

Bivalvia 101

An Introduction to Marine Bivalves

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Beautiful Bivalves of Southern California









Class Bivalvia

= two valves (shells)

Clams, mussels, scallops, oysters and their kin

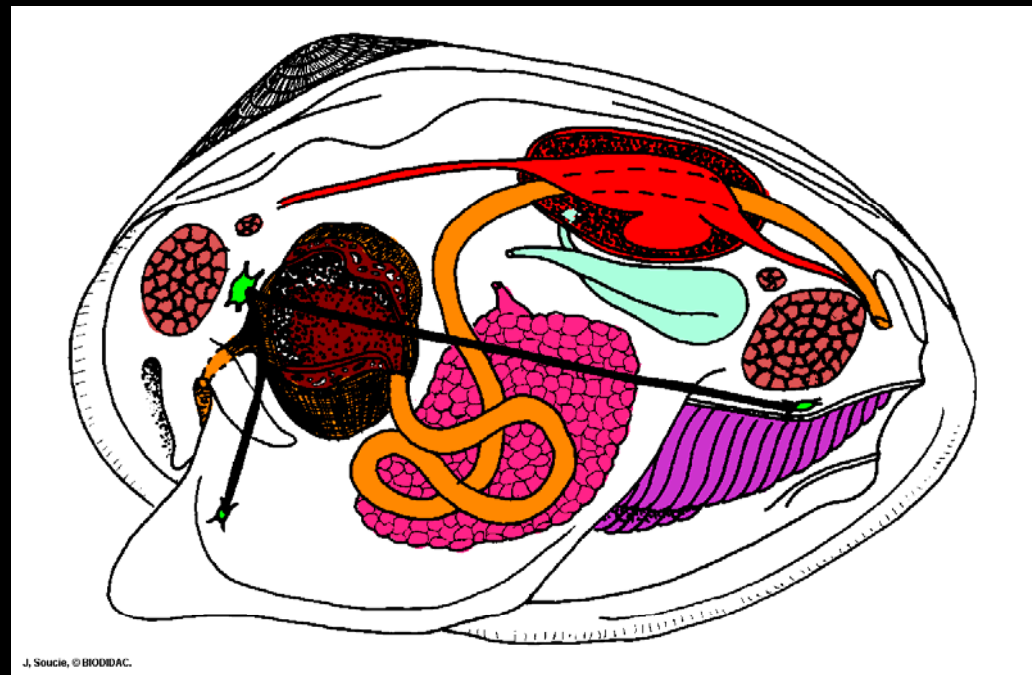
- Two part shell



Bivalvia

Clams, mussels, scallops, oysters and their kin

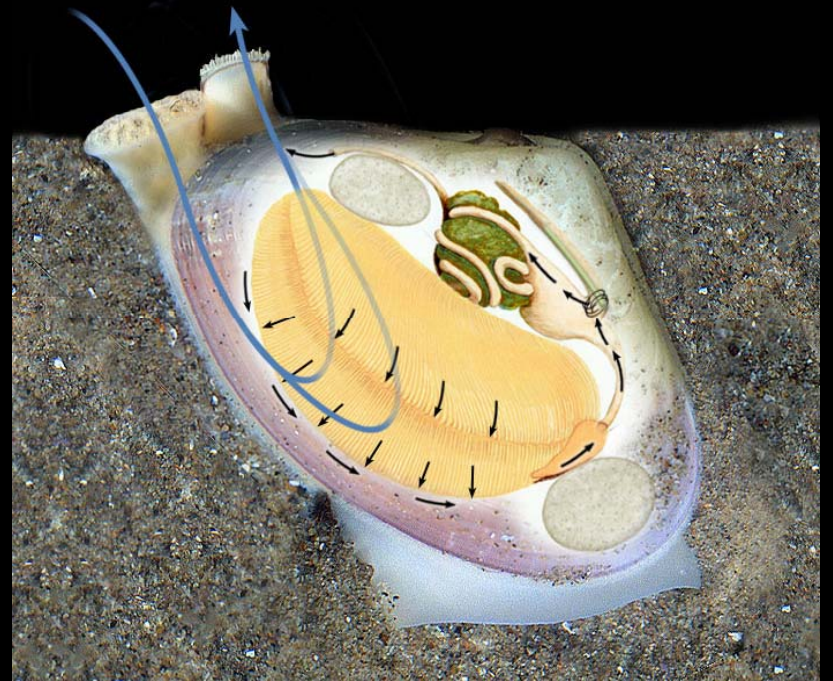
- Two part shell
- No head



Bivalvia

Clams, mussels, scallops, oysters and their kin

- Two part shell
- No head
- Most are filter feeders



Bivalvia

Clams, mussels, scallops, oysters and their kin

- Two part shell
- No head
- Most are filter feeders
- Broadcast spawners



Bivalvia

Clams, mussels, scallops, oysters and their kin

- Bivalves are great to EAT!!!



Bivalve Orienteering



Looking from the top – Dorsal view

Bivalve Orienteering

Posterior



Anterior

How do we know which end is which??

Bivalve Orienteering



Ligament is usually posterior

Bivalve Orienteering



Beaks often point anterior

Bivalve Orienteering

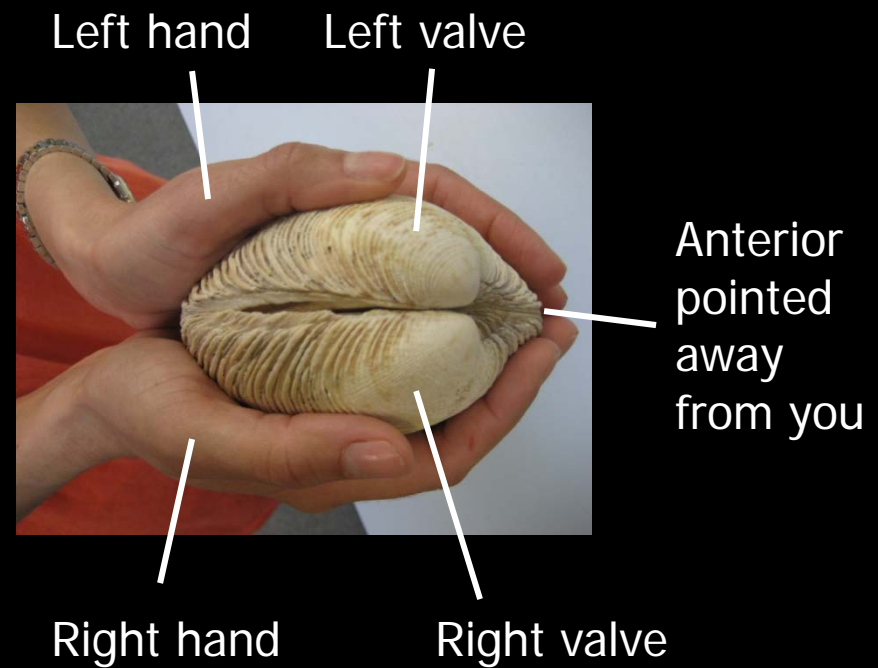


Determining left from right

Bivalve Orienteering



Anterior pointed
away from you



Quick hint

Bivalve Orienteering

Dorsal

Posterior



Anterior

Ventral

Looking from the side – Lateral view

Bivalve Orienteering

Dorsal

Posterior



Anterior

Ventral

Looking on the inside

Bivalve Characters



Beak vs. Umbo

Bivalve Characters – Sculpture



Radial Sculpture

Bivalve Characters – Sculpture



Commarginal Sculpture

Bivalve Characters – Sculpture



Cancellate Sculpture

Bivalve Characters – Sculpture



Divaricate Sculpture

Bivalve Characters – Sculpture



Commarginal Lamellae

Bivalve Characters – Sculpture



Crenulate



Smooth

Inner Ventral Margin

Bivalve Characters



Lunule and Escutcheon

Bivalve Characters - Ligament

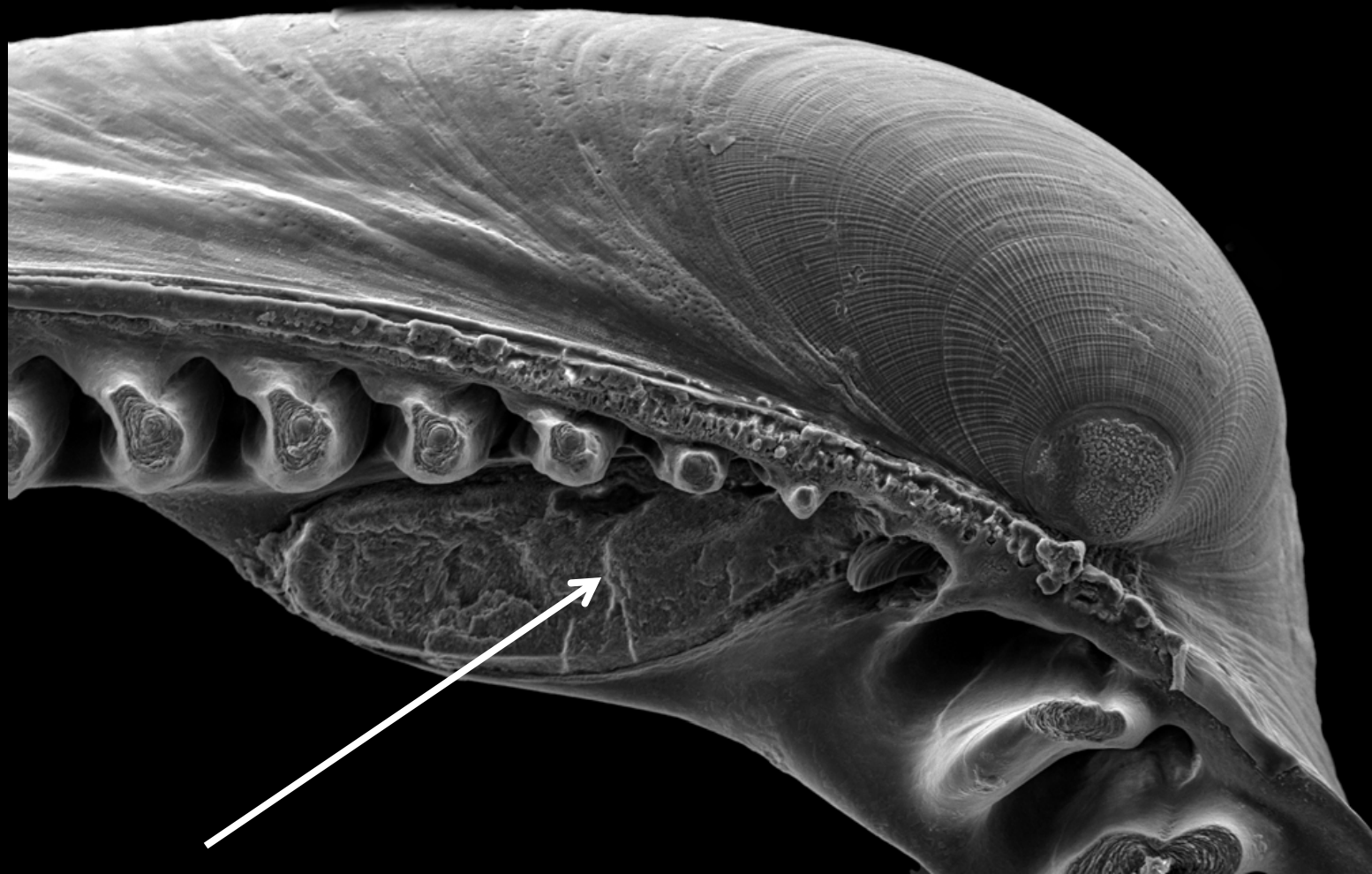


External Ligament

Bivalve Characters - Ligament



Internal Ligament

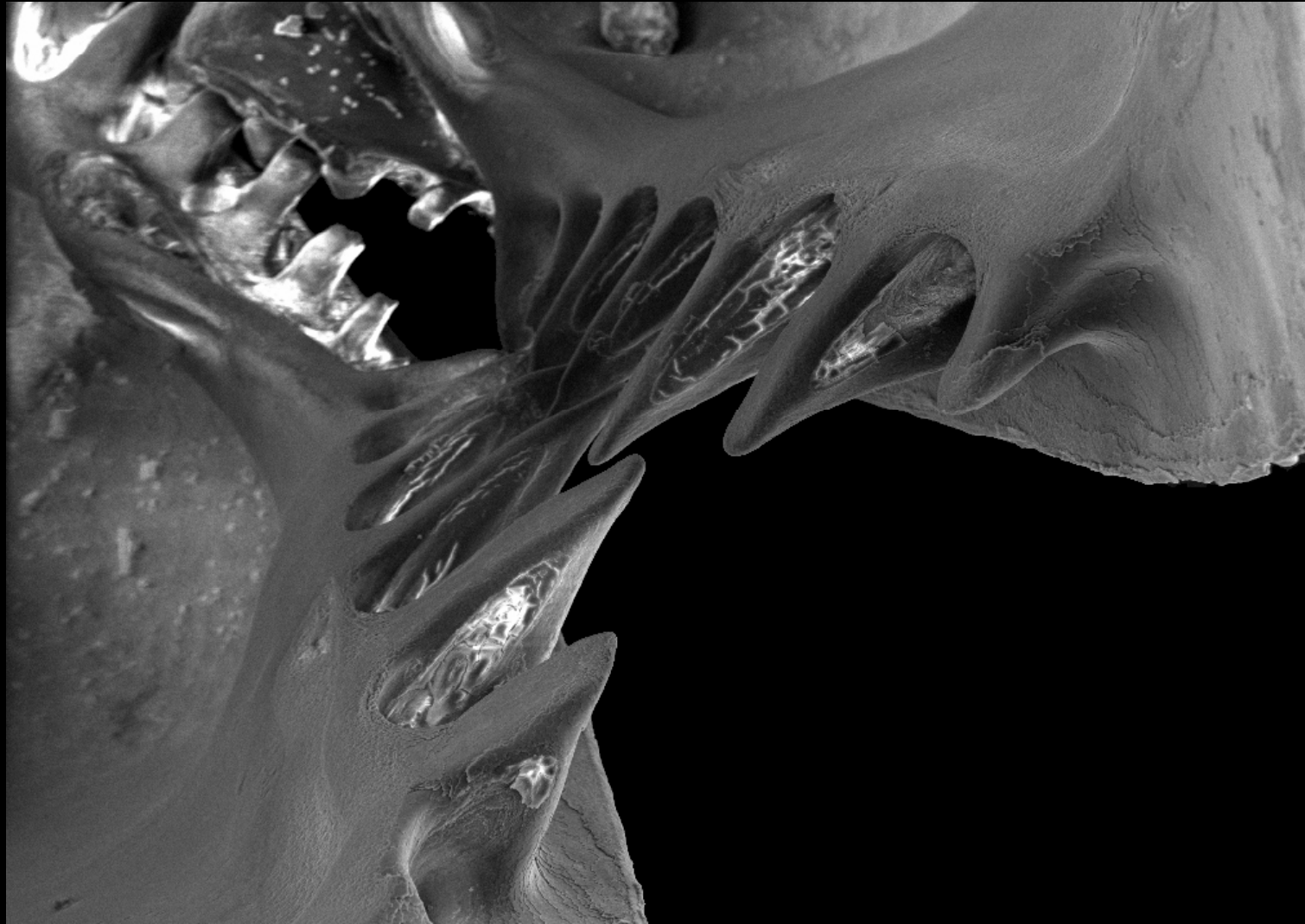


Internal Ligament

Bivalve Characters - Dentition



Taxodont Teeth



Taxodont Teeth

Bivalve Characters - Dentition



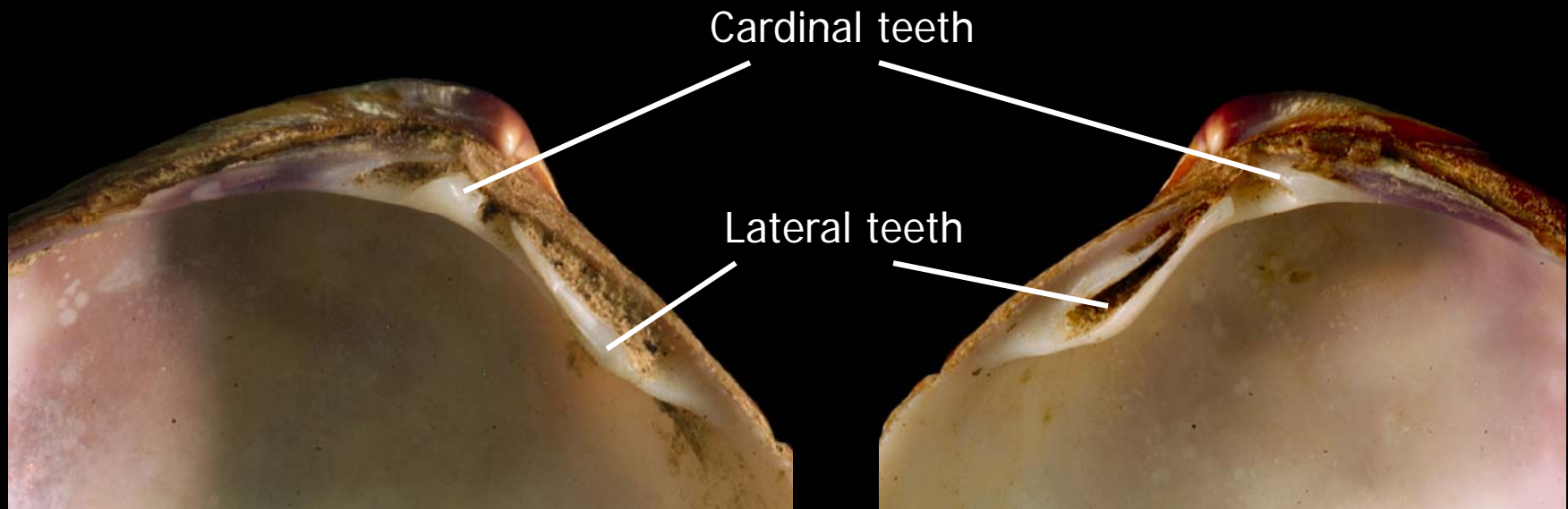
Heterodont Teeth

Bivalve Characters - Dentition



Without Teeth - Edentulous

Bivalve Characters - Dentition

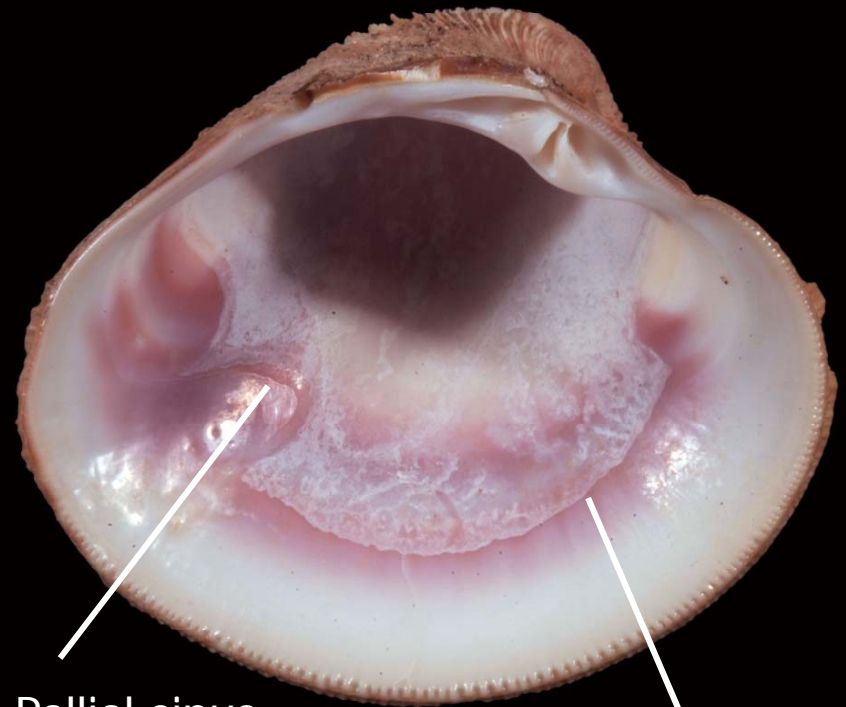


Cardinal Teeth & Lateral Teeth

Bivalve Characters - Scars



Pallial line



Pallial sinus

Pallial line

Pallial Line & Pallial Sinus

Bivalve Characters - Scars



Adductor Muscle Scars

Bivalve Characters - Color

