Anatomy of Riftia pachyptila Chemosynthetic bacteria GIANT CO2 These symbiotic bacteria live inside the worm's cells and use HShydrogen sulfide from nearby H,S vents as an energy source TUBE Capillary **Trophosome Bacteria HEART** WORM Vascular structure that captures molecules from the surrounding vent environment hydrogen **SULFUR** Crystals of sulfur are a product **TROPHOSOME** of chemical Special organ reactions going containing symbiotic on inside the bacteria worm and accumulate **TUBE** there Protective chitin tube secreted by the worm that it can retract inside of hydrothermal **TRUNK** Main body segment of the worm **Attachment** The worm attaches as a larva and will remain here for life deadle Symbiont uptake Symbionts migrate through the larva's body wall when it is still developing hhmi Tangled **Bank Studios**