



**FIGURE 9.5.** (A) Choanoflagellates are the closest living unicellular relatives to all extant multicellular animals. The single choanoflagellate cell has a collar (red arrowhead in B and C) and a single flagellum (green arrowhead in B and C). B is a drawing of a choanoflagellate, whereas C is an actual photo in which the cell body and flagella are stained green, the nucleus blue, and the collar red. Cells, called choanocytes, with a very similar morphology are seen in sponges (D, green arrowhead points to a flagellum and the red arrowhead points to a collar of a single choanocyte cell).

9.5A, redrawn from King N., *Dev. Cell.* 7: 313–325, © 2004 Elsevier; 9.5B,D, reprinted from Kent W.S., *A Manual of the Infusoria*, Plates IV-13, X-2, © 1880, David Brogue, London; 9.5C, photo courtesy of Nicole King, University of California, Berkeley