

CONGRATULATIONS TO OUR 2011 RIDE & TIE SCHOLARSHIP RECIPIENT HEIDI TALBOT

Heidi Talbot is the 2011 recipient of the Ride & Tie scholarship award, presented annually to a deserving veterinary student. Heidi is a first-year veterinary student at Washington State University College of Veterinary Medicine in Pullman, WA. Here Heidi shares with us her first introduction into the world of equine veterinary research. What a totally cool summer job!

The Best Summer Job I Ever Had

by Heidi Talbott

Sometimes being in the right place at the right time is all it takes for a truly wonderful opportunity to present itself. That is exactly what happened to me when I heard about what turned out to be the best summer job I ever had. At the time, I was working at a local bar in town. A customer came in and when he heard me talking about riding horses he asked me if I had horse experience and whether I wanted a summer job. As it turned out, this customer was a second-year veterinary student at Washington State University. As part of his extracurricular education he had applied for, and been granted, money toward a project at the Equine Exercise Physiology Lab. Hearing of my horse experience and desire to attend veterinary school myself, he invited me to apply to work there for the summer.

The Veterinary College at WSU has a high-speed equine treadmill. This treadmill is used primarily for research purposes in equine exercise physiology, but can also be used to make respiratory diagnoses and evaluation, and was once even used in a study for sled dogs! Typically, research projects are funded through grants and are carried out during the summer, when veterinary students are available to work. The first summer I spent at the treadmill was a busy summer, with two funded projects and over nine Thoroughbred horses to bring into peak fitness and test. The first project was a study of erythrocyte ion-exchange during prolonged low-level activity (in other words, how salts were internally regulated during an endurance-type ride). The second project was aimed toward creating a more effective mask which would measure O₂ consumption and CO₂ output more effectively than the models which were currently available on the market.

In the beginning of summer, the day would begin at 7 or 8 in the morning. The five to seven of us students who were working would show up, take a five horse stock trailer to where the horses were located, about a half-mile away, and bring the first load of horses to the lab. There we would pick hooves, brush coats and trot out the horses to detect any lameness prior to exercise. We would also perform minor health checks including temperature, respiration and heart rate. We would record this information in the horses' charts and then stall the horses until they were ready to get on the treadmill. Approximately 15-20 minutes prior to loading the horse on the treadmill, one person would hand-walk a horse to warm them up for more intense exercise. Post-workout, the horses were once again hand walked to cool down, then hosed, grained and watered until all horses were ready to go home.

During the first six to eight weeks of the summer, the workouts for the horses included alternating low intensity extended exercise - for example a trot at 4 meters per second (mps) [about 8.2 miles per hour], for 30 minutes at a 7% incline - or a more variable interval or incremental workout at higher speeds (i.e. 4 min. at 4 mps, 2 min. at 6mps [about 12.2 mph], 2 min at 8 mps [about 16.4 mph], 3 min at 10 mps [about 20.5 mph] and a cool-down of 4 min. at 4 mps also at 7% incline). As time progressed, the horses became more fit and the exercise became more strenuous. Eventually, the horses were running incremental workouts to their VO₂ max at peak fitness. This is the highest threshold of speed and O₂ consumption. The speed is maintained for only a short while, but the data collected from this VO₂ max gave us a baseline for how fit the horses were relative to each other.

Once the horses reached peak fitness, it was time for data collection. Data collection was much more grueling for us student workers than a regular workout day. Collection days involved long hours, attention to detail and no room for mistakes. I once ran blood work on over one hundred test tube samples, one at a time. Despite the reasons for possibly hating data collection, it was the most fun. Emotions ran high, friendships were forged and I learned a great deal.

My job at the treadmill was a great experience. It expanded my knowledge of veterinary medicine, but it also gave me valuable insight into the world of research. The horses at the treadmill are often donated horses. Most horses accept the treadmill quickly and readily, because it plays on their natural desire to move. The horses of the treadmill are treated well, with excellent veterinary care and great attention paid to their health and happiness. You can see it in the eyes of these ex-racehorses they love the speed and exhilaration they experience with every workout. While animal research is often dubbed as a controversial topic, my experience with it was fruitful and fulfilling.

Working at the treadmill was the best job I have ever had. I have gained invaluable veterinary experience, I worked with some of the nicest (and smartest) people you have ever met, and to top it off, I got to 'play' with horses, all day, every day. And for someone like me, who loves horses more than life itself, there is hardly anything more exhilarating than standing, unmoving, mere inches away from their favorite beast moving nearly thirty miles per hour! The halls of McCoy Hall come alive with the sound of hoofbeats and the walls reverberate from the force. It's the next best thing to being on top.

Right: Heidi and her horse, Levi. Heidi is very interested in Ride & Tie. Let's get her out on the trails for some races soon! Photo: Cyndi Smith

