



OHIO CSI FORENSIC DIVISION

UNIT 1 · MEDICAL INVESTIGATION · CASE RESPAWN

Period 6A-7B · Respawn, an e-sports lounge with a smoothie counter

FORM NO. CSI-1-D14
CASE NO. JH-26-0831-B
REV. 2026-27
PAGE ____ OF ____

FOR EDUCATIONAL USE

OHIO CSI FORENSIC DIVISION

DO NOT DISTRIBUTE ANSWER KEYS

DAILY INVESTIGATION PACKET

Sep 30 · Investigation Day 14 of 18

OFFICIAL

THE BRIEFING: WHAT YOU ARE DOING TODAY, AND HOW THE PROS DO IT

SEC 00

Picking up from Day 13: you learned that a wound that bled tells you the person was alive when it happened. Vital response is the body time-stamping its own injuries.

Real pathologists put tissue under a microscope to name the process behind an organ finding, because the weave of the tissue tells a truth the naked eye misses. Today you read the case slides the same way: describe, name the pattern, then connect it to the finding it explains.

OBJECTIVE

Today you will read the case's tissue slides: learn the four tissue families, then make the histology calls that explain the organ findings from Day 13.

Take-home (the ten-year idea): Organs are built from four tissue families. Disease and injury change the weave, and the microscope reads the weave.

CASE FILE UPDATE

SEC 01

The histology slides come back: the airway under the lens, and the immune cells that name the mechanism.

Every organ in the body is woven from four tissue families: EPITHELIAL (covering and lining sheets), CONNECTIVE (support and transport: bone, blood, the fibrous packing), MUSCLE (contraction), NERVOUS (signaling). Analogy: check the fabric, not just the shirt: two shirts can look alike on the rack while one is cotton and one is polyester; the weave tells the truth. LIMIT: real slides mix families in one field, and staining quality varies; histologists read patterns, not single cells.

What changes under the lens in disease and injury: fluid where it should not be (edema: a waterlogged sponge look, widened spaces), inflammatory cells arriving (small dark nuclei crowding in: the body's response crew on site), tissue architecture collapsing or scarring. Each is a mechanism footprint. The organ findings from Day 13 said WHERE; today's slides say WHAT PROCESS.

The case slides in this pack were selected by the examiner to answer the open questions from day 13. Your call sheet works like every comparison so far: describe the field first (what you SEE), then name the pattern (what it MATCHES), then connect it to the finding it explains (what it MEANS for the cause tree). Name first and you start seeing what the name predicts. Three columns, same discipline as day one.

NEW VOCABULARY (RECORD IN YOUR NOTEBOOK BANK)

SEC 04

TERM	PLAIN-LANGUAGE DEFINITION	ANALOGY TO HOLD ONTO
histology	reading tissue under a microscope	checking the fabric weave, not just the shirt
edema	swelling from fluid where it should not be	a waterlogged sponge

YOUR ROLE

Team E leads; everyone reads.

THE SITUATION

The case slide set (printed micrograph cards with magnification noted) plus reference cards for healthy tissue of each family.

THE RULE YOU APPLY

Describe before naming; name before connecting. Every call cites a visible feature, and reference cards stay on the table.

WHAT YOU PRODUCE

Histology call sheet: per slide, the description, the pattern call, and the cause-tree connection.

Claim ceiling. Tissue findings support mechanisms; they do not name manners. The tree prunes further today, but it does not resolve.

WHAT THIS UNLOCKS

The evidence phase is complete. What remains is reasoning: the synthesis days.

Activity 1.2.4 Histology (referenced by title only; all materials in this file are John Hay original work)

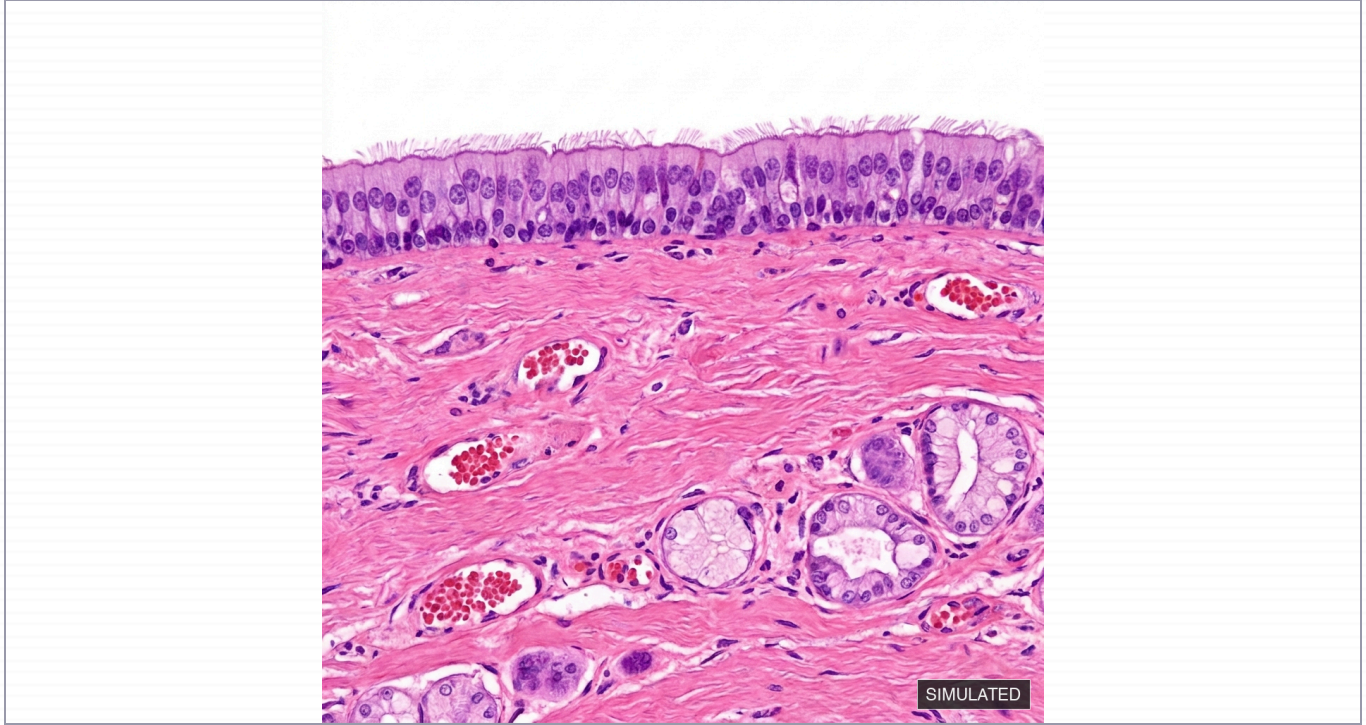
- **Histology: Four Tissue Types simulation** mendozabiomed.org/learn/lab-sim/pbs-histology-four-tissue
- Portal: Histology Four Tissue Types simulation (pre-lab gate), day page, guided notes

Hand out only the exhibits listed for this day.

EXHIBIT 016 · Medical thread

RELEASED DAY 14

Reference slide: healthy laryngeal lining (100x)



Case slide: larynx, submucosal edema (100x)

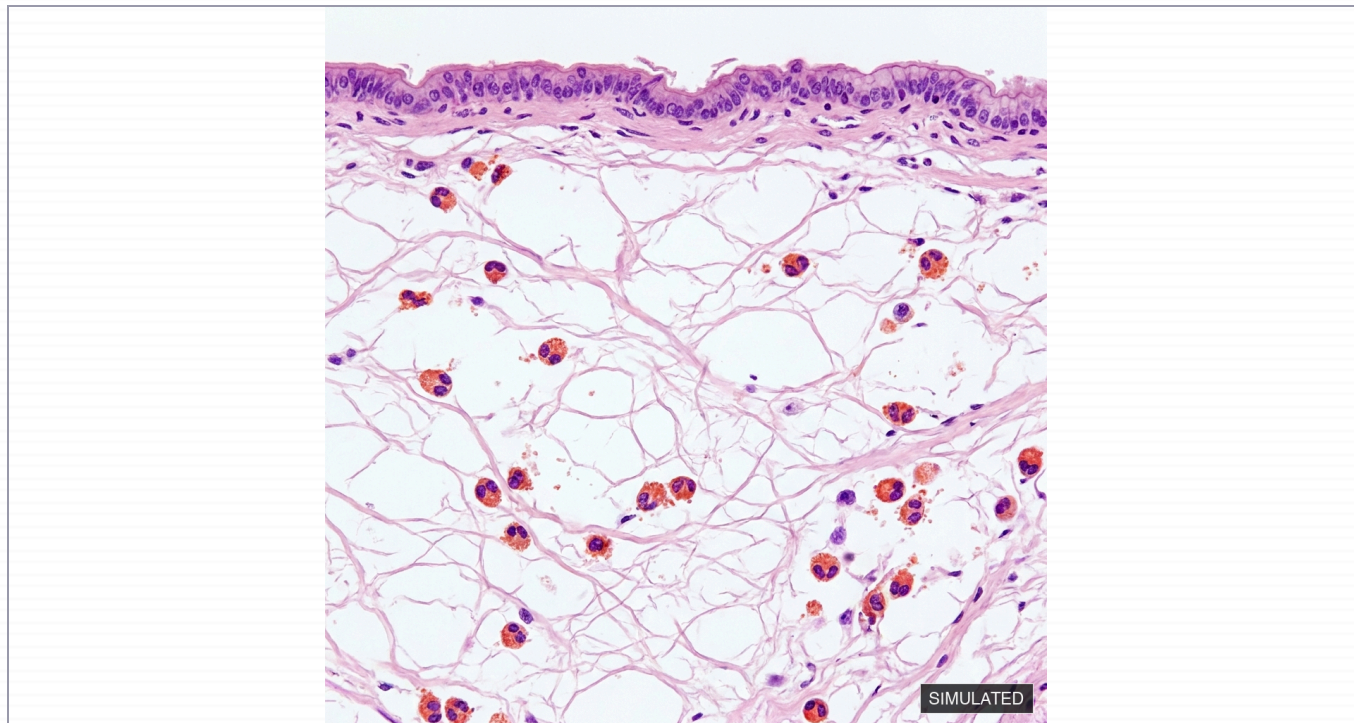
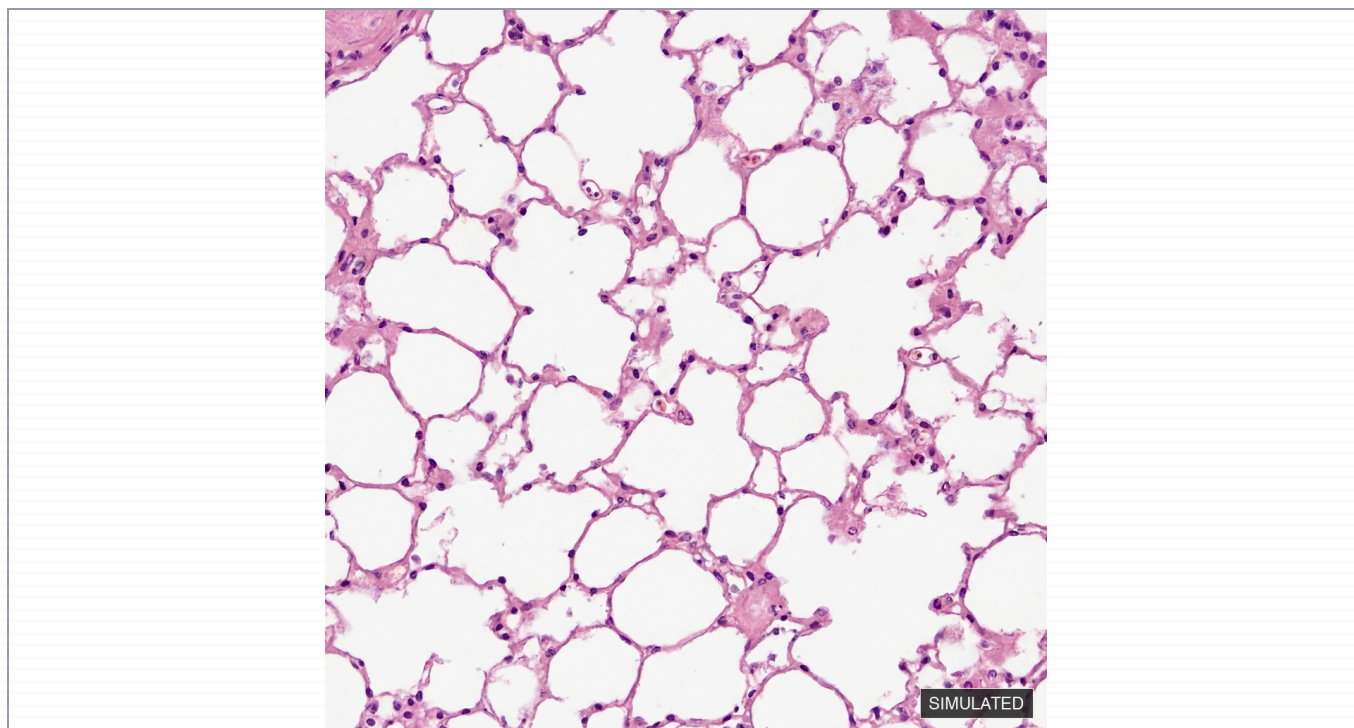
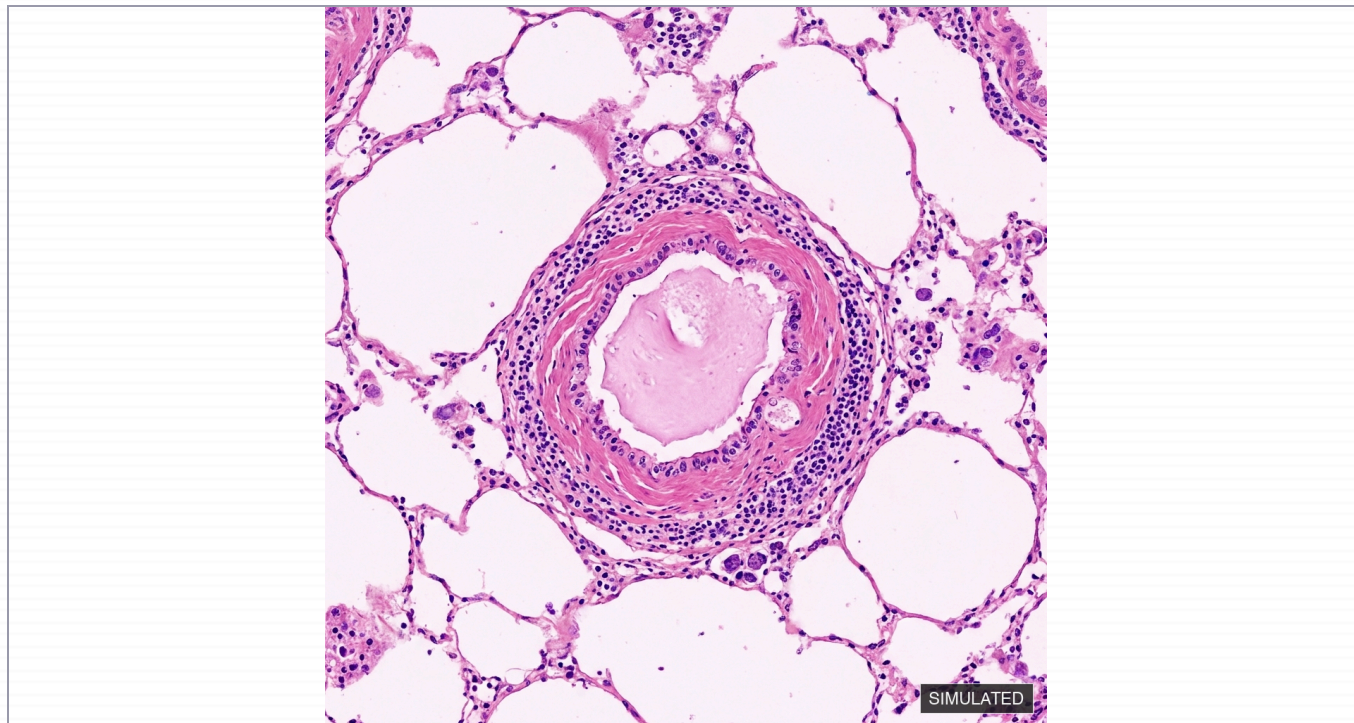


EXHIBIT 018 · Medical thread

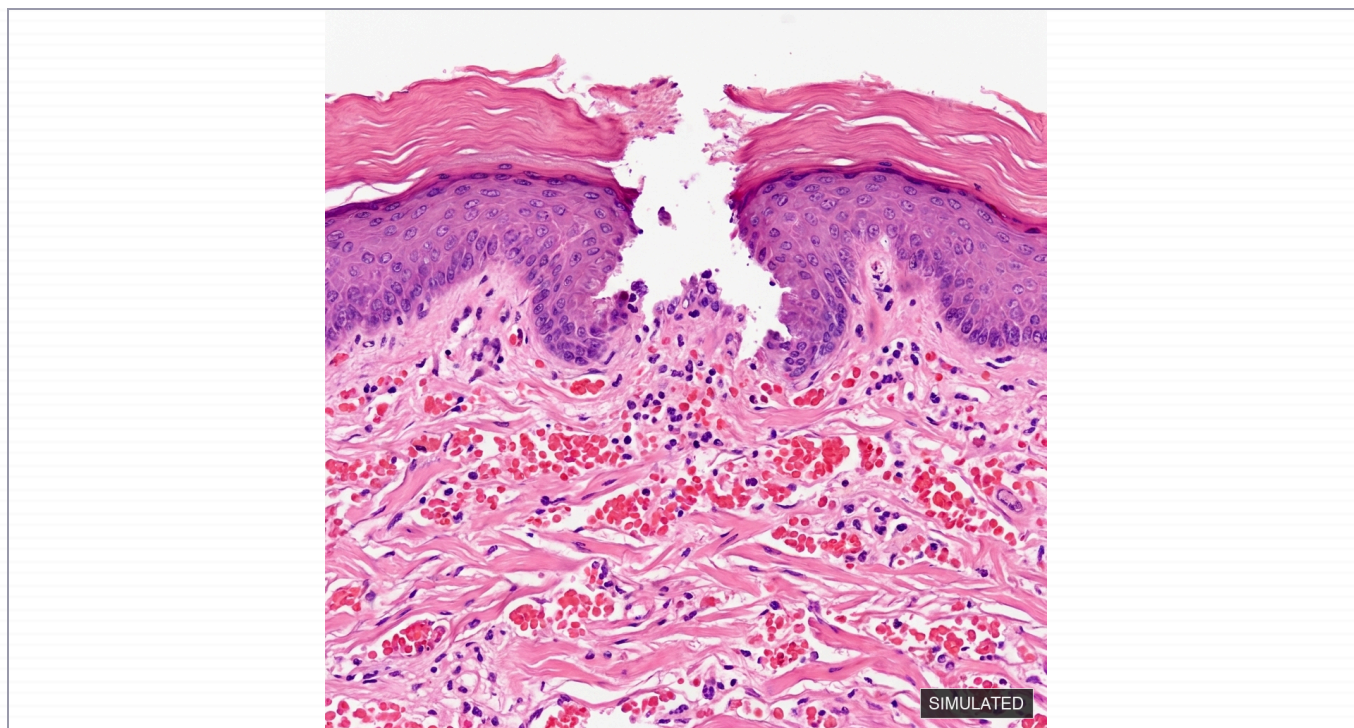
Reference slide: healthy lung (100x)



Case slide: lung, airway plugging (100x)



Case slide: brow wound margin, vital response (200x)



INVESTIGATION TEAM ASSIGNMENTS

SEC 05

A Scene and Documentation

Log the slide set into the evidence log; reference numbers on every call sheet.

B Trace

Read the trace-relevant slide (wound margin) and brief it.

C Serology and DNA

Read the serology-relevant slide and brief it.

D Toxicology and Chemistry

Connect slide 1 to the panel and the cassettes: write the full mechanism chain in plain English for the conference.

E Medical Examiner

Lead the reads: describe, name, connect, against the healthy references.

F Records and Timeline

Tree bookkeeping: surviving branches and the evidence that would separate them.

NOTEBOOK PAGES IN USE TODAY

SEC 06

- Histology call cards organizer
- Logic tree update
- Day 14 Cornell page

DAILY SUBMISSION FORM: HISTOLOGY CALL SHEET

JH-26-0831-B / D14

- ☐ Per-slide: description, pattern, connection
- ☐ Logic tree pruning noted
- ☐ One remaining open question

INVESTIGATOR (PERIOD + CODE, NO
NAMES)

TEAM

TIME SUBMITTED

Complete daily product. Complete Parts A to E of the Day 14 Daily Evidence Sheet. Submit one PDF to Wk6 D14 · The Fabric Under the Lens (PLTW 1.2.4) in Schoology by 11:59 PM. Keep notebook pages in your Investigative Notebook.