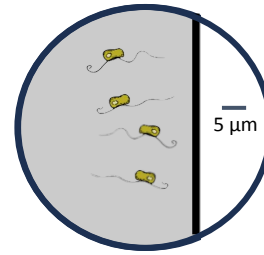
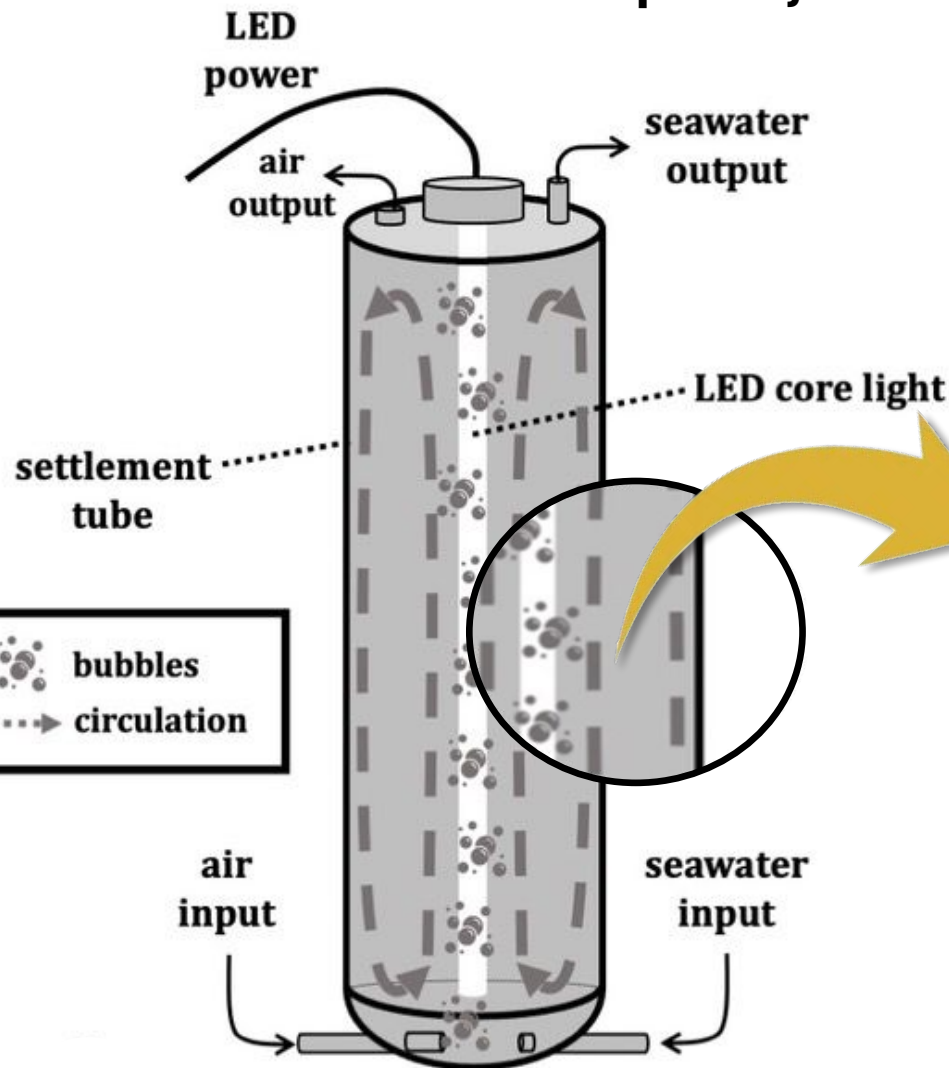


Universal hatchery system for developing new seaweed strains for land-based aquaculture production

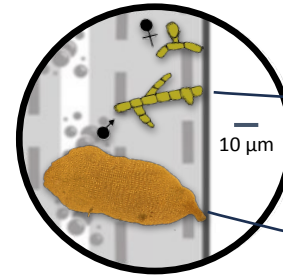
Goal: Diversify and grow sustainable aquaculture by making seaweed hatchery technology accessible

Concept: An all-in-one, modular, affordable core-lit apparatus for seaweed hatcheries (CLASH) system

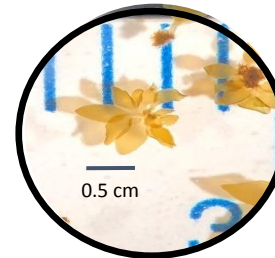
Kelp Life Cycle in the CLASH system



1. Free swimming zoospores (N) are added (water circulation and light are both off). After 3 days, air and light are both turned on, with lights mimicking a spring/summer photoperiod.



2. Within 1-2 weeks, the spores grow into microscopic gametophytes that attach to the walls where gametogenesis and syngamy form zygotes (2N). The zygotes grow into microscopic embryonic sporophytes.



3. After 4 weeks, embryonic sporophytes develop into macroscopic sporophyte seedlings (2N) that are scraped from the walls into suspension to hasten development.



4. When large enough, suspended sporophyte adults (2N) are transferred to an outdoor grow out tank to reach market size.



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Want to learn more or test a CLASH unit? Reach out! Andrew Kim or Lucie Gaw
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CLASH info