

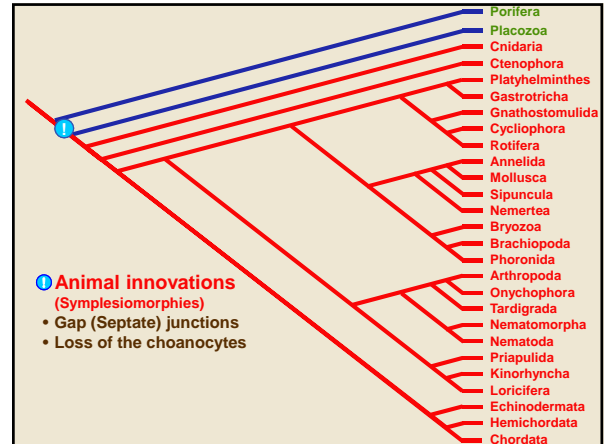
Cnidaria

Cnidaria

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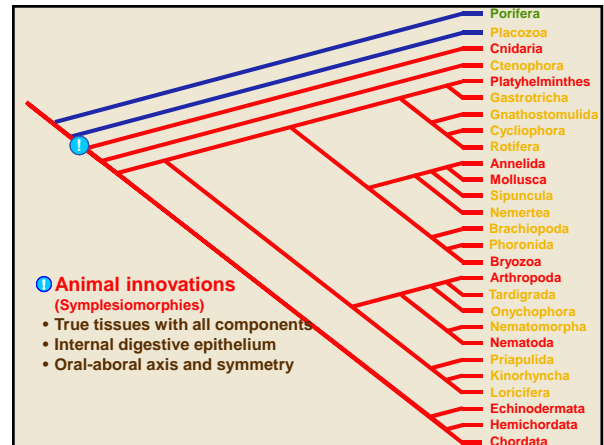


Gap (septate) junctions (Connexon)

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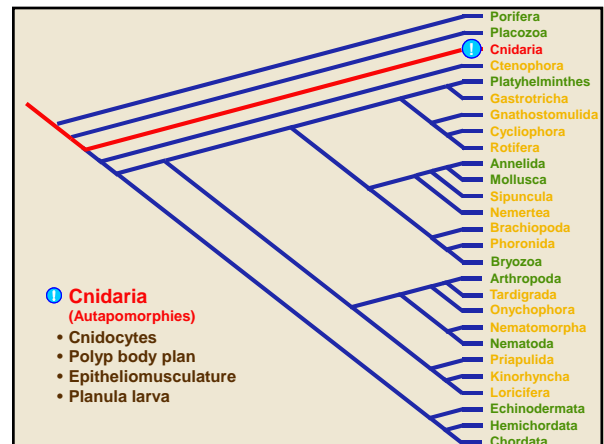
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Symmetry types


Radial Biradial Bilateral

U / Univer



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Cnidarian diversity



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Cnidarian diversity




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Cnidarian diversity



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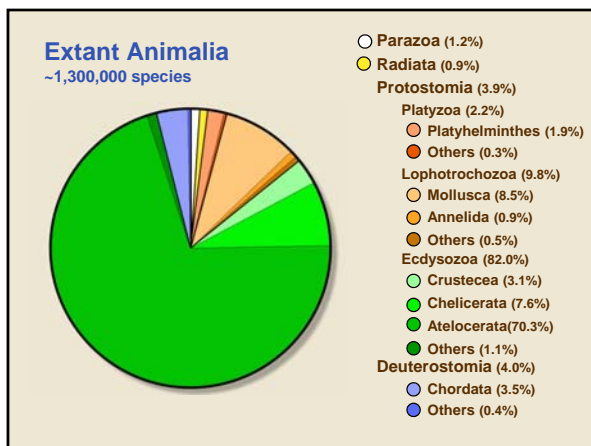
Cnidarian diversity



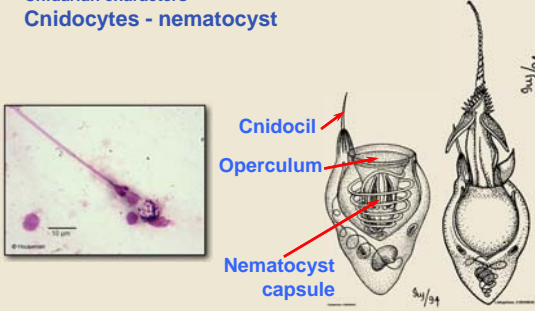
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Cnidarian characters
Cnidocytes - nematocyst



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Polyp body wall

Epidermis
Mesoglea
Gastrodermis
Gastrovascular cavity

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Body wall

Gastrovascular cavity
Gastrodermis
Mesoglea
Epidermis

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Hydrostatic skeleton (Polyp)

Epitheliomuscular cells (longitudinal)
Nutritive muscular cells (Circular)
Gastrovascular cavity

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Body wall

Cnidocyte
Epidermal nerve cell
Epitheliomuscular cell
Gland cell
Nutritive muscular cell

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Epidermis

Epitheliomuscular cells
Sensory cell
Nerve cell
Myoneme

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**Cnidarian characters
Planula larva**

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Cnidarian phylogeny

Anthozoa Scyphozoa Cubozoa Hydrozoa

1 Anthozoan innovations (autapomorphies)

- Biradial symmetry
- Siphonoglyphs
- Muscular septa
- Gonads in gastrodermis
- Opercular nematocysts

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Anthozoa
Biradial symmetry
a variation on radial

Modified radial caused by paired structures on a radial body plan

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Anthozoa
Biradial symmetry
a variation on radial

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Anthozoa
Anemone anatomy

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Anthozoan body wall

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Anthozoan septal wall

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Anthozoa: Corals

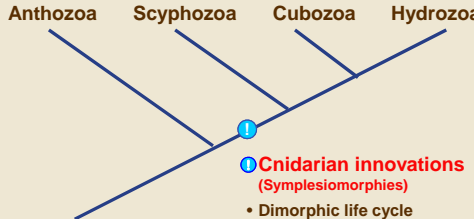


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Cnidarian phylogeny



1 Cnidarian innovations (Symplesiomorphies)

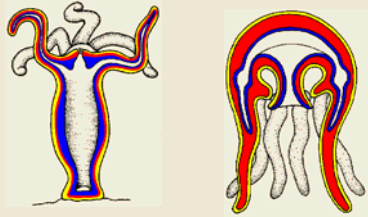
- Dimorphic life cycle
- Medusa by strobilization
- Opercular nematocysts
- Tetraradial symmetry

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Dimorphic life cycle



Epidermis
Mesoglea
Gastrodermis

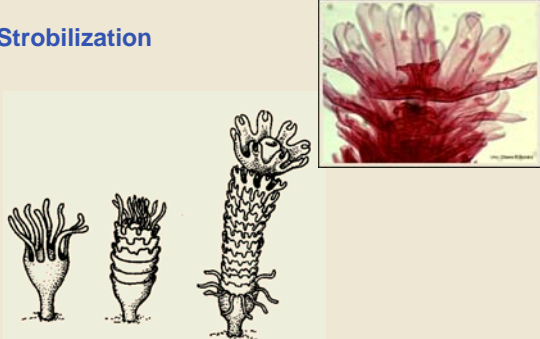
Polyp **Medusa**

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Strobilization

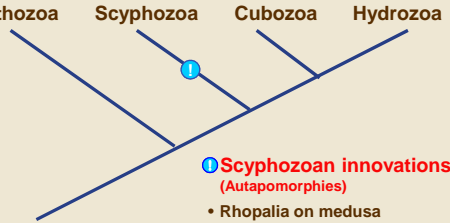


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Cnidarian phylogeny



1 Scyphozoan innovations (Autapomorphies)

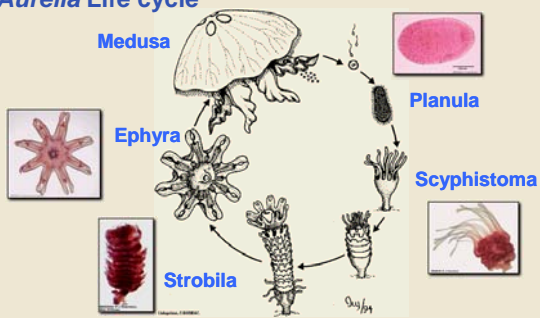
- Rhopalia on medusa

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Scyphozoa
Aurelia Life cycle



Medusa **Planula**

Ephyra **Scyphistoma**

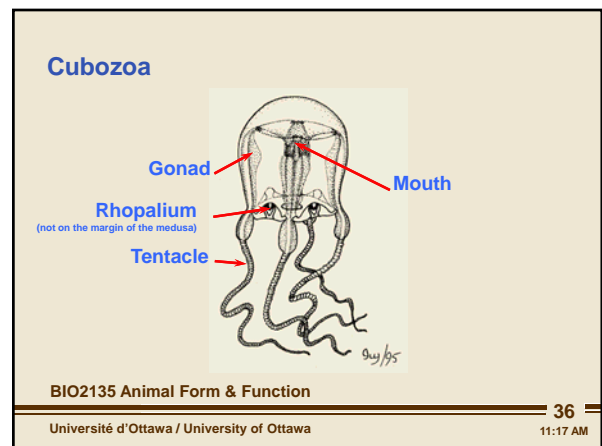
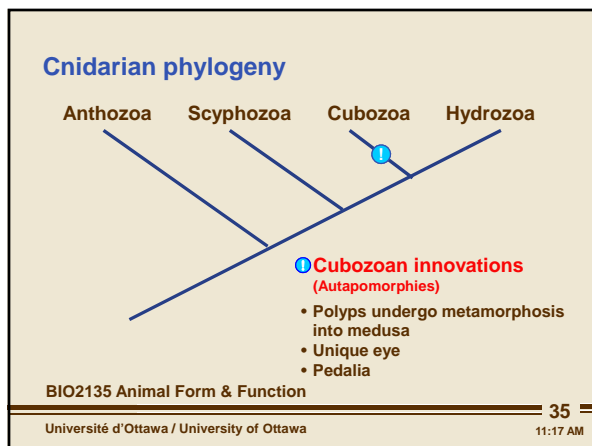
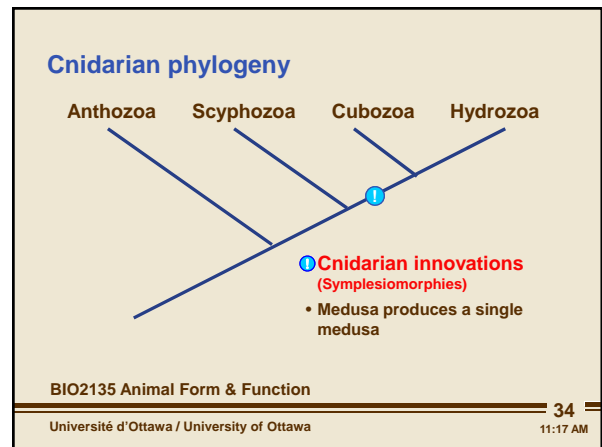
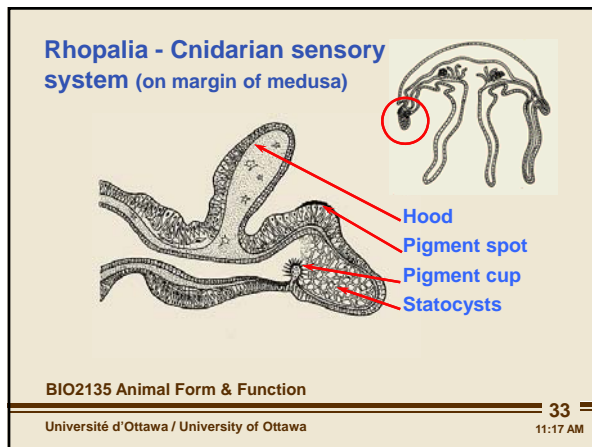
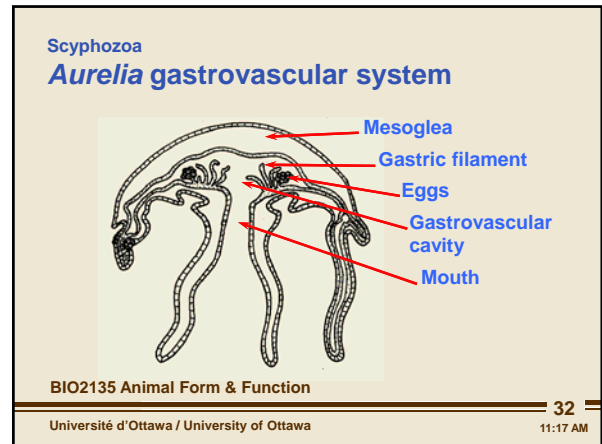
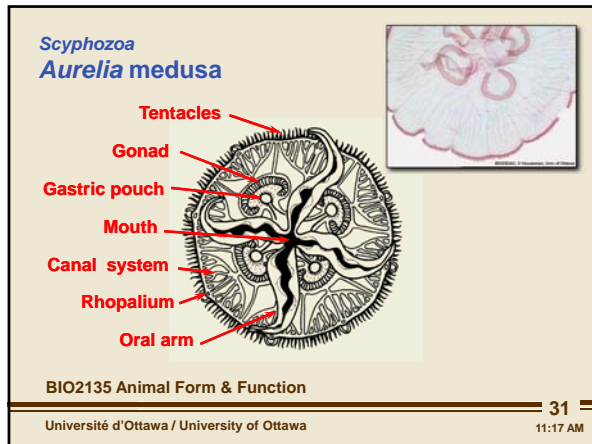
Strobila

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Cnidaria



Cnidaria

