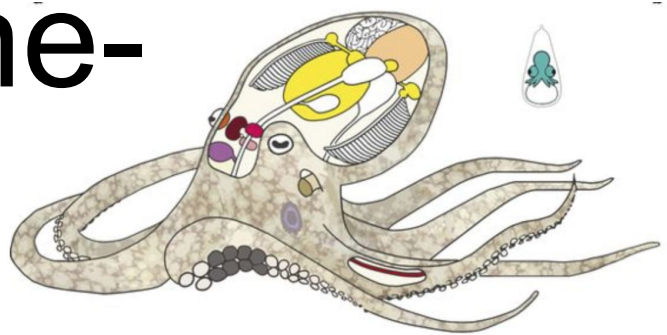
Gene regulation by microRNA in marine-invertebrates

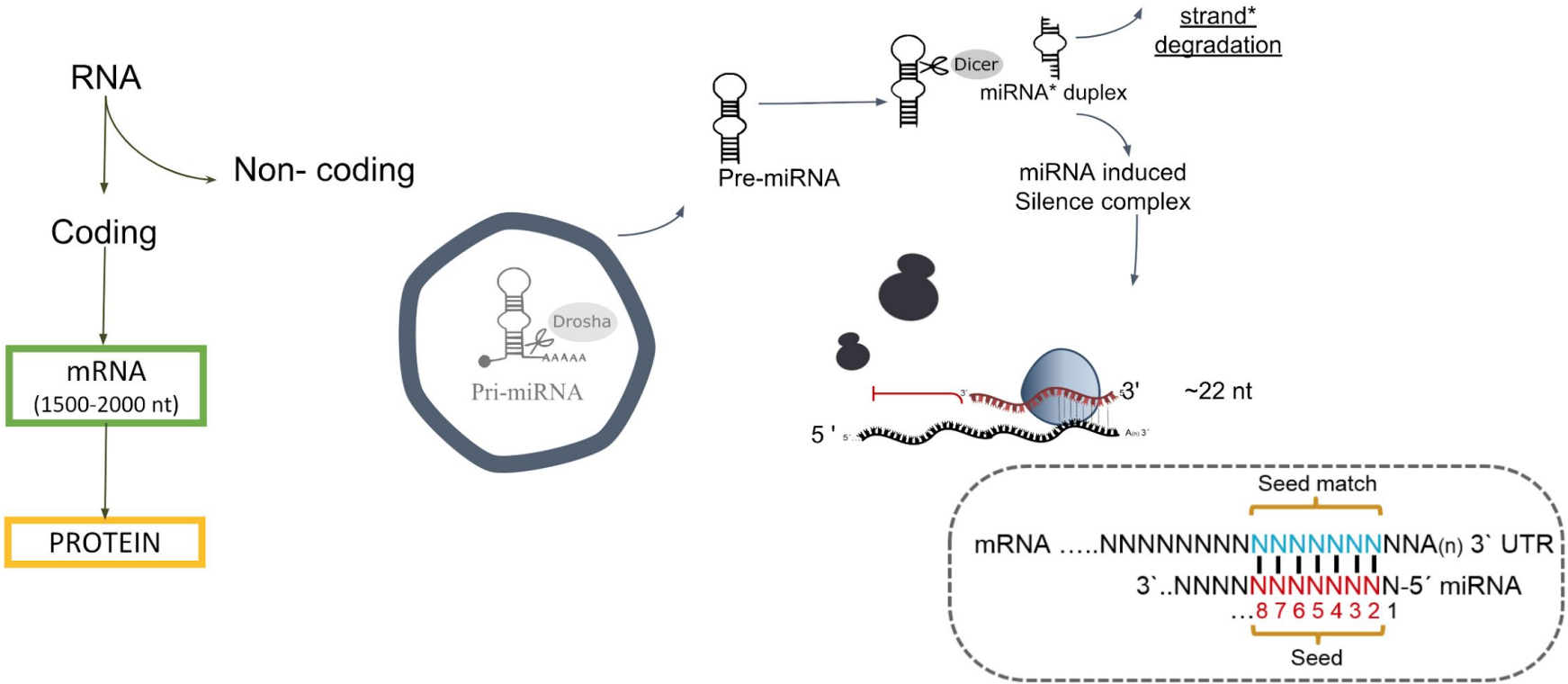


Mollusca

The phylum Mollusca is second in number of species only to Arthropoda and many of them are economically, ecologically, or biomedically important [1].

- Aquaculture [2]
- Ecological (Biomarkers in coast adaptability, ocean biomineralization / acidification) [3,4]
- Biomedical model (Neurology) [5]

microRNAs: gene expression regulators



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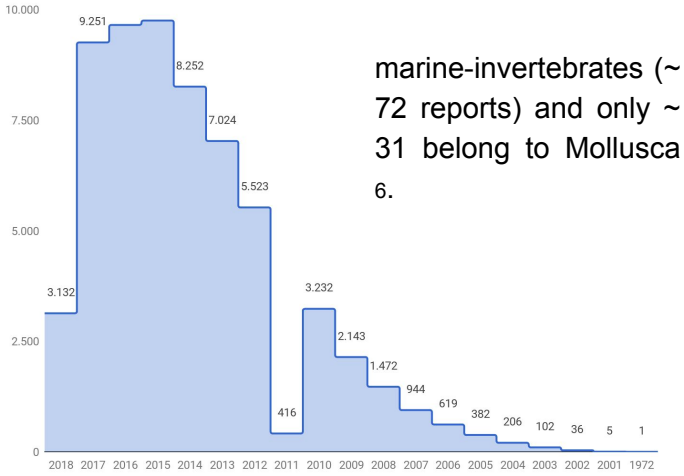
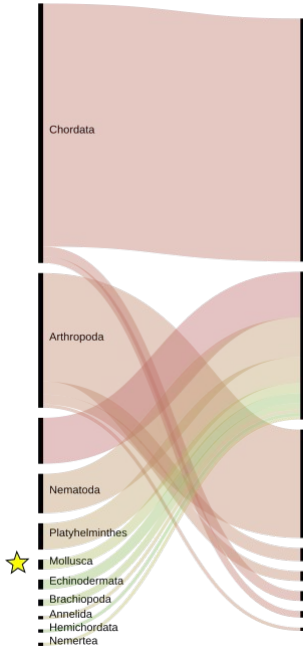
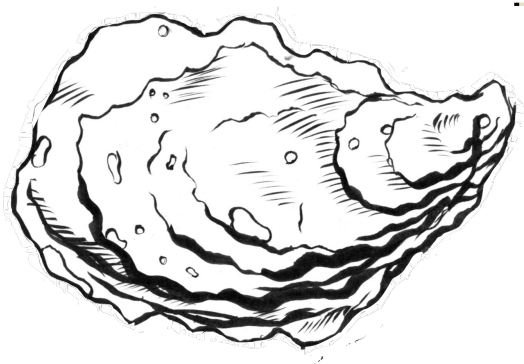


marine-invertebrates (~ 72 reports) and only ~ 31 belong to Mollusca 6.





Using *Crassostrea gigas* dataset free available in databases:

- Use genomic to find kwno and novel miRNAs
- Use RNA-seq to correlate miRNa machinery
  - Experimental condition to detect the turnover of genes modulated by miRNAs
- Bioinformatics:
  - Alignments
  - Assembly
  - Gene Expression profiling
  - Networks

Reference

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