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Profiles in Success

Apprenticeship at Temple College with the Texas Bioscience Institute and Scott & White Memorial Hospital

Laboratory Animal Technician



The Laboratory Animal Technician (LAT) apprenticeship program developed through the collaboration of Scott & White Memorial Hospital in Temple, Texas, and the Texas Bioscience Institute at Temple College (TBI/TC), is an example of the innovative way apprenticeship can be adapted to meet the special needs of certain area industries. Scott & White maintains several medical research laboratories and its proximity to Temple College and the Texas Bioscience Institute creates an ideal environment for the location of this non-traditional apprenticeship. In order to support the research that will translate into state-of-the-art medical treatment, expert and humane care of laboratory animals is absolutely essential. This apprenticeship in lab animal husbandry provides skilled, highly-qualified employees to satisfy the local demand for specialized workers needed to sustain one particular aspect of this region's new high-growth medical research industry.

The LAT apprenticeship at TBI/TC takes a year to complete and is a competency-based program requiring apprentices to demonstrate mastery of certain skills and knowledge, along with on-the-job learning (OJL) and related instruction (RI). Apprentices must complete 2000 hours of OJL and master competencies in providing quality animal husbandry and health care to research animals. They must learn to follow standard operating procedures with regard to protocols and management of their animals, to properly use and maintain equipment, to properly document and problem-solve for medical research trials, and to demonstrate ethical and responsible conduct. The LAT apprenticeship requires 146 hours of RI and provides apprentices the opportunity to take classes at Temple College in science courses such as introduction to biology, introduction to allied health professions, laboratory technical mathematics and laboratory animal medical technology. Laboratory animal husbandry is also learned through online modules designed by the American Association of Laboratory Animal Science (AALAS) and by direct instruction from Scott & White researchers and investigators. Upon program completion, participants receive a Certificate of Completion of Apprenticeship, a nationally recognized credential awarded by the U.S. Department of Labor.

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major advantage of the LAT apprenticeship program is the opportunity for participants to earn while they learn. The LAT offers a health care and benefits package and apprentices are paid on a progressive wage scale as they master competencies and advance in their coursework. Once the apprenticeship has been completed, apprentices are eligible to sit for certification through the AALAS. Certification by AALAS represents the highest recognition of professional achievement for technicians in the laboratory animal science profession.

The LAT at TBI/TC is the result of a collaborative effort on the part of community stakeholders. Partners Temple College, TBI and Scott & White worked together to identify and respond to the



growing needs of the community employers as well as the area workforce. TBI/TC educators recognized that there was a growing demand for medical research support workers in the Temple area. With input from area employers, they determined that training opportunities were needed to prepare individuals to start at entry level in this field.



Since there was no preexisting registered apprenticeship in laboratory animal husbandry, the program architects purposefully incorporated college course work to give their apprentices higher education experience along with exposure to the vast array of opportunities in the allied health care profession. The Laboratory Animal Technician apprenticeship can, therefore, lead to a solid career or serve as a starting point for continued education in the biosciences field. Since the program's inception in 2006, two students have completed the program and two more are in the process. As Scott & White expands its laboratory capacity, more positions will become available for lab animal technicians in central Texas.

"The Laboratory Animal Technician apprenticeship will provide training and opportunities for advancement for individuals that have an interest and skills for working in this area but that otherwise might not have a chance for employment in research."

Katie Burrows, Chair, Biotechnology Department Texas Bioscience Institute/Temple College July 2009 – Issue One Profiles in Success

Participant Profiles

ori Shepperd White heard about the LAT apprenticeship through a veterinarian's office in Belton, Texas where she was working. Tori attended college for two years, and then decided to return to the workforce. While she enjoyed her job working with animals, she was looking for an opportunity with better pay and a more secure future. The LAT apprenticeship was a perfect fit because it allowed her to earn while she learned, and still be in a field where her love of animals was part of her daily routine. Tori knows she is a hands-on learner and likes the applied context of learning through apprenticeship, precisely because it makes learning easier. She says apprenticeship is a great opportunity for a young person just out of high school who does not want to go right back to the books. Now 22 years old, Tori completed the apprenticeship and received her Certificate of Apprenticeship in 2007. As a Lab Animal Tech I, she was eligible to sit for the AALAS Assistant Laboratory Animal Technician Certificate, which she took in 2008. She was promoted to Animal Health Tech II and plans to continue with the goal of achieving certification to to be a facility manager one day.



"I love my job. I love taking care of animals. My working life is the best it could be."



"I love what I do. I love working with animals. It can be hectic, but I feel very at home here, very at ease."

✓ risty Schendel was working in a veterinarian's Clinic, also looking for a better job. She saw an announcement for an apprenticeship opening in the Laboratory Animal Tech I program and applied for it. She interviewed and was accepted into the program, completed the LAT apprenticeship and currently works as an Animal Tech I for Scott & White. Exposure to the medical community through this experience is what really led Kristy to set her sights on becoming a Certified Medical Assistant. In a new 10-month program sponsored by Scott & White and Temple College, Kristy will be one of the first 20 people to complete this certification. Rigorous clinical labs are built into the curriculum where Kristy receives training to assist physicians. The idea of helping doctors in their practices and being part of their teams is appealing to Kristy since her long-term goal is to become a nurse. This will involve more school, but the ability to combine hands-on training while working is a big plus for her and makes Kristy's future bright.

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Participant Profiles

'ara Bennett, age 20, grew up on a ranch in Gatesville where taking care of animals was a daily activity and something she could not imagine living without. She started the LAT apprenticeship in May 2008 and is expected to complete it in August 2009. She had heard about the apprenticeship from her Uncle Blu who thought she would be particularly well-suited for it. He was right: Tara says the work is challenging but rewarding. Every day she is responsible for fresh water, fresh food, new bedding and nutritional enrichment for her 120 to 150 cage animals. Her larger animals, pigs, are specially bathed, given fresh blankets and mats and taken out to play twice daily. Tara notes that this job requires an individual to be very observant as any small changes in an animal's behavior or appearance can be critical to research. Tara says the apprenticeship has been satisfying because the coursework parallels what is going on in the lab: for example, her biology class helped her understand outcomes in her mouse breeding colony. Other aspects of the apprenticeship that Tara likes include paid time off, health insurance and retirement benefits, and an atmosphere where her instructors are helping her to learn and in turn, earn raises.



" I love what I do. I am so glad I found it and don't think I'd be happy doing any other job."

Melanie Johnson is 35 years old and a single mother of four, who loves being in the LAT program. She has always wanted to pursue a career in the medical field and has found the apprenticeship to be an excellent fit with both her previous work experience and her busy family life. Melanie is a little more than six months into the program, having started in December 2008. Prior to the apprenticeship program she was working in the medical research industry in Gatesville for a large manufacturer of computerized mannequins used in simulation teaching and learning exercises. Melanie says the related instruction of the LAT apprenticeship is invaluable in giving her daily work a context. Her medical terminology course gives her a vocabulary to describe and articulate what she monitors each day for research, knowledge she was lacking at her prior job, even though she was quite familiar with the skeletal and muscular structure of the simulation mannequins. Melanie says the hands-



on learning built into the apprenticeship is a tangible learning process that brings something new to her each day. She loves working in an environment where she is responsible for nurturing animals and ensuring they receive quality care. She has noticed that already her own interest and enthusiasm for her work has spread to her children: her oldest son's grades have improved and he is making As on a regular basis. Melanie plans to complete her apprenticeship and continue a path of advancing to consecutively higher levels in the world of laboratory animal science.

Melanie says the hands-on learning built into the apprenticeship is a tangible learning process that brings something new to her each day.