarcinoma ten years ago this October. She was 56 when she died, which is why I donate $56 each month. In searching for answers and trying to figure out what I could do, I found out about LUNGevity online. There aren’t very many organizations that raise awareness about lung cancer, particularly that it can affect even never-smokers.

When I found LUNGevity, I first made a memorial gift and then I set up monthly giving, and I’ve been a contributor ever since. Recently, I changed jobs and immediately signed up for my company’s matching gifts program, so I am able to double the contribution and make my donation go even further.”

**LEIGH LIEVAN, Sustaining Donor since 2010**

“At the age of 71, 25 years after my dad quit smoking, he was diagnosed with lung cancer. He died four months later.

After my father’s diagnosis, I did a lot of research. I was shocked to learn that although lung cancer is the leading cancer killer, funding to fight the disease pales in comparison to the fund-raising efforts for many other cancers, due in part to the stigma associated with lung cancer.

That led me to enroll in LUNGevity Foundation’s sustaining donation program. Now I take comfort each month in knowing that I’m contributing to advancing lung cancer research.”

**Cheryl Delby, Sustaining Donor since 2010**

**GIFTS OF HOPE**

Join Cheryl, Jacob, and Leigh to keep the momentum going.

Become a Sustaining Donor by setting up an automatic monthly donation. It’s easy to do, and this ongoing commitment to stopping lung cancer can make a real difference. Call 312.407.6100 or sign up on the website at www.LUNGevity.org/SustainingGift.
Bernice Weiss’ Biggest Goal of All for Breathe Deep Phoenix

Bernice Weiss wants people to know “You don’t have to be a smoker to get lung cancer—I’m proof of that.” In her third year of participating in LUNGevity’s Breathe Deep Phoenix walk, Bernice has upped the ante: “I’ve set a really big goal for myself this year, not in money donated but in years. You may remember that the 5-year survival rate for lung cancer is only 16%. Well, with new treatments coming out and the research studies that your donations help make possible, I’m going to give it my best shot and go for that exclusive 16% Club.”

Please support Bernice and all those fighting lung cancer. As Bernice says, “You all have been so generous in the past years—I’m hoping that the giving spirit is still with you.”

Honoring Bill Canfield at Breathe Deep NYC

Lisa Gilfillan, Captain of Team Canfield, shares what inspires her team to walk for lung cancer research each year.

“I met Bill in 1996 when I started working for Canfield Scientific after college. Bill is truly one of the best friends I have ever had. Bill loved the outdoors and you could usually find him kayaking, hunting, fishing, or scuba diving on the weekends. Bill’s family meant the world to him—he was an amazing father, and he showered his nieces and nephew with love. Bill was full of life and had such a positive energy that was inspiring to so many people. There are many Team Canfield members who never had the opportunity to meet Bill, but I truly believe that they know what an amazing man he was through the stories and memories of those who did. The first year Team Canfield was formed, Bill was still alive and I had hoped he would be well enough to join us. Sadly, he passed in August 2009 and Team Canfield walked in October. We have walked every year since to honor the memory of this incredible man. I know Bill is there with us in spirit and once again feel truly blessed to have such a beautiful person as my guardian angel. I pray one day there is a cure so that we can end this terrible disease.”
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<th>Date</th>
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