

Good Neighbors

CCR and Walter Reed National Military Medical Center commit to sharing strengths.

Directly across Rockville Pike from the NIH Bethesda campus, stands the world's largest military integrated medical center, The Walter Reed National Military Medical Center (WRNMMC). WRNMMC provides first class care to over 800,000 beneficiaries each year. Walter Reed Bethesda encompasses what was once called the Bethesda Naval Campus. For many years a clinical branch of the NCI intramural program was physically located there. This tangible intersection led to many seminal advances in cancer research and treatment, including creation of the world's largest cell line bank in lung cancers and the first randomized trial demonstrating that standard dose therapy was as good as double dose in small cell lung cancer.

In 2011, the leadership of CCR and Walter Reed Bethesda came together to discuss the formation of the Murtha Cancer Center at Walter Reed Bethesda. They realized the time was right to work together on new initiatives that would capitalize on the strengths of each institution to improve cancer research and patient care.

"We began having more and more discussions to find ways to better integrate Walter Reed [Bethesda] and ourselves," said William Dahut, M.D., CCR's Acting Scientific Director for Clinical Research and Clinical Director, who is part of an oversight group including Deborah Citrin, M.D., Senior Investigator in CCR's Radiation Oncology Branch, Craig D.

Shriver, M.D., COL, Director, Murtha Cancer Center, Rear Admiral David Lane, M.D., Director, WRNMMC, and Acting NCI Director, Doug Lowy, M.D.

The first initiative to come from these discussions was Activation Grants, funded from a joint pool of discretionary funds available to the Directors of each institution. Joint teams of investigators from each institution can apply each year for funding to conduct research. Two projects were awarded in 2014; three more were awarded in 2015.

"NCI has world-class scientists; we have world-class clinicians interested in translational research. The fund has enabled them to work together more collaboratively," said Shriver. "Each year Dr. Lowy and I decide how much we can put in the funding pool. We started three years ago and the quality of the proposals outstrips our ability to fund them."

"Walter Reed [Bethesda] has a cadre of very skilled physicians who are interested in clinical care and often in clinical research, but who have not historically had the research infrastructure that we have in CCR or the basic science component that we have here," said Dahut. "When they have clinical research ideas, we have a wider, deeper network

of basic scientists with whom to collaborate."

Any interested investigator can send an email to their respective office asking about capabilities and skill sets at the other institution. "An NCI Investigator might have a great idea and say 'I wonder if there's anyone at the Murtha Cancer Center who would be interested in a collaboration,'" said Shriver. "It has happened more often than I can count and it is very rewarding. It's a forcing function, as we say in the military, for collaboration and better research."

The second initiative was shared biobanking. The Murtha Cancer Center has a biobank of tumor samples, whose origins date back to 1993. A protocol is in place whereby any patient who has cancer surgery is asked to contribute to research the excess tissue not needed for diagnostic pathology. The tissue is collected according to strict procedures and associated with a wealth of clinical data. Now, CCR will have a "mirror" of that repository.

"Because the NIH Clinical Center is limited to research protocols, NCI does not have access to 'run-of-the-mill' cancers. Yet for research, you need collections of samples ranging from early stage cancer to advanced

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Photo: Sharon Renee Taylor, WRNMMC PAO



The first transfer of biospecimens collected by the WRNMMC biobank to the biobank managed by CCR's Laboratory of Pathology. Left to right: COL Craig Shriver, LTC Joel Moncur, MAJ Patrick Malafronte, David Kleiner, M.D., and Fredric Barr, M.D.

cancer," said Shriver "We have worked with NCI scientists who needed such samples over the years, on a one-to-one basis, but each time, we had to put together a protocol that needed approval from both sites. Since, we have enough of each sample on our side, it made sense to split them. A simple idea, but it is huge conceptually as an agreement that we want to help each other to drive cancer cures forward, rather than being parochial about it."

On February 12, 2016, the first samples were transferred between Walter Reed Bethesda and NCI. Going forward, every two weeks, samples that have been collected (typically 20–50 tissues) will automatically be shared.

The military has 9.2 million beneficiaries, tracked through a single electronic health record system worldwide. When a patient enters the system, and even after they transition to the Veterans Administration, their data can be tracked over clinical changes, demographic changes, and outcomes. "When you align that data

with tissues and put them in the hands of world-class scientists at NCI, the results could be transformative," said Shriver.

Finally, and most importantly from a patient perspective, Walter Reed [Medical Center] and the NIH Clinical Center have begun to collaborate on patient care. "Military patients could, of course, always come to the NIH Clinical Center if they matched our current protocols," said Dahut. "But our nonmilitary patients did not have access to care at Walter Reed [Bethesda]. Now, they can receive care across the street, even if they are not Department of Defense beneficiaries."

Since the agreement was signed in April 2015, 24 patients have been transferred between NIH and Walter Reed Bethesda. A quarter of them were under the age of 18. Moreover, a co-credentialing agreement has meant that physicians from NCI can go to Walter Reed Bethesda and continue to be involved in their patient care. "This has not only cemented our relationship, but it is good for patients," said Shriver.

"There was one young man who had his leg amputated on a protocol at NCI as a result of a sarcoma, after multiple other treatments failed. Given our unique patient population, we are the amputee rehabilitation center of the world with a state-of-the-art prosthetic facility. He could not have asked for more expert care."

"Walter Reed [Bethesda] has a large network of patients, who have not always had the easiest access to NCI clinical trials," said Dahut. "By giving them clearer access, we can conduct and complete our trials more easily and with a broader population. Meanwhile, our patients have access to their skilled physicians. It is the best of both worlds."

Another critical component of this mutual relationship is taking shape as well. CCR is working towards allowing Clinical Fellows to train at Walter Reed Bethesda, to expose them to more routine cancers, rather than limiting their experience to patients who qualify for clinical research studies at NCI.