



## Becoming Jonah: Analyzing Forces & Flows in the Whale Mouth

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The whale mouth is a mysterious place. Its anatomy is unlike that of any other mammal, without cheeks or lips, with floppy or piston-like tongues, and with comb-like baleen plates, peg-like teeth, or protruding tusks. How does water flowing into and through the whale mouth enable capture, ingestion, processing, transport, and swallowing of plankton, fish, or squid? Functional morphology findings from dissections, experiments, biologging tag data, 3D printing, and mathematical and computer modeling together reveal secrets of cetacean oral anatomy, physiology, and ecology, showing why it matters to whales—as well as to human industrial designers creating better filters.



**Thursday, June 16<sup>th</sup>, 13.15**  
**Zoophysiology Seminar Room (1131-127)**