

# San Joaquin County Public Health Laboratory:

## Lessons from the Great Central Valley

### Director

Dennis Ferrero became the youngest public health laboratory director in California history when he took over the Yolo County laboratory in 1972. He left three years later to move to the San Joaquin Local Health District—now the San Joaquin County Public Health Laboratory—where he still works today. Ferrero directs not only the public health laboratory, but also the health department's Disease Control & Prevention Division. This dual role, he says, "has certainly helped the laboratory," by enabling him to carve laboratory services into programmatic grants and cooperative agreements and to "see where the program people come from." Ferrero is also executive director of the California Association of Public Health Laboratory Directors.

### Location

In an older residential area in the city of Stockton (pop. 250,000), about 30 miles south of Sacramento, 70 miles from Silicon Valley and 80 miles due east of San Francisco. Stockton sits in the Great Central Valley, a fertile agricultural basin producing billions of dollars worth of livestock, fruits, vegetables and dairy products each year, which prompts concerns on agri-terrorism. Stockton maintains an inland port for a thousand miles of delta waterways, raising additional security concerns.

### Facility

"The building has been there for too long—since 1964." The laboratory occupies one floor—about 6000 square feet—of the county health department. It has working BSL-2 suites with capability for some BSL-3 practices. Plans have been developed for a replacement facility.

### # Staff

28 laboratory staff and 105 additional employees within the Disease Control & Prevention Division.

### Revenue

Prior to 1978—when California's infa-

mous Proposition 13 was enacted to overhaul the state's property tax laws—the laboratory received 70% of its funding from real estate taxes, 30% from grants and contracts and 0% from fees. In the aftermath of the new law, the laboratory was forced to rethink its *modus operandi*. Today it receives about half of its funding from fees, 25% from local revenue, and 25% from grants and contracts. "We're chasing fees," said Ferrero. "We have funding sources we have no control over. It forces us to offer some services that maybe we wouldn't otherwise, in order to sustain core public health services." Importantly, Ferrero is authorized to waive fees at his discretion if there is an over-riding public health need. "Any specimens that we really want to see we don't charge for—that flexibility is an important element of any fee-based operation."

### Distinguishing Characteristics

- ▶ Largest regional public health laboratory in California (est. 1923), serving 1.8 million people in eight counties.
- ▶ In the first group of four local California public health laboratories admitted into the Laboratory Response Network in 1998.
- ▶ One of few public health laboratories in the state with full virus isolation capabilities.
- ▶ Has corona virus and West Nile virus molecular identification capabilities.
- ▶ Has extensive molecular experience, with many articles published in the *Journal of Clinical Microbiology* and other peer-reviewed international journals.
- ▶ Known internationally for its research on cutting-edge molecular procedures to detect chlamydia, gonorrhea and other communicable diseases.
- ▶ A center of excellence for laboratory research. "We've made millions of dollars and funded several positions for the county by doing research with diagnostic companies and evaluating new

tests. We have access to specimens in large quantities that other sectors don't have."

### Highest Volume Testing

On the clinical side: STDs (including HIV), followed by TB, hepatitis C and other communicable diseases. On the environmental side: drinking and bathing water, followed by rabies and vector and foodborne disease testing.

### Notable Success Stories

- ▶ Dealing with an influx of Southeast Asian refugees in the early 1980s. "At least 20,000 refugees came to San Joaquin County. It became the local jurisdiction's responsibility to screen the refugees and follow up on any communicable diseases detected. Screening was important because many of these refugees went to work in local restaurants where there was potential for disease transmission."
- ▶ Responding to major local floods—affecting several thousand people—in 1997. The laboratory tested for shigella and other enteric diseases, in addition to re-certifying drinking water wells that had been flooded.
- ▶ Dealing with the anthrax scare of 2001. "We tested hundreds of powders. We rotated people in and out on a 24/7 basis and did the job."
- ▶ Recently, the laboratory has pushed the envelope in molecular diagnostics to add new tests for many LRN procedures, including tests for ricin, influenza and corona virus (SARS).

### Biggest Challenges

- ▶ Continuing to survive in the post-Proposition 13 world with limited funds and "dramatic need."
- ▶ Communicating the public health laboratory's vital role to the public, to decision makers and to the public health professional team.
- ▶ Dealing with a population surge

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## Staff News

**Anna Dillingham** was hired as APHL's new membership manager, effective April 27. A graduate of Brigham Young University, Dillingham comes to the association from Trust for America's Health.

**Emily Mumford**, APHL's membership manager, left on April 29 after nearly three years with the association. Following the impending arrival of her first child, she will continue in her role as editor of the APHL Minute.

**Doris Riley**, APHL's human resources manager, left on April 12 after more than seven years with the association. During her tenure, the association's staff expanded rapidly, and she helped develop a modern

suite of employee benefits to enhance staff retention. APHL wishes her well in all of her future endeavors.

**Ava Sheffield** began employment as the administrative assistant to the environmental health and infectious disease departments on March 31. Sheffield has years of experience as a legal secretary.

**Ralph Timperi, MPH**, retired from his position as director of Massachusetts' State Laboratory Institute and joined APHL staff on April 4. As a longtime state public health laboratory director, Timperi brings valuable experience and insight to his role as senior advisor to the global health program.

## Recent State Laboratory Director Changes

### Kentucky

Stephanie Mayfield, MD, has been appointed as director.

### Louisiana

Henry Bradford, Jr., PhD, retired. The acting director is Stephen Martin, PhD.

### Massachusetts

Ralph Timperi, MPH, retired. Alfred DeMaria, MD, is acting director.

### Mississippi

K. Mills McNeill, MD, PhD, FACPM,

formerly acting director, has been officially appointed laboratory director.

### Montana

Paul Lamphier and Mike Spence, MD, have left the laboratory. The acting director is Anne Weber, MS.

### Rhode Island

Gregory Hayes, DrPH, has resigned to pursue other opportunities. The acting director is Ken Jones, DrPH.

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consisting largely of people who live in San Joaquin County and commute to work in Silicon Valley or San Francisco every day. "Growth projections are huge and our infrastructure may be inadequate for this influx of people."

## # Vacancies

0. Because the laboratory has a robust training program (turning out 35 public health microbiologists since 1975), "we don't go long with a vacancy."

## Goals

- ▶ Building a new, state-of-the-art laboratory. "We've gone through the design phase already, but haven't identified the funds to build it. This needs to be the county's number one priority just because of the potential for disaster without a new facility."
- ▶ Continuing to find ways to grow our programs to better serve the region's residents.

APHL

## Local Laboratory Director

### Listserv Launched

In March, APHL launched a new listserv for local laboratory directors. Intended to facilitate interaction and collaboration, the listserv will serve as a practical means of working through shared issues in a peer-focused environment. Email [membership@aphl.org](mailto:membership@aphl.org) with any questions about this new member benefit.

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The Association of Public Health Laboratories (APHL) is a national, non-profit dedicated to working with its members to strengthen public health laboratories. By promoting effective programs and public policy, APHL strives to provide public health laboratories with the resources and infrastructure needed to protect the health of US residents and to prevent and control disease globally.

This publication was supported by Cooperative Agreement Number 303019 and 319522 from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of CDC or imply an endorsement by APHL officers, members, staff or management.

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