Life has turned around for a faculty couple upended by cancer, disappointment

Photo by Jeff Dodd

Richard Musser and Sue Hum-Musser

By Jackson Board

The summer of 2007 didn't begin well for Dr. Richard Musser, assistant professor of biological sciences, and his wife and research partner Dr. Susan Hums-Musser. The National Science Foundation had declined Musser's fifth grant proposal in five years. In June, although disappointed, the Mussers launched into their summer research activities and prepared for the upcoming challenges of the fall semester.

But something was not right.

Richard didn't feel well. His lymph nodes were swollen. He had a sore throat. But, he didn't think anything of it; after all, the couple's young children had been sick and Musser himself keeps a marathon schedule of teaching and research.

A month later, after trips to the doctors and tests, Musser received the news that he had cancer. He had been diagnosed with a very rare form of the disease called Burkitt's lymphoma. It was an aggressive cancer that's more commonly found in children — mostly in areas of Central Africa.

The diagnosis was something the scientist himself could never have hypothesized, he says.

"I thought to myself, 'I'm a big guy, maybe I'm having a heart attack'."

Musser began chemotherapy administered via spinal tap. He was admitted to Methodist Medical Center in Peoria six times in four months. With the support of his wife Sue, he was determined to fight back. It was a fight typified by uncertainty, stress and loneliness.

Despite the disease and his arduous treatment schedule, Musser was still able to come to work and teach some of his class sessions.

"If I thought I was really going to die, I would have changed my decision to come back to work," Musser says. "But it gave me something else to think about."

For her part, Sue's strength and resolve were regularly tested. She juggled regular trips to Peoria with caring for the couple's two young children (then age 4 and 11 months), dealt with vague doctors, and coped with news that her brother had been involved in a near-fatal car accident that hospitalized him for more than a month – just as Richard's chemo had ended. All this happened while she took charge of the lab that was operating without external funding and taught the classes that her husband couldn't supervise.

Today, the couple seems to have emerged from the dark days of 2007 with a bright future.

After being discharged from the hospital for the last time in October, Musser transferred the energy he required to fight the ferocity of the cancer toward gaining a research grant to be used in Biological Sciences.

Although the National Science Foundation funds just 15 percent of the research grant proposals it receives each year, Musser prepared

another proposal. This time, he worked to better focus his proposal on undergraduate research and his lab's research goals. His years of effort were rewarded and he received a grant for $350,000, a significant award for WIU and for Musser personally.

Photos by Jeff Dodd

Hum-Musser uses a pippettor to administer precise amounts of solutions to chemical reactions.

Today, Musser strolls confidently around his lab – now filled with expensive, modern equipment – cured and optimistic about his future.

If the circumstances were a Hollywood happy ending, the script could not have been written any better.

"It was like a game-show contestant winning a million dollars," he says. "There was sheer excitement. The grant will really benefit the students."

Enthusiastic and quick to praise their professor for his guidance and leadership, Musser's students now work and learn with fewer financial or emotional pressures.

Musser is quick to attribute his good fortune to his partnership with Sue, saying that he could never have achieved the same outcomes alone.

"Sue was definitely a rock in getting me through, and taking care of the family at a stressful time, and then supporting me on my research pursuits," he says. Her commitment and extra efforts throughout the past year resulted in more good news for the Musser household. Sue received a tenure-track position, giving her more job security and better access to lab space. "She's the detail and I'm the big picture," Musser says.

After the infusion of resources, WIU's biology laboratory is now comparable to labs in larger universities, Richard says – and even better equipped than some.

His team of students, including several new graduate assistants, currently works on an extensive experiment on the relationship between caterpillars and various types of plants on a genomic level. They are studying how plants respond, at the molecular level, to being fed on by different insects – similar to how the human immune system reacts to being invaded by bacteria, viruses and other pathogens. The true benefits of this research are yet to be seen, although Richard is hoping that the results could be prove to be significant, particularly in helping reduce pesticides in the environment.

"This could be useful down the road," he says. "You never know where the next cure is coming from."

Though he is reflective about his own cure, and the remarkable manner in which his family's life has changed over the past 18 months, it is clear that the job makes the man, as it's said.

"It makes you wonder a bit," he says.

If this dramatic turnaround doesn't convince him of good works rewarded, there may not be much in this world that would.

He said that his scientific knowledge, as well as a natural curiosity about the nature of the cancer, gave him the confidence to disobey doctor's orders and press on with normal life – even during weeks of treatment.

"What gave me confidence was that I knew it was curable, so that was a benefit for me," he says. "It has motivated me to shift some of my research in to a cancer research area in the future.

"I'm no Lance Armstrong," he adds, smiling, "but I'm getting there."

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