

Seattle & King County Laboratory: Keeping an Eye on Emerging Threats

Director

When Paul Swenson was offered the directorship of the Public Health-Seattle & King County Laboratory in 1986, it was an opportunity to do the work he loves and a chance to return to his native Seattle after years of study and work on the East Coast. Unlike many public health laboratory directors who come to their positions after a circuitous career path, Swenson said, “Early on in my PhD program I pretty much decided that that’s what I wanted to do.” After earning his doctorate in clinical microbiology at the Medical College of Virginia, he stayed on for a post-doctoral residency program in medical and public health laboratory microbiology. Swenson then directed the clinical virology laboratory at North Shore University Hospital in Manhasset, Long Island, before coming home to Seattle.

Location

“When I came here in 1986,” Swenson said, “our public health lab was located in the Public Safety Building in downtown Seattle, which also housed the police department. It was a very old building and the laboratory facility was very old. I remember when I was here interviewing for the job—it was such an old facility it almost made me think twice.” Thanks to funding from a county bond issue, in 1997 the laboratory traded its antiquated space for a brand new building. Now, he said, “we’re in a county hospital with other health care workers instead of the police.” The local medical examiner, public STD clinic and TB clinic are located in the same building, which overlooks the downtown city area.

Facility

The bulk of the 5,000-square-foot laboratory is BSL-2, with a 200-square-foot BSL-3 suite used for TB and bioterrorism (BT) testing. Swenson said the new facility has only one drawback: “instead of being on the 13th floor with

a beautiful view of Elliott Bay, now we’re in the basement with no windows.”

Staff

16, comprising 14.5 full-time employees. Swenson said his staff size was stable from the time of his arrival until 1999, when a state initiative was passed eliminating the state motor vehicle excise tax. “That cut some state revenue that came to public health.” Despite having reinstated some positions that were lost at the time, Swenson said, “We’re a smaller laboratory today—by about 3 FTEs—than we were in 1999.”

Revenue

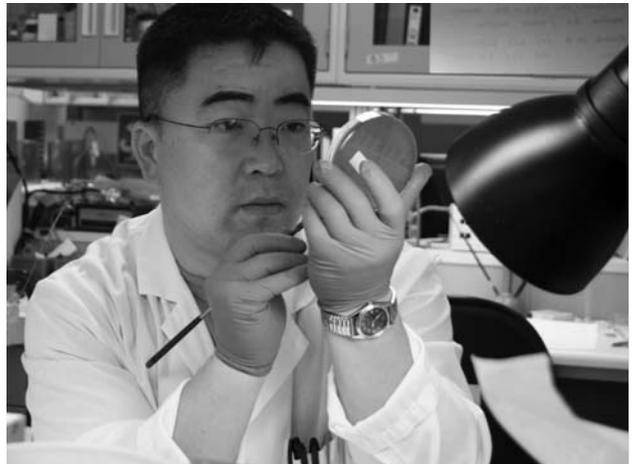
About \$1 million of the laboratory’s \$1.6 million budget comes from local and state taxes, \$200,000 from federal and other grants and the remainder from customer fees.

Distinguishing Characteristics

- ▶ The larger of only two local public health laboratories in Washington, it performs nearly 140,000 tests per year. Swenson’s shop serves the 1.8 million residents of Seattle and the surrounding area. Most of the laboratory’s work supports the activities of Public Health-Seattle & King County.
- ▶ A reference laboratory for clinical microbiology laboratories in King County
- ▶ Recently began a BT program “strictly to maintain capacity.” The laboratory assures appropriate staff training and select agent registration, but does not routine BT work.

Highest Volume Testing

Syphilis and HIV serology, followed by hepatitis serology and testing for chlamydia and gonorrhea. Lower volume work includes tests for TB, herpes serology, respiratory and enteric



Song Cho, microbiologist, at the Seattle & King County PHL, keeps “an eye on future health threats.”

bacteriology, total coliforms and *E. coli* in drinking water, stool parasites and viruses (e.g., influenza). Swenson noted that Washington is one of the only US states—and perhaps the only one—that has not had a single human case of West Nile virus.

Notable Success Stories

- ▶ Computerizing the laboratory in 1995. The laboratory uses M/LAB software from M/MGMT Systems in Sacramento. The technological upgrade was a “huge improvement over a completely manual system with individual little lab forms for each test that we did.”
- ▶ Relocating into the new laboratory facility in 1997.
- ▶ Expanding nucleic acid testing for gonorrhea and chlamydia.
- ▶ “Making good progress” in automating some laboratory testing (e.g., hepatitis testing).

Biggest Challenges

“Our biggest challenges usually have to do with county funding—our biggest source of revenue. County revenue is not keeping up with the cost of county services. We feel that; some years worse than others.”

- ▶ BT work. “Instead of just being prepared to do this testing, we may have to actually do some of the testing to take the load off of the state (public health laboratory).”
- ▶ Serving a growing—and increasingly diverse—population. “There are actually a large number of immigrants

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--Dr. Paul Swenson

entering the US through the state of Washington,” sometimes with a higher prevalence of infectious disease. With this increasing clientele, the laboratory’s workload is increasing about 5% per year—“another reason we’re looking toward more automation.”

- ▶ Preparing for emerging threats, such as avian influenza.

Vacancies

0. “We virtually never have any vacancies. If we have a vacancy, we have to hire someone like yesterday just to keep up with the work. Fortunately . . . we have been very successful bringing in

well-educated, trained folks to do our lab testing” (perhaps due to the proximity of the University of Washington and the state public health laboratory, both of which train laboratory scientists).

Goals

“Our principal goal is to continue to provide high-quality, cost-effective lab services to our health department and to develop the capacity to provide whatever lab services our department might need to handle emerging health threats. For example, right now, one of the questions I keep getting asked is ‘Can you do any avian flu testing?’ Right now we do not have the containment facilities to do that. One goal may be to look at molecular methods for doing flu testing that we could do in our BSL-2 work area.”

APHL

Update from Board of Directors Meeting

The APHL Board of Directors met in September in Boston, MA. Key results from the meeting are as follows:

- ▶ A revised edition of the Board Policy Handbook was approved
- ▶ A finance committee was created to review proposals, APHL quarterly financial statements and investments, collaborate on the development of new business strategies, and approve all investment purchases and sales. If necessary, individuals who are not members of APHL may serve on this committee provided that: 1) they have financial management skills that the general membership does not and 2) the non-members constitute a minority of committee members. The chair of the finance committee will be the secretary-treasurer.
- ▶ The new Nominations Committee will be formed this fall to address the vacancy in two board director positions created by the membership restructure. The elections will take place before the end of the year.

- ▶ The board reviewed all committee plans and prioritized the work according to the current and new strategic plan.

- ▶ The board met with representatives from APHA to discuss the National Citizens Movement to Protect Our Health. The group discussed a joint effort of several other public health agencies to evaluate and design a research agenda, and to help the CDC develop its agenda.

- ▶ The board endorsed the LIMS collaborative development effort with consideration for the differences in information technology restrictions and regulations between states and for the coordination of the project within the existing APHL development activities.

- ▶ The Council of Chairs met with the consultants from Quatt Associates for two days to revise and flesh out the association’s 2006-2009 Strategic Plan. Details of the plan will follow in an upcoming issue of the *Minute*.

For more information, contact Shawna Webster, 202.822.5227 ext. 225, swester@aphl.org.

Member Notes

Michael Loeffelholz, PhD, has resigned from his position as laboratory director at the Arkansas Department of Health and Human Services. Under his leadership, the Arkansas laboratory has seen many successes, such as implementing an innovative, new method to ensure accurate and reliable test systems; increasing external training, outreach activities and emphasis on customer service; and building a state-of-the-art, BSL-3 laboratory, a new virology lab and a chemical terrorism response laboratory. Loeffelholz has been an active member of APHL, serving on the Board of Directors and numerous committees. APHL extends its deep appreciation for his service, and wishes him well as he tackles his new position on the senior management team of Viromed Laboratories in Minnesota.

At the upcoming American Public Health Association annual meeting, **Matthew Matusiak**, Marion County, Indiana’s public health laboratory director, will be presenter at one of the scientific sessions. Matusiak will detail one of their laboratory projects that

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