

Tar Heel of the Week:
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His research helps limit severe sports injuries

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Fred Mueller takes a methodical approach, whether he's collecting data about catastrophic sports injuries or baking bread or pruning trees in his front yard.

Last week, after Tropical Storm Hanna rumbled through the region, he wasted no time before tending to his yard. He couldn't resist.

"No sooner was the rain done and he was in the yard picking up the limbs and blowing the drive," says Jo Ann Mueller, his wife. "That's Fred in everything he does."

This thoroughness, this tireless attention to detail, is evident in Mueller's everyday work. As a pioneer in sports injury research, he has earned the respect of peers throughout the country.

Mueller, 71, a researcher and professor of exercise and sport science at UNC-Chapel Hill, spends his days researching catastrophic injuries. He tries to investigate the cause of every sports-related death or serious injury of a student athlete in high school or college.

He focuses on such cases as the death of Chapel Hill High School football player Atlas Fraley last month after a scrimmage. No cause has been determined, but it has been reported that the 17-year-old called 911 after the practice complaining of dehydration and full-body cramps.

Reports by Mueller, a former Tar Heel football player and coach, help shape safety guidelines for high school and college athletes around the nation. He is the founder and director of the National Center for Catastrophic Sports Injury Research based at UNC and funded by the National Collegiate Athletic Association.

In October, the center will release its annual report to the National Federation of State High School Associations and the NCAA. The research helps those organizations make decisions about rules and equipment changes that could improve safety standards for all organized sports.

Information on catastrophic injuries in football has been collected since the 1930s. But it was Mueller who started collecting the data for all sports, in 1982.

Bob Colgate, assistant director of the high school federation, says Mueller's diligence in expanding the research has contributed to fundamental rules changes.

"What he has done has had a profound impact on our rules-writing process and I think also the NCAA's, too," Colgate said. "It's not just stuff being collected, numbers posted and updated and thrown on a shelf. It is being widely used."

His reports are considered unique and important. He studies an average of 30 cases per year involving catastrophic injuries.

"That registry has been a constant since 1982," says Dr. Robert C. Cantu, chief of neurosurgery at a hospital near Boston and a friend of Mueller. "There is no other one like it."

Catastrophic injuries, as defined by Mueller, are those that result in death or permanent disability, as well as serious injuries -- those to the head or neck -- that an athlete recovers from.

As a graduate assistant in 1968, after two years as UNC assistant football coach, Mueller worked under UNC professor Carl Blyth, who started collecting football injury data at the school.

Death, paralysis

That year, there were 36 student-athlete deaths nationally -- 26 at high schools -- and 30 cases nationwide in which students were paralyzed. Mueller says the natural reaction was: "What the heck is going on?"

"You start looking at that and you say, 'Oh my God,' " he says. "A 15-, 16-, 17-year-old kid dying. Or permanent paralysis, in a wheelchair for the rest of his life."



Fred Mueller, a pioneer in sports injury research, has been collecting data on catastrophic cases for decades.
Staff Photo by Harry Lynch

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