

Glowing squid's genome sheds light on how animals and microbes evolve to work together

Every evening, nocturnal Hawaiian bobtail squids ... emerge from their burrows in shallow waters of the Pacific to hunt for shrimp. These soft-bodied, golf ball-size cephalopods don't have much to protect them So they rely on another organism to help out: the bacterium *Vibrio fischeri*. This microbe lives in an organ embedded in the squid's ink sac and emits light throughout the night to match the illumination of the moon.

"It is basically acting like a little invisibility cloak for the squid," said Jamie Foster, a microbiologist at the Space Life Sciences Lab at the University of Florida. In return for help with camouflage that protects against predators, the squid offers up sugars to feed the bacteria and lure them into the organ.

This mutually beneficial relationship ... is one of numerous examples of how multicellular animals and microbes work together to increase their chances of survival.

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Now, Foster and an international team of researchers have mapped the genome of a Hawaiian bobtail squid, creating a new tool to explore these questions. ... [Published in the Proceedings of the National Academy of Sciences](#), the findings lay the groundwork for future studies of animal-microbe interactions, including those in humans.

Read full, original post: [New Squid Genome Shines Light on Symbiotic Evolution](#)