

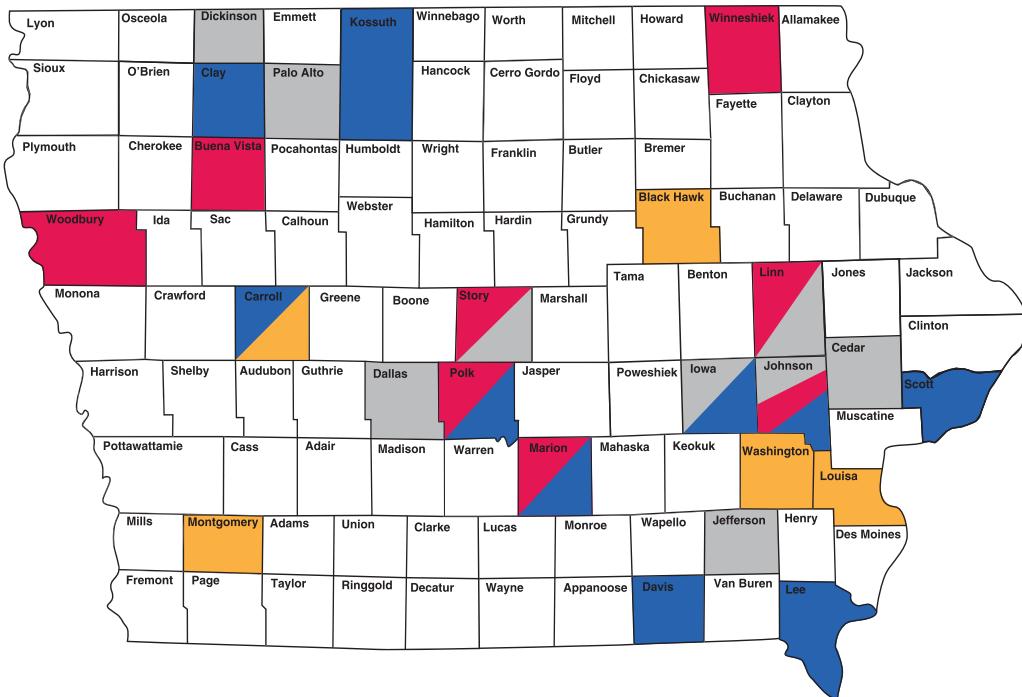


State  
Hygienic Laboratory  
**OUR IMPACT**  
[www.shl.uiowa.edu](http://www.shl.uiowa.edu)



## EDUCATION AND TRAINING FOR CURRENT AND FUTURE LABORATORY SCIENTISTS

### REACHING TEACHERS AND STUDENTS ACROSS THE STATE



STEM Teachers as Externs  
2011 - 2017

Interns  
2007 - 2017

Student Mentorship Participants  
2001 - 2017

Schools Implementing iExplore  
Laboratory Science  
Field of Streams Module  
2016 - 2018

### TRAINING THE CURRENT WORKFORCE

- ◊ All 99 Iowa counties receive SHL public health training.
- ◊ Some programs extend beyond Iowa.
- ◊ In one year, the State Hygienic Laboratory
  - Trained 6,200 professionals and
  - Hosted 109 professional development events.



### BRINGING PARTNERS TOGETHER

- ◊ Center for the Advancement of Laboratory Science (CALS), located in Coralville, Iowa, is a venue for professionals, students, educators and other community members.
- ◊ A fully equipped scientific laboratory
- ◊ Three conference rooms with technology for onsite and remote presentations
- ◊ Opened in 2014
- ◊ From 2014-2017, CALS hosted about 20,000 people at roughly 1,000 events.



### ADDRESSING A CRITICAL SHORTAGE

- ◊ An estimated 250,000 public health workers will be needed by 2020.\*
- ◊ In one year, SHL held 66 STEM events to teach nearly 7,600 students about public health careers.



\*Source: Association of Schools of Public Health

# Opportunities for Career Development

## PARTNERSHIPS

Partnerships are at the heart of our work. We collaborate with students, teachers, businesses, colleges and other groups at the local, regional and national levels to train the current workforce and inspire the next generation of environmental and public health laboratory scientists. Learn more about our education and training programs via our website: [shl.uiowa.edu](http://shl.uiowa.edu).



## LABORATORIES

- The Hygienic Laboratory provides career development and training for the environmental and public health workforce, including sentinel laboratorians, county sanitarians, water and wastewater operators, emergency management partners and policymakers.
- Trainings include in-person events, such as wet workshops for clinical laboratorians, and online courses about topics like biosecurity and regulatory compliance.



## K-12 STUDENTS AND EDUCATORS

- Middle and high school students gain laboratory experience through our Student Mentorship and job shadowing programs.
- In-person and virtual lessons help engage students, and tours of SHL give a glimpse of laboratory science at work.
- SHL hosts teacher externs to show STEM educators a real-world application of the subjects they teach.



## STUDENTS AND YOUNG PROFESSIONALS

- Internships and practicums make it possible for college and university students to apply their knowledge by working with laboratory professionals.
- In coordination with national partners, SHL hosts environmental, infectious disease and management/leadership fellowships.
- SHL teams with Kirkwood Community College to provide hands-on training for students in the Medical Laboratory Technology associate degree program.

