



## Illuminating the Microbe Associated with AIS in the Search for their Achilles Heel

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- Microbes have evolved to live in close association with aquatic organisms (e.g. macrophytes, bivalves, fish etc)
- AIS support large populations of microbes (bacteria and fungi) which can be extremely distinctive to AIS depending on their lifecycle and particular environmental conditions.
- We propose to use DNA sequencing approaches to identify microbes associated with AIS.
- General approach

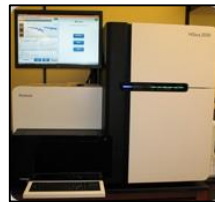
### AIS samples



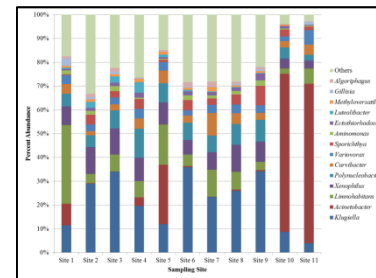
### DNA extraction



### Sequencing



### Sequencing Analysis



Identification of AIS specific microbiota

- This characterization may allow us to eventually develop effective, specific, and cost effective biological control agent of AIS. That is, we can identify bacteria that are unique to AIS and use them to develop biocontrol strategies