

COACHING TEAM SCIENCE

Cancer Research
Aims For The Future

By Ann Miller Baker



Photography: Jeremy Peplow

TOM SELLERS, PH.D., M.P.H.

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SO WHERE DOES HE DRAW INSPIRATION FOR MOFFITT’S FUTURE PATH? FROM HOCKEY LEGEND WAYNE GRETZKY, OF COURSE.

TOM SELLERS IS A MAN OF MANY INTERESTS.

The cancer center’s executive vice president and center director is an accomplished investigator with experience that’s varied to say the least: undergraduate studies in nutrition, Ph.D. in epidemiology, postdoc training in genetics, a master’s in Public Health.

So where does he draw inspiration for Moffitt’s future path?

From hockey legend Wayne Gretzky, of course.

“The Great One,” as most hockey fans know him, once told a reporter his success came not from skating to where the puck was — but to where it was going.

“That’s what we really need to do in science,” says Thomas A. Sellers, Ph.D., M.P.H. “When you’re in the trenches, focused on that experiment or that manuscript or the next grant, it’s hard to look at the horizon and see, where is the puck going in science? But that’s something that we consciously do here at Moffitt. We try to anticipate, where’s the field going? What expertise do we need to bring in?”

Like a coach touting his team’s prospects, Dr. Sellers says Moffitt is uniquely positioned to lead cancer research in its next 30 years, thanks in large part to its longstanding commitments to

both a multidisciplinary approach to care and a team science approach to research.

“We’re recruiting laboratory investigators, basic scientists, from the very best labs all over the country,” says Dr. Sellers. That’s possible because Moffitt offers “an environment where they can work with our surgeons, with our medical oncologists, with the imaging experts. And therefore, the research that they’re doing generates results that can be translated for patient benefit. That happens because of a respect and a commitment between scientists and clinicians.” It’s something Dr. Sellers says few institutions have fostered as well as Moffitt.

“Our scientists are not interested in doing research solely for the sake of generating publications, knowledge and understanding,” he adds. “They want to do research that has impact. And that’s possible because of the culture that we have and our commitment to translating research from the bench to the bedside.”

Creating a culture of cooperation and camaraderie is an essential element of successful team science, according to Dr. Sellers. The team concept will be critical to cancer research moving forward because of the need for expertise in rapidly evolving, disparate fields of study.

NO “ME” IN TEAM

“It’s almost paradoxical. When people go through their scientific training, they’re encouraged to focus and be the world’s expert in this one little area,” he observes. “But the technologies and the expertise are getting so specialized. The days where one person can be the know all and end all are long gone. So, it requires that we all as team members against cancer learn other languages. From the basic scientist to a clinician or someone who studies imaging, we all have our jargon. We need to start with, ‘All right, let’s speak English.’ Don’t use the language of your scientific discipline that only 10 other people on the planet understand. That will accelerate the progress.”

Especially, notes Dr. Sellers, because team members now are routinely needed from fields of study not previously associated with cancer research, like mathematical modeling and information technology.

“Who would have thought that you need computer science?” he muses. “And yet we’re generating these massive data sets because of the technologies that we have. Now, we’re limited only by our ability to interrogate the data that we’re generating. That means that you better have different people at the table who can provide technical solutions to understanding the data that are being generated.

“Recognizing team science is actually in our promotion and tenure guidelines now. We have literally done a 180 from the tradition of science, based on what can you point to as your singular role. We take away that fear that somebody is going to steal your ideas because Moffitt recognizes team science. Everybody gets credit for the role that they play. If you’re contributing your expertise in a way that enabled the outcome, it doesn’t matter where you fall in the authorship order. And this is not a passing fancy.”

Nor, says Dr. Sellers, is it a new idea at Moffitt.

“It had been in existence almost from day one. When the hospital opened the doors, this concept of providing multidisciplinary care meant that as scientists were hired, they came into this environment where that’s the way everybody worked.”

When Moffitt’s doors opened back in 1986, Dr. Sellers was at Tulane University, working on his Ph.D. dissertation in epidemiology. Cancer research had never even entered his mind. His diverse interests in nutrition, epidemiology, genetics and public health were a natural progression that led to a research post at the Mayo Clinic in Rochester, Minnesota, where he would become the cancer center’s deputy director. It was in this post, as part of a review committee for the National Cancer Institute, when Dr. Sellers first crossed paths with Moffitt — “a fledgling cancer center that I had never heard of before.”

“I was on the site visit team for Moffitt’s NCI Comprehensive Care Center application review in 2000. And I remember looking around, admiring the tenacity and the spirit. It was a small center,

much smaller than it is now. But you could see the conviction, the determination and that there were some very talented people already here. I remember wondering, is this a place where I might be some day? This is exciting, a center that’s on the rise. It would not be a step up from Mayo. But, I thought, Moffitt’s going to be better than Mayo someday. I wasn’t sure how long it would take. But I was convinced it would happen. I’ve only been here 13 years, and it’s hard to believe the rate of growth and accomplishment in that span of time.”

HOW DID MOFFITT DO IT?

As Moffitt celebrates its 30th anniversary, the measures of respect are numerous. Renewed as an NCI Comprehensive Cancer Center with a five-year extension of its core grant, Moffitt also was ranked the No. 6 cancer hospital in the nation based on [U.S. News and World Report](#).

“It’s no coincidence that our faculty, our doctors are routinely being recruited to go start or lead cancer centers elsewhere,” notes Dr. Sellers. “Those centers want to learn, how did Moffitt do it?”

Moffitt’s alliances with industry in recent years are accelerating the translation of research findings from bench to bedside. Since 2004, Moffitt’s Office of Innovation and Industry Alliances is credited with 66 U.S. patents issued and 160 license agreements executed, as well as approximately \$30 million in industry alliances funding for Moffitt in just the past 18 months.

“We’re anxious to make a difference.”

Industry representatives tell Dr. Sellers that Moffitt is their preferred partner. “They say academic institutions can move slowly. Moffitt’s pace is somewhere between academic and industry pace. I think it’s our sense of urgency to accomplish our mission — a trait that makes me proud of this organization. We’re anxious to make a difference.”

Much, Dr. Sellers says, like our founder H. Lee Moffitt. “He really set the bar in terms of courage and tenacity. If anyone told him it couldn’t be done, that just doubled his efforts. He knew that Florida needed a comprehensive cancer center. He went to the NCI and told them that he was going to build one in Florida, and they laughed. They aren’t laughing now.”

As for what Moffitt will be in another 30 years, Dr. Sellers likes to imagine it will be “a museum, where people will come to learn about this disease called cancer that they’d read about in textbooks, but we are the place that erased it.

“Moffitt is a freestanding hospital solely focused on cancer care and research,” Dr. Sellers says. “With support from the state and our community, we have a constellation of resources — an environment, commitment and will — that makes this more than an opportunity. It’s our responsibility to do things that other centers simply can’t do. So we better get it done.” 🎧