

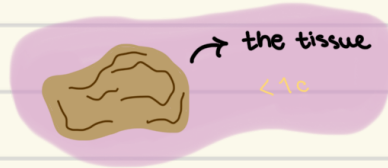
3. Staining 🍷💧💧

4. Microscopic Examination 🔍

Tissue processing for Paraffin method

1. Obtaining the tissue: fresh and small

RFT ❤️



2. Fixation

by formalin (formal saline) 10% *

or other combinations of fixatives

why?

- to harden the tissue
- to save the cellular structure (natural state)
- to prevent enzymatic digestion
- to increase staining affinity

formalin 10%

Tissue

3. Dehydration

- H₂O 💧

by alcohol

"ascending grades"

to prevent tissue shrinkage

alcohol grades



4. Clearing

by Xylo

to replace alcohol

Xylo

tissue

tissue

for 2h

the tissue is

TRANSLUCENT !

It's ready for being exposed to PARAFFIN 🔥

5. Impregnation

by melted soft PARAFFIN wax

In the oven 🔥

- to replace Xylol and harden the tissue from inside



the tissue

melted soft paraffin

This image does not represent the actual process, it is only meant to help you remember the key points.

for 2h!

2025

Paraffin BLOCK!

2000 YEARS LATER

Paraffin BLOCK!

6. Embedding

by melted HARD paraffin

- to harden the tissue from

Outside forming

✦ Paraffin BLOCK ✦

- make the section easy to cut.

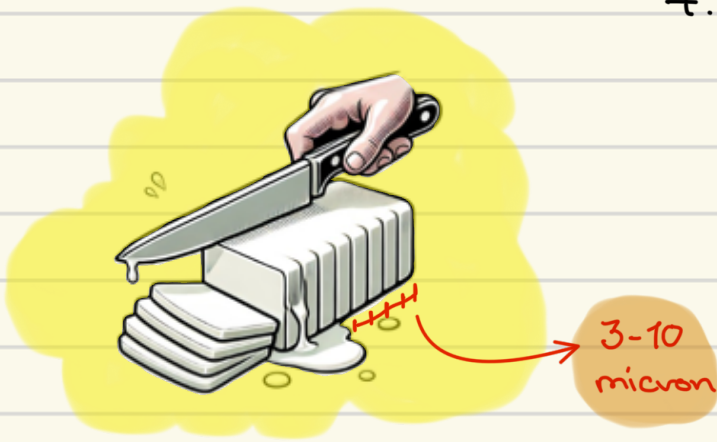
- Can save the tissue for

yeeeeeeeears!



7. Section cutting

by **Rotatory microtome**



8. Mounting Sections

Attaching sections - permanently - to individual **glass microscope slides**.



The end ♡

Raghad F. T.