Civil War St. Louis: A port for arms and the wounded

By David Baugher, special to the Beacon

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Holding forth to a rapt audience at the St. Louis Science Center last night, Dr. Mark Frisse is giving a most unusual presentation.

For one thing, he's halfway into a lecture, "Battling the Odds: Medical Care During the American Civil War," when he pauses the energetic, rapid-fire talk that mentions James B. Eads, the importance of rivers as transportation conduits, St. Louis' civic future and the need for civility in political discourse in order to briefly note the one topic that has only marginally entered the conversation.

Namely, medical care during the American Civil War.

"This was supposed to be about medicine," he said with an almost apologetic chuckle. "I'm going to get you there."

Frisse was as good as his word but if Thursday night's listeners expected a narrowly focused seminar on a standalone subject, they were in for a surprise.

PHOTOS BY DAVID BAUGHER | FOR THE BEACON

Dr. Mark Frisse stands with some Civil War-era medical instruments.

Mark Frisse doesn't do narrow. It was something the Highland, Ill., native seemed to make clear in an interview with the Beacon hours before taking the podium in connection with "Medicine in the Time of the Civil War," a Science Center exhibit that showcases common 19th-century medical equipment.

"I try to stay at a high level and make something relate to everything," he said noting that many in his audience, which had a heavy concentration of academics and physicians, would have more to offer on the specifics.

Does that make him a sort of Renaissance man? The question draws a laugh.

Not really, he says.

"My passion is to understand how the world works and what I can do to make a difference," Frisse said. "Whenever I see an issue in my own unusual way, I follow it wherever it is going to take me, whatever that means."

If Frisse sounds like a generalist, it would seem to come naturally to a man with his resume. The 59-year-old is a graduate of both Washington University's medical and business schools and has a degree in medical information science from Stanford University where he worked on the then-newfangled art of hypertext. A member of his late 1980s' lab team went on to become one of the key architects of Google. Later, Frisse would become a vice president of Express Scripts as well as an associate dean at Washington University School of Medicine.

Today, Frisse is the Accenture professor of medical informatics at Vanderbilt University as well as director of its master's of management in health care. Though he now resides in Tennessee, he still maintains a house in the St. Louis area.

And the Gateway City dominated much of his remarks to Thursday's audience.

"We want to look forward," he said. "We want to look at what it is going to take to create the kind of vibrant scientific culture from the youngest children up to graduate level to our industries and economy to retain the greatness that the city had 150 years ago."

He spoke at length about Eads, designer of the now-famous bridge that bears his name, as well as Civil War generals with extensive connections to the area like William Tecumseh Sherman, Ulysses S. Grant and Robert E. Lee.

MORE ACCURATE WEAPONS, MORE FATALITIES

He also spoke about advancements in weaponry, particularly the development of the minie ball, a deadly innovation in ammunition that created high-powered rifles with pinpoint accuracy. It was a far cry from previous firearms.

"If I had an old-fashioned musket and shot at you, odds were I'd miss," he said, noting the same was true of pistols. "That's why duels didn't kill that many people. You'd stand 20 paces away and shoot and you never knew where these things were going to fly."

And those newer, more lethal weapons frequently weren't matched by medical technology, which had little way to treat wounds in the trunk of the body.

"If you were shot anywhere but an extremity, it was game over," Frisse told the group. "Sometimes (you could survive) a head wound, believe it or not, but if you were shot in an internal organ there was nothing that could be done."

Even for those who were hit in a less vital region such as an arm or leg, the prognosis was anything but pleasant.

"All you could hope for was that, if you had a damaged extremity, you could get somebody to cut it off and then hope you didn't die of infection," he said. "Period. That was Civil War medicine."

Those who survived faced an unpleasant recovery, often on hospital ships that paddled upstream to St. Louis. Those hospital ships often passed ironclad gunboats headed south to advance the union cause. The city's importance to the war effort hasn't always been acknowledged by history, he said.

"We sent the guns down that created the carnage that helped us win the war, and we brought the wounded right back," Frisse said.

Worse still than the horrors of the 19th-century battlefield hospital tent were the horrors of the 19th-century campsite where illness often ran rampant. Frisse said that disease killed more than twice as many men as the enemy. The situation was so dire that President Abraham Lincoln once penned a letter to a reluctant general urging him to attack soon as he would just lose his men to sickness in camp otherwise.

WORLD OF DIFFERENCE TODAY

Frisse contrasted that with battlefield medicine of today in which medics can save lives by acting quickly to bring the wounded to a facility where they can receive treatment.

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"You can now get someone airlifted out of the middle of nowhere in Afghanistan or Iraq and have them at Ramstein [Germany] or the United States within 36 hours," he said. "You don't have to have much of a body left and we can keep you alive."

Although those advancements save lives, they also create new challenges. Maimed veterans must now deal with the psychological toll of surviving with missing limbs and broken bodies. That's meant pushing the boundaries of research in creating better artificial arms and legs.

"Amputees have come a long way," Frisse said. "The prosthetic industry has become fabulous. We have people running marathons now. We have intelligent limbs and are starting to get neural connections with hands that can move things around."

Frisse focused much of his talk on St. Louis' history. But he feels the more

important topic is the city's future.

"We have a lot of promise in this town and we must hold onto that," he said. "You don't hold onto that unless you have people all over the world saying 'I want to come and train in St. Louis' and then 'I want to stay, work here and start a company or be a great surgeon. I want to make this economy roll here because St. Louis is taking great care of me.'"

He also noted that America as a whole faces challenges. People worldwide still long for many things American, but our system of gridlocked government isn't one of them. He hopes the nation will promote education and innovation.

"We, as Americans, have to figure that out," he said. "We have to figure out how we are going to come up with something that is going to take care of these soldiers who protect our interests because we are very much at risk every day by people who hate us. We've got to figure out how to take care of one another and build strong kids because we've got a lot of work to do and it is going to take a lot of effort."

"Medicine in the Time of the Civil War" will run through at least the remainder of the summer at the Science Center. The next event is set for Aug. 20 when historian Marc Kollbaum is scheduled to demonstrate the era's surgical techniques. Call 314-289-4400 for more information.

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