Understanding the Role of Estrogen in Lung Cancer

Dr. Lee Goodglick, Professor of Pathology and Laboratory Medicine, and his colleagues at the University of California, Los Angeles are aiming to turn successes in treating breast cancer into lifesaving treatments for lung cancer patients.

Many studies have shown that breast tissues are highly regulated by the hormone estrogen. Using this key fact, researchers have developed extremely successful treatments for breast cancer that target the estrogen pathway. When studies showed that lungs in men and women also naturally respond to estrogen, Dr. Goodglick wondered whether there were also treatment parallels. continued on page 3

LUNGevity Heroes Program Celebrates Lung Cancer Advocates

This March, LUNGevity Foundation launched the LUNGevity Heroes program, a monthly spotlight on an exceptional ally in our fight against lung cancer. Lung cancer remains an underfunded and overlooked disease, yet LUNGevity has an extraordinary and diverse community of supporters who make a difference to advancing our mission to increase survivorship and improve the lives of those living with it. LUNGevity’s March Hero was NBC4 Chief Meteorologist Doug Kammerer, who uses his post as an NBC reporter to extend awareness of LUNGevity’s mission and actions to a much larger audience via broadcast and social media.

In April we honored the late Monica Barlow, who until her recent death selflessly gave her time and energy to help people understand the reality of lung cancer and to raise money for critical research. continued on page 5
REFLECTIONS FROM THE PRESIDENT’S DESK

It’s May—Lung Cancer Hope Month! We celebrate the work of dedicated scientists, whose research is making a difference to those living with lung cancer and is bringing us closer to the day when no one dies of it, and the lung cancer community itself, whose courage and optimism about the brightness of the future are unsurpassed.

This hope-filled issue of Fresh Air focuses on important research, support services and programs, and individuals who inspire us. We highlight the research of scientist Lee Goodglick in understanding the role of estrogen in lung cancer. We introduce two new Scientific Advisory Board members: Dr. John Heymach, an expert in targeted treatments, and Dr. Julie Brahmer, an expert in immunotherapy. We also discuss regional survivorship HOPE Summits that serve people in their local communities and announce our new Survivor Advisory Council that will ensure that LUNGevity serves the lung cancer community in the most effective way. We report on our first New York City Celebration of Hope Gala. And lots more!

Thank you for sharing our hope,

Andrea Ferris

Survivor Advisory Council: The Voice of Lung Cancer Patients

LUNGevity Foundation puts the needs of people living with a diagnosis of lung cancer at the center of all that we do. In 2014, LUNGevity is introducing the LUNGevity Survivor Advisory Council (LSAC).

Composed of people living with lung cancer from across the nation and representing various ages, histologies of disease and stages of diagnosis, the LUNGevity Survivor Advisory Council will provide the patient’s point of view on LUNGevity initiatives, programs and upcoming events. Council members will also provide perspective on policy and regulatory issues, as well as identify unmet needs in the lung cancer community.

By providing the “voice of the patient,” the Council will ensure that we are making improvements and offering services that our constituents value. The contributions of the Council will help us to better serve all people living with a diagnosis of lung cancer and create a better world for those who will face the disease in the future.

BOARD OF DIRECTORS

Peter Babej
Grace Bender
Susan Bersh, Secretary
Andrea Ferris, Chairman and President

Alan Hilburg
Pierre Massion
Chris Olivier
Jerome Sorkin, Vice Chairman

Alexander Stern
Andrew Stern
Paul G. Stern
Jason Swanson, Treasurer
Marc Swerdlow

SCIENTIFIC ADVISORY BOARD

Denise R. Aberle, MD
David Geffen School of Medicine at UCLA

Nasser K. Altorki, MB, BCh
NewYork-Presbyterian/Weill Cornell Medical Center

Philip D. Bonomi, MD
Rush University Medical Center

Julie R. Brahmer, MD
Johns Hopkins University

David P. Carbone, MD, PhD
Ohio State University

Martin “Mac” Cheever, MD
Fred Hutchinson Cancer Research Center

Steven M. Dubinett, MD
David Geffen School of Medicine at UCLA

John V. Heymach, MD, PhD
University of Texas MD Anderson Cancer Center

James R. Jett, MD
National Jewish Health

Robert L. Keith, MD
University of Colorado, Denver

J. Jack Lee, PhD, DDS
University of Texas MD Anderson Cancer Center

Scott M. Lippman, MD
University of California, San Diego

Pierre Massion, MD
Vanderbilt-Ingram Cancer Center

Charles Rudin, MD, PhD
Memorial Sloan-Kettering Cancer Center

Lawrence H. Schwartz, MD
NewYork-Presbyterian/Columbia University Medical Center

Lecia V. Sequist, MD, MPH
Harvard Medical School and Massachusetts General Hospital

Steven J. Skates, PhD
Harvard Medical School and Massachusetts General Hospital

Avrum E. Spira, MD, MSci
Boston University

Margaret R. Spitz, MD, MPH
Baylor College of Medicine

HEADQUARTERS
218 South Wabash Avenue, Suite 540
Chicago, IL 60604
312.407.6100

BETHESDA OFFICE
6917 Arlington Road, Suite 352
Bethesda, MD 20814
240.454.3100

Info@LUNGevity.org

www.LUNGevity.org

LUNGevity Foundation is a 501(c)(3) nonprofit organization.
LUNGevity’s 2013 Chicago Fall Benefit Honors Researcher, Survivor and Volunteer

The theme of LUNGevity’s 14th Chicago Fall Benefit, held on November 16, was “Believe. Inspire. Celebrate Hope,” and that's exactly what the almost 500 guests at this lovely event at The Montgomery Club by Gibsons did, while also contributing more than $300,000 to support LUNGevity’s lung cancer research, support and education programs. Jill Feldman, lung cancer survivor and long-time LUNGevity volunteer herself, presented The Kay Barmore Volunteer Award, bestowed each year on a LUNGevity volunteer who has shown extraordinary commitment and dedication over time, to Mary Ellen Hand, RN, BSN. Since the early days of LUNGevity, Mary Ellen has supported us by serving on the Board of Directors, participating on research and planning committees, and serving as a valuable resource. The Melissa Lumberg Zagon Founders Award was presented to David E. Kozono, MD, PhD, of Dana-Farber Cancer Institute, a 2013 LUNGevity Career Development awardee, who is working to improve lung cancer survival rates by developing radiation treatments that selectively kill cancer cells while leaving the surrounding vital organs unharmed. Keynote speaker Jenny Beban spoke movingly of her husband, Mark, and the eight months since his lung cancer diagnosis. Mark was the high bidder in the evening’s live auction for a black Labrador puppy, whom he named Remi—short for Remission! Thanks go to Fall Benefit Chairs, Debra Baum, Lynda Fisher and Edie Saltzman, and their energetic committee for creating this special evening.

Role of Estrogen in Lung Cancer continued from page 1

He wanted to study the role of estrogen in the development and progression of lung cancer, so Dr. Goodglick, in collaboration with Dr. Richard Pietras, Professor of Medicine at UCLA, applied for research funding from LUNGevity Foundation in 2008. After being awarded this grant, Dr. Goodglick, Dr. Pietras and their colleagues found that the estrogen pathway is indeed critical for lung cancer proliferation. The team’s exciting studies also showed that blocking the estrogen pathway could inhibit growth and even kill lung cancer cells in laboratory cultures and in mice. Even more remarkably, by giving the mice a combination of treatments that blocked the estrogen pathway and damaged the tumor cells’ DNA, they were able to completely wipe out the lung cancer.

Eager to use these findings to help lung cancer patients, researchers began a two-year clinical trial in early 2013 to refine their approach and to determine the optimal dosages for patients. This trial aimed to enroll approximately 20 women (over the age of 60) who have been diagnosed with non-small cell lung cancer.

“Going from laboratory bench to hospital bedside is absolutely fantastic. It’s huge.” says Dr. Goodglick. “It’s the most exciting thing in the world. It’s what we, as researchers, live for.”

This vein of research is particularly promising because it uses treatments that have already been approved by the Federal Drug Administration (FDA) for treating other types of cancer. When a drug is already approved for one use, it speeds up the timeline for getting it approved to treat other diseases.

“We still have to prove that the combination of drugs is safe,” notes Dr. Goodglick. “But it is very likely it will be.”

“Funding is tight these days,” says Dr. Goodglick. “And LUNGevity added a boost to our research and was part of the team that helped propel us forward.”

www.LUNGevity.org
LUNGevity has launched a regional HOPE Summit program that takes the strengths of our national HOPE Summits—educational sessions, inspirational speakers, panel discussions, and informal activities that lead to lasting connections—to people living with lung cancer in local communities across the country.

“Regional HOPE Summits bring the same level of information, educational sessions and support for people impacted by lung cancer into the local community as at the national meeting,” says Katie Brown, LUNGevity’s Director of Advocacy and Support. “Many times there are no in-person support resources specifically for people with lung cancer or, if there are, patients simply don’t know about them.”

Through our regional summits, LUNGevity acts as a bridge between the patient and their families and local experts and resources. These summits also create a local community of survivors who can offer each other peer-to-peer support.

LUNGevity’s first two regional Summits were held in Columbus, OH, and Dallas, TX, and the next one is scheduled for Seattle, WA, in August 2014.

“I got so much from this conference and from the people I met...I’m looking forward to attending the next conference that’s close by.”
Benita (Dallas)

“We had a great day meeting survivors from around Ohio and surrounding states. Excellent presentations, personal stories, a few tears, comfortable location, good food...what more can I say?”
Allan (Columbus)

“The Summit was incredible. Thank you for bringing it to Dallas and making us feel important.”
Gail (Dallas)

For more information about regional Summits, contact us at HOPE@LUNGevity.org or 817-501-9313.
John Heymach and Julie Brahmer Join LUNGevity Scientific Advisory Board

LUNGevity has made two key additions to its Scientific Advisory Board. Drs. Julie Brahmer and John Heymach, world leaders in lung cancer research and treatment, bring their depth of expertise to LUNGevity.

Julie R. Brahmer, MD, is a global thought leader in the emerging field of immunotherapy. Julie is Associate Professor of Oncology at The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins. Dr. Brahmer’s research and clinical practice focus on the development of new therapies, including immunotherapies, for the treatment and prevention of lung cancer and mesothelioma. She was involved in the phase 1 trial of the PD-1 blocking antibody, nivolumab. Dr. Brahmer is a member of the American Society of Clinical Oncology and the Eastern Cooperative Oncology Group (ECOG) Thoracic Committee and Cancer Prevention Steering Committee.

John V. Heymach, MD, PhD, brings expertise in the field of targeted therapies and small cell lung cancer. John is Professor and Chairman, Department of Thoracic/Head and Neck Medical Oncology at The University of Texas MD Anderson Cancer Center. Dr. Heymach’s research focuses on investigating mechanisms of therapeutic resistance, understanding the regulation of angiogenesis in lung cancer and developing biomarkers for selecting patients most likely to benefit from targeted agents. Dr. Heymach has led a number of Phase I/II clinical trials in NSCLC and currently serves as the principal investigator on the BATTLE-frontline trial using novel combinations of targeted agents as frontline therapy for NSCLC patients. Dr. Heymach also serves as a co-leader of the MD Anderson Lung Cancer Moon Shot Project.

LUNGevity Welcomes New Board Member Alan Hilburg

LUNGevity announces the addition of Alan Hilburg, President and CEO of Hilburg and Associates, to our distinguished Board of Directors. Alan is a strategic communications and branding counselor known internationally for assisting senior executive teams and boards of directors in values-based decision making.

Alan has been described by the London Times as a “leading corporate brand architect.” His substantial branding credentials include leading the creative team in developing GE’s “Bringing Good Things to Life” branding initiative, Wendy’s “Where’s the Beef” campaign, AT&T’s “Olympic Torch Run” campaign, and work in the financial services, insurance, consumer products, transportation, energy, technology, and healthcare sectors. Alan and his teams have navigated numerous award-winning campaigns for global brands such as National Geographic, Coca-Cola, Gillette, Four Season Hotels, American Airlines, and JPMorgan Chase.

Alan has co-authored two New York Times bestsellers on leadership, Russell Rules . . . Eleven Lessons on Leadership from the Greatest Winner of the Twentieth Century and Twelve Hats of a Corporate President. He is currently writing a book for Penguin Putnam on the relationship between organizational transitions, decision making, communications, and institutional branding. Alan also teaches a course in the University of California’s executive MBA curriculum, and is the recipient of many awards, including five Public Relations Society of America Silver Anvils and three Cios.

LUNGevity Heroes continued from page 1

LUNGevity Heroes can be either individuals or organizations. They range from survivors and caregivers who inspire with their powerful stories of survival or support to members of the media who focus public attention on the need for more research to scientists and scientific organizations that seek innovative early detection methods and more effective treatments.

We look forward to recognizing many more Heroes, including our November Lung Cancer Awareness Month Hero, who will be nominated by you.
First New York City Celebration of Hope Gala a Huge Success

New York City, with its many thought leaders, innovators and passionate supporters, came out in full force to help LUNGevity achieve our vision of a world where no one dies of lung cancer. This past October, more than 350 philanthropists, business leaders, Scientific Advisory Board members, and lung cancer survivors joined us at our first New York City Celebration of Hope Gala, held at the Pierre Hotel in New York City. The inspirational evening exceeded expectations and raised over $800,000 for lung cancer research.

The Gala Chair, Board Member Alexander F. Stern, and Honorary Chair Vernon E. Jordan, Jr., together with Vice Chairs Marlene Hess and Sheila Labrecque provided the leadership and energy for this event. Guests included David and Kelly Gerstenhaber, Jim Neuberger and Helen Stambler Neuberger, and Vice Chairman of JPMorgan Chase, Alphonso Jackson.

NBC 4 New York Anchor and Reporter David Ushery emceed the hope-filled evening, where scientific advances researchers have made in the fight against lung cancer were spotlighted. Matt Ellefson and other lung cancer survivors who have benefited from XALKORI®, Pfizer’s ALK inhibitor drug, presented the 2013 Hope Award for Corporate Leadership to Pfizer Inc. They thanked President and General Manager of Specialty Care and Oncology Geno Germano for Pfizer’s commitment to creating and supporting the type of innovation and discovery that saves lives as well as to providing high-quality education and patient assistance programs such as Lung Cancer Profiles, which raises awareness about the role of molecular testing in lung cancer.

Planning is already under way for the 2014 New York City Celebration of Hope Gala, to be held on October 15. For more information, to purchase tickets or to become a sponsor for this important event, please contact Susan Sugarman at SSugarman@LUNGevity.org or 240-454-3101.
Making Lemons into Lemonade

One of the many ways in which our supporters make concrete their passion for a time when no one dies of lung cancer is by contributing the proceeds from their own events to LUNGevity. These supporters are very creative; they hold golf outings, fashion shows, motorcycle rides, sports nights out, jewelry sales, and more. These supporters independently raise money, inspired by a very personal connection to lung cancer, and entrust LUNGevity to apply it in the most effective way possible.

Among these supporters is the Bauer family. For several years, sales from the Bauer/Powers Lemonade Stand in Shaker Heights, Ohio, have benefited LUNGevity Foundation. Harriet Bauer and her two young children, Greta and Owen, opened a little after-school one-day-a-week lemonade, hot cocoa, and sweet treats stand in front of their house. When they lost Harriet’s mother, Lois Karp, to lung cancer, the purpose of the stand changed from learning about how to run a business to supporting lung cancer research. The sign in front of their stand explains to customers and passersby that “proceeds are donated to lung cancer research,” so that their customers, largely students from nearby schools, walk away with not just a treat but with an awareness that they have contributed to an important cause.

Walk, run, golf, and celebrate with us this year as we build communities of engagement across the country. LUNGevity’s 2014 events are under way from coast to coast! For information about events near you, visit www.LUNGevity.org/events.
## JOIN US AT THESE LUNGevity SPRING AND SUMMER EVENTS

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 19</td>
<td>Breathe Deep Blue Ridge</td>
<td>Blue Ridge, GA</td>
</tr>
<tr>
<td>April 26</td>
<td>Breathe Deep Columbia</td>
<td>Columbia, MD</td>
</tr>
<tr>
<td>April 27</td>
<td>Breathe Deep North Shore</td>
<td>Deerfield, IL</td>
</tr>
<tr>
<td>May 2-4</td>
<td>2014 LUNGevity HOPE Summit</td>
<td>Washington, DC</td>
</tr>
<tr>
<td>May 3</td>
<td>Breathe Deep Michigan</td>
<td>Birmingham, MI</td>
</tr>
<tr>
<td>May 10</td>
<td>Breathe Deep Kankakee</td>
<td>Kankakee, IL</td>
</tr>
<tr>
<td>May 10</td>
<td>Breathe Deep Newark</td>
<td>Newark, OH</td>
</tr>
<tr>
<td>May 12</td>
<td>Breathe Deep Cary Golf Classic</td>
<td>Cary, NC</td>
</tr>
<tr>
<td>May 12</td>
<td>Breathe Deep DC Golf Classic</td>
<td>Arlington, VA</td>
</tr>
<tr>
<td>June 1</td>
<td>Breathe Deep Bay Area</td>
<td>San Jose, CA</td>
</tr>
<tr>
<td>June 7</td>
<td>Breathe Deep NE Pennsylvania</td>
<td>Kingston, PA</td>
</tr>
<tr>
<td>June 21</td>
<td>Breathe Deep Des Moines</td>
<td>West Des Moines, IA</td>
</tr>
<tr>
<td>August 9</td>
<td>Breathe Deep Seattle</td>
<td>Seattle, WA</td>
</tr>
<tr>
<td>August 11</td>
<td>Breathe Deep Chicago Golf Outing</td>
<td>Long Grove, IL</td>
</tr>
</tbody>
</table>

For more information on these and other events, visit [www.LUNGevity.org/events](http://www.LUNGevity.org/events)