Assignment #1: Get Wet

This project forced me to look at my photography differently. In most of my pieces I choose to photograph the interaction between people. Unfortunately I am very unfamiliar with the ideas of flow visualization, so simply coming up with an idea to photograph was a struggle for me. I tried to stage many different situations that I thought would satisfy the objectives of this assignment but I found myself simply copying images I had seen on the class website. I photographed steam and water splattering off of a hot pan, a mixture of water and oils in a clear glass, the movement of ribbons and papers created from the air stream of a fan, the collection of water on a flat surface, etc. Finally as an art student I decided to just try to create a beautiful image that contained a fluid as the subject. The photo I finally decided on displaying the movement of water droplets in air as a result of gravity.

The flow apparatus used in this photo is quite simple; it is a metal railing with a flat metal surface underneath it. The circular railing is about an inch in diameter, while the surface below it is 1/8 inch thick. The distance between the railing and the tabletop is 1 ½ inches and the tabletop is a foot long starting from the closest side of railing moving back. As the water hits the top of the railing it is forced by gravity to move to down to the bottom, moving along either side of the circular pole. The water eventually settles at the bottom side of the railing forming a droplet until additional pressure force the droplet to fall to the tabletop below. Because the tabletop is a flat, level surface the water puddles below the railing.

As mentioned before, I tried many different situations where I staged the visualization, however in the end I found that some of the most beautiful movements of fluids we see everyday, forming naturally. I saw this fluid flow occurring outside as a result of an evening rain, however I believe that this same situation could easily be formed using a lot of water and a moist surface. There was little lighting on my subject because it was photographed in the night, so I was forced to use a long exposure to get the needed details. The lights seen in the image were a result of neon lights from the restaurant to the left of the image as well as headlights and brake lights from cars in the distance and to the right. Because of the small amount of light it is essential to use a tripod when trying to duplicate this image.

This image is a very close up view, so the size of the field of view is fairly small, only 4 ½ inches. The distance between the end of my lens and the railing was about 7 inches. The camera used is a digital Nikon D40X with 10.2 mega pixels which captures 3,872 x 2,592- pixel images. The lens' total range is 18-135 mm, f/3.5-5.6. The aperture setting of this image was f/8, with a shutter speed of one second, and an ISO setting of 800.

I think this image reveals fluid dynamics that we see everyday but may never realize. Personally I think this is a beautiful image that captures the movement of water. This image is not as technical as some of the other images shown in class; as an art student, rather than an engineering student, I was drawn to different imagery when working of this assignment. Since I am new to flow visualization I would like to better understand the different fluid dynamics that are being displayed in this image. I think there could be many aspects that could be analyzed such as the rate at which the water is

moving and the shape that is formed by the droplets. I think that this concept could continue further with looking at other fluid dynamics that are occurring naturally.