University of Colorado Foundation

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University of Colorado Cancer Center

Director's Overview

Appreciating the Little Things

D. Ross Camidge, MD, PhD

Welcome to another annual newsletter from the Lung Cancer Colorado Fund (LCCF) – the fund that supports the University of Colorado and the University of Colorado Hospital's combined fight against thoracic cancers. We've been going since 2011 and the concept of appreciating the little things seems appropriate to mention this year.

Firstly, from a fund raising point of view, we know you can contribute your hard-earned dollars to big national or international causes. Instead, we hope through the 'boutique beauty' of the LCCF you get much more of a chance to see where your money is going and to really feel like you are part of the solution. The University of Colorado's Thoracic Oncology Program (that's what we call the group of us here who diagnose, treat, and conduct research into lung cancer, thymic cancer and mesothelioma) is small but very powerful.

Karlene Vandam with Dr Doebele and her granddaughter, Kinsey, who designed and sold T-shirts to benefit the LCCF

In this newsletter you will see how our patients, care-givers, scientists and physicians are all making a difference - standing up to be counted. You will see stories of new research directions we have taken and projects the LCCF are helping to fund. You will see stories of people generating support for us to help change the world in different ways, from Kinsey who made T-shirts to support her Grandmommy fighting lung cancer, to Gary who created a memorial fund for his wife, to Ben and Ellen learning how to include the LCCF in their Estate plans. After only a few years, as we approach half a million in donations, even modest gifts, when we all work together, have helped us to shift the needle on a large scale.

Secondly, with regard to the little things, in this newsletter you will see multiple examples proving that in research, as in so many things, details matter. The best breakthroughs often come when physicians and scientists work together to see and then address the elephant-sized problems hiding right in front of us in the room. The elephant might be an elephant, but the signs indicating it is there may be very tiny. Like how the fact that we aren't killing 100% of the lung cancer cells that are sensitive to a targeted therapy suggests that a microscopic 'resistance nursery' state must exist that we will have to go after if we are ever going to cure this disease.

Finally, at the end of the day, even after a cancer diagnosis, life is about living, not necessarily living large, just living, taking time to smell the flowers and enjoying the awesomeness of everyday.

In line with this I am thrilled to be able to continue the Colorado C-stories section showing pictures of all the fun things (including several 5 year or more "cancer-versary" celebrations) that you have all been up to. So, please keep these coming. As you will see from some of the patient stories in this newsletter; even if sometimes you don't feel like you are anything special, just know that you can still provide hope just by showing others that someone who has gone before is still doing well, that while the future is uncertain, anything is possible.

No plans but life itself

Taylor Abarca

After a successful clinical trial for his small cell lung cancer, Jerry Williams has come to terms with others seeing him as an inspiration

Jerry Williams has no big plans for his future. And he likes it that way. He's already accomplished more than most people will in two lifetimes. Now, after 66 years, Jerry prefers to sit back, enjoy his family, and take time to read the newspaper.

Jerry, father of four, grandfather of 12, and great-grandfather of eight, served stateside in the United States Marine Corps and then enlisted in the Navy. In four years he traveled around the world three times on the aircraft carrier USS Ranger. During his time in the Navy, Jerry met his beautiful wife, Veronica, and they are celebrating forty years of marriage this year. After leaving the Navy, Jerry worked for the Department of Defense for nearly 31 years before retiring in 2010. It was a few years into retirement when Jerry's health suddenly started declining.

Jerry Willliams is thankful to be a candidate for a cancer clinical trial.

Something isn't right

Jerry had been active all of his life. In high school he played basketball, football, and ran track and was accepted to the University of Colorado on a football scholarship. So, in May of 2015 when he could not shake a persistent, dry cough and lost nearly forty pounds in four months, Jerry knew something was not right.
"It would not go away, no matter what I did," he says. "The doctor prescribed me some cough syrup but it didn't do anything so a few weeks later I went in for an x-ray."

The x-ray showed something no one wants to see - three large tumors located in his left lung. A biopsy revealed that he had small cell lung cancer. Later, additional scans showed that the cancer had spread to the lining of his right lung, making it inoperable. "It was a big shock. A life-changing shock. No one ever expects to hear they have stage four lung cancer," Jerry says. "But I did not have time to feel bad for myself. I had to get to work on beating it."

Jerry and his primary care doctor started creating a treatment plan for him. Although he tried to remain positive, Jerry was very aware of his situation.
"I like to hear the bad news before the good and my doctor was very honest with me," he says. "I was prepared for the worst, I gave my wife all of the passwords and showed her how to pay our bills online. I wanted to make sure she was ready. It was pretty traumatic."

An aggressive cancer

Small cell lung cancer (SCLC) makes up ten to 15 percent of all lung cancers. Even among other types of lung cancer, SCLC is infamous for its rapid growth and aggressive spread. At the time of diagnosis SCLC has often metastasized to other sites in the body and is typically treated with chemotherapy as the first line of defense. Standard treatments almost certainly will not cure stage IV SCLC and national survival rates are short.

"Unfortunately small cell lung cancer is a very aggressive form of lung cancer and the standard of care has not been changed for nearly thirty years," explains Ross Camidge, MD, PhD, University of Colorado Cancer Center Investigator and director of thoracic oncology. "We are working to change that."

Standard is not enough

In June of 2015 Jerry started chemotherapy and initially responded well to it. His tumors shrank by nearly 75 percent. However his cancer began to grow again in February of 2016.

"After chemotherapy stopped working my doctor recommended I consider going on a clinical trial," explains Jerry. "He used to work for the Cancer Center and was very familiar with all of the different studies here. He thought I would make a great candidate."

Jerry made an appointment with Dr. Camidge to see if he was a good fit for a cutting-edge trial being offered at the University.

"I felt like participating in the trial was my best option because, quite frankly, I was out of options," says Jerry. "The chemo stopped working, the cancer had come back and there was nothing else anyone could do at that point. I never once hesitated or had a second thought about being a part of the study." With a fighter's mentality Jerry started the clinical trial in April of 2016.

A ground-breaking trial

Jerry was put on a combination of two new drugs, ipilumumab and nivolumab, in hopes that they would boost his immune system and help his body fight off the cancer.

Ipilumumab, commonly known as Yervoy, works to activate the immune system and help Cytotoxic T lymphocytes (T-cells) kill cancer cells. Think about it this way, the T-cells have the ability to destroy cancer cells but their growth is somehow blocked. Yervoy turns off the mechanism that damps down the T-cells and boosts their numbers. Yervoy is commonly used to treat melanoma but, on its own, has had little effect against lung cancers.

That's where the second drug comes in. Nivolumab is a "checkpoint inhibitor", also commonly used against melanoma, that works to block another strategy that cancer uses to escape T-cells. The combination of the two drugs seems to be the key for small cell lung cancer, not just boosting the numbers of T-cells but also making sure they are able to follow through and attack the lung cancer. During his first treatment on the drug combination therapy Jerry recalls looking at the patients around him and feeling incredibly blessed.
"I remember telling myself 'you could have it so much worse, Jerry'," he says. ""There are thousands of people going through this every day, be thankful that I am even a candidate for the trial'."

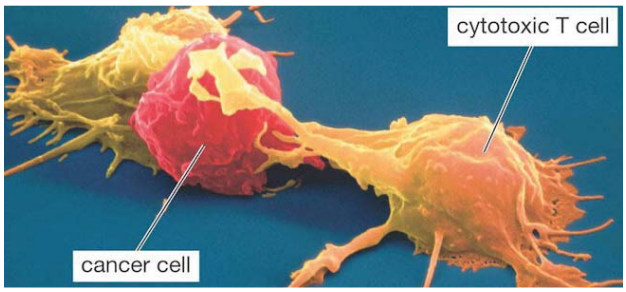
Jerry did have some negative side-effects from the drugs but he never once thought about stopping the trial.

"After my first treatment I felt like I could not stand up, my eyes were extremely itchy, and my skin started flaking off," he explains. "But by the second and third time they were gone and I felt pretty much back to normal."

The response in the tumor on his scans has been dramatic. At the appointment before the interview for this article, Jerry learned that his tumors had shrunken to nearly microscopic size.

"This treatment, which is looking to be one of the first real breakthroughs in this type of lung cancer for many decades, is now showing these sorts of responses in about 20 to 30 percent of people, with side effects, when they occur, mostly coming from the person's own immune system attacking some of the good parts of their body as well," says Camidge. At the point of this interview, Jerry had been on the trial for exactly 25 weeks and he will continue to be on it as long as the combination controls his tumors.

"Unless the cancer progresses or the side effects start outweighing the benefits there is no reason for him to stop," explains Camidge.



Representation of activated immune cells attacking cancer

"Last year I felt like I was on death row," says Jerry. "Now I am able to get up and run around with my great-grandkids. People don't believe me when I tell them I have cancer because I have put my weight back on. It is incredible."

A man with a big heart

Despite the fact that Jerry is going through treatment for stage IV small cell lung cancer, he is

not as concerned with his well-being as he is with the well-being of the people around him.

"Going through cancer and cancer treatment is tough on me, but I feel like it is even harder on my friends and family," he says. "I know that them having to watch me go through this is very upsetting, especially for the little ones."

Luckily for Jerry he never once had to worry about a lack of support. As the third oldest of 12 siblings, he always had someone to take care of him, drive him to treatments, and go to all of his appointments.

"We are a family of preachers and nurses," Jerry says. "We believe in the power of prayer in combination with science. I feel like I am living proof of that."

Although many people going through a cancer diagnosis often plan a "bucket list" of sorts, Jerry sees things differently. He has no desire to travel the world, go skydiving, or climb a famous mountain.

"I have lived my life exactly how I wanted to," he says. "If I were to die tomorrow I would have no regrets. I am focusing on my time with the people I love."

Jerry also sees the bigger picture when it comes to the importance of participating in a clinical trial. Unfortunately people of color are underrepresented in clinical trials, making it harder to discover which treatments work best in these populations. Jerry wants to help change that.

"When I started the study I always said it would be great if it helped me but it would be better to help other people," he says. "If something they learned from me could help another person that is all I could ask for. The fact that I am still here today is just an added bonus."

Colorado C-stories: *Images of life after a cancer diagnosis.*

Receiving the news of any cancer diagnosis can be devastating. Patients may feel like their lives are coming to an end, that they will not be able accomplish many goals they had. Yet time and again the human spirit (with a little advanced medical care) prevails and people remember to be the people they were before they became patients – not just living with a cancer diagnosis, but thriving. At CU, we see patients from all over the country and the world. Here are a selection of the CU's finest showing that life remains about living, even, or perhaps especially, after a cancer diagnosis. Send your pictures and a line or two to ross.camidge@ucdenver.edu and each newsletter going forward we'll aim to show others what 'hope' really looks like.

Look for more images scattered throughout this newsletter.

Lisa Moran (right) 'Runs the Rocks' for lung cancer awareness

LCCF Supported SPORE Pilot Project 2016

As in each year since its creation, the LCCF continues to fund research directly at the CU Cancer Center. In 2016, funds were again given to the scientific committee of the CU Specialized Program of Research Excellence (SPORE) in Lung Cancer, which helps to organize cross-disciplinary research at the Cancer Center to support a pilot project. In 2016, Dr Caroline McCoach's project "Early Rebiopsy to Identify Mechanisms and Biomarkers of Tumor Cell Survival Following Targeted Therapy", was selected as this year's beneficiary of the LCCF pilot grant, which she describes on the next page.

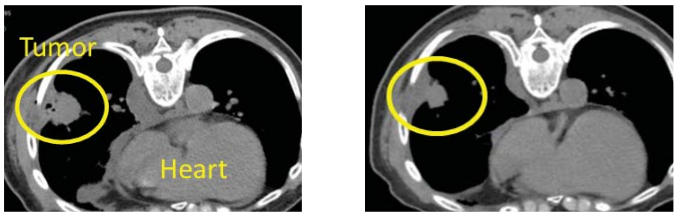
For information on previously supported projects please review past newsletters on line at:
http://uch.thankyou4caring.org/lungcancercolorado

Studying the 0.1%

Caroline McCoach, MD PhD

Why we are controlling but not yet curing advanced lung cancer

In non-small cell lung cancer there have been significant advances in treatment for patients with mutations in targetable genes such as the EGFR (epidermal growth factor receptor) gene. By targeting this gene with drugs such as erlotinib, gefitinib or afatinib many patients experience reduction in disease for a prolonged period of time without the significant side effects of chemotherapy. However, cancer cells are constantly mutating and, similar to how bacteria become resistant to antibiotics, lung cancer cells can, eventually, become resistant to these drugs. A lot of work has been done thus far to overcome this resistance to therapy once it has developed and, for example, one success is the licensing of the newest EGFR targeted drug, osimertinib, in patients who have been found to have developed a specific secondary resistance mutation (T790M) after treatment with drugs like erlotinib.



Baseline (left) and on-treatment (right) CT-guided biopsy images of left-sided EGFR mutant lung cancer shrinking down after 14 days on erlotinib

However, we have proposed a different, complimentary strategy, to just analyzing and attacking resistance once it has developed. Instead, as drug sensitive cells are not completely killed off, but, instead, might act as the survival reservoir from which these later hard-wired resistance forms emerge, we are proposing studying this very early resistance mechanism in cancer cells. For example, when tumors with specific mutations are treated with targeted therapies a small population of cells, the so-called 0.1%, are able to survive the treatment and these residual cells then form the nursery from which later resistance mechanisms like T790M can be generated. Work done in the research laboratories at the University of Colorado has demonstrated the presence of rapid onset, early survival pathways in cancer cells growing in the lab. The goal of my project is to identify these pathways in patients' tumors on therapy to ultimately be able to target and prevent them from being activated.

The project that the LCCF has funded proposes to do this by enrolling patients who have just been diagnosed with advanced EGFR mutation positive lung cancer. In this study, patients will have 2 research biopsies. The first biopsy of their tumor is done prior to starting therapy with an EGFR inhibitor, such as erlotinib and the second biopsy is done about 2 weeks after therapy has begun. After the second research biopsy, patients continue to receive the same standard of care treatment they normally would. The biopsy tissue will be analyzed by several methods to look at protein and gene expression to identify cell survival pathways activated following the EGFR therapy. So far we have enrolled four patients in this trial. We ultimately hope to obtain 20 paired biopsies from patients to be able to determine if there are common survival pathways being activated early in treatment with targeted therapies that allow cancer cells to survive. Ultimately, if we are able to target these key pathways with drugs we hope we can decrease the number of cancer cells that survive and prevent or delay resistance to targeted therapy.

Caroline McCoach, MD, PhD

Saved by the screen

Tyler Smith

A CT scan at University of Colorado Hospital revealed a cancerous nodule in Donna Vogelsong's left lung. She couldn't be more grateful.

Last fall, Donna Vogelsong was diagnosed with lung cancer. She couldn't be more grateful.
Vogelsong, 63, of Aurora, knows all too well the price of the disease. Advanced lung cancer claimed her older brother's life, just before the surgery that has extended hers. She has the chance her brother will never have in large part because a CT screen caught her cancer early.

"Early screening saved my life," Vogelsong said.

Donna Vogelsong thought a CT scan of her lung was no big deal. As it turned out, it was.

She received the screening through the Lung Cancer Screening Clinic at University of Colorado Hospital, which launched in November 2014 after the Centers for Medicare and Medicaid Services approved low-dose CT scans for patients who meet specific criteria. The screen revealed small spots in the lower lobes of each of Vogelsong's lungs.

In April, University of Colorado Hospital cardiothoracic surgeon Michael Weyant, MD, removed the lower lobe of Vogelsong's left lung, where a roughly 2-centimeter adenocarcinoma had nestled. She'll get regular scans to monitor the nodule that remains in the right lung, said Derek Linderman, MD, co-director of the Nodule Clinic at UCH.She urged others who qualify to get the scan. "Lives are at stake. Lung cancer is a silent killer."

Screen savers

Vogelsong is one of about 300 patients screened since the program began, said Stephen Malkoski, MD, PhD, who co-directs the Nodule Clinic with Linderman. The original U.S. Preventive Services Task Force study that supported the effectiveness of lung cancer screenings showed that it took about 300 CT scans to save the life of one lung cancer patient. The program at UCH is doing far better: Vogelsong is one of four diagnosed with lung cancer; a fifth had metastatic renal cancer, Malkoski said.

Stephen Malkoski, MD, PhD, says about 300 low-dose CT scans at the Lung Cancer Screening Clinic have detected five cancers.

One reason for the success rate is that Linderman and Malkoski assess the lung cancer risk of patients who meet the criteria for a screening. Instead of screening everyone who qualifies, they calculate the six-year risk of lung cancer, based on smoking history, family history, body mass index, and other factors.

Derek Linderman, MD, who co-directs UCH's Nodule Clinic with Malkoski, performed a bronchoscopic lung biopsy on Donna Vogelsong.

"We're trying to capture those at highest risk for the screenings," Linderman said.

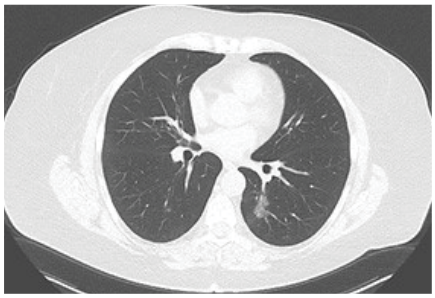
Vogelsong's experience shows that very often good medical care is the product of collective effort rather than individual heroism. The tiny spots on her lungs could easily have escaped detection. She had received a scan in 2012 after complaining of shortness of breath, Linderman said, but it wasn't clear what the small hazy smudge in the left lung was. The image remained in her medical record, however, and was ultimately to prove vital to her

diagnosis.

In 2015, Vogelsong had a colonoscopy as part of her routine preventive care. She followed up with her primary care provider, Kandace Shepherd, PA, who saw that Vogelsong's smoking history – she smoked for more than 30 years before quitting in 2002 – and other factors triggered a "best practice advisory" in UCHealth's Epic electronic health record recommending that she get the CT screen. "I said, 'Sure, no big deal,'" Vogelsong recalled.

Detective work

It turned out to be a very big deal after the screening in late September. She met with Linderman, who showed her the CT scan, which revealed nodules in both lungs. He recommended waiting three months, then repeating the scans to determine if there were any changes. A second scan in December showed that the nodule in the left lung had grown.



The hazy gray area near the bottom of the right side of this CT image was the cancerous nodule in Donna Vogelsong's left lung.

But like the still-hazy CT images of her lungs, Vogelsong's diagnosis was far from sharply etched. She went through two separate biopsies of the left lung, one by an interventional radiologist, another through a bronchoscopy performed by Linderman. Both came back negative. Still, the UCH team recommended surgery to remove the lower lobe and carefully explained why.

Linderman noted that a comparison of the 2012 and 2015 scans also showed the spot in the left lung had changed. He added that, while it's very difficult to get a bronchoscopy sample definitively proving malignancy, the evidence pointed to cancer.
"They were so confident and understanding and answered every question I had," Vogelsong said. She had also done her own research, using the Patient Resource Center at UCH to help her make the decision to have the surgery. Because the cancers lay deep in the tissue of the lung, Weyant explained that he would need to remove the entire lower lobe, not a section, of the lung.

"I felt very confident that I was getting the right treatment," Vogelsong said.

Second chance

She scheduled the surgery for April, but any anxiety she felt was overcome by the trauma of her brother's illness. A heavy smoker – he smoked about three packs of cigarettes a day for decades - he was diagnosed with lung cancer in January 2016 and given only a couple of months to live unless he received treatment, she said. He went through a round of chemotherapy but died just days before Vogelsong's scheduled surgery. On the day of his funeral, Weyant removed the lower lobe of her left lung.

She feels confident her brother would have approved of her decision to go forward with the surgery and take advantage of the second chance given to her by the lung cancer screening and her decision to quit smoking more than a decade ago.
"I am now at peace with whatever happens," she said. "I wanted to have the opportunity to see my grandchildren graduate from school and college. It's an opportunity my brother missed."

Donna Vogelsong wants more people to have that opportunity. She encourages others who qualify to get the screening. "It doesn't hurt," she said. "It takes five minutes."

The time Vogelsong invested in the screening paid for what promised to be many bright days ahead. She's grateful to her providers at UCH and many others. In mid-July she traveled to Southern California on a 10-day trip that included thanking members of her sister's church who had prayed for her during her ordeal. She is slowly rebuilding her stamina and plans to steadily increase her walking and exercising.

"I have a new lease on life," she said. "I feel complete and happy. When you find out you have cancer, it changes your life forever. I am finding new joy in every part of my life and want to bring joy to other people. I want to be with my grandchildren to see the world. I want to start living again."

Expanding the Net?

Stephen Malkoski, MD, PhD

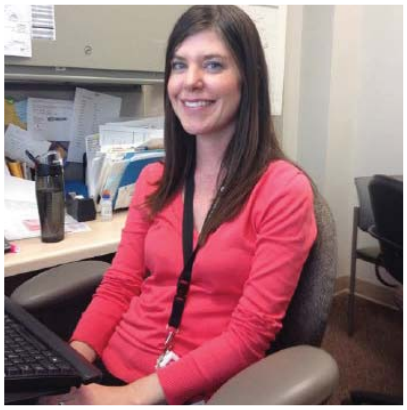
This year the LCCF is helping the UCH Nodule Clinic explore whether others could also benefit from Lung Cancer Screening

Lung cancer screening with annual low dose CT scan can reduce the risk of lung cancer death in high risk current and former smokers by detecting early lung cancer while it is still asymptomatic and potentially curable by surgical resection.

Lung cancer screening has been recommended by the US Preventative Services Task Force (USPSTF) for current or former smokers between the ages of 55 and 80 who have smoked a pack of cigarettes per day for at least 30 years and are still smoking or have quit within the last 15 years. The original trial that got everyone excited about screening was the National Lung Screening Trial (NLST) which enrolled people up to age 74, but because they then did three consecutive annual CT scans in the trial some people were getting their last scan at aged 77. Based on modelling the data, the USPSTF extended the eligibility age to 80 but even with this extension, unfortunately, fewer than half of lung cancers are currently diagnosed in patients who meet these criteria.

In the last several years, even more sophisticated models have been developed that integrate multiple lung cancer risk factors to predict an individual's lung cancer risk. Both patients and providers can use these calculators like the one at www.shouldiscreen.com to calculate lung cancer risk. We are now using these risk prediction tools to offer lung cancer screening to patients at high risk for lung cancer who fall outside of the USPSTF criteria.

This project is currently being supported by the University of Colorado Hospital (UCH) and we are grateful for the additional support from the Lung Cancer Colorado Fund. The project is being managed through the UCH Lung Cancer Screening (LCS) Clinic and has a dedicated part time project coordinator (Erin Hirsch, BS) who works closely with our LCS Nurse Navigator (Stephanie Brown, RN) to identify, enroll, and track eligible patients. Our goal is to eventually offer lung cancer screening to all patients at high lung cancer risk throughout the UCH system. Patients interested in lung cancer screening can contact us at 720-848-6495 or www.uchealth.org/lungscreening for an appointment to discuss their lung cancer risk and the potential benefits of screening.



Stephanie Brown, RN. Lung Cancer Screening Nurse Navigator

The CU Cancer Center's Lung Cancer Program

The world renowned Multidisciplinary Lung Cancer Program of the CU Cancer Center is located at the University of Colorado Hospital in metro Denver, part of the UCHealth network of hospitals in Colorado:

https://www.uchealth.org/Pages/OHAM/OrgUnitDetails.aspx?OrganizationalUnitId=381

In addition to in-person visits, the CU Cancer Center's Remote Second Opinion program helps patients get an expert second opinion from our cancer specialists, without the inconvenience and cost of travel:

https://www.uchealth.org/Pages/Services/Cancer-Care/Remote-Second-Opinions.aspx

Philanthropy in Action:
Lynne Montrose's Thymic Cancer Legacy

Gary Montrose

At the Van Gough exhibit at the Denver Art Museum in December 2012, my beloved wife of 33 years, Lynne Montrose, sat down to rest more than usual. She had noticed a stich in her side. The next business day, she went to her chiropractor, who sent her to her primary care provider. They ordered a scan. Later that evening, her PCP, called to tell us she had a metastasized cancer of an "unknown primary." After multiple second opinions, months later we learned what kind of cancer she had. - Thymic Carcinoma – a rare cancer which falls under the thoracic umbrella, with few if any long term treatment options.

We felt lost in the overwhelming world of cancer until we found Dr. Ross Camidge and his team at the University of Colorado Anschutz Medical Campus. Dr. Camidge was among the 17 different oncology consultations we had pursued across the country, including many different well-known Centers of Excellence.

My wife was hesitant to even consider switching over to the University because she had heard tales of 'poor customer service' from one particular person beforehand. People always have opinions and I cannot comment on what others have experienced, but for us it turned out to have been the best decision we could have made. Apart from the fact that Dr. Camidge was one of only two initial experts who immediately made the diagnosis of thymic cancer, his team was amazing. Lynne received world-class care, in the midst of world-class humor and attention to every imaginable detail to her comfort and care.

Nurses Dana Gregory, Stephanie Bender-Przbylski NP Candice Rossi, medical Fellows Dr. Sinead Noonan and Dr. Vignesh Narayanan, and our scheduler Bethie Jean-Philippe were all shinning beacons of kindness and hope. They rapidly became family to us.

My wife, the longtime Director of Experiential Education at Regis University, enjoyed asking all students and Fellows who shadowed or rotated with Dr. Camidge about their career aspirations. As they felt the metastasis in her liver, the students would tell her their personal stories, as no one could escape Lynne's charm and concern for others. We came to look forward to these appointments, as much as one can ever look forward to being reminded about one's cancer, as we got to catch up with our new extended family. The team showered us with attention and love at every visit, and on more than one occasion, Lynne would bring Dr. Camidge & Team English tea and scones, as a treat for our English-born doctor.

My wife lived almost three years longer than expected, and that is because of Dr. Camidge's unrelenting investigative mind, and a fastidious willingness to hear what treatment options Lynne was willing and able to pursue, including seeking treatment opinions at other academic medical centers, or opting out of prolonged treatment all together. Despite a thousand questions at each visit, the team didn't leave the room until we were satisfied with answers. When things were bad and we were running out of options, Dr. Camidge never faltered from telling us the truth. He was our trusted guide through our journey into uncharted waters of medical science; and a constant source of compassion to Lynne, myself and our adult children Shana and Max.

In the weeks following her memorial service, we received many donations to support Lynne's chosen beneficiary - the University of Colorado Cancer Center's Thoracic Oncology Program. As a family we decided to dedicate this money to help others struggling with the expense of cancer care, as was Lynne's wish.

Lynn Montrose

Whether coaching young medical students or funding another person's treatment, it was in the fabric of Lynne's character to consider other people's needs before herself.

May her grace, humor and giving spirit be her legacy.

A Breath Away from the Cure

Erika Matich

The University of Colorado Cancer Center's director of thoracic oncology has now joined a short list of lung cancer experts honored with the "A Breath Away from the Cure" Award. The award, presented by the Lung Cancer Foundation, acknowledges individuals for excellence in oncology, coordinated treatment, care and compassion for those with lung cancer.

Ross Camidge, MD, PhD, along with lung cancer survivors Jim Brown and Lisa Goldman at the "Simply the Best" Gala in San Francisco, photo taken November 12. 2016

Ross Camidge, MD PhD, CU Cancer Center investigator and the Joyce Zeff Chair in Lung Cancer Research, received the award in San Francisco at the 11th annual "Simply the Best" Dinner and Gala in November 2016. "Our whole clinical and research team in Colorado are committed to living up the title of this award; to work tirelessly to move us closer and closer to curing this disease," said Camidge. "In the month of November, when many men grow beards and moustaches to support men's cancers, it's important that lung cancer is included in that list of cancers since lung cancer kills more men than prostate and testicular cancer combined."

The Addario Lung Cancer Foundation is one of the largest and most prominent lung cancer advocacy organizations and in addition to supporting patients and caregivers with lung cancer, acts to drive increased public awareness of the disease and fund research.

"We have been working with Dr. Camidge almost since our inception in 2006. He is simply 'One of the Best' in treating lung cancer today, " said Bonnie Addario, lung cancer survivor and CEO of the Foundation. " Couple that with his research and the fact that he is always putting his patients first and he is one of the best in the lung cancer field today. We are honored to work with him in and out of the clinic to bring the very best in care and research to patients."

Watch the Gala Video here:

https://vimeopro.com/lungcancerfoundation/gala/video/191728298

The new UCHealth Highlands Ranch Hospital

A new medical campus, with comprehensive outpatient services, is set to be built at Highlands Ranch near Lucent Boulevard and C-470. The new UCHealth Highlands Ranch Hospital is designed to provide the very best care, close to home, for patients in this growing area of the Denver Metro region. The hospital is part of a comprehensive plan to develop a clinically integrated network and to provide a broader geographic footprint for population health. It will also eventually enable patients to receive clinical trials and advanced treatments without always traveling to the Anschutz Medical Campus.

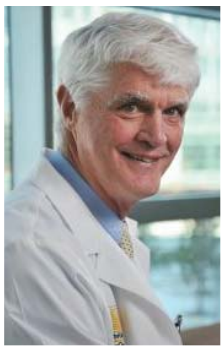
Artist rendering of UCHealth Highlands Ranch Hospital

Expected to open in 2018, the six-story hospital will provide 72 inpatient beds, an ICU, operating rooms, advanced cardiac services, an emergency department, complete imaging capabilities together with both medical and radiation oncology services. Tom Purcell, MD MBA will be the Chief Medical Officer and Mark Hancock, MD will be the Medical Director of Cancer Services at the new hospital, each of whom will while maintain their ties to the lung team at the main Anschutz campus.

CU Cancer Center's Paul Bunn, Jr., MD, FASCO, earns ASCO David A. Karnofsky Memorial Award

Garth Sundem

Paul Bunn, Jr., MD, FASCO, distinguished professor at the University of Colorado Cancer Center and James Dudley Professor of Lung Cancer Research at the University of Colorado School of Medicine was named the 2016 David A. Karnofsky Memorial Award and Lecture recipient, a prestigious award presented at the American Society of Clinical Oncology's (ASCO) Annual Meeting. Dr. Bunn's distinguished career in lung cancer research includes more than 320 peer-reviewed articles, 200 reviews and 90 book chapters. Dr. Bunn served as ASCO President from 2002 to 2003, as president and CEO of the International Association for the Study of Lung Cancer, chairman of the FDA Oncology Drug Advisory Committee, and is the founding director of the CU Cancer Center.



Paul Bunn, Jr., MD, FASCO

"I view this award as an honor but also as an indication of progress in the field of lung cancer," Bunn says. "In the last decade, molecular therapies and immunotherapies have improved outcomes for lung cancer patients considerably. New screening protocols and methods have reduced mortality. And getting people to stop smoking has made a huge impact. I view this award as a tribute to those people who made these advances in prevention, early detection, pathology, staging and treatment."

The award is named after David A. Karnofsky, researcher and oncologist at Harvard University and then Memorial Sloan Kettering Cancer Center. Karnofsky was instrumental in the development of the first chemotherapies and then described what became known as the Karnofsky Performance Status Scale, which quantified a patient's ability to withstand chemotherapy and became a standard tool in choosing cancer treatments. Karnofsky died of lung cancer in 1969.

"The reality is that the investment in research has worked. Understanding the biological principles has resulted in treatments that help patients," Bunn says. He states that he is extremely grateful for the many fruitful collaborations with many outstanding CU basic scientists, pathologists, pulmonologists, medical and radiation oncologists, thoracic surgeons, radiologists, statisticians, and bioinformaticians. These collaborations have made CU a leader in the rapid advances in lung cancer worldwide.

More Colorado C Stories Images

Lung Cancer advocate and LCCF friend Chris Draft (5th from left) hanging out with Obama, Biden and others for the Cancer Moonshot in DC.

New Faces: Mark Hancock, MD Medical Oncologist

Tell us about where you grew up and trained?

Hancock: Grew up mostly in Texas, initially the west Texas town of Lubbock, then on a ranch in east Texas, and ultimately in Dallas. I went to Vanderbilt for biomedical engineering, then back to Dallas at Southwestern for medical school, then to MCV in Richmond VA for internship, then back to Southwestern/Parkland for medicine residency and fellowship.

What drew you to the UCHealth System?

Hancock: I had been commuting to Grand Junction for eight years working as medical director for the program at St Mary's Hospital there. I was looking to wrap that up and came upon the opportunity to work with UCHealth to do what I love to do - practice oncology while working to build a program and work with great people.

How did you become interested in treating lung cancer and what will your role be?

Hancock: We had a strong lung cancer program where I trained at Southwestern, led by John Minna and David Carbone. When I left my training and took my first clinical position in Missoula, MT my practice, though general in nature, was anchored around both lung and head and neck cancers. So they have remained at the core of my interest and expertise throughout my career. I'm incredibly fortunate to have landed as part of this great program here. I am around a lot at present, but eventually I will be heading up the Cancer Services at the new Highlands Ranch Hospital. When that happens I will keep a day a week in the lung cancer clinic at the Anschutz Medical Campus, so I will maintain my expertise in lung cancer going forward.

What are your interests/hobbies?

Hancock: I love music, play a lot of guitar, always looking for other musicians. With Cathy and the four daughters (Maddy and Chloe in college and Melanie and Courtney in high school) there always seems to be something going on though it's starting to get quieter. I get out when I can to go skiing, hiking, biking, camping, playing hockey, or bird hunting with our dog, Cadbury.

I have to ask – you only have part of one arm. Can you tell us what happened and how this affects you?

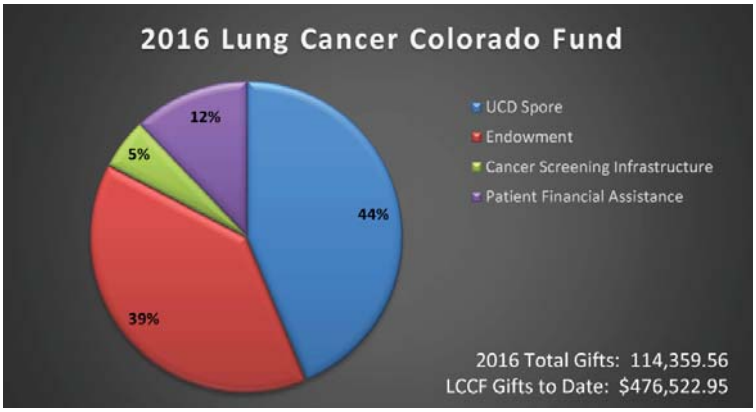
Hancock: Having only one hand can be a real hassle. I can't clap, and spontaneously climbing a tree is difficult. I have different prosthetic attachments for playing hockey, rock climbing, golf and various other activities, but I don't always have them on hand, so to speak. I lost it after year 1 in med school when our sailboat got tangled up in some high power lines. Quite the shock. But really life is good and I don't feel that it's ever been a major impediment. I've been lucky.

Video Links

Pfizer Scientist Bob Abraham Meets Patient Matt Hiznay
https://www.youtube.com/watch?feature=share&v=DgwZMVnCyUM&app=desktop

Patient Power's Lung Cancer Town Meeting for Patients and Care Partners
https://vimeo.com/182704143
https://vimeo.com/182865750

Kim Ringen, Lung Cancer Patient, Speaks at Dinner in White
https://www.youtube.com/watch?v=EjdvDuMpPyA



LCCF Expenditures: Every dollar counts

D. Ross Camidge, MD, PhD

By December 2016, when the LCCF committee met to review the distribution of the funds raised for the LCCF through both the Hospital and University mechanisms that year, the annual amount raised had exceeded $114,000. We gave our usual $10,000 to support patient welfare through our social work department with an additional $3857 (total 13,857) through the Lynn Montrose Memorial Fund (see story by Gary Montrose in this newsletter) and $50,000 to fund pilot grant(s) to be awarded by the CU Lung Cancer Specialized Program in Research Excellence (SPORE) scientific review process. We reviewed proposals for infrastructural improvements and committed to giving $6000 to explore expanding the criteria for CT screening for Lung Cancer (see article by Stephen Malkoski in this newsletter). Finally, we continued to build towards our medium term goal by contributing the remainder (~$44,500) into a growing training fellowship endowment to help support the salary of trainees in any aspect of the program in the future.

Additional Video Links

Surviving With Metastatic Lung Cancer Thanks to Research
https://www.youtube.com/watch?v=USJ7YCECBGc

'Cure' article on Navigating Clinical Trials
http://www.curetoday.com/publications/cure/2016/fall-2016/who-are-cancer-clinical-trials-for-guinea-pigs-test-pilots-or-prize-poodles?p=3

Cancer Cells Turn Body's Immune System to "Dark Side" in Most Common Form of Lung Cancer

Taylor Abarca

A University of Colorado Cancer Center study published in The Journal of Immunology shows that cancer co-opts varieties of immune system 'macrophages' to promote tumor growth in the most common form of lung cancer. "Somehow the cancer is able to make the macrophages that are supposed to be destroying it work in its favor," says Raphael Nemenoff, PhD, investigator at the CU Cancer Center. "Cells in your immune system are being recruited by the cancer cells to help grow and metastasize."
Macrophages are immune system cells that respond to infection by recognizing and destroying target cells. Previous studies show that macrophages play a role in the way cancer tumors grow and metastasize.
"In several types of cancer it has been seen that macrophage depletion results in slower tumor growth," says Nemenoff. "This implies that the cells are important when it comes to tumor progression and may also indicate the clinical outcome of a patient."

The most well-known immune cells are M1 and M2 macrophages. M1 macrophages encourage inflammation and are proposed to inhibit cancer growth. M2 macrophages are proangiogenic, meaning that they encourage the growth of new blood vessels. They are proposed to promote cancer progression. M1/M2 cells are complex and can be divided into distinct, multiple populations that are not well understood, particularly when it comes to their role in cancer.

To see how macrophage varieties affect cancer progression, Nemenoff and colleagues implanted Lewis lung carcinoma (LLC) cells into animal models. Then, once the disease had metastasized, the researchers obtained cancer cells again. The team used RNA-sequencing to profile differences in gene expression between the macrophage populations and determine how they change during tumor progression. Nemenoff and his team discovered four populations of macrophages present in the lung. One of the populations of macrophages, which they designated MacA, are resident in the lung and do not significantly change in the setting of cancer. The other three populations, named MacB1, MacB2, and MacB3 cells, were recruited to the tumor, and appeared to have an effect on tumor growth. Populations of MacB2 and MacB3 cells increased dramatically with growing tumor size. The population of MacB3 cells increased the most with tumor progression. The team also discovered that MacB3 cells might help the tumor attach to other organs in the body. These populations also appear to have different roles in cancer progression, with MacB2 expressing genes that alter the biophysical properties of the tumor, while MacB3 cells express molecules critical for communication between the cancer cells and the surrounding microenvironment.

Raphael Nemenoff, PhD

"This study indicates that certain populations of macrophages generally aid tumor progression, suggesting that selectively blocking their recruitment may represent a therapeutic strategy to inhibit lung cancer progression," Nemenoff says.

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L to R: Todd Jaycox and daughter parasailing for the first time in Cancun, Mexico. Surprise party for Michael Moore for his 45th birthday and 5 year living with lung cancer anniversary. Hazel Senz enjoying the western life in Colorado's high country.

Andy Hill: The personal side of a public hero

D. Ross Camidge, MD, PhD

The public story is well known. Andy Hill, a successful businessman in Seattle who had taken early retirement, develops some chest discomfort during physical activity and in February 2009 is diagnosed with locally advanced non-small lung cancer. After six months of chemotherapy and radiation therapy his cancer spreads to become stage IV, but, around the same time, his Seattle oncologist had sent off ALK testing and Andy was ALK positive. At that point in time the only way of getting access to an ALK inhibitor was in the original phase I trial of PF-02341066, or what would later become known as crizotinib. The nearest site for the trial was in Colorado and, fortunately, Andy's oncologists already knew the Colorado team and Andy had family in Colorado. So in October 2009, Andy turned up in my clinic to begin what would turn out to be a very long and satisfying relationship between the two of us.

If Andy was just a fun guy, who had enjoyed coaching his kids' soccer team and going for runs with Molly, his wife, then his cancer journey, no matter how significant would still have been predominantly a family matter. But that was not to be. Andy did very well on crizotinib and having got what he considered a second chance on life, wanted to give back. Sometime in 2010, he told me that he had discussed with Molly how important it was that his kids saw him going out to work and that, having never been a politician previously, he had been thinking about running for State Senator in Washington State.

As a doctor, you get used to having free-ranging conversations with your patients. Cancer can strip away a lot of the nonsense that just gets in the way of our lives. So we had the following conversation: Would he be alive to complete his term of office if he won? I thought he would. Would he be able to perform his duties? I thought that was also likely. Then I turned things around and asked him questions. What about the rigors of campaigning? Andy felt that the number of doors you knocked on was directly related to your chances of getting elected and he felt good enough to knock on thousands of doors (which he eventually did). What if his opposition brought up his diagnosis – 'Don't vote for this guy, he's a dead man walking' – that sort of thing? I will never forget the way Andy looked me in the eye and said, 'I would love it if he did that.' That's when I realized that, regardless of his successes as a politician, and there were many – Andy won two terms in office, eventually serving as chairman of the Washington Senate Ways and Means Committee - Andy's public role was going to mean something much more to all those affected by lung cancer. He was going to become someone who was, literally, not afraid to stand up in public and, by standing up, say, 'Yes, I have lung cancer. No, I am not dead. I still have things to contribute. Now, let's move on.'

Andy never shied away from his diagnosis. He recognized that being a positive public face for a negative poorly-understood disease was also part of his service commitment. He attended lung cancer fun runs, lung cancer conferences, patient

Andy Hill (far right) at the World Lung Cancer Conference in Denver 2015 with patients Janet Freeman-Daily, Kim Ringen and Dr Ross Camidge

educational events - anything he was asked to do. He also did amazing work behind the scenes, the kind of work that will mostly go unrecognized. One time in clinic, I was looking after a young man with lung cancer, who, despite doing well on therapy, was suffering a crisis of confidence. He had been thinking about proposing to his girlfriend, but, with a diagnosis of stage IV lung cancer, he had instead been thinking about ending the relationship. All of a sudden, he brought up the example of Andy – 'I can't cope with this diagnosis, I'm not a hero like Andy Hill.'

I stopped what I was doing. 'Hold on a moment,' I said. I left the clinic room and called Andy's cellphone. 'Andy, I need a favor. Can you give someone an honest pep-talk and can you give it now?' I went back into the clinic room and handed over the phone – 'I have a State Senator who wants to talk to you,' and then I gave them a little space. I have no idea what the two of them talked about, but less than a year later I got invited to that same young man's wedding.

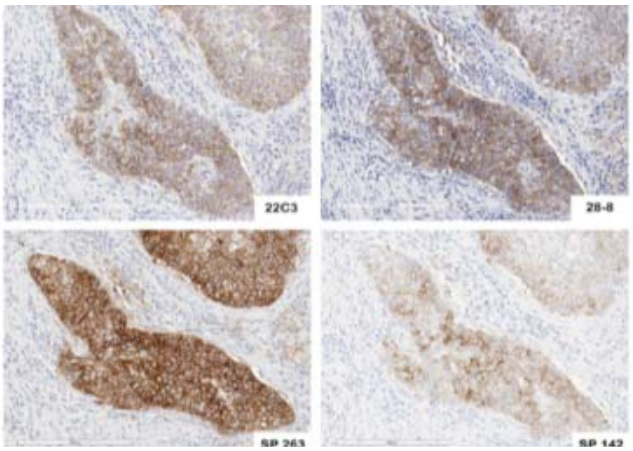
The effectiveness of crizotinib didn't last forever and, between Colorado and his Seattle Oncologists, together we worked hard, changing our approaches, adapting as his cancer adapted, to keep Andy well. Unfortunately, on the 31st of October, 2016, just before Lung Cancer Awareness Month began and nearly eight years from his original diagnosis, Andy passed on.

I am profoundly grateful to have known both the public and personal sides of a man who was unafraid to make a difference and who inspired so many affected by lung cancer. We need more like him in this world.

In cancer immunotherapy, one PD-L1 test to rule them all?

Garth Sundem

Clinical trials have proven the power of immunotherapies targeting PD-L1 or PD-1 in a range of cancers. However, these same trials show that only some patients benefit – tumors must depend on PD-L1 to be affected when medicines block its action. In response, the companies Merck, AstraZeneca, Genentech/Roche, and Bristol-Myers Squibb together with the diagnostic companies Ventana and Dako have developed four tests to predict which tumors do and do not express on PD-L1 and thus which tumors will respond to the therapies. An ambitious collaboration between these companies and research organizations including the International Association for the Study of Lung Cancer, the American Association for Cancer Research, and academic medical centers including the University of Colorado Cancer Center, resulted in a study published in the Journal of Thoracic Oncology comparing these four tests.



Same lung cancer specimen stained through 4 different anti-PD-L1 antibody tests

The study, called the "Blueprint PD-L1 IHC Assay Comparison Project," used all four tests to evaluate 38 samples of human non-small cell lung cancer. In all four tests, half of the tumors were positive for PD-L1 and 5 of the tumors were negative. However, in 14 of 38 cases (37 percent), some tests considered the sample positive while others considered it negative. The disagreement implies that the choice of test used to determine a tumor's PD-L1 dependence may influence whether or not a patient is offered anti-PD-L1 therapy. "Immunotherapy is evolving very fast and with very encouraging results in lung cancer as well as other cancers. However, a main issue is how to select patients for these therapies. Each company is pursuing their own predictive PD-L1 assay in order to select patients. However, the PD-L1 assays are all different in terms of antibody used and cut-off values for positive/negative results," says Fred R. Hirsch MD, PhD, investigator at the University of Colorado Cancer Center and CEO of the International Association for the Study of Lung Cancer.

With support from the U.S. Food and Drug Administration, Hirsch brought together the four pharmaceutical companies and the two diagnostic companies with leading PD-L1 assays to explore their agreements and discrepancies. Importantly, each test is paired with a drug – the drug pembrolizumab, developed by Merck, is prescribed based on results from the assay called 22C3; the drug nivolumab, developed by Bristol-Myers Squibb, is paired with an assay called 28-8; likewise, atezolizumab by Genentech/Roche and durvalumab by AstraZeneca are both paired with assays specific to the compound. In fact, this mimics the way in which targeted therapies generally earn FDA approval – a drug and a test determining which patients will benefit from the drug tend to be approved in tandem.

However, all four of these drugs target a tumor's ability to hide from the immune system by the expression of PD-L1, which interacts with the protein PD-1 expressed on immune cells in a way that deactivates these immune cells against tumor tissue. However, by blocking the interaction between PD-L1 and PD-1 the immune cells (T-lymphocytes) remain activated against tumor tissue. In theory, any of these four tests should be able to predict the benefit of any of these four drugs. Critically, each measures how much PD-L1 protein is expressed on the membranes of tumor cells and, based

on clinical trial data, how much PD-L1 must be expressed in order for the drug to show benefit. "Rather than black and white, this can be a grey area. It is not that some tumors express PD-L1 and others do not, but rather that tumors express PD-L1 across a gradient and at some cutoff point in that gradient, the expression becomes clinically relevant," Hirsch says. Results show that three of the four tests tend to cluster together in their results. Also, differences in these tests meant that there was no absolute cutoff in the amount of PD-L1 that made a sample positive or negative – the different tests must be evaluated by their own scales.

Now with results in hand for the first phase of this study, the comparison will continue into a second phase by comparing these test results to patient outcomes. Basically, the goal is to determine which test allowed doctors to prescribe PD-L1 inhibitors to the patients who benefit, while avoiding the use of these drugs with patients who went on to see little or no benefit.

"This is a unique study based on a unique partnership meant to solve a very important clinical problem," Hirsch says. It might not be long before the field of anti-PD-L1 cancer immunotherapies receives a peer-reviewed recommendation for the one test that will rule them all.

Fred R. Hirsch, MD PhD

Help Support Us:

Overseen by the physicians and scientists of the University of Colorado's Lung Cancer Program, the Lung Cancer Colorado Fund is used to support the many different needs of the University and UCHealth's combined fight against lung cancer ranging from basic science, clinical and translational research, through to patient support and infrastructural improvements.

Contributions to the Lung Cancer Colorado Fund may be via the hospital or university to allow the most efficient use of any fund matching schemes. All donations, regardless of whether given via the Hospital or University are overseen by the same committee, for the same purposes.

Giving via the: **The University of Colorado Hospital Foundation**

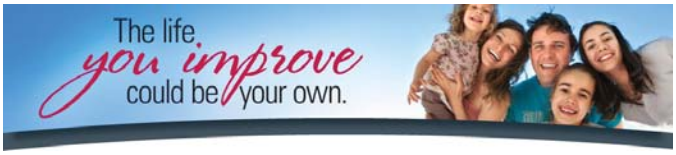
You can write a check payable to the Lung Cancer Colorado Fund and please be sure to write "UCH Foundation" on the memo line. Mail your donations to: University of Colorado Hospital Foundation, Mail Stop F485, 12401 East 17th Avenue, Aurora, CO 80045

Or you can give on line at: http://uch.thankyou4caring.org/lungcancercolorado

Giving via the: **The University of Colorado Foundation**
(which may help for some fund matching schemes, if, for example, a center for higher education is required to be listed)

You can write a check payable to the CU Foundation and please be sure to write "Lung Cancer CO Fund" in the memo line. Mail your donations to: CU Foundation, Mail Stop A065, 13001 E. 17th Place,
Aurora, CO 80045

Or you can give on line at: https://giving.cu.edu/fund/lung-cancer-colorado



'Thinking Ahead' - Ben and Ellen's adventure into estate planning to benefit the Lung Cancer Colorado Fund

Ben and Ellen Smith

Ellen was first diagnosed with stage III lung cancer in April 2008. But after chemotherapy, radiation and giving up one lung to surgery, the cancer returned the next year, this time as stage IV disease. Yet, amazingly, here we are more than seven years later and Ellen is still doing well. It hasn't all been smooth sailing, of course, but Ellen has now turned into something of a professional medical pioneer – leading the charge at CU in one clinical trial or out-of-the box approach after another.

Ben and Ellen Smith

Beyond the medical care, the level of concern and interest shown to us by so many members of the Cancer Center team has been incredible over this time. You can feel it. Its good - it really helps - when a patient knows that they are more than just the content of their medical file. While we have always shown our gratitude by telling everyone we can about the cancer program at CU, one day we asked our doctor if we could do more. Both of us are retired and not what you would call wealthy – Ben was an elementary school teacher and Ellen was a kindergarten teacher – but, together, we discussed whether there was something we could do that wouldn't impact our ability to have vacations, spoil ourselves as we see fit, or enjoy special times with our families – and that's how our estate planning adventure began.

"Would you consider being pioneers in finding out what it would take to leave a modest amount to the Lung Cancer Colorado Fund in your will?" our favorite doctor asked. "The materials are all there, but we haven't really exploited this avenue yet. I think it could be a major way people could help us out and stay within their means. We just need someone to draw up a users' guide for others to follow."

We agreed but, in reality, we were both worried that the amount we were considering giving to the University wouldn't be of interest because it might not make a large impact by itself. Specifically, we were imagining maybe a $2500 amount and definitely not enough to set up the 'Smith Cancer Pavilion.' Our worries were, fortunately, unfounded. After a quick email introduction we met with Amanda Brodie and Angela DellaSalle from the CU Advancement Office for coffee and a chat. When we mentioned our planned amount they didn't lose interest. In fact, they couldn't have been more gracious and emphasized that they were excited to work with donations of any amount. They had lots of written material we could go over but the simplest version of what to do might look like this:

- Meet with a lawyer (CU doesn't provide one, but the Advancement Office suggests you check in with them to advise on this) and insert this language into your will:
- "I give, devise and bequeath to the University of Colorado Foundation, a Colorado non-profit corporation, (enter a specific dollar amount or percentage of your estate) for the benefit of the Lung Cancer Colorado Fund at the University of Colorado Foundation."

And that is almost all you need to know. However, Amanda also pointed out an important document in their packet. It was the "Letter of Intent" which she strongly recommended be sent to the Advancement Office in the event a bequest is made in your will. This letter then gives their team the heads up to look out for a gift in the future (hopefully not too soon!).

Beyond the basics, we were also impressed by the very flexible and comprehensive options for supporting the lung cancer program at the University that can be tailored to the needs/desires of different individuals. These range from making use of financial assets in all their various forms including stocks and real estate to describing how best to get tax breaks on the gifts. They even allow you to create your own named funds that can be set up for specific purposes with the entry level for these being about $25,000. Although a fund named after us sounded good it was beyond our means. However, if this was something that someone was considering, we would seriously recommend discussing

such ideas with either your doctor or someone on the LCCF in advance to make sure your plans achieve what you really want them to achieve and how they can result in the most good to the lung cancer program. For ourselves, we ended up very comfortable with the idea of just contributing to the general Lung Cancer Colorado Fund and knowing that lots of smaller donations will add up to something of significance when they are combined.

A lot of the details of how the Advancement Office can work with donors, plus all the forms, including the "Letter of Intent," are covered on their website (http://cu.planmygift.org/). Or you can phone them at 303-724-8227.

Amanda Brodie and Angela DellaSalle

For us, the adventure was completed without any drama at all and we now have our game plan ready for when we next meet with our lawyer to update our wills.

Although we didn't discuss it with Amanda and Angela, the only other thing we'd mention is to cut out the wording below and have your loved ones make use of it when the time comes. Because every little bit helps and that's the truth!

IN LIEU OF FLOWERS, please make checks payable to:

CU FOUNDATION (LUNG CANCER COLORADO FUND)

In memo line say: LCCF (0222633)

Mail to CU Foundation, Mail Stop A065, 13001 East 17th Place, Aurora, CO 80045

or give on-line at: https://giving.cu.edu/fund/lung-cancer-colorado

More Colorado C-Stories Images

Images L to R: Deidi Bergesteun celebrating her 5 year "Cancer-versary". Jane Grifasi dipping her toes in the Sea of Cortez. Kim Ringen and husband, Davin, grabbing attention at Dancing with the Stars.

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2400 S Peoria Street #8
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then choose Lung Cancer Colorado Fund from the drop down box. Enter your donation amount, donation type and complete the general information requested