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LEADERSHIP & STAFFING

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CUSTOMIZED TRAINING
THE RIGHT EMPLOYEE TRAINING AT THE RIGHT TIME PROVIDES BIG PAYOFFS

Equipped for testing, analysis, and study, the laboratory is full of technologies and setups that require both initial instruction and ongoing training. In addition to possessing foundational knowledge in their fields, successful laboratory professionals contribute to their disciplines by keeping up with methodology and technology through regular training and education, both inside and outside their organizations.

Most effective lab managers, no matter the specific field, understand the need for continuing education and work through budgetary and time constraints to provide the required opportunities for their staff to grow.

“Our laboratory work supports the hazardous waste treatment operation of our facilities, and training is an important aspect that enables us to perform our job at the highest possible standard,” says William Fornoff, laboratory manager at Clean Harbors Environmental Services in Maryland. “Safety and compliance training are critical and consistently apply to everything we do in the lab.”

Regulated by the Occupational Safety & Health Administration (OSHA) and the Resource Conservation and Recovery Act (RCRA), the staff at Clean Harbors is trained to manage its labs in accordance with the guidelines of the overseeing federal agencies.

“This includes chemical hygiene and the management and disposal of hazardous laboratory chemicals,” Fornoff says. “It is important for a new lab chemist to come into the lab having a foundational knowledge of chemistry, a familiarity [with] laboratory practices, and a willingness to be taught. [However,] consistent training creates an overall culture of safety and compliance in the laboratory where we look out for each other, bring up issues, and work to resolve them quickly.”

Fornoff ’s outlook on training is not unique. James Cale manages the distributed energy systems integration group at the National Renewable Energy Laboratory (NREL) in Colorado. His laboratory research focuses on new types of distributed energy systems and their controls, such as microgrids and smart grid technologies, and the impact of large-scale distributed resources such as photovoltaic power on the electric grid. To Cale, who manages up to 30 people at a time, training is a necessary aspect of maintaining an effective and thriving group.

His team typically works on 15 to 30 projects simultaneously at any given time. Considering the nature of the work, the staff is required to possess a certain level of scientific and engineering background. NREL provides general safety training, which is required of all employees, but also specific training based on the type of work or laboratories where the employees work.

“There are several ways employees can get training,” Cale says. “First, NREL provides a wide variety of optional training beyond the required training. For instance, we have classes that are offered on personal or career development for staff and more targeted management training for managers. We also have regular training on specific business systems at NREL that employees can take as refresher courses or to learn a new skill.

“Second,” Cale adds, “employees can take off-site training on specific tools or development skills that they individually request. Third, employees can complete university degree requirements while working at NREL. Some employees enroll in online courses, take courses in the evening at local colleges, or work part time while they pursue their degree.”

Training and economy
Although it is a necessary ingredient for growth, it’s not always easy to fit training into laboratory schedules and budgets, especially during times when businesses are going through an economic down cycle. However, many managers often understand the potential returns on investing in continuing education.

“If I can convince my executive management that the additional training will result in higher efficiency—meaning lower costs—or provide skills that will attract additional business opportunities above and beyond the cost of the training, then the decision should be clear,” Cale says.

In addition, Cale and many others emphasize that some types of training—such as those having to do with safety and

health—are essential and must be completed regardless of the budget environment.

“It is critical to reduce injury and stay in compliance with state and federal authorities,” Fornoff says. “Prioritizing safety and compliance training ultimately improves the laboratory workplace and increases productivity. This type of training is a top priority.”

Managers at times have a tougher time convincing executives to grant their staff budget and time for further education beyond required training. But executives who understand the ever-changing setting of the laboratory business will be more open to the continual training of their staff.

“I understand that there is an initial cost of training in time and resources, but by matching personnel with a certain training subject, a laboratory manager gets a return much greater than the initial investment,” Fornoff says.

The continuing education landscape

Luckily for managers and their staff, budgetary and technological changes within the laboratories are often mirrored in training organizations; therefore, those running training organizations have adjusted their programs accordingly.

When the Association of Public Health Laboratories, through a cooperative training program with Centers for Disease Control (CDC) called the National Laboratory Training Network (NLTN), started providing training about 25 years ago, laboratory professionals interested in receiving training often had to take off more than a day from their normal duties to travel to a location for the class. If they happened to be lucky, the training came to them.

“In the early ’90s, we did a lot of road shows, where we would go around to different cities,” says Linette Granen, membership and marketing director at the Association of Public Health Laboratories (APHL) in Maryland. “These days it's more expensive to travel and more expensive to get subject matter experts to actually travel, even if they have time to do that.”

“We also found that many times the people in the laboratories, even if they had money to go to conferences or to participate in continuing education, couldn’t leave because of the staffing of the laboratory,” Granen adds.

Granen and others at APHL/NLTN recognized these constraints and responded by providing satellite courses where attendees with satellite dishes could remotely attend classes. They then started providing training through teleconferences—but this type of schooling fell short because attendees did not have access to the visual components presented during classes.

Things changed with the popularization of the Internet in the 2000s. Organizations such as the APHL started offering many more online courses and webinars than traditional sit-in classes. This turned out to have many benefits, the most important of which are the lower cost of a training session and the number of attendees from different labs who can participate in a given session.

“For example,” Granen says, “in a webinar we allow an unlimited number of people to sit in and listen and participate and receive training at a site. We also allow that site six months’ access to that webinar when it’s archived.

“What we found was that many of the people in our audience might have work going on during the exact time that the webinar is being broadcast, so in order to accommodate that, we actually archive every one of our courses and allow anyone from the site to go into the webinar and participate,” she adds. “We find that model works very well and that people really like that.”

Because of the new technology and models available to trainees, organizations are seeing an overall upward trend in those receiving training.

“I think the numbers are either stabilizing or going up a little, and I think that’s because the technology is allowing more labs to participate and is keeping the costs down,” Granen says.

Julie D. Collins, training and membership manager at the American Association for Laboratory Accreditation (A2LA) in Maryland, is also seeing an upward trend.

“A2LA has also been very active in increasing the number of training programs available to members, accredited organizations, and the public,” she says. “In addition to our traditional public courses, we offer training provided at your location (upon request) as well as webinars and interactive online training programs on a variety of specific subjects,” says Collins, whose organization runs approximately 20 public courses all over the U.S. and some 50 to 75 on-site trainings per year.

The right way to train

In most cases, the goals of managers and trainers are the same when it comes to continuing education for lab

professionals: to find a means to provide laboratory professionals with the necessary preparation to excel in their work. The key is to ensure that individuals seek and receive targeted education that will advance the overarching goal of the lab team.

“I have had staff [who] wanted to take multiple personal development training courses, but I encouraged them to focus on the skills they most wanted to enhance, [because] from a management perspective I have to ensure that people aren’t taking training for training’s sake,” Cale says.

“For motivated staff who take their career development seriously, there have been great opportunities to advance their career and have a positive impact on the lab’s work,” he adds. “For instance, I had an employee who recently took an off-site, three-day course on project management fundamentals in support of her goal of becoming a certified project management professional (PMP).”

Fornoff also believes that focused training is imperative— both for the individual and for the organization.

“By knowing your staff, their strengths and weaknesses, you can target training and education that will benefit them and the overall laboratory workplace,” he says.

Continuous learning could also come from sources within the laboratory or an organization. For example, at Clean Harbors laboratories, management follows up on safety and compliance training with weekly discussions. Staffs at different sites also share training information online.

“To connect the many Clean Harbors laboratories, we have a Laboratory Share Point site that is populated with training tools and a discussion board,” Fornoff says.

Also, some instrument manufacturers and laboratory supply companies offer local information sessions. Many of their websites offer training in the form of literature, videos, and web-based seminars as well.

“I also like to foster mentoring in the lab,” Fornoff says. “This type of training offers many benefits over book training, as it opens up the nuances of an instrument or a methodology.”

At the end of the day, many managers believe that receiving training and continuing education is the responsibility of the individual laboratory professional and should match with his or her short- and long-term goals. Relaying these goals to the correct management individuals will allow those in charge to help marry the organization and staff objectives.

“The best way for employees to receive training—especially off-site training—is to make it part of their annual goal setting with their manager,” Cale says. “If we both agree that it will enhance your contribution to the laboratory and have a positive impact on your career development, that sets the stage for me to not only support your request but [also] make a case to my management on why you need the training.”

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