

Discovery of the Ninja Lanternshark kicks off our first STEM cafe !

What went on during our first Piner High STEAM Café this year? We found out about Lost Sharks! Our guest presenter Vicky Vásquez from the Pacific Shark Research Center shared her adventures in exploring and discovering uncommon sharks of the deep, one that she even got to name...the Ninja Lanternshark that glows in the dark.

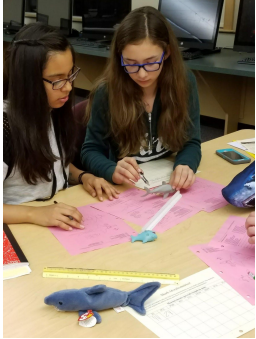
Her love from sharks began innocently enough- going fishing with her father off the coast of her family's native country, Venezuela. Her life changing moment occurred when they landed a fish that had been attacked by a shark- so efficiently- that it's brain was fully functional. As it lay breathing, eyes seeing- mouth gaping-- on the boat deck she was hooked (!) and there started her fascination with sharks and science.

Fast forward through UC Davis education and a variety of fishing boat adventures to her appearance during the Discovery channel's' Shark week talking about Alien Sharks ! This is where she introduces the world to lost sharks such as the Greenland shark that are rare so rarely seen. She also talks about her fascinating project working with a collected museum specimen that no one else has identified- found 1,000 feet below the surface and glowing emitting an eerie bioluminescent glow from it's eyes, spines and belly.. As she unraveled the steps to determine if her shark was indeed a new species- it occurred to me that Science operates on similar principles as does the law: A species is assumed to be similar to those that are known until proven otherwise. Taking on this task is where she learned the most about shark morphology and taxonomy. She analyzed tooth size, fin shape, photophore placement (the glowing lights on the shark body)...until it became completely clear---this WAS a new species !

Naming a new species also has certain agreements- the scientific name of this new guy was *Etmopterus benchlyi* to honor the steadfast work that Peter Benchley has done to promote sharks as necessary and admirable top predators after he created such a shark fear frenzy with his movie, Jaws. The common name was more fun and we watched a live action video with Ms. Vásquez' niece and nephew as they discussed the merits of a variety of names- finally settling on the Ninja Lanternshark.

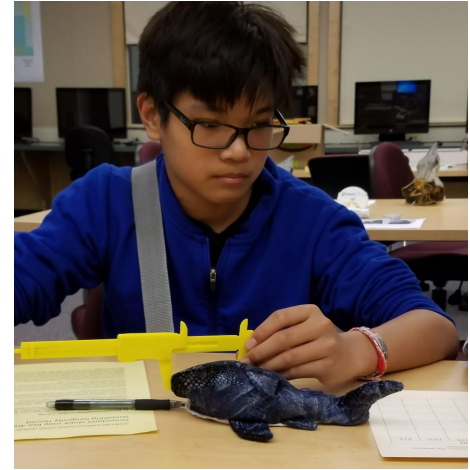


Sadly her vivacious talk came to an end but we were treated to shark fin cupcakes, watermelon shark mouths and a blue jello ocean cup complete with gummy sharks as we started further exploration in the after cafe. These treats were prepared by the Piner High Culinary catering class led by Ms. McCabe.



Students had the opportunity to act as taxonomists do, learning about morphometrics and measuring proportionalities of fins and tails to classify our shark specimens (some of them even being the stuffed kind). We also got to physically hold Mako shark heads and leathery shark egg cases. Having Vicky come to each table to answer questions and share more stories was indeed a wonderful way to end an exciting start to our STEM cafe

season.



Written collaboratively by Piner High STEAM Club.

[Video link to Lanternshark trailer](#)



Marine Biologists: Vicky Vásquez (L) with Sarah Heyne (PHS teacher)

Shark Fin cupcakes cleverly crafted by Piner culinary catering class !