Atlas of Comparative Vertebrate Anatomy
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KRISTEN ROOSA
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Unlabeled Images (Powerpoint files)
About the Atlas of Comparative Anatomy

The Atlas of Comparative Anatomy began as a class project at SUNY Oneonta in 2017 because of the lack of a comprehensive freely-accessible photographic atlas. The majority of entries in this atlas were produced by students including dissection, photography, and identification. It is a work in progress, but we hope that students of anatomy find this a useful tool for studying anatomy outside of the lab.

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The authors are interested in learning who adopts this tool for their course. If you do, please email Dr. Kristen Roosa at Kristen.Roosa@oneonta.edu.

Photographed specimens were prepared by and purchased from Bio Corporation, Alexandria, MN.

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LAMPREY
Larval lamprey

Whole mount of larval lamprey. CC-BY Kristen Roosa

Cross section through pharynx of larval lamprey, b. Cross section through trunk region of larval lamprey. CC-BY Skylar Jackson.

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Adult lamprey

External anatomy of head and pharynx of adult lamprey. CC-BY Skylar Jackson.

Transverse sections of the head (a), pharynx (b), and trunk (c) regions of the lamprey. CC-BY Skylar Jackson.
SKELETAL SYSTEMS
Squalus skeleton

Ventral view of the splanchnocranium and chondrocranium of *Squalus*. CC BY Elizabeth Swislosky & Kristen Roosa.
Pelvic girdle (left) and pectoral girdle (right) of Squalus. CC BY Elizabeth Swislosky & Kristen Roosa.

Semidorsal view of the pectoral girdle and fin of a Dogfish (Squalus canicula). From The Vertebrate Skeleton, Reynolds, S.H. 1897. In the public domain.
Fig. 8. Dorsal view of the pelvic girdle and fins of a male Dogfish (*Squalus canicula*).
Necturus skull

- Dorsal view of Necturus skull. Based on CT scan of Necturus beyeri by the University of Florida Museum of Natural History CC BY-NC.

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Necturus skeleton

- Ventral view of *Necturus* vertebrae and ribs
- Dorsal view of *Necturus* vertebrae and ribs
- Cranial view of *Necturus* vertebra and ribs

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Pigeon skull
Pigeon skeleton

Lateral view of pigeon skeleton. CC-BY Alexandra Caffrey.

Anterior view of pigeon skeleton. CC-BY Alexandra Caffrey.
Lateral view of pigeon thoracic cage. CC-BY
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Turtle skull

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Turtle skull - dorsal, ventral, and lateral views. Authored by: Kelsey Murdock & Kristen Roosa. License: CC BY: Attribution
Turtle skeleton
Pelvic girdle and hindlimbs of turtle, ventral view. CC-BY Kelsey Murdock.

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Cat skeleton: overview

Cat skull

Lateral view of the cat skull, dentary bone removed. CC BY Kristen Roosa.

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Ventral view of the cat skull, dentary bone removed. CC BY Kristen Roosa.

Lateral view of the dentary bone of the cat. CC BY Kristen Roosa.

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Cat vertebral column

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Cat scapula & ribs

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Cat limbs
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NERVOUS SYSTEMS
Squalus brain

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Sheep brain

Dorsal view of the sheep brain. Dura matter removed. CC-BY: Elizabeth Swislosky and Kirstin Conroy

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Squalus digestive system

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Necturus digestive system

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Cat digestive system
MUSCULAR SYSTEMS
Squalus musculature

Ventral view of head musculature of Squalus. CC-BY Jarred Epps.
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Necturus musculature
Deep musculature of the ventral aspect of head of Necturus. CC-BY Kristen Roosa.

Lateral view of the forelimb musculature of Necturus. CC-BY Elizabeth Swislosky.
Musculature of ventral aspect of hind limb of Necturus. CC-BY Kristen Roosa.

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Cat musculature

- Clavobrachialis
- Epitrochlearis
- Pectorale superius
- Pectorale major
- Pectorale minor
- Xipholumeris
- Latissimus dorsi

Ventral view of the cat chest muscles. CC-BY: Elizabeth Swislosky

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UROGENITAL SYSTEMS
Squalus urogenital systems

Ventral view of internal and external urogenital organs of the female Dogfish shark, digestive organs removed. CC-BY Destiny Woodson.

Ventral view of internal urogenital organs of the female Dogfish shark. CC-BY Destiny Woodson.
A) Ventral view of male external urogenital organs of Dogfish shark. B) Ventral view of internal urogenital organs of the male Dogfish shark, digestive organs removed. CC-BY Destiny Woodson.

Ventral view of testes of the male Dogfish shark, digestive organs removed. CC-BY Destiny Woodson.

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Necturus urogenital systems
Cat urogenital systems

Ventral view of the male cat reproductive system. CC-BY: Elizabeth Swislosky.

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CARDIOVASCULAR SYSTEMS
Squalus vasculature

Ventral view of Squalus heart and major vessels. Digestive organs removed. CC BY Christina Chumpitazi.

Close up view of Squalus heart. CC BY Kristen Roosa.
Cat vasculature

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**Lamprey**

**Skulls**

**Skeletal**

**muscular – Squalus**

**Muscular – Necturus**

**Muscular – cat**

**Nervous system**

**Digestive systems**

**Urogenital**

**Vascular systems**