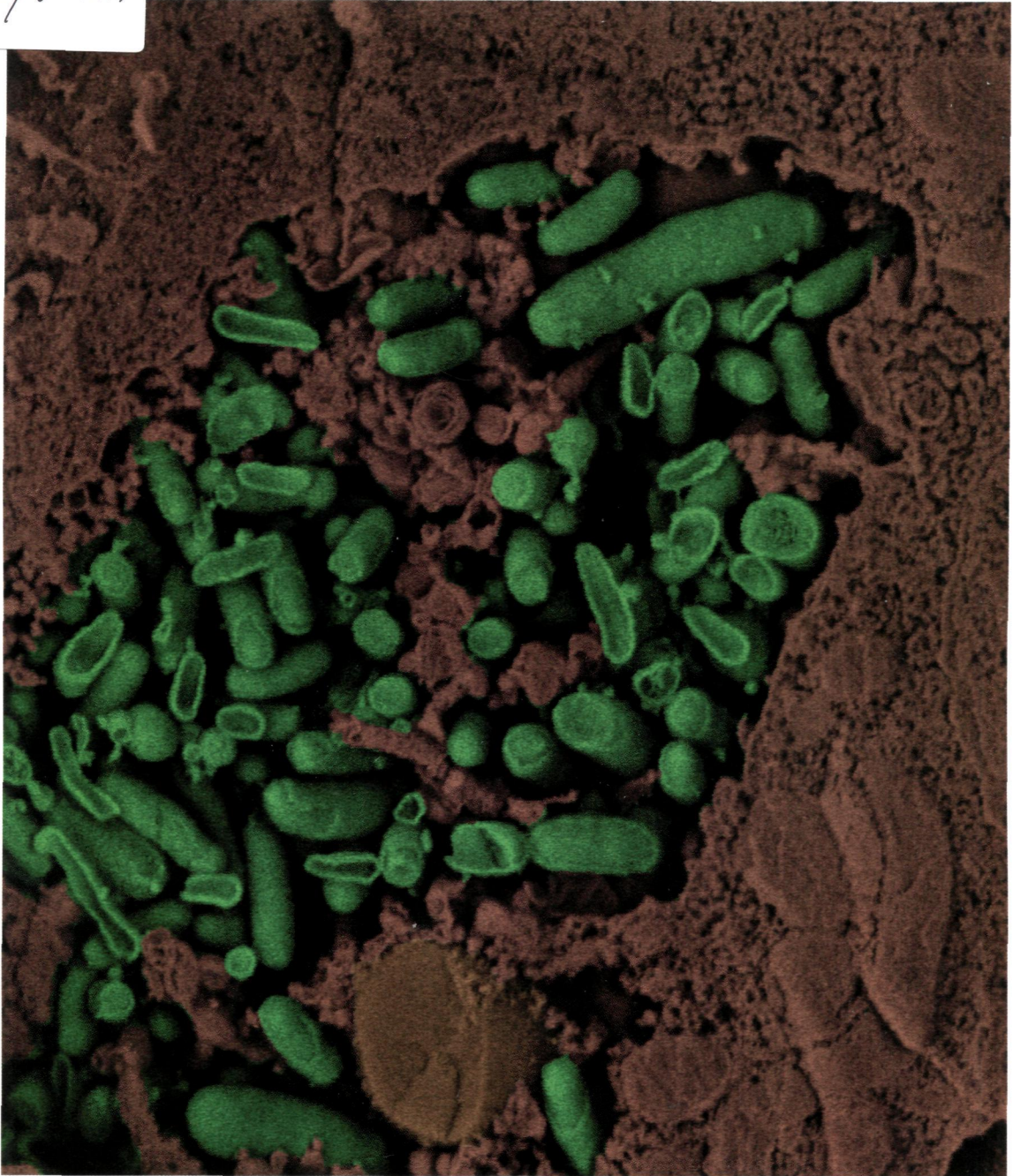


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*Cover photograph* (Courtesy of Elizabeth Fischer, Research Technologies Branch, Rocky Mountain Laboratories Microscopy Unit; reprinted with permission.): Scanning electron micrograph of a cryoprepared Vero cell (brown) showing a vacuole harboring *Coxiella burnetii* (green), the bacterial cause of human Q fever. *Coxiella* directs development of its replication vacuole by secreting proteins with effector functions into the host cell cytosol via a Dot/Icm type 4B secretion system. Signaling through the PmrAB two-component system is essential for *Coxiella* Dot/Icm function. (See related article on page 1925.)