

AAALAC International Fellowship 2015

The AAALAC International Fellowship is meant to promote and reward technicians who “have demonstrated a commitment to a career in laboratory animal science and have shown a strong interest in attaining additional education and training to become more proficient in their vocation. The awardees are individuals who have made (or have the potential to make) significant contributions to the field of laboratory animal care and use.” After my own experience, I feel AAALAC has truly accomplished its goal.

I have worked in research for about 12 years and I have had the honor and privilege of working with a wide variety of animals and people. I have had a fulfilling and exciting career up this point in my life. I am always searching for more experience and knowledge. This fellowship provided exactly what I needed. When I applied for this fellowship, it was my fourth attempt. Prior to my most recent application, I had given up on trying, figuring there were many more qualified and worthy applicants out there. Last year, during my first year of ILAM (Institute for Laboratory Animal Management), one of our presenters was a previous recipient. After hearing of his experiences going into and coming out of the fellowship, I went home and worked on my application. For me, this experience has molded my view of my path in this field. I will forever be grateful for this experience and I hope I can continue to contribute to our field in a positive way for years to come.

From the minute my feet touched the ground at Heathrow International Airport they started running and didn't stop until I returned to the US. “They drive on the wrong side of the road” is what I have heard about England. Although, I wouldn't call it ‘wrong,’ it took a lot to get used to that difference. Up until my last day, I tried to sit in the driver's seat of vehicles. One of the main intentions for this fellowship is to study the differences between the English system and the American system. Other than the side of the road, accents and dining utensils, there wasn't much difference between our two countries. Although I spent my tea time drinking coffee and the fact that I did not use my knife to eat, not many other differences were exceptionally notable in my day-to-day activities.

I spent my first two days exploring London and doing typical tourist activities. The first day, I went out and got lost in the city. I find that to be the best way to really learn a city. After toiling around in the tube (aka the subway) for a day, I quickly became a navigation expert. The following day, I grabbed a hop-on hop-off bus tour. I was driven about the city so I could see Parliament, Big Ben, The Tower of London, Westminster Abbey, Buckingham Palace and other iconic buildings in London. I rode the London Eye, providing me with a great view of the entire city. I was amazed at the dramatic architecture. In the skyline one can view Saint Paul's Cathedral in the same view as the Gherkin or the Shard (two ultra-modern buildings). The remainder of my visit consisted of touring many research facilities and the IAT Congress with some free time to explore the country.

On my third day I received a tour of the MRC National Institute for Medical Research, where I saw their fish lab, opossums and large water treatment area. They recently celebrated their 100th anniversary, which amazed me that any animal facility was over 100 years old. The facility was isolated in the country, however, it was beautiful. The building was so appealing that *Batman Begins* used this building to film a

portion of the movie. After NIMR, I was also provided a tour of the new Francis Crick Institute in downtown London. The NIMR building will be decommissioned and all research will be relocated to this new site, which will no longer be supported by MRC (Medical Research Council). It should open in November 2015 and has quite an impressive in design and size. The Francis Crick Institute is a biomedical discovery institute dedicated to understanding the scientific mechanisms of living things. Its work is helping to understand why disease develops and to find new ways to treat, diagnose and prevent illnesses such as cancer, heart disease, stroke, infections, and neurodegenerative diseases. It is a consortium of six of the UK's most successful scientific and academic organizations - the Medical Research Council (MRC), Cancer Research UK (CRUK), the Wellcome Trust, UCL (University College London), Imperial College London and King's College London.

My third day ended with a nice relaxing train ride to Porton Down. Upon my arrival, I was picked up by the taxi driver that drove the previous year's recipient around. After a few days of eating English food, I had the opportunity to try an Indian Restaurant, which was a marvelous reprieve from the bland English diet. On my fourth day I toured the Centre for Macaques, located on a military base in Porton Down. It was a very clean facility with highly trained primates, both human and non-human. I did not notice many of the common stereotypies found in caged primates, which can be attributed to their enrichment and training programs.

Next I was provided a tour of King College's massive aquatic facility. King's College London is a research-led University with an outstanding reputation for driving cutting-edge research. Its experts advance science, inform policy, shape industry, pursue cultural inquiry and engage communities. Collaborating internationally and across the disciplines, researchers at King's are united in responding to global challenges and making a difference. The history is present in every statue, mosaic and stairwell. I, then, met with staff from Understanding Animal Research (UAR) who are in the final stages of their Concordat for 2015 where companies vow to be open with their animal research to counteract the years of negative press for animal research. Understanding Animal Research aims to achieve broad understanding and acceptance of the humane use of animals in biomedical research in the UK, to advance science and medicine. The information provided by Understanding Animal Research is based on thorough research and understanding of the facts, historical and scientific. One of my goals in this industry is to be a part of the change towards openness and pride in this field. Too many years have gone by while the research community hid what they did, not out of shame but out of fear of extremist retributions. I felt emboldened upon my return to work with our US industry to promote this culture of care and openness with the community at large.

For the last two days of the first week, I traveled to Cambridge. First, I toured the MRC-LMB Ares Building. The LMB is responsible for many pioneering techniques, such as methods for determining the three-dimensional structures of proteins and other macromolecules, the sequencing of DNA and the development of monoclonal antibodies. Their scientists tackle difficult, long-term research problems. At the same time they are encouraged to exploit their discoveries – through patents, licensing and business start-ups – helping to advance medical research and improve the UK's economic competitiveness. I was able to observe a mouse implantation procedure, which is fascinating. I visited the cage wash area where they use robots named Johnny 5 and Megatron. This little touch of personalization in the area created an

interactive and energetic staff. Then, I was provided a tour of Cambridge and drinks at the Eagle pub where Watson and Crick celebrated the discovery of DNA. The science geek in me really enjoyed having a pint in such an historic place. On my seventh day, I was provided a tour of primate, rodent, sheep and avian research facilities. I was even permitted entrance into a marmoset enclosure where I was able to feed marshmallows to a family as they crawled all over me. I believe I giggled like a giddy school girl, but who wouldn't?

My two free days, eighth and ninth, I spent touring Stonehenge, Windsor Castle, Bath. Although Stonehenge is a 'bunch of stones in a field', I was still taken aback by the age of this site and the mystery behind it. Windsor Castle was the first castle I had ever seen and I was able to see the changing of the guard as well as Henry VIII's grave. My visit to Bath allowed me to tour an ancient Roman bath. After my day trip, I spent my ninth day visiting as many museums as I could. I managed to make it to the British Museum, Science Museum and Natural History Museum. The most memorable displays I visited were the dodo and the Rosetta stone.

On my tenth day I returned to Cambridge and visited the Wellcome Trust's Sanger Institute. Their research is broadly divided into six main areas of investigation: Human genetics, Mouse and zebrafish genetics, Cellular genetics, Pathogen genetics, Malaria, and Bioinformatics. Working within these areas, our Faculty of world-leading scientists can explore and develop their own unique hypotheses. Here I met last year's UK winner of the AAALAC Fellowship. We were able to trade some notes on our experiences as well as some vital regulatory documents to aide each other in our essays. At the Sanger Institute, I was able to observe the injection of a mouse embryo. They, too, had robots in their cage wash area; named Marge and Homer.

On my eleventh through fourteenth days I attended the IAT (Institute of Animal Technology) Congress. The Congress is smaller than the AALAS national meetings but it is very intimate and rich in content and quality. Another difference between Congress and Nationals is that there are no partial registrations at Congress. This may lead to decreased attendance due to the inability to afford paying for full registration as well as inability to take off from work. If I were to make a suggestion for improvement, I would try to encourage younger technicians and staff to attend; this will ensure the torch is carried on to the next generations of leaders.

Throughout my trip, I saw amazing sites, toured many types of facilities and fully immersed myself in the experience; including eating haggis and blood pudding. Out of everything, I am most enchanted with the people I met. From managers to husbandry staff, everyone I met seems genuinely proud and excited about working in animal research. Two special individuals deserve special attention, Gail Thompson and Margaret Skeoch. Gail, a past president for AALAS and founding member of ILAM, found me the first night of IAT and was a great companion for my week at Congress. Margaret or Mags was my adoptive mum from Scotland. She was gracious enough to take me around Glasgow and out to see Loch Loman and other sites. Both Gail and Mags were a part of small group of IAT attendees that were indoctrinated into the S.O.B.S. (Society of Bridge Spitters). During the conference I had the special honor of being added to the group and we all spit over a bridge on the River Clyde.

As with our driving lanes, the regulations for research in the UK may seem to be different than the US, almost on the opposite side of the road. In reality, we are all on the same road going from point A to point B, we arrive there differently. Left or right side of the road, we are all on the correct side of research and regulations. The main difference lies in culpability. When compliance is a concern, the institute is held accountable in the US but the individual is held accountable in the UK.