‘Game changer’: Besides new physicians, WMU med school to create life science innovations through academic research

Written by Mark Sanchez

After years of planning and preparation, Western Michigan University opens its new medical school this month, ushering in a new era for both the university and the health care and life science industries in Southwest Michigan.

Envisioned shortly after WMU President John Dunn arrived seven years ago, the Homer Stryker M.D. School of Medicine begins instruction Aug. 18 for the inaugural class of 54 medical students.

WMU developed the medical school in partnership with Borgess Health and Bronson Healthcare Group. Their goal: Create a pipeline of physicians for the region and, through academic research, spur economic growth in the life sciences sector that has a long legacy in Kalamazoo.

Dunn calls the School of Medicine’s opening “a very, very significant moment” in Western Michigan’s history that elevates the university’s stature nationally. Only a limited number of American universities have a medical school, and WMU is now among them, Dunn said.

“It’s a game changer for the university. Even if you are a student studying in business or education or history, the idea that you are affiliated and at a university that has a medical school is a value added to all degrees in all directions,” he said. “It signifies that the university is a comprehensive university with multiple opportunities for students to study.”

WMU will host a grand opening celebration at the School of Medicine on Sept. 18, followed by a public open house Sept. 20.

Housed in a former Pfizer Inc. research facility in downtown Kalamazoo that underwent a $65 million renovation, the School of Medicine’s enrollment is expected to grow steadily over four years until it reaches its full capacity of 336 students, or 84 incoming students annually. The School of Medicine plans to admit 60 students in the second year, 72 in the third and 84 annually by the fourth year.

About half of the students in the inaugural class — selected from more than 3,500 applicants — come from across Michigan. Eleven are from Southwest Michigan, and the furthest student comes from California. One of the local students is attending the medical school under the Kalamazoo Promise.

WMU, Borgess and Bronson hope the School of Medicine can help to mitigate the local effects of a growing national physician shortage that’s projected to worsen as the population ages and requires more care, and as doctors from the baby boomer generation retire.

At the present rate, the U.S. faces a shortage of 91,500 physicians by 2020, according to the American Association of Medical Colleges. That includes an estimated 45,400 primary-care physicians and 46,100 surgeons and specialists.

“The message for the nation as a whole, and particularly for Michigan, is that there are just enormously talented, bright young people that desire a medical education, and fortunately we’re providing another option for them, and we need to do that,” Dunn said. “We can’t get there quickly enough.”

The addition of four new medical schools and the expansion of capacity at existing schools did push enrollments nationwide last fall to an all-time high of 48,014 students, according to the AAMC, which projects that 250,000 physicians in the U.S. who are currently practicing will retire by 2020.

In Michigan in 2012, 46 percent of the active physicians responding to an annual survey by the Michigan Department of Community Health indicated they planned to continue practicing medicine for another one to 10 years.

Key for WMU with the new program is to keep some School of Medicine graduates in the area.

About one-third of the doctors practicing in the region received their residency training in Kalamazoo and opted to stay in the area, said Hal Jenson, founding dean of the School of Medicine. The medical school not only creates a pipeline of new physicians for the region but can also lure doctors and specialists to the region who want to teach or conduct research.

Across Michigan, 42 percent of active physicians surveyed by the Department of Community Health in 2012 said they attended a medical school in Michigan and 60 percent
completed a residency in the state.

“We know there’s going to be an even greater shortage of physicians in the future, and Southwest Michigan will be competing with all of Michigan and all of the United States for physicians,” Jenson said. “The medical school is a key factor in being able to have that pipeline and also creating the culture of inquiry and the culture that really is attractive for physicians.”

Detailed plans for the research side of the School of Medicine are not yet finalized, although WMU wants to move in three directions: community-based outcomes, clinical trials and research, and basic science, Dunn said.

The School of Medicine should begin recruiting basic science researchers and building out and renovating lab space later this year, Jenson said.

While getting the medical school open is itself a major accomplishment for WMU, building a research base is one of the major undertakings still to come.

“We’ve moved a mountain to get this far, but we’ve got a mountain range left to go. There’s still a lot of work to do,” Jenson said.

When the recruitment for researchers begins, the School of Medicine has on its side a strong legacy of bio-medical research in Kalamazoo from the former Upjohn Co.’s Kalamazoo history. That legacy continues today with a number of contract research organizations and startup pharmaceutical companies that were formed in the past decade by former Upjohn or Pfizer Inc. scientists and can help draw researchers to the School of Medicine, Jenson said.

“It is the kind of environment that researchers are looking for and want to be a part of when they come to a community, to know that there are other like-minded people around who are interested in discovery and innovation, and they can be part of that culture,” he said.

From an economic development perspective, the School of Medicine will help to further build the region’s life sciences sector, Southwest Michigan First CEO Ron Kitchens said.

The potential economic benefits through increased research and commercialization of resulting innovations are in addition to what the medical school will do for physician recruitment and retention in Kalamazoo, Kitchens said.

“The medical school is kind of the next accelerant for health care in the region,” he said.

A 2011 analysis for the AAMC conducted by the Pittsburgh, Penn.-based research firm Tripp Umbach estimated that every $1 spent on research at medical schools and teaching hospitals results in $2.60 in economic activity.

To take full advantage of the opportunity, Kitchens said, community, political and business leaders need to ensure that Kalamazoo creates “an environment that is a high-education level throughout the region” and the kind of community that’s attractive to the talent a medical school needs to attract.

“We have to make sure we are doing a better job in this region of creating well-educated, global citizens,” Kitchens said. “We have to make sure that our urban infrastructure is strong because it’s clear that the higher the levels of education, the more people expect an urban center that is thriving and provides the services and the experiences, the arts and culture. That’s required.”

At the same time, Southwest Michigan First over the next few years needs to extend its ability to support the commercialization of innovations developed through research. Much of the work in the last decade in that area came from startup companies led by former Pfizer scientists who were working on a specific pharmaceutical, knew the commercialization pathway and needed support in building a business around it.

Innovations coming from academic research at the School of Medicine will spur new ideas at their earliest stages that have the potential to translate into new products, whether for pharmaceuticals or devices, Kitchens said.

“So we need to make sure we’re building capacities to capture that and clearly align with its transition into the community,” he said.