Eric Blank has been with the Missouri state public health laboratory since 1985; all but two years as its head. During that time he has seen the emergence of the public health laboratory as a major emergency response entity and the role of the public health laboratory director make a “180 degree turn” from an internally- to an externally-focused job.

Blank, who plans to retire within the next three years, has given some thought to the future of the laboratory that has been his professional home for two decades. Next summer his staff will be moving about two miles across Jefferson City to a brand new building with 80,000 square feet of usable space, more than twice that now available. The laboratory will be upgraded from a BSL-2+ facility to a solid BSL-3, and the setting will change from a downtown location to an overview of the Missouri River.

The new laboratory, said Blank, “is on-budget and on-schedule.” In fact the design and construction have progressed so well that state officials call it one of the smoothest running projects in the state, despite its complexity and $30 million budget (raised via state bonds). Assuming no major upheavals in the next seven or eight months, a full complement of almost 100 staff members will be on-site for the building’s christening. (There is currently only one vacancy: a chemist position that Blank is “holding back” because of fiscal constraints.)

Once the move is complete—coincidentally during the laboratory’s centennial anniversary—Blank has a full agenda for his last two-and-a-half years as laboratory director.

Of course the laboratory’s primary mission—supporting the public health programs that serve Missouri’s 5.2 million residents—will remain unchanged, with most resources directed toward newborn screening (including MS/MS testing) for 75,000 infants a year and toward STD tests. (St. Louis has the highest rate of syphilis in the country.)

Maintaining emergency readiness will also be a focus. The public health laboratory faced its first major catastrophe under Blank’s leadership in 1993, when the Missouri River overflowed its banks and inundated most of Jefferson City, including the laboratory. “We got into the emergency response mode perhaps a little bit earlier than most folks because we had to deal with it,” he said.

"As you lose your senior staff to retirement, you have fewer and fewer individuals who are ready—or have had enough experience to even understand if they are ready—to move into management positions.

But in addition to assuring quality service in core areas, Blank wants to set the laboratory on a forward-looking path that goes beyond the traditional. “I don’t want to necessarily limit ourselves in terms of how we think about [the laboratory’s future]. I think we can maybe be a little more innovative in the testing services and assistance we can provide to the department.” He noted, for example, that Missouri has a serious obesity problem and the public health laboratory needs to consider what can be done to address obesity-related illness from a laboratory perspective—such as quality assurance for Type II diabetes testing. “We have not gone into those waters yet,” said Blank, noting that a full-time state training coordinator is building the groundwork for enhanced public-private collaboration through an outreach program to clinical laboratories.

Blank also wants to make the best use of the new laboratory’s training and conference facilities, something not now available to his staff. “We want to use those to extend our outreach,” he said.

The laboratory’s chemistry section is moving away from environmental testing toward biomonitoring, and that trend is likely to continue. Blank explained that it’s easier than “fighting another state agency for resources for water testing” and satisfies a real need for studies of possible human exposure to a number of environmental toxicants. Missouri-based agribusinesses, concentrated in the state’s northern plains, place workers and communities at risk for exposure to high levels of agricultural pesticides. Lead smelting—the state’s “number one” mining activity—produces industrial tailings containing a number of heavy metals and other toxicants. And the underlying geology of the state—with central Missourians using groundwater and southern residents using surface water—predisposes Missourians to a mix of potential sources of water contamination.

Supplemental bioterrorism grant money supports a chemical terrorism (CT) Level 2 chemistry suite that has been used to
develop additional capabilities to detect heavy metals in tissue, thus demonstrating the dual-use of CT funding for emergency preparedness and improving services for ongoing public health concerns.

Finally, Blank looks forward to increasing the laboratory’s involvement in professional development and global health activities: perhaps serving as a host site for an APHL fellow and/or participating in a twinning project with a foreign laboratory.

But while positioning the laboratory to capitalize on these opportunities, Blank is also striving to prepare the laboratory for two significant challenges: limited fiscal resources and limited human resources.

The Missouri public health laboratory has a budget of roughly $10.8 million. Forty percent of that budget comes from general state revenue, 30 percent from federal grants and the remaining 30 percent, Blank said, “we earn.” But the largest of those funding streams may be cut in the next fiscal year. Blank explained that “demand [on the state treasury] exceeds revenue.” And with a governor opposed to tax increases, the likely alternative will be a reduction in funding. Blank is exploring options to increase earned income—mostly from Medicaid reimbursement and fee-for-service work—to at least partially offset any state budget cuts.

The second challenge—staffing—is one that the Missouri laboratory has been focused on for years. Blank said that once new staff members come onboard, “they stay; they tend to spend their careers here.” But finding those people is becoming more and more difficult, especially with a worsening national shortage of laboratorians. The Jefferson City area, explained Blank, does not provide “access to as large a pool of qualified candidates as a larger metropolitan area or [a site] near a university.” Moreover, it is hard to attract outsiders to a “mid-America, small town.”

So far, the laboratory has been blessed with low turnover. But with an aging workforce, the situation is likely to change. “We feel very acutely the shortage of qualified people at the entry level,” said Blank. “It took us well over a year to finally fill four or five vacancies for positions created with BT funding, and we were working very hard. The problem is magnified as you go up the organizational chain-of-command. As you lose your senior staff to retirement, you have fewer and fewer individuals who are ready—or have had enough experience to even understand if they are ready—to move into management positions.”

Blank, who serves on the board of APHL’s National Center for Public Health Laboratory Leadership, has long encouraged unit managers to take on mentoring responsibilities. One of their job expectations, he said, is to identify junior staff members who have the interest and potential for advancement. The goal is to develop a pool of potential future managers. Blank said, “we can provide them an opportunity to take the training courses supervisors need to take and to dip their toe in the [managerial] water and see if they like it.”

He noted that it takes a different skill set to be a good manager than to be a good laboratorian, and that skill set has changed “tremendously” in the past twenty years. Blank said that the job is much more policy-oriented now and therefore subject to greater public and political pressures. That may lead to higher rates of turnover among public health laboratory directors nationwide; rates that are more comparable to those of other senior health department managers today than to lab directors in the past.

“Our previous lab director was here 30, 35 years,” said Blank. “I think that era is over. I think we’re chopping off 10 to 15 years in future tenures. I’m very concerned where my replacement is going to come from and where others’ replacements are going to come from.”

And yet Blank recognizes the necessity of having managers who are more externally focused. “If you don’t want to be treated like a black box, you can’t sit in your little black box. You have to get out and talk to people. You have to be out there working with the constituents and with the policy people at the departmental levels. You have to speak their language. If you don’t, it can hurt the laboratory.” The upside is that the public health laboratory is now considered “more of an equal partner with the health agency.”

Blank acknowledges that he and the Missouri lab have “grown along with public health.” The Utah native began his career in a private environmental laboratory. Then he worked as a venereal disease investigator and later as a laboratory scientist for the state of Utah and—after graduating from the University of North Carolina/CDC laboratory directors’ program—served as assistant director for the Wyoming public health laboratory before coming to Missouri.

What will Blank be doing three years from now? It is too soon to say. Blank said he has no definite post-retirement plans. Nor has he yet “reached the point of being able to do a retrospective” on his laboratory career. “There are things that need to be done. There’s the move into the new building and the attempt to try to find someone to succeed me. I haven’t hung up the spurs yet.”