Tulane helps identify rare shark near BP spill site

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It's not exactly Jaws, but Tulane University is hosting a unique guest—a small and very rare species of shark, nicknamed the "pocket shark." Just five and a half inches long, the specimen is archived in the Royal D. Suttkus Fish Collection at the Tulane <u>Biodiversity Research Institute</u> in Belle Chasse, Louisiana.

The only other known specimen of this kind of shark was captured 36 years ago off the coast of Chile. Housed at the Zoological Museum in St. Petersburg, Russia, it was named *Mollisquama parini*.

Tulane's specimen was collected in February 2010 near the site of the Deepwater Horizon spill by the National Oceanographic and Atmospheric Administration's (<u>NOAA</u>) ship *Pisces*, during a mission to study sperm whale feeding. NOAA researcher Mark Grace discovered the shark in the freezer at NOAA's Pascagoula, Mississippi, laboratory in 2013.

"He contacted us and asked if we would archive the specimen and allow him to access it for study," says Hank Bart, Professor of Ecology and Evolutionary Biology and Director and Curator of Fishes, Tulane University Museum of Natural History.

Grace and Tulane postdoctoral researcher Michael Doosey undertook a study to determine what species it was. "They noticed the circular rows of teeth and suspected it was a member of the kitefin shark family, *Dalatiidae*, which includes cookiecutter sharks," says Bart.

Fish scientist Gavin Naylor of Hollings Marine Lab and Medical University of South Carolina provided genetic confirmation of this hypothesis. "Because our taxonomic evaluation of the Gulf specimen is ongoing, we are referring to it as *Mollisquama* sp., rather than described species *M. parini*." Bart says.

"This find highlights how little we know about the Gulf of Mexico," says Bart. "It also highlights the importance of marine surveys by agencies like NOAA Fisheries and the detective work of NOAA scientists like Mark Grace. Without this work, we never would have discovered the Gulf specimen of *Mollisquama* sp."