2020 IMPACT CIRCLE

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Project Ahab

Whales are amongst the largest animals to have ever lived, and some species can live for more than 200 years. We have little insight into how such gigantic animals maintain their health for such long periods of time. Recent developments in cell biology and microfluidics enable creating miniaturized versions of complex tissues such as muscle, brain and skin of the whale, that have many of the characteristics of the full-grown organs they are derived from. By growing such “organoids” from whales in the lab, we can study tissue function from these incredible species and ask specific questions about how whales apparently avoid many of the diseases of aging.

We hypothesize that there are secreted factors from living whale tissue that can improve function in human tissue.