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not a real database

FishBase & "ParasiteBase"

education for the digital age

A publicly accessible virtual learning environment

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Blended education, an innovative educational project

Digitalisation of specimens and their integration into courses

Construction of a virtual learning environment using state of the art digitalisation methods

1. 3D Structured light scanning
2. 3D µCT scanning
3. 3D DiceCT scanning
4. Interactive platform with 2D scans

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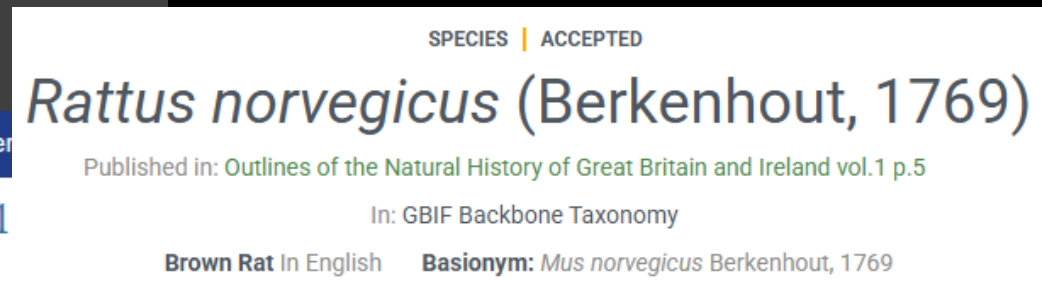
1. Structured-light scans of dissections of fresh specimens

Allows for the investigation of (annotated) dissections in a digital format



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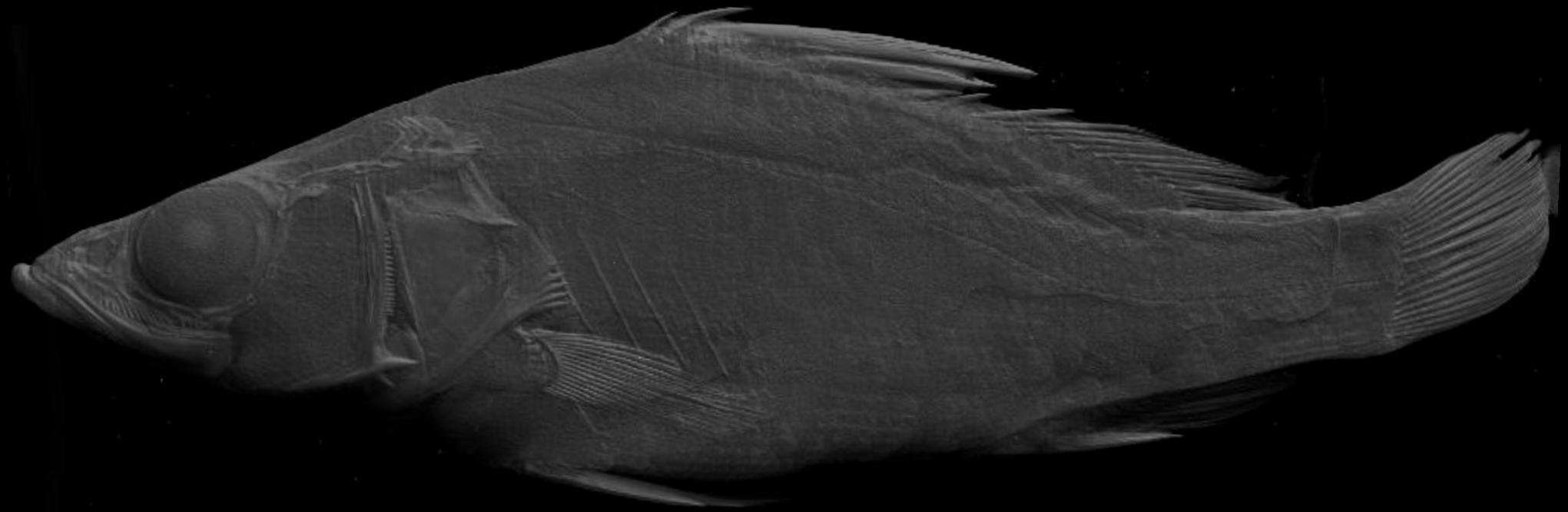
2. µCT scan of a museum specimen of Nile perch (*Lates niloticus*)



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Lates niloticus (Linnaeus, 1758)
Nile perch

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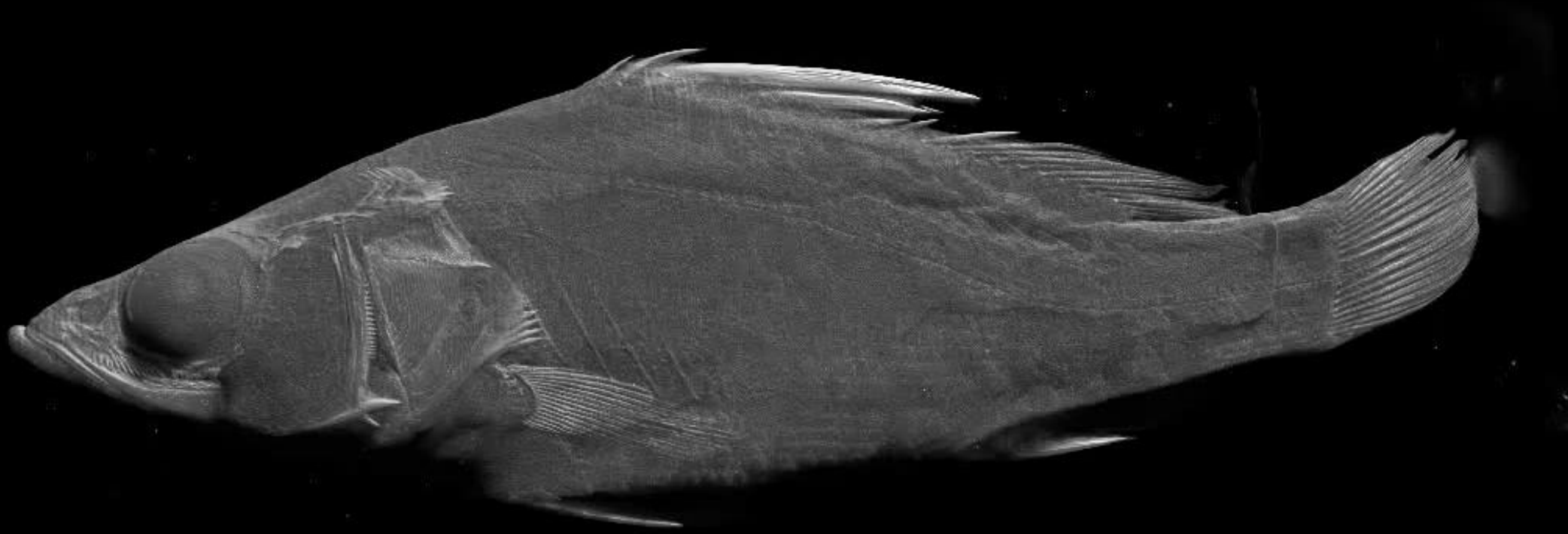
2. µCT scan of a museum specimen of Nile perch (*Lates niloticus*)

Allows for the segmentation of the skeleton



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3. DiceCT scan of a museum specimen of Nile perch (*Lates niloticus*)

µCT scan of the same specimen after iodine-staining

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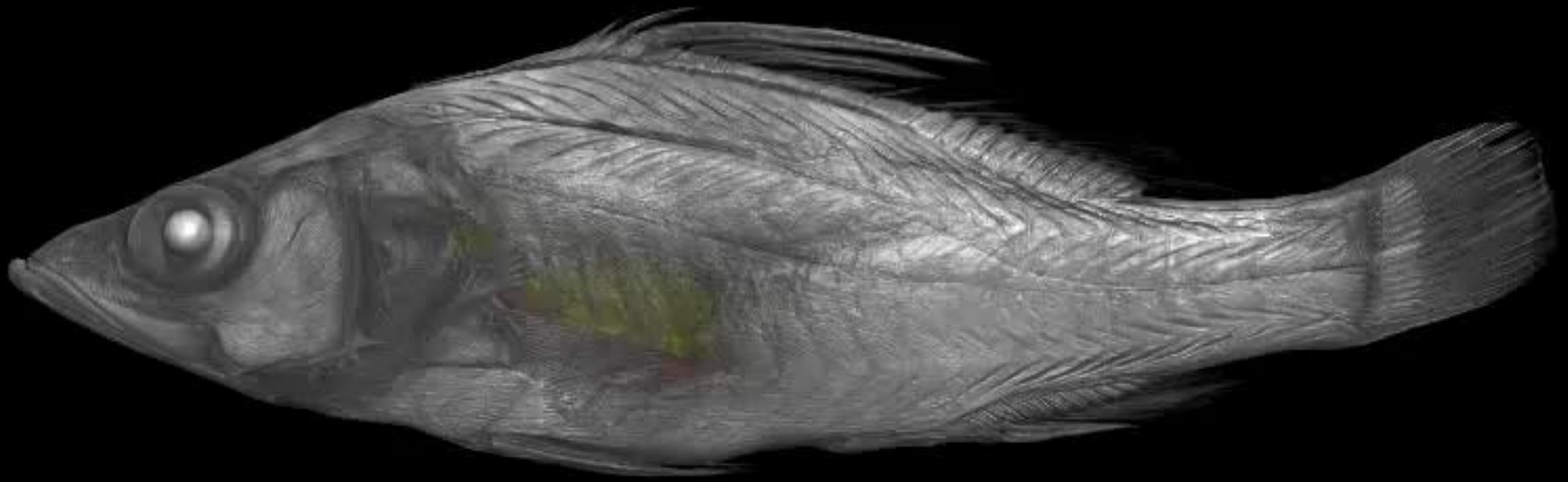
3. DiceCT scan of a museum specimen of Nile perch (*Lates niloticus*)

Segmented soft tissues in 3D



Swim bladder

Digestive tract (part of)

Urinary bladder

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3. DiceCT scan of a museum specimen of a parasitic isopod

µCT scan of iodine-stained specimen

Specimen to be identified

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3. DiceCT scan of a museum specimen of a parasitic isopod

Should allow for the segmentation of soft tissues in 3D

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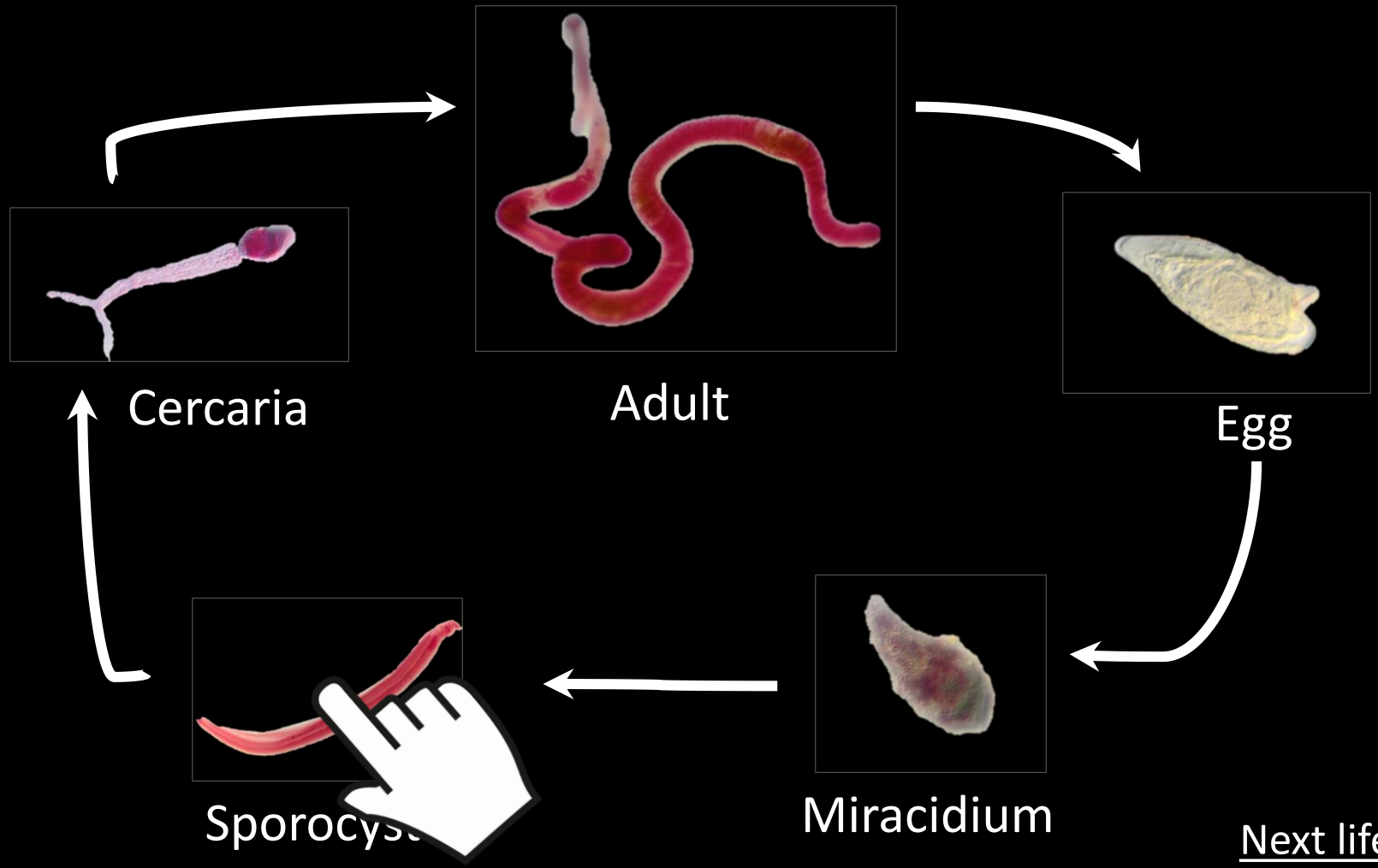
4. Interactive platform with 2D scans of microscopy slides

Example of the interactive platform

Life stages of *Schistosoma* sp.



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4. Interactive platform with 2D scans of microscopy slides

Example of the interactive platform

Sporocyst of *Schistosoma* sp.

Inside the intermediate host (snail), the miracidium develops into a sporocyst.

The sporocyst produces numerous cercariae.

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Blended education, an innovative educational project

Digitalisation of specimens and their integration into courses

Practical-oriented blended learning

- All scans will be incorporated in a publicly available virtual learning environment

Further integration between practicals and lectures

- Scans can be annotated and/or include concise versions of the course material

Connecting to technological and social developments

- Increased attention to animal welfare
- Course material is available to the Global South

Scans will be hosted by CANATHIST on an ORTHANC server

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Thank you

CANATHIST

For all your questions
and suggestions:
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