Figure S1



Figure S1

Cladograms illustrating the relationships of the host (33; 108) and the symbiont (19; 121) within their respective domains. *, clades with symbiotic systems where welldeveloped host genetics are available; †, examples of the clades of host and symbiont with members that develop light organ symbioses; such associations are thought to have evolved independently in the squids several times (60). *V. fischeri* image (lower right) provided by Dennis Kunkel Microscopy, Inc.

Figure S2



Figure S2

Embryogenesis, the developmental period that occurs in the absence of the symbiont. (a) An adult female surveying a clutch of ~200 eggs, which she has laid on hard substrate provided in the culture system. (b) A ventral view of an embryo removed from the egg capsule. This image of an individual about half way through embryogenesis shows the light organ (white square) developing as a rudiment associated with the ink sac. (c, d) Light organ about two-thirds of the way through embryogenesis. (c) A surface view reveals the developing anterior appendage, and early invaginations at the pores. (d) A deeper view shows a duct, medial to one of the pores.