

A Game Plan for Filling the Medical Technologist Ranks

by Bowman Cox.

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A West Coast pathology association is leveraging a small but unique revenue stream in the hope of sparking a nationwide effort to relieve the shortage of medical technologists. For more than 30 years, the Western Pathologists Quality Assurance Association has been using royalty revenues from sales of quality control sera to run QC training programs for laboratory personnel. But over the past three years, the not-for-profit group has switched to establishing endowments as seed money for baccalaureate MT scholarships.

The training programs the association had been running were becoming too labor-intensive for its aging leadership, says Robert P. Gibb, MD, the group's 83-year-old treasurer and former president. Moreover, hospital laboratories were becoming so shorthanded they could no longer afford to send staff off site for training. The association's members realized they could improve quality more by helping those laboratories become fully staffed. So they began endowing scholarships to draw students into the field.

"We know there's a need," Dr. Gibb told *CAP TODAY*. "When we call a school, there's excitement on the other end of the phone."

But by itself, the Western Pathologists Quality Assurance Association, or WPQAA, lacks the funding and national reach that's needed. "We want to attract other organizations in industry. I think there's potential for attracting grant funding from foundations and even the federal government," Dr. Gibb says. "If we got more support from other sources, this could be expanded to a national program."

Alternatively, the association could serve as a model for other local or regional initiatives. "We're hoping to publicize what we're doing so that other pathology organizations might do the same thing," says WPQAA board member John D. Batjer, MD, of Redmond, Wash.

Each year, 4,000 newly trained medical technologists are needed to replace retirees and others leaving the workforce, and an additional 3,000 are needed to keep up with the growth in the volume of work, according to data in the 2004–2005 Occupational Outlook Handbook, published by the U.S. Bureau of Labor Statistics.

However, fewer than 2,000 medical technologists were graduated in 2004, according to the latest annual survey of MT programs by the National Accrediting Agency for Clinical Laboratory Sciences, or NAACLS. The graduation rate has edged up in recent years but remains well below historic levels of 3,572 in 1995 and 6,519 in 1977. "There's a tremendous need," NAACLS CEO Olive M. Kimball, PhD, EdD, told *CAPTODAY*. "The number of graduates is not keeping up with the number of retirements and won't in

the future.”

Many universities have reacted to the loss of interest in clinical laboratory careers by pulling the plug on their four-year MT programs. The number of these programs has declined from nearly 800 in 1970 to 232 in 2004, according to NAACLS data. This has sharply reduced the pool of trained MTs. “Having a program at a university affects recruitment,” Dr. Batjer says. “And having scholarships in those programs affects recruitment.”

Ninety percent of labs reported having difficulty filling at least one shift for MT staff, according to a 2003 wage and vacancy survey by the American Society for Clinical Pathology’s Board of Registry, published in the March 2005 issue of *Laboratory Medicine*. It took six months for 66 percent of labs to fill these positions.

As the technologist supply tapers off, the workload is rising. Medicare Part B lab spending grew 14.4 percent in 2002 and 9.4 percent in 2003, even though lab fees were frozen in 2002 and grew only 1.1 percent in 2003, and the Medicare Part B population grew only 0.8 percent in 2002 and 1.3 percent in 2003, according to the latest data from the Centers for Medicare and Medicaid Services.

In response, many labs have brought in more automation and staff with less training. “Everybody thinks you don’t need highly trained people anymore, and that is a huge mistake,” Dr. Batjer cautions. “These machines turn out results faster than ever, but they can be bad results. You need people who understand the fundamentals of laboratory medicine more than ever before.”

The WPQAA has so far established \$10,000 endowments at five schools of medical technology: British Columbia Institute of Technology in Burnaby, BC, Canada; University of Washington School of Medicine in Seattle; Sacred Heart Hospital in Spokane, Wash.; Arizona State University in Tempe, Ariz.; and San Jose (Calif.) State University. A sixth endowment fell through when the University of Arizona in Tucson closed its MT program.

Meanwhile, the association is working with Washington State University in Pullman to reinstate the medical technologist program it shuttered 20 years ago. The new program would be affiliated with one of the five endowment recipients, Spokane’s Sacred Heart Hospital, as is an existing program at Montana State University in Bozeman.

The association began collaborating with Beckman in the early 1980s to develop chemistry control sera that contained multiple analytes. At the time, labs were buying and using tubes of single-analyte sera, an expensive and wasteful practice. The WPQAA helped Beckman develop and produce 50-analyte sera. Since 1993, Beckman Coulter has manufactured and marketed the sera under the WPQAA name and paid the association an honorarium for each milliliter sold.

The association, which doesn't charge dues, gets all of its funding via royalties from the sale of these quality control sera. But it's not much. "Our budget is less than \$15,000 a year. You can't do a whole lot on that small of a budget," Dr. Gibb says.

Despite the high level of interest from medical technologist programs, the endowments are so small it can be tough to persuade big universities to accept them. So far, the association has had to rely largely on personal contacts to give its money away. Once established, though, the endowments tend to grow.

For example, the University of Washington initially refused the association's offer. "They wouldn't talk to us unless we had 50 grand," Dr. Gibb says. "But we had a friend there" he adds, who established the \$10,000 endowment anyway. It has since grown to \$25,000 with money coming in from alumni and others.

Similarly, San Jose State University accepted an endowment despite a \$25,000 cutoff by combining it with \$10,000 from another source that wasn't earmarked for any particular program and \$5,000 that the university's laboratory director found.

When the WPQAA holds its next annual meeting in Vancouver, BC, in February 2006, its board of directors will decide where to plant the next seed in its quest to support the baccalaureate programs needed to ensure quality lab testing.

Bowman Cox is a writer in Alexandria, Va.

Number of MT graduates

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| 2001 | 1,894 |
| 2002 | 1,823 |
| 2003 | 1,923 |
| 2004 | 1,975 |

Source: Annual NAACLS survey, as reported in the summer 2005 "NAACLS News."