Sierra Imanse
AAFV Scholarship – Summary of Experiences

Thank you very much for your support in my aquatic externships; they were all excellent experiences that helped me grow as a veterinary student. The following is a summary of three of my externships:

## Eastern Fish Health Workshop (EFHW)

My Michigan State Univeristy Aquatics Rotation, which included the Eastern Fish Health Workshop for one of the three weeks, was a fantastic send-off into my aquatic experiences. There were a variety of lecture topics, from fungal disease in sturgeon to discovery of new species of flavobacterium in salmonids. There was also an array of aquatic-interested professionals attending, and I got the opportunity to talk with fish immunologists, aquaculture and aquarium veterinarians, DNR officers...even human pathologists! The networking was the most important part of the workshop for me; because fish health is such a small field, attending these meetings is like jumping in to a gathering of long-lost friends. Dr. Faisal, the aquatic veterinarian at Michigan State, had many wonderful words said about him for his upcoming retirement. Overall, it was both a fun and educational experience.

## University of Florida's Tropical Aquaculture Laboratory (UF-TAL)

The University of Florida's Tropical Aquaculture Laboratory was the most intense externship I've ever had! It was an educational and incredibly satisfying experience. I was living on-site of the diagnostic laboratory that services many aquaculture facilities in Florida, so I got to see a large variety of fish species. My first week consisted mostly of visitations to different sites; I went to the Florida Aquarium, Segrest Farms, and the 5-D Tropical fish farm. In addition, I visited a site that leases space for fish holding, and was home to many "retired" fish from Disney World and shadowed a USDA veterinarian's airport inspection. The most important concepts I learned at UF-TAL is the importance of water quality in fish health (it's VERY important, and too often overlooked!), the process of choosing an appropriate medication, and the technicalities of dosing a system with a drug, and thinking all the way through the nitrogen cycle, beyond "ammonia to nitrite to nitrate". The physical skills I learned at UF-TAL included performing a thorough necropsy on a fish (with cultures) and performing water quality tests. The time not spent directly on cases or visitations was always full of learning, be it from homework assignments, oral examinations, interactive powerpoint lectures, "mystery" histopath slide interpretations, or additional readings. Roy Yanong and Debbie Pouder's investment of both time and resources into the education of their students is phenomenal, and I recommend this externship to anyone interested in fish medicine or pathology!

## The Vancouver Aquarium

The Vancouver Aquarium gave me significant insight into the day-to-day activities of aquarium veterinarians, and more marine mammal experience than I'd ever had previously. I spent most of my time at the aquarium, but also multiple days a week at the Marine Mammal Rescue Center. We had a Northern Sea Otter pup come in at the end of my first week, and I got to care for him for many hours over the course of my externship. Because I had just finished my UF-TAL externship and had an interest in fish path, they handed a lot of cool fish cases off to me. I saw several different species and conditions such as mycobacteriosis, uronemiasis, gas bubble disease, chronic orchitis, and more! I also was able to work with several amphibians, and of course, dolphins and pinnipeds. The highlights of my externship were assisting with anesthesia and procedures (dental, endoscopy) on an adult Northern Sea Otter, three Steller Sea Lions, and a huge 500 lb California Sea Lion! Although the cases were all quite cool, the most important thing I gained from the Vancouver Aquarium was a role model on how a great veterinary staff functions. Despite the recent tragedies they've endured, the veterinarians and technicians at the

Vancouver Aquarium made the most welcoming, upbeat, and efficient veterinary team I've ever worke with.