



▶ MEET THIS QUARTER'S
MARKEY MOVER 3



▶ UPDATED AWARDS AND
RECOGNITIONS 4



▶ MARKEY RESEARCH DAY
RECAP 5

○ ISSUE 2 | ○ 2015

MARKEY *quarterly*

SEASONAL NEWS FOR
MARKEY CANCER CENTER
FACULTY AND STAFF

SUPPORTING LONG-TERM CANCER SURVIVORS

THE COMPLEXITY OF CANCER SURVIVORSHIP EXTENDS BEYOND A PATIENT'S LAST TREATMENT

At Markey, the Long-Term Survivorship Clinic is one form of support that serves the needs of patients who have no signs of disease and are not receiving treatment. An estimated 1,000 patients have been seen since the clinic's inception three years ago.

Cindy Robinson is a nurse practitioner in the Long-Term Survivorship Clinic where patients receive a comprehensive care plan, along with a summary of their treatments, surgeries, pathologies, disease stages, medications and side effects. The care plan encompasses health promotion, covering everything from information on mammograms and colonoscopies to help connecting with a primary care physician. An important tool for patient care, this care plan will be part of the online UK Physician and My UK HealthCare Patient portals.

According to the NCI, an individual is considered a cancer survivor from the time of cancer diagnosis through the balance of his or her life. Long-term survivors have completed treatment and have no signs of disease (other than long term hormonal therapy). With this general definition, patients are referred to the Long-Term Survivorship clinic after a year of scans showing no disease, or at the discretion of the patient's oncologist.

Initial visits at the Long-Term Survivorship Clinic can last up to 45 minutes, allowing patients the time to review the care plan; discuss topics such as smoking cessation, diabetes and osteoporosis; talk with a dietician; and receive community resource information from the American Cancer Society navigator. Robinson notes that generally,



The Expressions of Courage Survivor Arts Celebration is for all cancer survivors and their loved ones.

MARKEY BY THE NUMBERS

Number of clinical trials open at Markey	69
Total cancer funding reported at Markey Research Day	\$38,704,574

FROM THE DIRECTOR

B. MARK EVERS, MD, DIRECTOR, MARKEY CANCER CENTER



Kentucky is first in the nation in overall cancer mortality rate. Here at Markey, our five-year goal is to decrease Kentucky’s cancer deaths by 50%. Toward that goal, Markey is treating over 3,000 new cancer cases each year. And each patient we treat is a celebration of survivorship.

Survivorship, during or after treatment, is a badge of honor. It can also be a heavy burden adjusting to physical and emotional changes that come with treatments, side effects and others changes in life after a diagnosis. Markey’s comprehensive care includes an intense focus on the issues of survivorship.

The Kentucky Lung Cancer Survivorship Program is made possible through a \$7 million grant from the Bristol-Myers Squibb Foundation (partnership between UK, U of L, and the Lung Cancer Alliance). This grant contains a specific component for Survivorship Care that aims to develop and evaluate a lung cancer survivorship care program for individuals diagnosed with lung cancer and their caregivers.

Our Long-Term Survivorship Clinic provides a comprehensive care plan, and includes a summary of the survivor’s medical history. The plan also offers an opportunity to connect with valuable resources such as an American Cancer Society navigator, smoking cessation assistance and our Psych Onc services to discuss financial concerns, dietary needs and other issues. This clinic is critical to Markey’s ability to fully, completely, care for our patients.

A new and increasingly popular activity for survivors and their loved ones is the Expressions of Courage Survivor Arts Celebration. Held in June, National Cancer Survivorship Month, this event showcases the visual, literary and performing arts expressions of all Markey patients and also provides an opportunity for them to reconnect with their community of caregivers.

The value of art in health care is evident in Markey’s radiation mask workshops. These free workshops give survivors of head and neck cancers an opportunity to turn what may represent an uncomfortable experience into an empowering work of art.

Survivorship is a priority at Markey. It’s one way we make a difference in the lives of the Commonwealth, Central Appalachia and the region.

LONG-TERM SURVIVORSHIP, continued

lung cancer patients experience on-going issues and benefit from a walking program, another issue that can be reviewed during a visit.

“Each cancer has its own long-term effects, and each patient is different,” says Robinson.

For patients dealing with emotional issues, fear of cancer recurrence, anxiety about being active in society after an illness or worries over the financial cost of care, members of Psych Oncology are brought into the discussion, often on the same day as the initial visit. Other issues may require additional support.

“The beauty of being at UK is the number of specialists,” says Robinson. Survivors of head and neck cancers may experience head drop or restricted arm motion, others may develop cognitive issues that can be addressed at the Neuro Cognitive Diagnostic Clinic. These resources are brought together to help long-term survivors live their lives to one’s fullest potential,” says Robinson. “Healthy living is what cancer survivorship is all about.”

In addition to the Long-Term Survivorship Clinic, Markey supports survivorship of all stages with the Expressions of Courage Survivor Arts Celebration. Held in June, National Cancer Survivorship Month, the event is an art exhibit showcasing original, artistic expressions connected in some way to an experience with a cancer diagnosis, or crafted by or in memory of a Markey patient whose battle has ended.

Building on the success of last year’s inaugural event, money was raised throughout 2015 for the second annual Expressions of Courage Survivor Arts Celebration. “Local business and the UK community were very supportive of our cause. The gala and other fundraisers, such as potlucks and chili lunches, helped us raise over \$5,000.”

This year’s event included 60 pieces of art on display in the Combs Research Building atrium, including a metal head and neck cancer awareness ribbon made by an underwater welder. On the Combs veranda, survivors and their loved ones provided readings and music. There were short stories and poems; two ovarian cancer survivors played piano; the 16 year-old granddaughter of a lung cancer survivor played violin and guitar; and an acoustic guitar rendition of the Crosby, Still & Nash song “Almost Cut My Hair” was played by an acute lymphoblastic leukemia survivor who died two weeks after the event (see inset).

The celebration included a keynote speech by Dr. Edward Romond along with tables devoted to music and art therapy; screening information for colon, skin and ovarian cancers; smoking cessation; physical therapy; nutrition; social work; and Live Strong. Survivors received lunch and refreshments, as well as t-shirts and buttons designed with seeds to plant and grow.

“We wanted survivors to be recognized for courage and strength,” says Robinson.

CELEBRATING SURVIVORSHIP COURAGE

On June 19, 2015, two weeks after participating in the Expressions of Courage event, Todd Fields, 33, died from complications of acute lymphoblastic leukemia. As Todd sang and played guitar, Cindy Robinson noticed his mother. “I knew who she was immediately by the tears. How blessed we were to have Todd share his courage with us on June 5.”

MEET A MARKEY MOVER

ROBIN FISHER

This quarter, Markey Quarterly introduces you to Robin Fisher, Administrative Associate I.

Good morning, Robin. Thank you for talking with us. Where are you from and what brought you to Markey?
I was born and raised in Owensboro, Ky. When I came to UK as a freshman, I fell in love with Lexington and stayed after graduation. In the first part of my career, I held various positions for a succession of acquired and merged banks. Although I had an opportunity to stay in the industry, I decided to leave banking. With some soul searching, I realized I wanted to broaden my career into Human Resources.

Next, I took an internship in Employment at UK where I reviewed programs designed to train supervisors to detect drug and alcohol abuse for employees who drove and operated heavy equipment. Being back on campus, I felt energized. I got into the STEPS program with an assignment as an administrative support person for UK's first Director of Work-Life. We conducted the first campus-wide Work-Life survey. With the second Work-Life Director, the results were tabulated, analyzed and shared with the campus community. The work resulted in numerous initiatives to improve UK's work culture. I sought a full-time position and was referred for my current position. I became full-time in January, 2007.

What is your role at Markey?

My primary function is to provide administrative support to our five outpatient clinics (Multidisciplinary, Breast, Hematology, Chemo Infusion and Gill Infusion) and the new Integrative Medicine Program that now includes Art and Music Therapies, Psych Oncology, Narrative Medicine and the relaxation therapy Jin Shin Jyutsu. My responsibilities pertain to human resources, purchasing, clinical operations, financials and anything else related to administration.

Another role I especially enjoy is being a member of the Patient Advisory Group Steering Committee (PAG). The PAG consists of patients and caregivers at least one year out of treatment who have a global view of the overall care experience. Many improvements to the quality of overall care for cancer patients and families can be traced back to the PAG.

I also support cancer-related charities such as Relay For Life and Making Strides. I've been most involved with Light the Night, the annual fundraising and awareness event to benefit the Leukemia Lymphoma Society (LLS). The LLS is focused on patient services and research for blood cancers. I've helped coordinate the Markey and Friends team for many years because LLS is an organization that is of tremendous benefit to our hematology patients, especially at the time of diagnosis. It's a very touching event that features personal stories, speakers, music and children's activities culminating in the walk around the ballpark at dusk with the lighted balloons



Robin Fisher is an Administrative Associate I at Markey.

that represent patients in active treatment, survivors and those we have lost. This year's walk is on October 17. I'd encourage anyone who wants to get involved can contact me at rafish3@uky.edu.

What do you like best about your job?

Unfortunately, many families are touched by cancer. Although I don't have the talent for providing direct care, I enable the people who do by making it possible for them to give the best care possible for our patients. I find my role very fulfilling on a personal level. I honestly enjoy coming to work every day.

What should others at Markey know about your role?

People should know they can contact me. I think people are under the impression they can only ask me about the specific things I do, and that's not true. If I can't help someone, I can put them in touch with the appropriate source.

How do you keep busy outside of work?

I look for opportunities to serve my community. My parents were civic-minded traditionalists who lived through the Depression and World War II. My dad served Owensboro for three terms as City Commissioner and two terms as Mayor. My mother was a homemaker who joined many opportunities to enrich our city. I watched my dad connect with people, bring in employers, expand the arts and carefully manage finances. I realized that as an adult, it is important to contribute to the betterment of one's community.

WHO SHOULD BE OUR NEXT MARKEY MOVER?

Email Markey's Research Communications Office at mccrco@uky.edu with your idea.

NOTEWORTHY

WELCOME

Amy Christian, Kentucky Leads Collaborative
Pan Deng, CESB
Jennifer Dolly, SRF Coordinator
Sally Hodges, BSTP SRF
Tina Johnson, CRO
April Howard, CRO
Wenbin Li, Biostatistics
Muxian Liu, Chunming Liu laboratory
Julia Nagle, B. Mark Evers laboratory
Peter Yin, Jianhang Jia laboratory
Juan Zhu, CESB

PRESENTATIONS & PUBLICATIONS

Markey authors were responsible for 149 manuscripts and publications in journals from May through June 2015. Notable publications include the following.

Hayslip J, Dressler EV, Weiss H, Taylor TJ, Chambers M, Noel T, Miriyala S, Keeney JTR, Ren XJ, Sultana R, Vore M, Butterfield DA, St Clair D, Moscow JA. Plasma tnf-alpha and soluble tnf receptor levels after doxorubicin with or without co-administration of mesna-a randomized, cross-over clinical study. *Plos One* 2015;10.

Ortega J, Li JY, Lee S, Tong D, Gu L, Li G-M. Phosphorylation of pcna by egfr inhibits mismatch repair and promotes misincorporation during DNA synthesis. *Proc Natl Acad Sci U S A* 2015;112:5667-5672.

Martin SK, Banuelos CA, Sadar MD, Kyprianou N. N-terminal targeting of androgen receptor variant enhances response of castration resistant prostate cancer to taxane chemotherapy. *Molecular Oncology* 2015;9:628-639.

Riedmann C, Ma Y, Melikishvili M, Godfrey SG, Zhang Z, Chen KC, Rouchka EC, Fondufe-Mittendorf YN. Inorganic arsenic-induced cellular transformation is coupled with genome wide changes in chromatin structure, transcriptome and splicing patterns. *Bmc Genomics* 2015;16.

Villano JL, Durbin EB, Normandeau C, Thakkar JP, Moirangthem V, Davis FG. Incidence of brain metastasis at initial presentation of lung cancer. *Neuro-Oncology* 2015;17:122-128

GRANTS

Vivek Rangnekar, PhD, was awarded National Cancer Institute funding for “Suppression of Prostate Tumor Growth and Metastasis by Inhibition of Vimentin”.

Binhua (Peter) Zhou, MD, PhD, was awarded National Cancer Institute funding for “Determine the Functional Role of Dub3 in Breast Cancer Progression and Metastasis”.

Xianglin Shi, PhD, was awarded National Institute of Environmental Health Services funding for “Oxidative stress, Cr(VI) carcinogenesis, and prevention”.

Rachel Miller, MD, was awarded Department of Defense funding for “Chemotherapy Induced Cognitive Impairment: A novel prospective study of the cognitive effects of platinum/taxane-based chemotherapy in ovarian cancer patients”.

Yvonne Fondufe-Mittendorf, PhD, was awarded National Institute of Environmental Health Services funding for “The role of chromatin structural and epigenetic changes in arsenic-induced gene expression”.

AWARDS, RECOGNITIONS & SELECTIONS

James K. Hartsfield, Jr., DMD, MS, MMSC, PhD, FACMG, Diplomate of the American Board of Medical Genetics, Professor and E. Preston Hicks Endowed Chair, University of Kentucky College of Dentistry has been named Co-Editor in Chief of the *Journal of Pediatric Genetics*.

Dianna Holtzhauer, a pediatric cancer nurse, received the M.J. Dickson Quality of Nursing Care Award. This award recognizes a nurse who shares Ms. Dickson’s commitment to professional nursing and demonstrates excellence in clinical practice.

Elisia Cohen, PhD, chair of the UK Department of Communication in the College of Communication and Information, gave this year’s annual Walter Fisher Lecture at the University of Southern California. Dr. Cohen’s lecture covered her research on developing communication strategies, both social media and clinic-based, to best increase demand for immunization in Appalachian communities. Dr. Cohen is the primary researcher on this project and has partnered with the UK Rural Cancer Prevention Center to create and test the strategies.

NOTEWORTHY, continued

MARKEY DIFFERENCE MAKERS

Congratulations to the following Markey Difference Makers for the second quarter of 2015.

- | | |
|-------------------|------------------|
| Geof Dixon | Deb O'Nan |
| Connie Donnatucci | Janki Patel |
| Lydia Eaves | Pearl Peterson |
| Brandi Elliott | Renee Rainey |
| Richard Gibbs | Princeton Reese |
| Tricia Jackson | Donica Sweat |
| Brenda Jenkins | Sandy Vice |
| Jill Lee | Stephanie Walker |
| Wilma Maloney | JoAnn Wright |
| Lisa Minke | Roger Yankey |
| Laura Olmstead | Kathi Zeller |

Do you know a Markey Difference Maker?

The Markey Difference Maker award recognizes the above-and-beyond dedication and talent of those who go about the business of treating cancer patients, finding efficiencies in business procedures, improving working conditions, and, generally, making life easier for everyone associated with Markey: patients, caregivers, families, providers, administrators and staff. Nominations are now accepted online.

Turning Radiation Masks into Sculptures of Strength

Fran Belvin, an art therapist with the UK Markey Cancer Center and UK Arts in HealthCare program, hosts mask-making workshops for head and neck cancer patients.

Radiation treatment to the head and neck requires a stiff plastic mesh mask to secure their positioning. Patients feel suppressed and confined during the treatment process.

Belvin starts the workshop by allowing patients to share emotions tied to the treatment process. Patients then transition to an art studio setting to paint and embellish their masks.

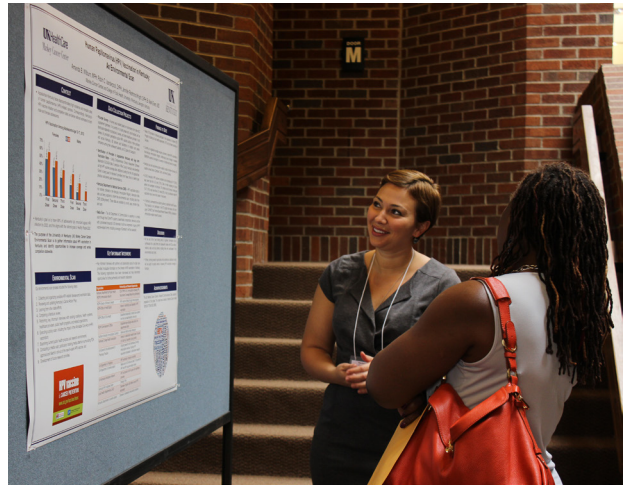
Call Christina Jewell at 859-323-4895 for more information.



Richard Powers and his Native American chief sculpture.

Markey Researchers Present Latest Studies at Annual Research Day

The sixth annual Markey Cancer Center Research Day highlighted the work of UK students, postdoctoral fellows and faculty from seven colleges and 26 departments across UK.



Amanda Wilburn, HPV Cancer Control Coordinator at Markey, presents her work at Markey's annual Research Day.

This year's event featured 122 posters; oral presentations from a current medical student, two graduate students, and one postdoctoral fellow; and faculty oral presentations from Dr. Ellen Hahn, the Marcia A. Dake Endowed Professor in the UK College of Nursing, and Dr. John D'Orazio, Drury Pediatric Research Endowed Chair in the UK Department of Pediatrics. Dr. Edward Romond was honored for his breakthrough research and stellar patient care with a lifetime achievement award from the Markey Cancer Foundation. Dr. B. Mark Evers, director of the UK Markey Cancer Center, delivered the State of Cancer Center Address. Kentucky native Phil Sharp, Nobel Laureate and Institute Professor for the Koch Institute at the Massachusetts Institute of Technology, gave the Susan B. Lester Memorial Lecture.

Markey Research Day Award Winners

- | | |
|--|---|
| Basic Sciences - Graduate
Lin Ao
Payton Stevens | Clinical and Translational Sciences - Postdoc
Rachel Stewart
Swati Yalamanchi |
| Basic Sciences - Postdoc
Yekaterina Zaytseva
Jie Chan | Researcher's Choice Award
Fengmei Pi |
| Clinical and Translational Sciences - Graduate
Meghana Kudrimoti
Kristine Song | Overall Winner
Stuart Jarrett |