

# Frog Anatomy & Dissection

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A visual guide to basic frog  
anatomy and dissection.

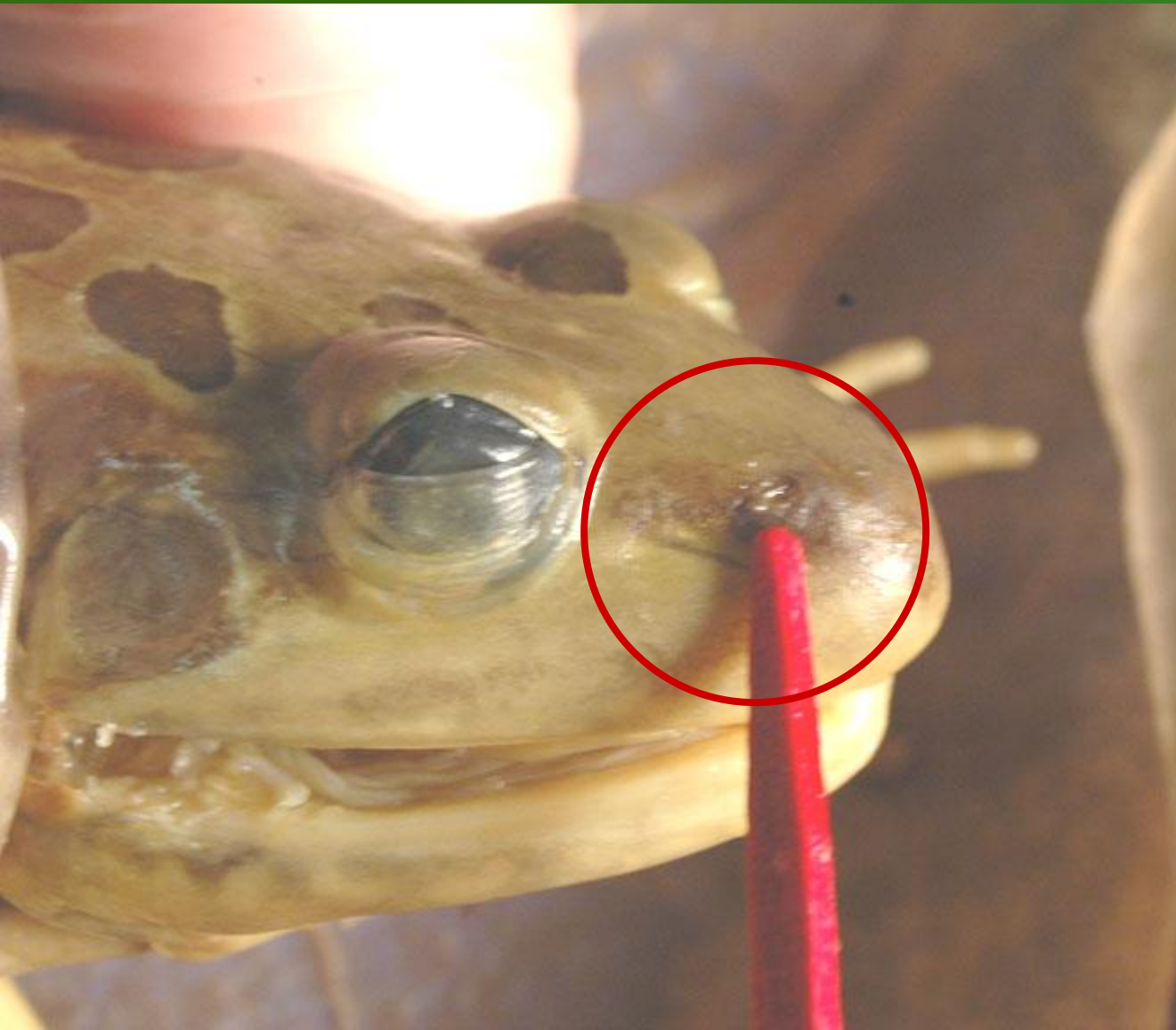
# **Basic Anatomy**

# The Eye



**Frog's eyes are covered by a nictating membrane that allows it to see under water.**

# Nostrils



Also called  
the  
**External  
Nares**, these  
are the  
same as  
your  
nostrils.



# Eardrum (tympanum)



**Frogs hear  
just like  
you do!  
They just  
don't have  
an external  
ear  
structure.**

# **Webbed Feet & Digits**



**Frogs have webbed feet to help them move under water, they act like flippers!**

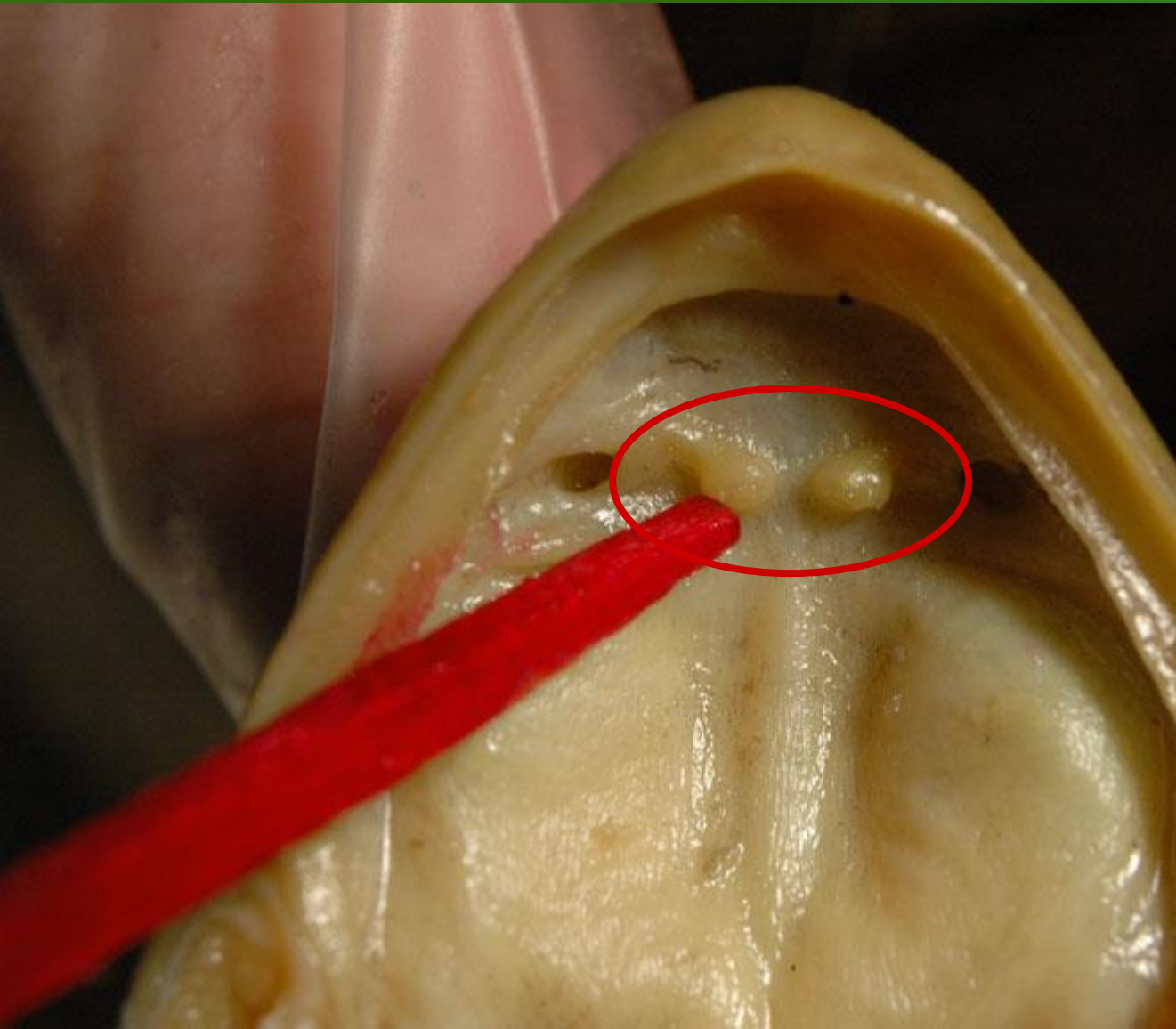


# Tongue



**Where is the tongue attached? See if you can plug the frog's nose with it's tongue.**

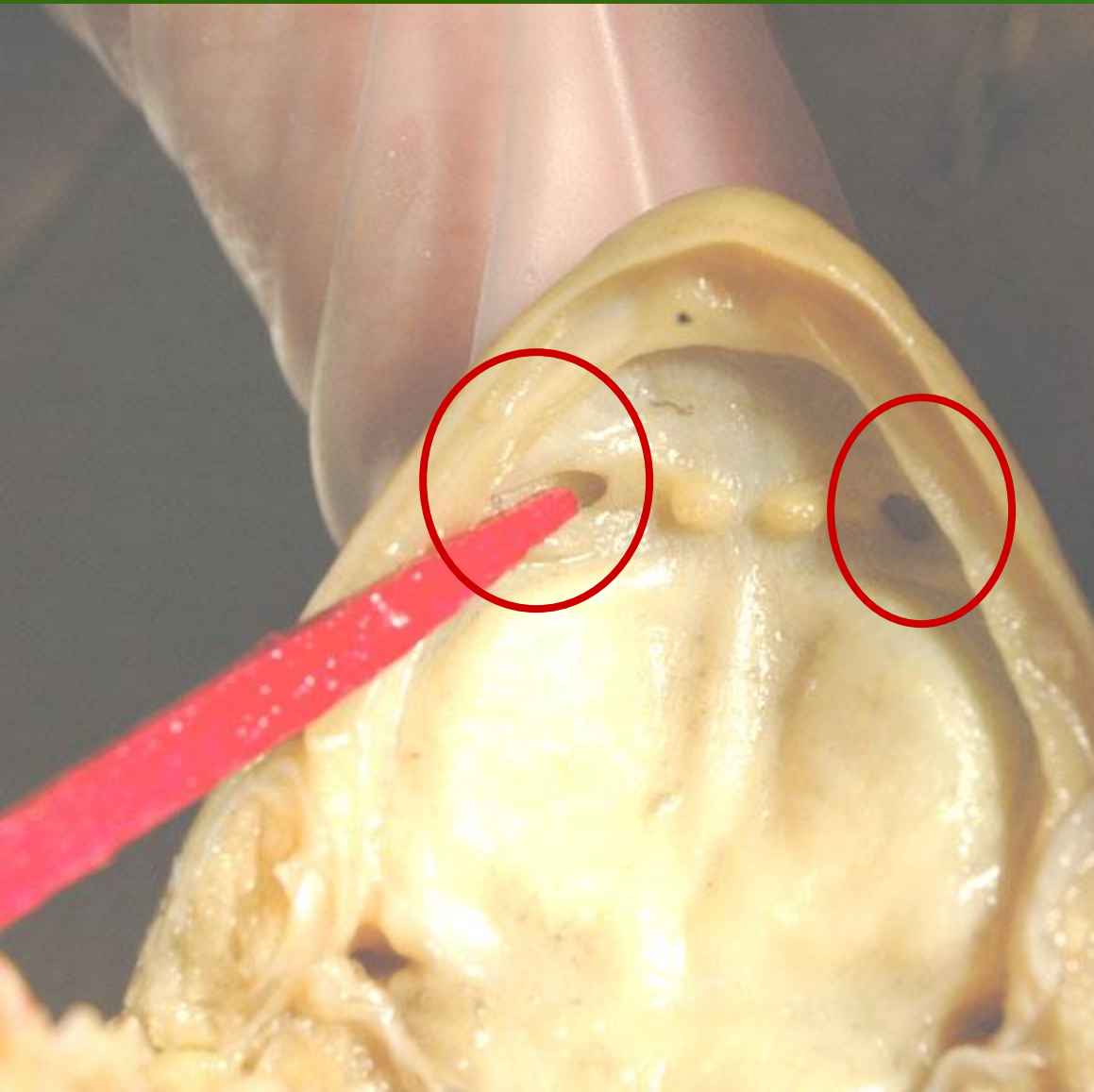
# Vomerine Teeth



**Frogs don't  
chew their  
food! These  
teeth hold  
onto the  
food until it  
can be  
swallowed.**

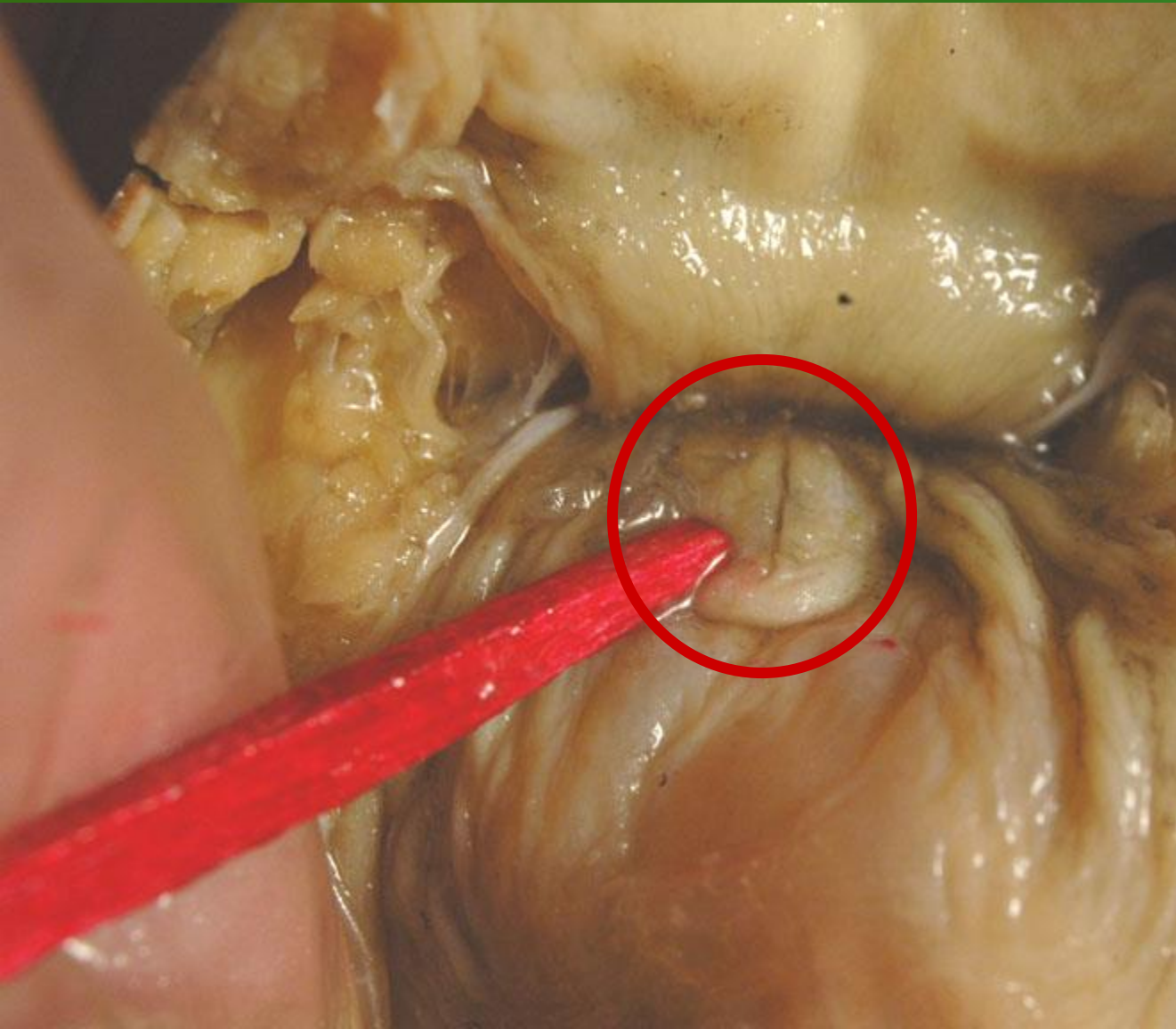


# Internal Nares



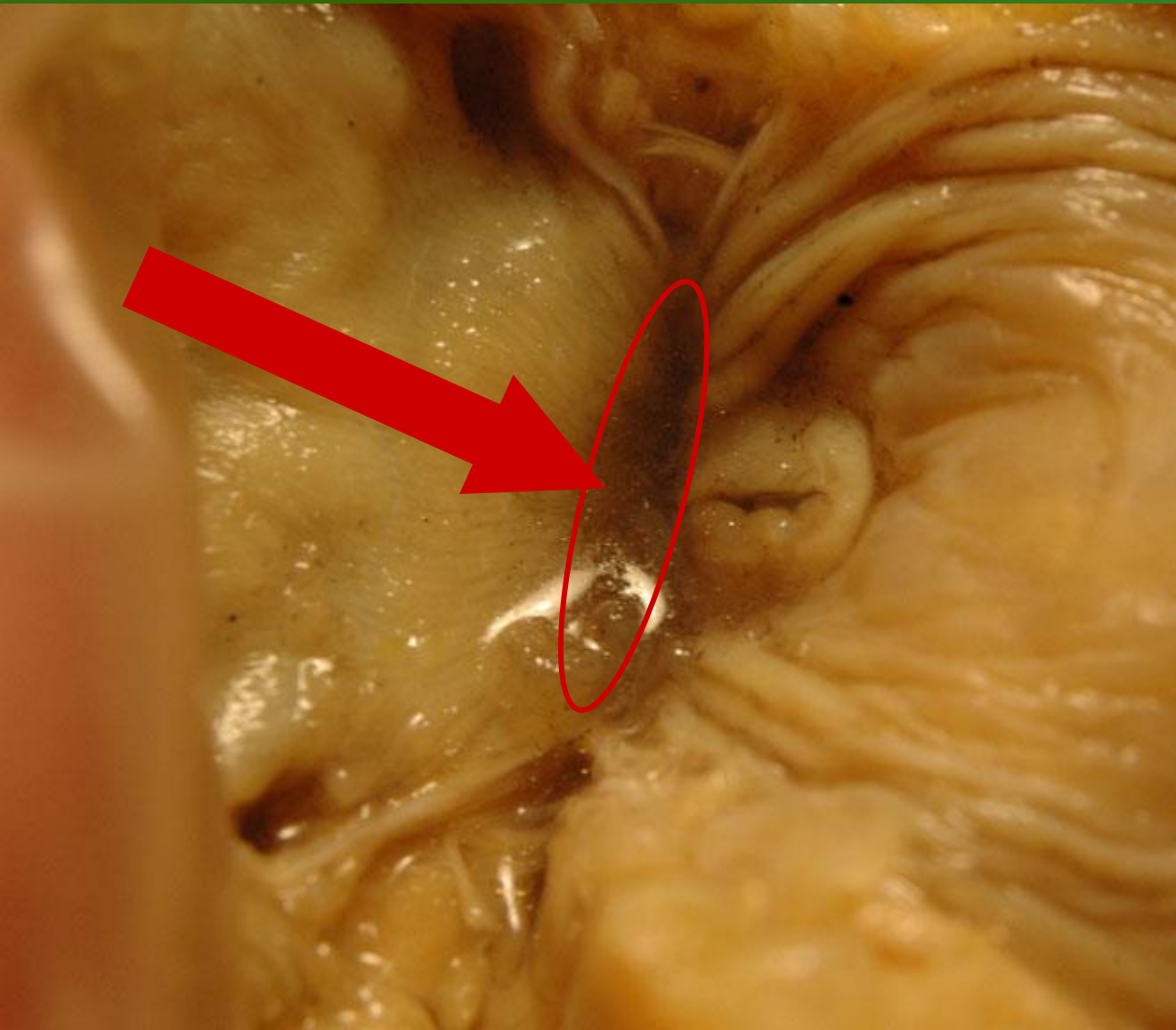
These are openings that allow air into the frog's lungs. A frog must plug these when underwater.

# Glottis



**This is the  
entryway  
to the  
trachea,  
which leads  
air to the  
lungs.**

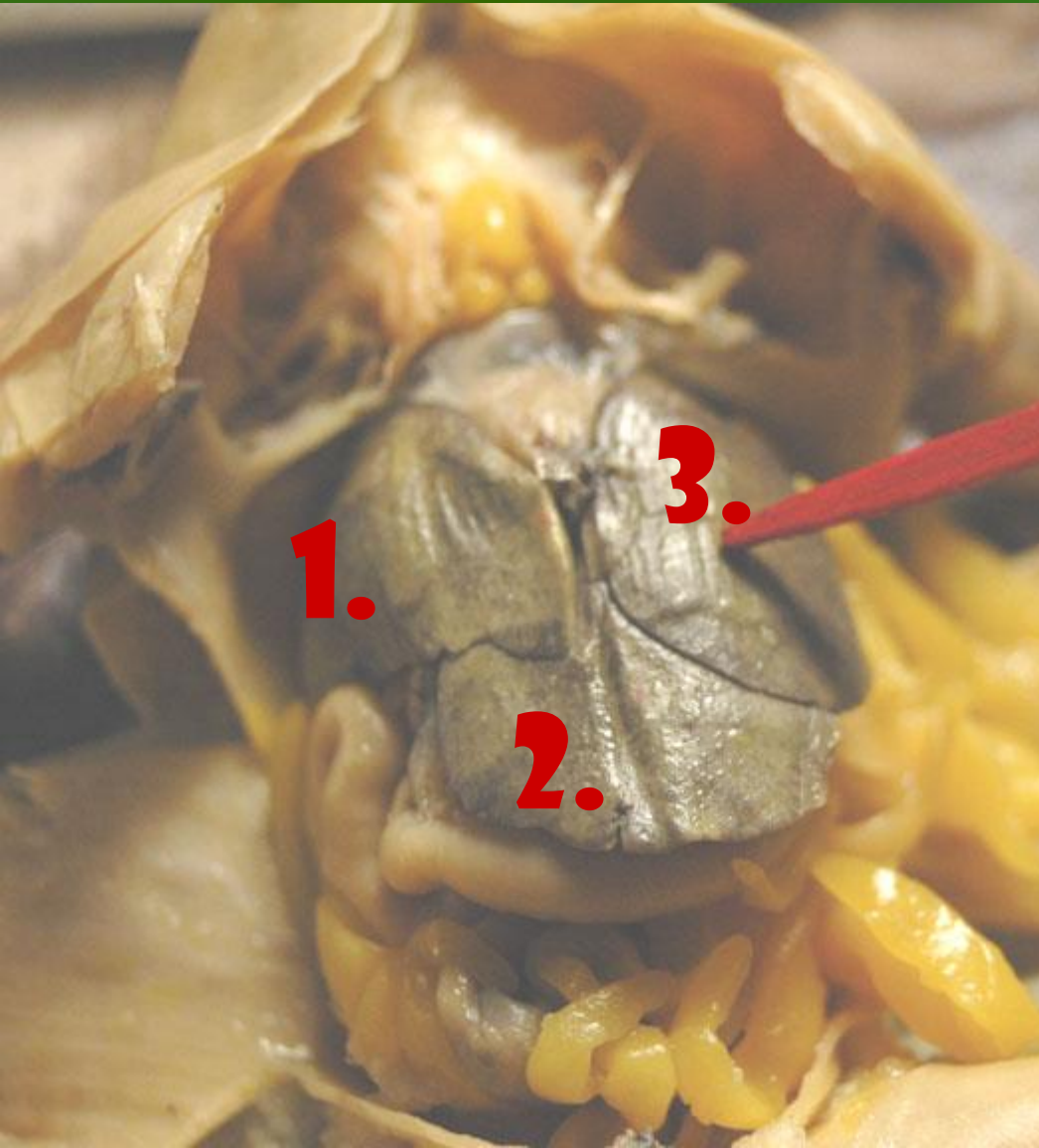
# Esophagus



**The  
esophagus  
is the width  
of the frog's  
mouth.  
Remember,  
frogs don't  
chew what  
they eat!**



# Liver



The liver is large, greenish brown, and has 3 lobes.

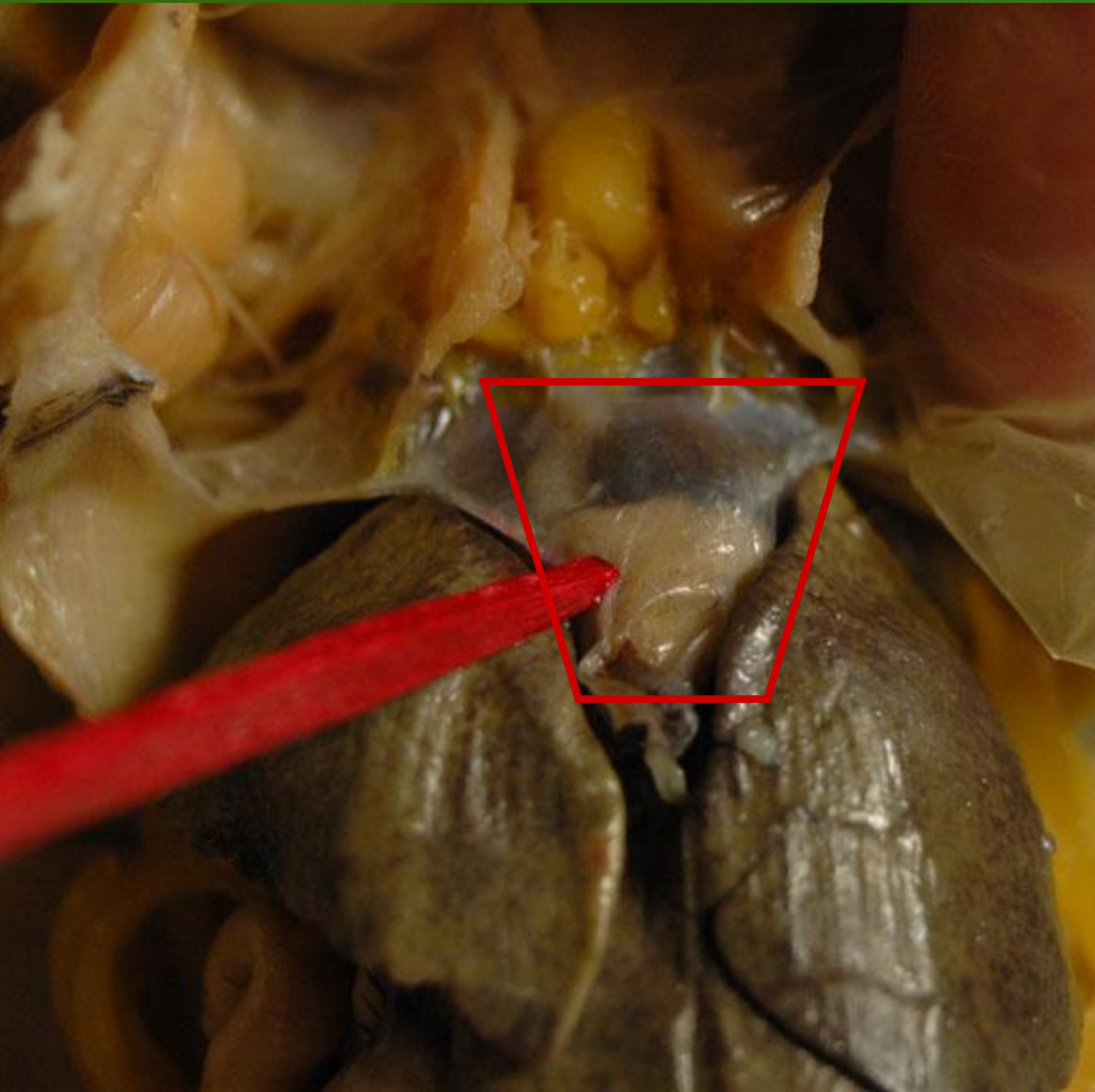
It covers the stomach, intestine, lungs, excretory and reproductive systems.

# Gallbladder



**Lift the lobes of the liver to find the gallbladder. This one is full, your frog's might be empty.**

# Heart

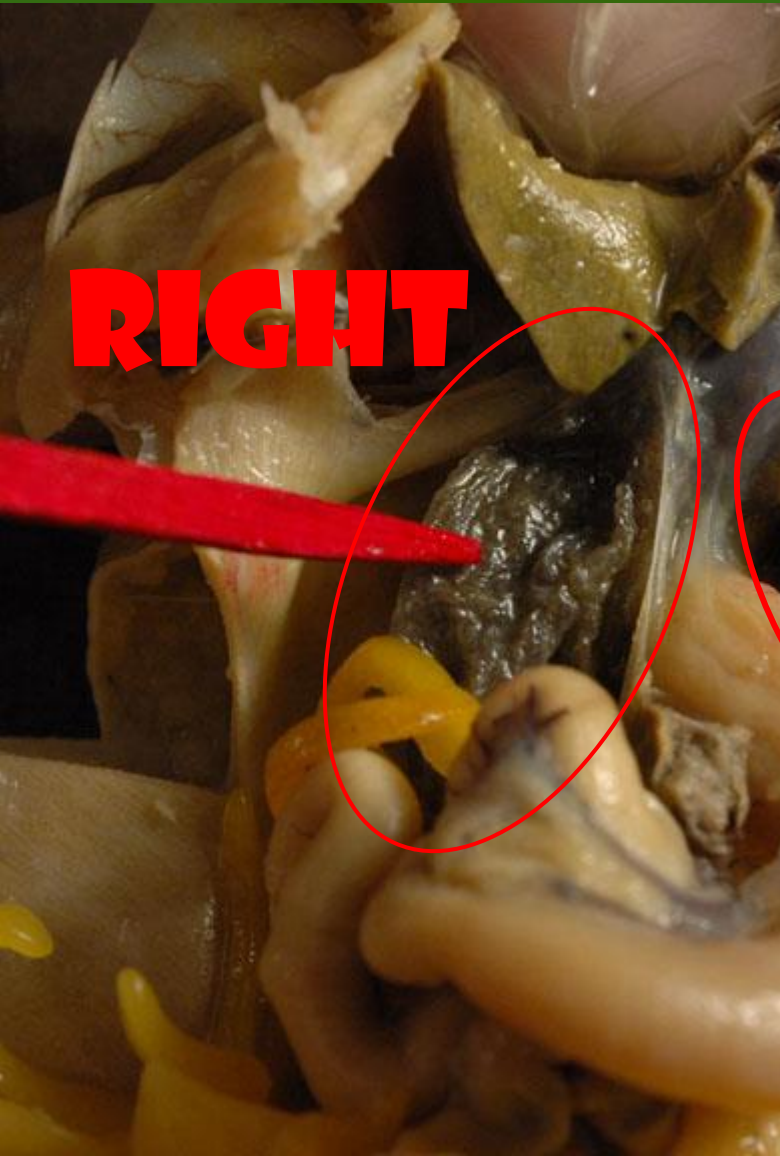


**Look for the tan triangle between the liver. A frog has one less chamber than a human heart!**

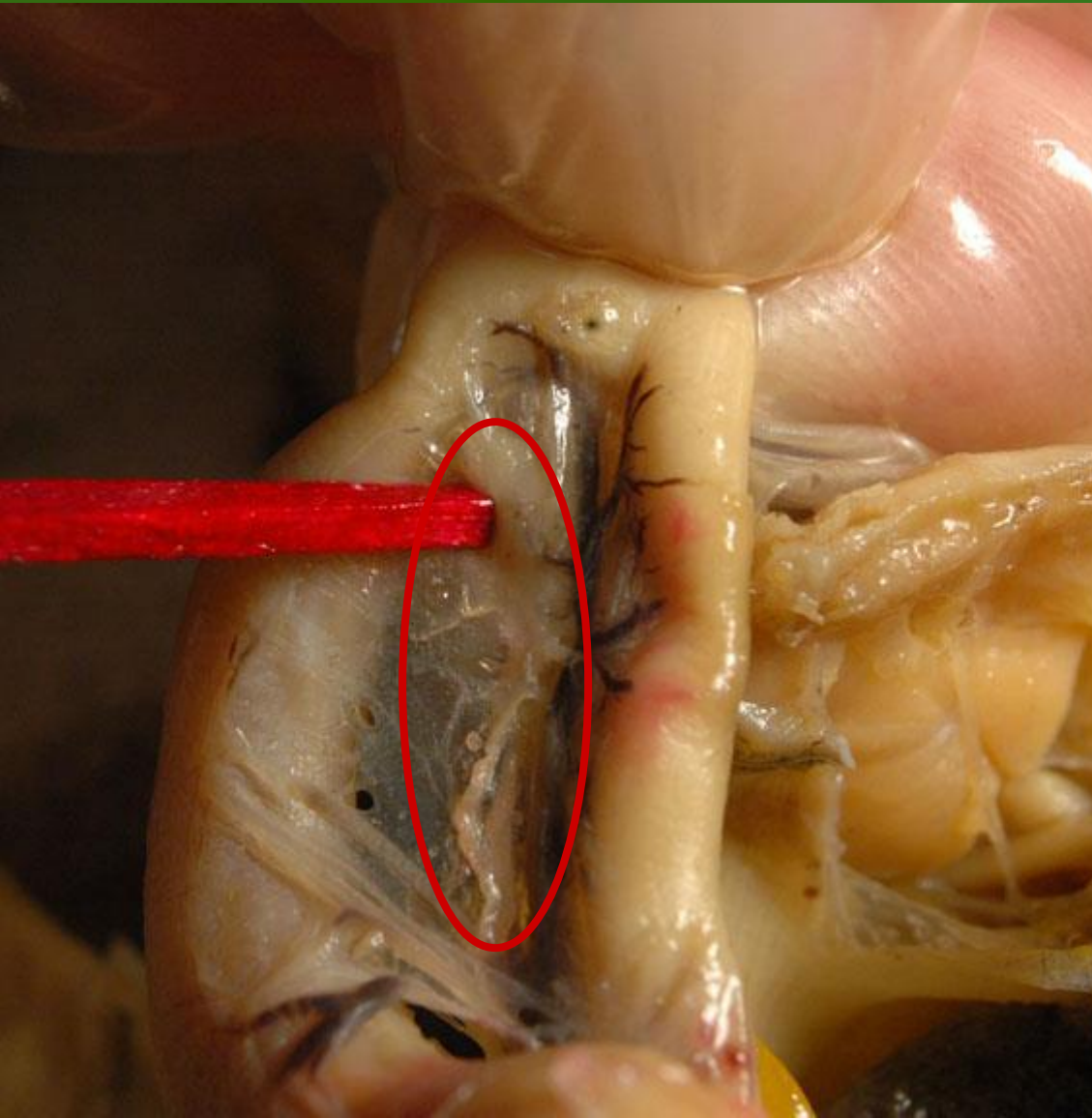


# Lungs

# The lungs



# Pancreas



**Certainly the most difficult organ to find. It is in the mesentery around the small intestine.**



# Spleen



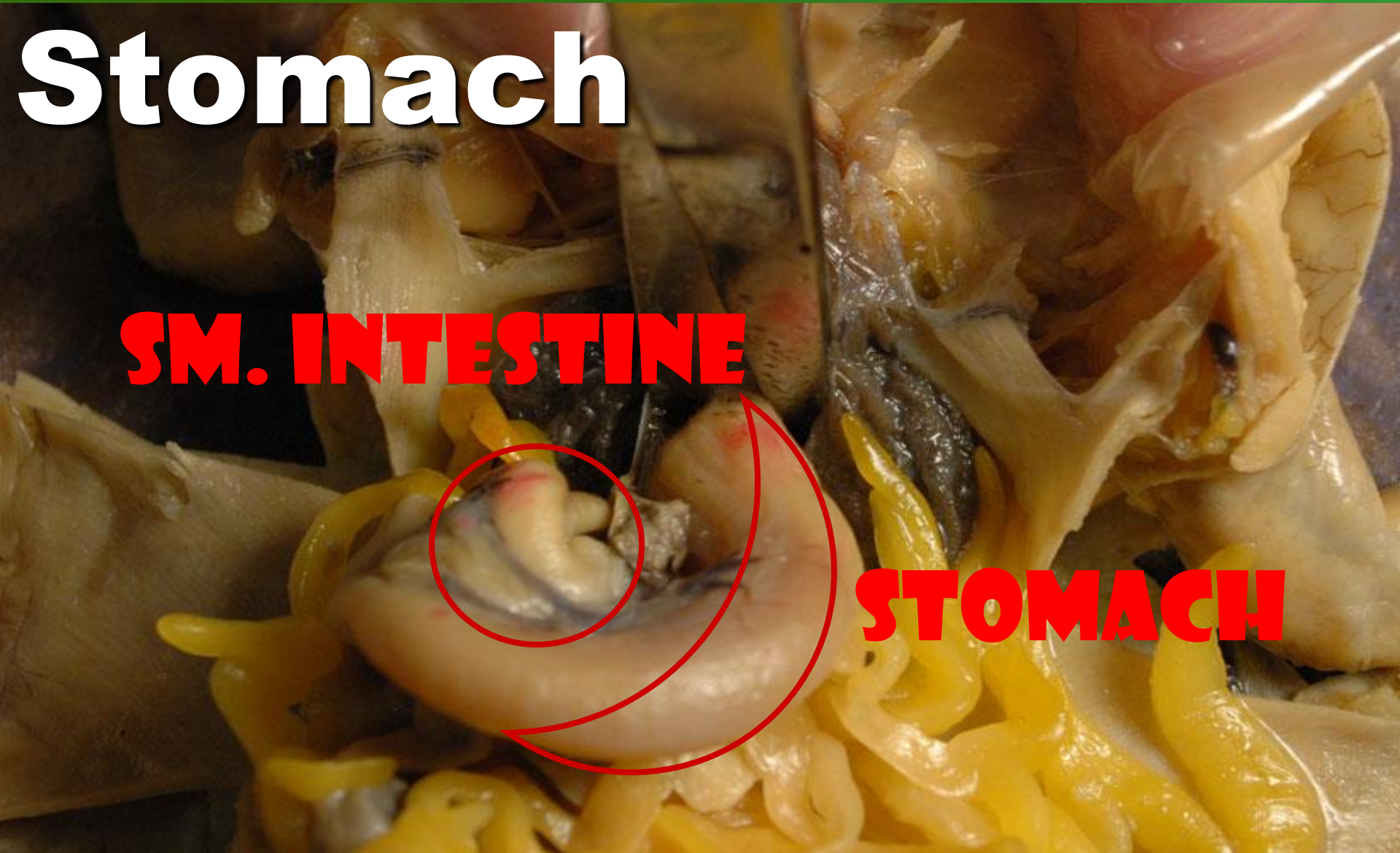
**Also very hard to locate. It is behind the small intestine near the rectum.**



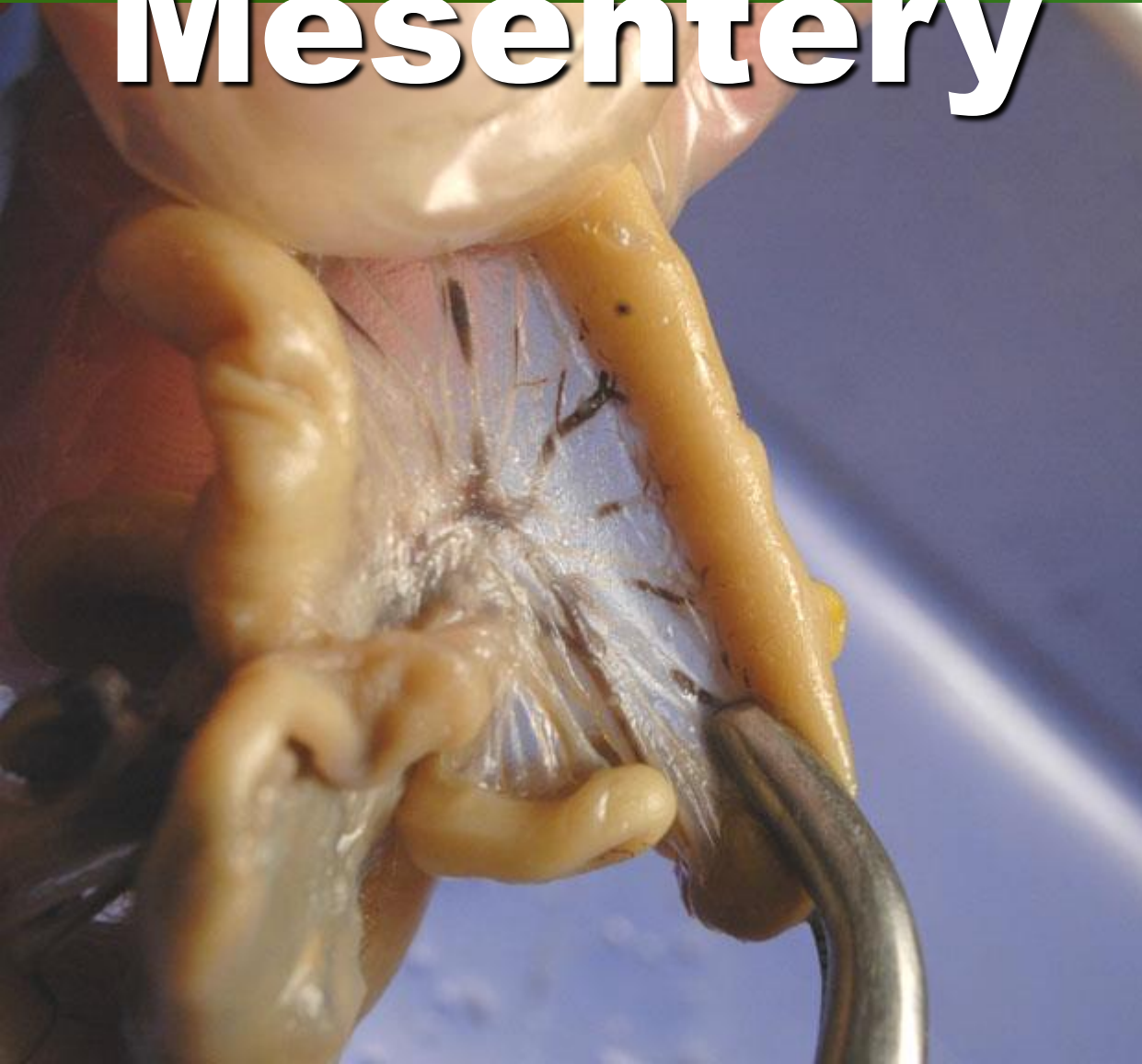
# Small Intestine & Stomach

**SM. INTESTINE**

**STOMACH**



# **Blood Vessels & Mesentery**



**You can see the blood vessels that are connected to the small intestine inside the mesentery**



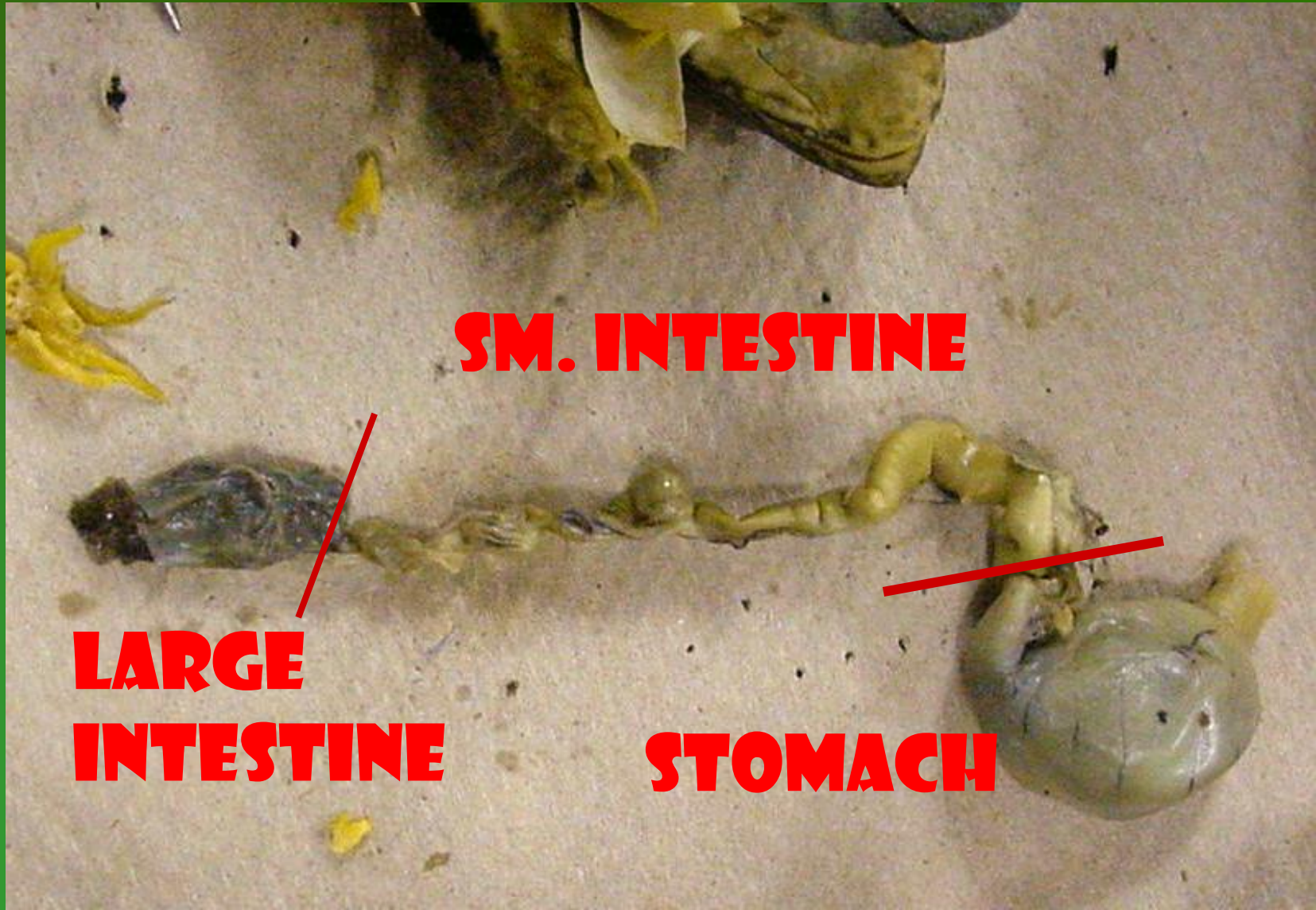
# **Large Intestine & Waste**



**Undigested material is stored in the large intestine and passed out the cloacal opening.**



# Digestive Tract



# Kidneys



**The kidneys are against the back of the frog along the backbone. They look like dark brown, shelled pecans.**



# Cloacal Vent



**Located between the legs, this is where both solid and liquid waste exit the frog's body.**





# **Muscular & Skeletal**

# **The Leg**

**Here you see the  
Femur, with the  
muscles removed.  
What type of joint  
has been taken  
apart?**

# Brain & Spinal Cord



Look how small a frog's brain is! The circle is the brain the rectangle is the spinal cord.

# **Dissection Procedures**



# Cutting the mouth

open



Cut both sides of the jaw open by placing the scissors as shown and cutting, unhinging the jaw.

# Pinning down the

# Frog



Use the  
'T-pins' to  
secure your  
frog to the  
dissecting  
pan. Place the  
pins so they  
are not in  
your way.



# Removing the Liver



**Lift the liver to cut it free. It will take several small cuts. Careful don't cut the heart.**



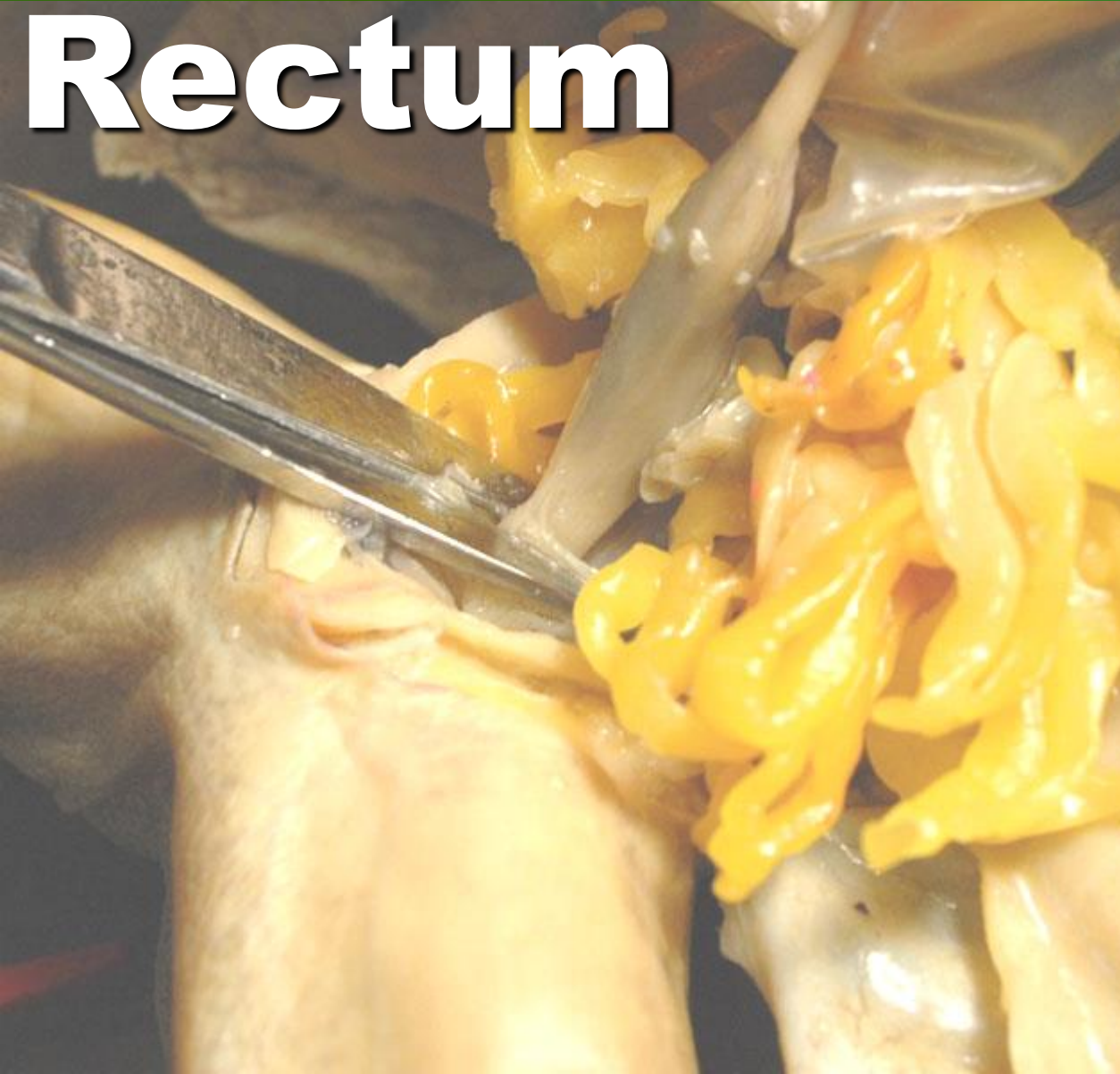
# Cutting out the stomach



Place the scissors  
at the top of the  
stomach as  
shown and cut  
the stomach free.

Careful, don't  
cut the lungs or  
heart.

# Cutting Free the Rectum



Find where the rectum ends and place the scissors as shown and cut free the digestive tract.



# Inside of Stomach

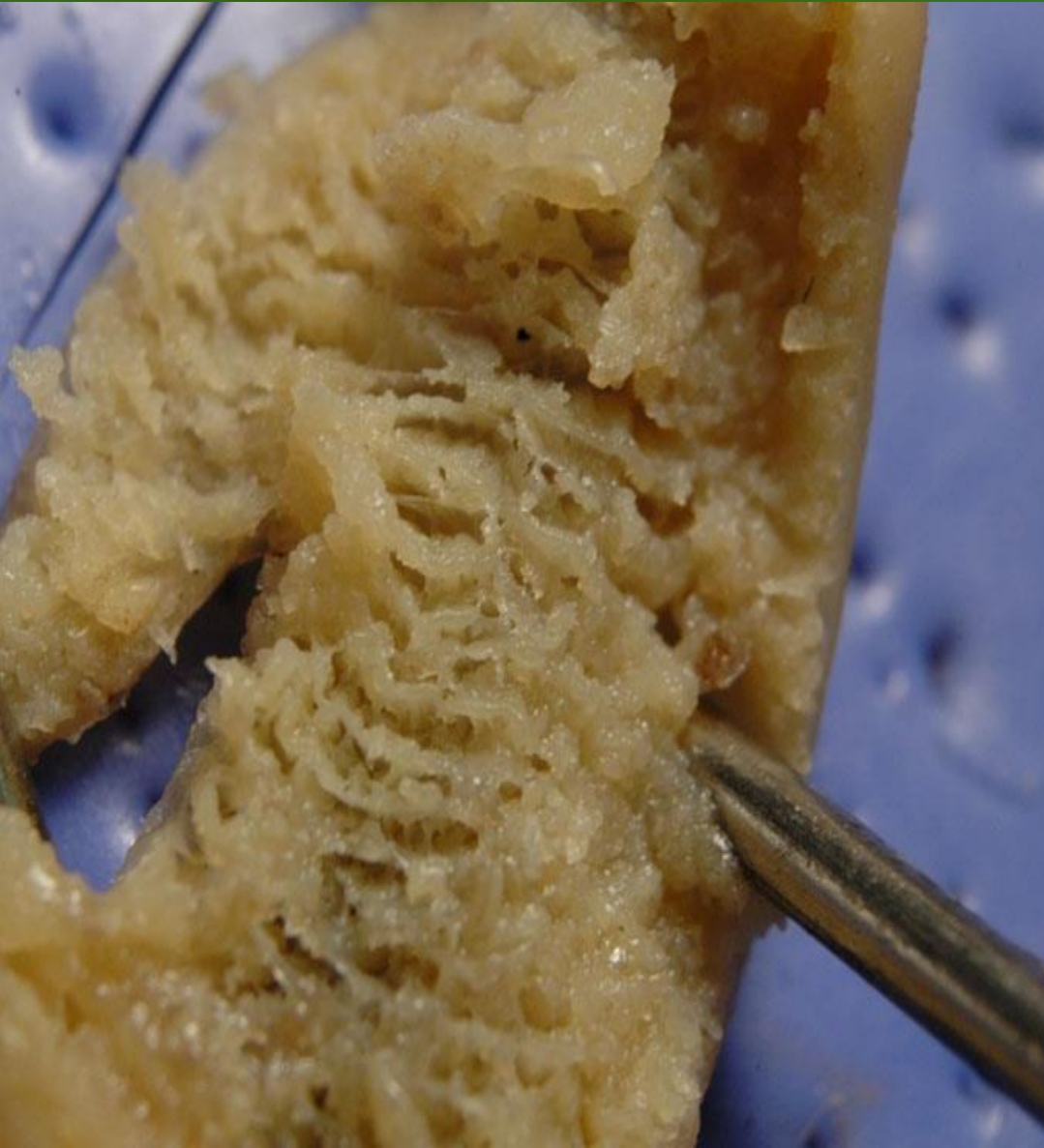


**You can cut  
open the  
stomach and see  
what the frog's  
last meal was.**

**Look for the  
muscular ridges.**



# Villi of Sm. Intestine



Open the small intestine. Look at all the surface area the villi create.

The purpose of the villi is to absorb nutrients.

