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# Searching for a CURE

By Gretchen Miller-Basso

DR. CHERYL BAKER, DIRECTOR,  
M. D. ANDERSON CANCER CENTER'S  
ORLANDO CANCER RESEARCH INSTITUTE

»» Amidst the theme parks and tourist attractions that make Orlando world-famous resides one of the city's greatest hidden treasures, M. D. Anderson Cancer Center's Orlando Cancer Research Institute (CRI). With the research done at the CRI — in this

city founded on fairy tales and wishes on stars — those stricken with cancer may find that their dream of a cure could come true.

Presiding over the CRI is Dr. Cheryl Baker. A graduate of Rollins College in Winter Park, Florida, Baker went on to earn her Ph.D. in Biochemistry from Texas Tech University and completed a post-doctoral fellowship in the

Department of Cancer Biology at The University of Texas' M. D. Anderson Cancer Center in Houston. She then served as an instructor in the surgery department at Harvard Medical School and Children's Hospital in Boston, and as an assistant professor in the Cancer Biology Department at M. D. Anderson in Houston. She also was chairperson of the Associate Member Council for the American Association for Cancer Research. With these impressive credentials, Dr. Baker returned home to Orlando in 2005 to lead CRI. Under her steady hand, CRI continues to grow in size and stature, most recently partnering with the University of Central Florida (UCF) to build joint facilities at UCF's new Health Sciences campus at Lake Nona.

"This partnership is a big step for the community because the more we invest in research, the sooner we can bring new treatments to cancer patients in Central Florida and across the world," says Baker.

**T Is cancer research something that you have always wanted to be a part of? How did you get your start?**

**cb** Undoubtedly each of us has, in some way, been touched by cancer. Whether we've faced our own personal battle with the disease, or suffered secondhand through the diagnosis of a family member or friend, it's clear that no one is immune to cancer's effects. I watched in awe as my father (a hematologist/oncologist) dedicated his professional and personal life to caring for cancer patients and their families. I knew I, too, wanted to dedicate my life to medicine. I watched in discouragement my mother-in-law's emotional and physical struggle with the diagnosis and spread of breast cancer, which ultimately caused her death in 1994. In an effort to combat this truly devastating disease, I am dedicated to conducting basic and translational cancer research studies aimed at understanding the mechanisms by which tumors grow and spread to other areas of the body, and developing more effective cancer treatments.

**T You grew up in Central Florida, later pursuing a world-class education. When did you come back to Orlando to work, and why?**

**cb** When Dr. Clarence Brown III, MD (CEO of M. D. Anderson - Orlando), approached me about taking on the role of Director of the Cancer Research Institute of M. D. Anderson - Orlando, I expressed my concern over leaving M. D. Anderson in Houston and the prestige affiliated with that institution. Dr. Brown shared how his earlier vision to build M. D. Anderson - Orlando was realized. He had to 'think outside the box' to accomplish such a lofty goal, and even more importantly, he had to convince others to do the same. He then posed the concept of the CRI as another 'think outside the box' vision. I

knew then that I could lead that vision. Dr. Brown's passion and dedication for M. D. Anderson - Orlando is inspirational and I am so fortunate to be spreading my enthusiasm for cancer research on the M. D. Anderson - Orlando campus.

**T Tell our readers about the CRI.**

**cb** The Cancer Research Institute is the basic and translational research hub for M. D. Anderson Cancer Center Orlando, and as such, is dedicated to fulfilling the mission "to use every available resource to defeat cancer."

The CRI uses basic and translational research to develop new therapies for pancreatic, kidney, head and neck, colon, lung, breast and brain cancers (and many more). Discoveries made at CRI could mean more Phase I clinical trials for patients here in Central Florida. Phase I clinical trials are the first step toward Food & Drug Administration (FDA) approval, which can often take years.

**T How does CRI differ from other cancer research facilities?**

**cb** The CRI bridges basic and translational cancer research, tests new drugs that may eventually enter clinical trials and focuses on cancer biology with an understanding of the metastatic potential that can be significantly altered or controlled by newly discovered approaches. The translation of basic research findings to clinical applications is paramount for the progress in clinical medicine as applied to the treatment of patients with cancer. A significant challenge in the past of bridging the gap between the laboratory and the patient is the traditional lack of interaction between physicians and scientists. This hurdle is overcome with the unique relationship CRI investigators enjoy with the M. D. Anderson - Orlando physicians, physicists, nurses, and entire medical staff, allowing for seamless transmission

of ideas, energy and discovery flowing from the laboratory to the bedside and back. This relationship is a key mechanism for shepherding pre-clinical trial results to Phase I and subsequently Phase II-IV clinical trials at M. D. Anderson - Orlando. It is anticipated that this approach will have a positive impact on the prevention, diagnosis, treatment and, ultimately, the cure and quality of life of cancer patients.

**T Describe the significance of CRI's partnership with UCF.**

**cb** M. D. Anderson Cancer Center Orlando's Cancer Research Institute (CRI) and the University of Central Florida (UCF) promise to advance cancer research in the region by coming together at UCF's new Health Sciences campus at Lake Nona. The agreement with UCF allows for 30,000 square feet of space for the CRI on the fifth floor of the new UCF Burnett Biomedical Sciences Building, which is scheduled for completion in 2009. There researchers at the CRI and UCF will join together, amplifying and leveraging the individual knowledge of each investigator.

Multidisciplinary teams comprised of physicians, mathematicians, engineers, chemists, computational biologists, epidemiologists, geneticists, sociologists, nanotechnologists, radiation biologists, nurses and others hold the collective keys to the future advancement for a cancer cure. It is anticipated that UCF and the CRI researchers will develop research collaborations and, when possible, share in the use of core support facilities. Many of the M. D. Anderson - Orlando researchers will also have appointments to the UCF College of Medicine faculty and will mentor UCF students looking to continue their research. This partnership will be a great asset to our university, and it will help to improve the quality of health care in Central Florida.