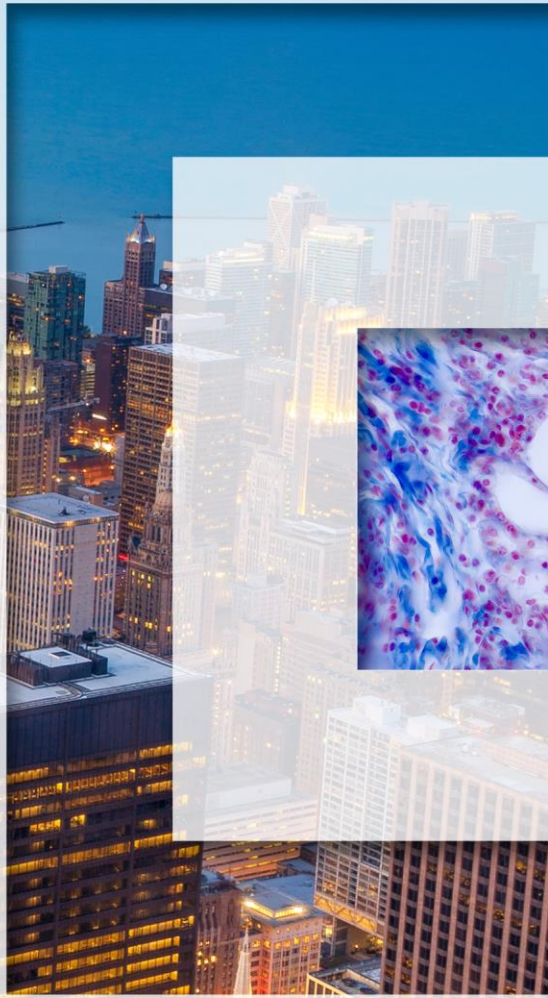
ASCP 2024
ANNUAL MEETING

Learning Anatomic Pathology and Preparing for the Boards



Kurt Schaberg MD
University of California, Davis

Financial Disclosures

- I have no financial relationships to disclose

Outline

- For the PGY1-2’s: Talk about basic strategies for learning AP
- For the PGY3-4’s: Talk about the boards (format, content, ways/resources to study)

Interactive Question #1

- What is your current level of training?
  A. PGY-1
  B. PGY-2
  C. PGY-3
  D. PGY-4
  E. Fellow (or beyond!)

What is this based on?

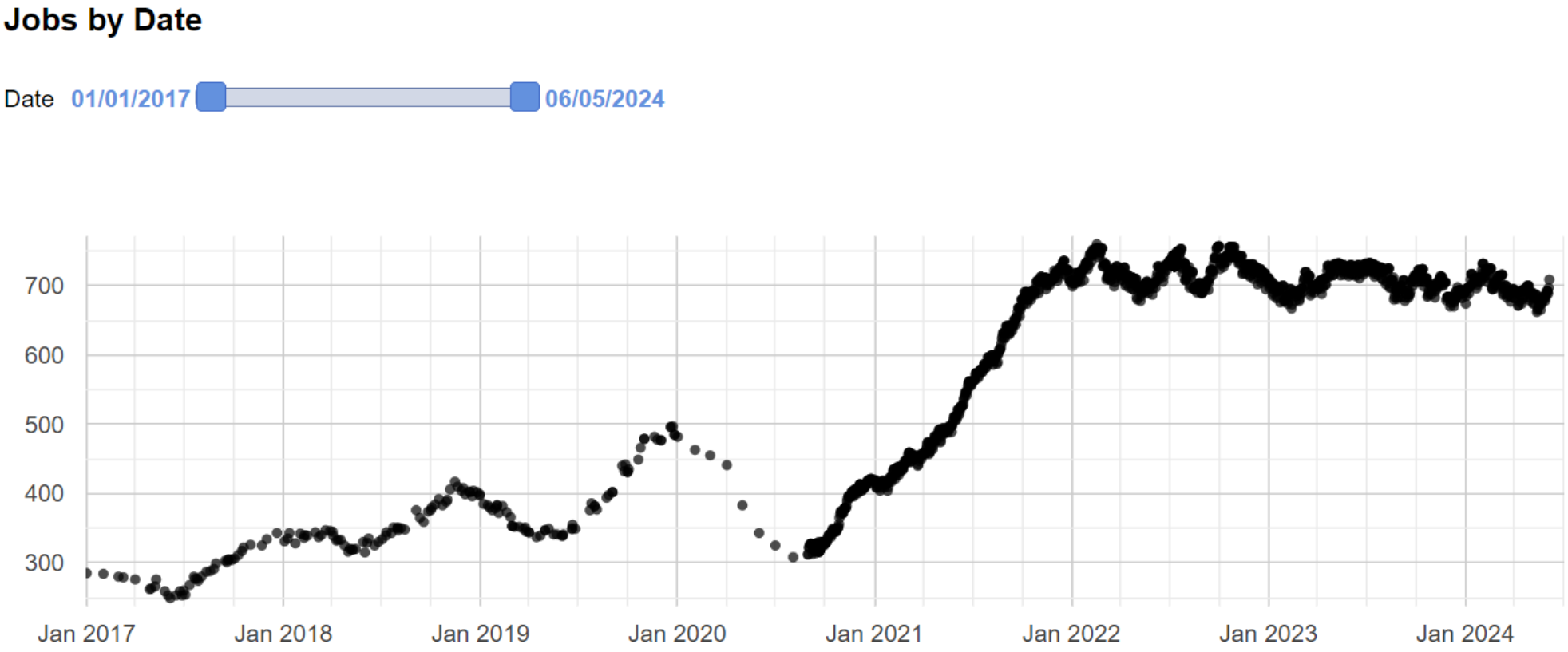
- The ABP website
- My own experience (in person)
- Lectures during my residency
  - Particularly a talk on “Learning Anatomic Pathology” by Drs. McKenney and Jensen
- Social media
- Feedback from my residents
- CAP survey, “Almost Everything You Wanted to Know About Pathology Board Exams but Were Afraid to Ask”
- Emailing the ABP

My Residency

Two things residents always worry about

1. Getting a job
2. The Boards

Getting a job



Source: https://www.pathologyoutlines.com/jobs

You will get a job!

Two things residents always worry about

1. ~~Getting a job~~
2. The Boards

What I heard about boards when I was a resident

- It’s really hard
- The pictures are terrible
- It’s random esoteric trivia
- It’s not practical
- You have to “read their minds”
- There’s no way to know what they’ll test you on

My thoughts walking out of the test center

- Phew!
- That wasn’t as scary as I feared
- I think I probably passed
- It was mostly fair
- I didn’t know everything, but I recognized most things

Candidate Examination Preparation: Do's and Don'ts

A Few Words from ABPath CEO Gary Procop, MD, MS, MEd

As we gear up for the upcoming board certification exams, I wanted to take a moment to offer some valuable tips on how to prepare. While I'll certainly be citing reliable references to support my suggestions, I'll also add a dash of common sense—something we're all familiar with, yet occasionally overlook in the heat of exam prep. Let's dive in and ensure you're ready for success on exam day.

Keep It Simple

I am very proud that, for as long as I've been associated with the ABPath, there has been a sustained and concerted effort to not accept items (i.e., test questions) that concern trivia or minutia. The items that are accepted have been reviewed and edited by groups of subspecialty experts in the various areas of Pathology and Laboratory Medicine with the charge to only include medically important and clinically relevant information. Therefore, study what you need to know and be able to do to succeed as a pathologist in practice as a means to do well on the certification examination.

Use the Guide

Use the blueprints on the ABPath website to help guide your studies. The blueprints show the rough percentage of the examination that is covered by each content area, as well as the distribution of written items, practical items, and items that include virtual microscopy.

Think Big

When studying any one area of pathology (of the type of material in any given category so read broadly. For example, iter l likely also include inflammatory and infectious conditions, malformations, etc.

Guidelines and Key Manuscripts

Coming Soon

Coming Soon!

- “Guidelines and Key Manuscripts”→ should be posted by the end of the year.

- “Moderately granular content specifications (i.e., content outlines) for each exam… will go out for stakeholder and public review late in the year with (hopeful) publication early in 2025.”

(personal communication with Dr. Gary Procop)

Building a Strong Foundation

- The best way to prepare for the boards is to **prepare for practice**!
  - **Study for Life**, not the test
  - Residency is an **apprenticeship**, not a class
  - Be **Engaged**

- You can't lean everything you need to know for boards in your last year.
  - Try to get the most out of *every rotation* and think critically about every case
  - Do *not* just be one of those residents that is "going through the motions"
  - Do *not* wait to figure out what something is at signout

- Try to treat every case as if it was ***your*** case


Studying for Practice
Studying for the Boards
Corporate needs you to find the differences between this picture and this picture.
They're the same picture.
imgflip.com

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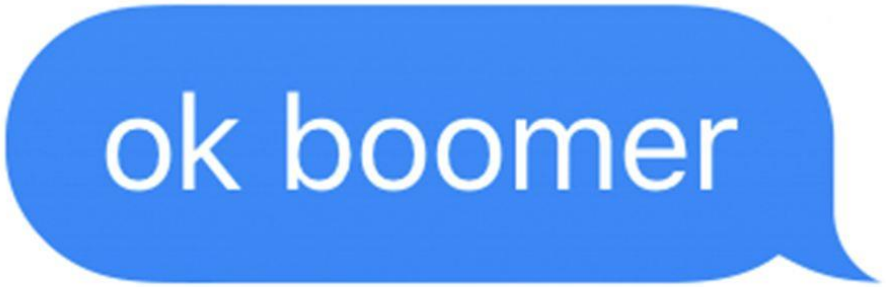
What you're probably thinking ;-)



Millennial to Millennial/Zoomer

Millennial to Millennial/Zoomer

If you could offer one piece of advice to future test takers, what would it be?

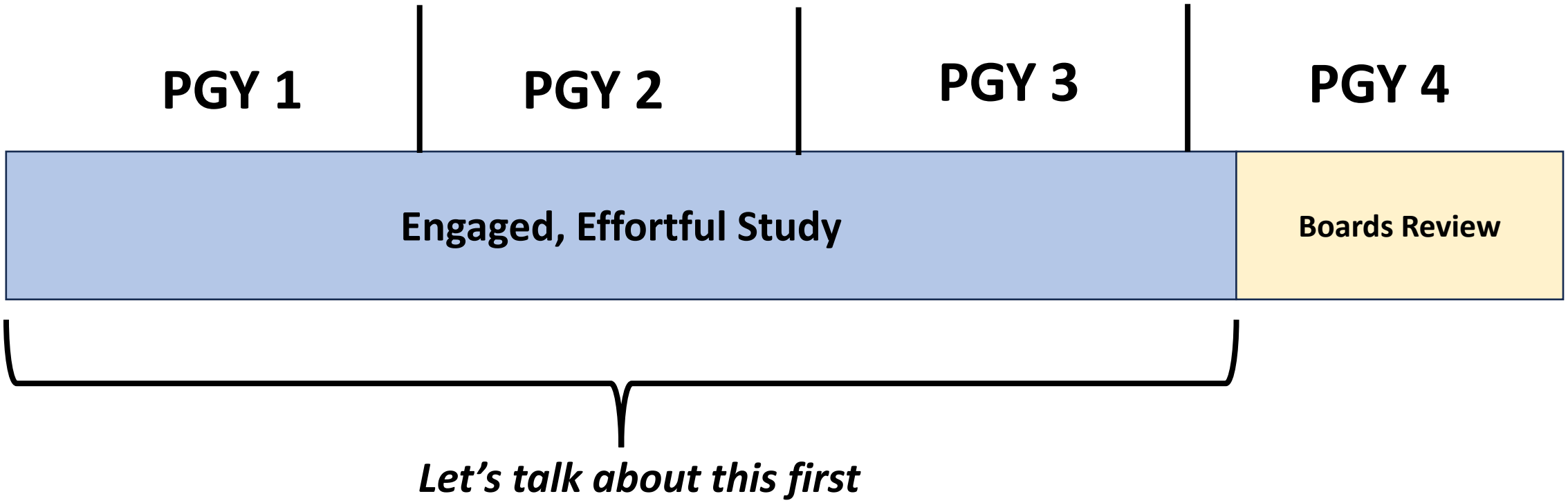
Learn material throughout residency:

- Learn as much as you can during your rotations
- Read about your cases
- Take your CP rotations seriously and get involved in lab management

Have a study plan and be committed to your plan:

- ~2 years in advance for rough preparation and give last 6 months for serious studies with timetable and topics to be read every day
- Start several months prior to the exam and study in small increments each day.
- Recognize your weaknesses and spend more time on those subjects.

Study timing



Engagement → “Effortful Study”

- How does one develop “expertise?”
- Why do some people spend the same number of years at a given activity (golf, chess, piano…), but have markedly different skills?
- **Time spent in *effortful* study**

What is “Effortful Study?”

What is *not* effortful study:

- listening to a didactic lecture
- picture flipping in a pathology book
- sitting at the scope with an attending
- googling a picture

What is “Effortful Study?”

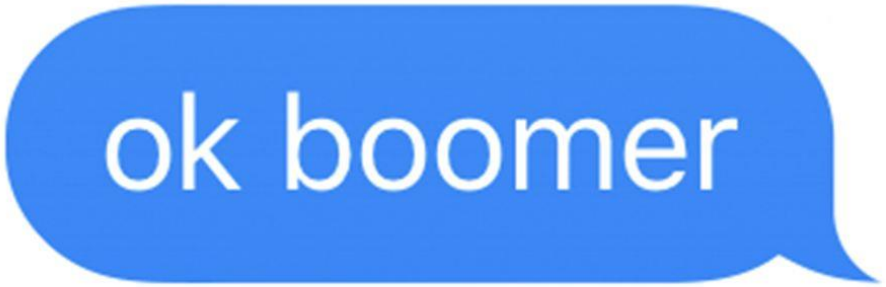
- Learning is not something done to students, but rather something that students *themselves* do

- Examples of effortful study (and engagement):
  - Previewing your cases in depth
    - Having diagnoses and DDXs
    - Suggesting next steps in work-up
  - Previewing for Unknown sessions
  - Reading and quizzing yourself
  - Anki

What is “Effortful Study?”

- Residency is an apprenticeship, not a job or class!
- Just showing up and moving the cases along is NOT enough!

What you're probably thinking ;-)



What you need to learn for AP (and how to study it)

- Disease Entities
- Morphology
- Special studies

Tested on the boards

- Grossing
- Reporting

Learning Entities

- If you don’t know it exists, you can’t make the diagnosis!
- “List Learning”
  - Diagnosis lists
  - Clinical lists

PGY1 Diagnosis Lists

- Spindle cell neoplasm in the GI tract
  - GIST (Gastrointestinal Stromal Tumor)
  - Leiomyoma
  - Schwannoma

PGY4 Diagnosis lists

Benign/Non-aggressive

- Leiomyoma
- Schwannoma
- Mucosal Schwann cell hamartoma
- Perineurioma
- Ganglioneuroma
- Glomus Tumor
- Inflammatory fibroid polyp
- Lipoma
- Plexiform Fibromyxoma
- Calcifying Fibrous Tumor

Malignant/Potentially Aggressive

- GIST
  - SDH-deficient GIST
- Leiomyosarcoma
- Desmoid Fibromatosis
- Rhabdomyosarcoma
- Solitary Fibrous Tumor
- Inflammatory Myofibroblastic Tumor
- Kaposi Sarcoma
- Angiosarcoma
- Gastrointestinal Clear Cell Sarcoma

PGY4 Work-up lists

IHC Panels

First Round (most common DXs):

CD117 (ckit), DOG1 } GIST

Desmin → Smooth Muscle tumors

S100 → Neural Tumors (and other, rarer, neural crest tumors)

Second Round (less common tumors):

EMA → Perineurioma

Nuclear β–Catenin → Fibromatosis

ALK → Inflammatory myofibroblastic tumor

Melan-A and HMB45 → PEComa

Calretinin, CD68 → Granular cell tumor

SMA → Myofibroblastic or muscle differentiation (or Glomus)

CD31 or ERG → Vascular tumors

CD34 → Vascular tumors, GIST, Inflammatory fibroid polyp, some NF cells

List Learning: Causes of “Diarrhea”

PGY1 list

- IBD
- Microscopic colitis
- Celiac disease
- “Infection”

PGY4 List

- IBD
- Microscopic colitis
- Ischemia
- Mediation-associated
- Eosinophilic gastroenteritis
- GVHD
- CVID
- Specific infections (e.g., MAI, EHEC)

List Learning

- Mass lesions for each organ
- Etiologies for each clinical diagnosis

Active List Learning

- On your own: with each case you get
  - Don’t waste an opportunity
- Unknown conference
- Also know what it is *not*

If you’re never heard of it, you can’t diagnose it!

Studying During Residency

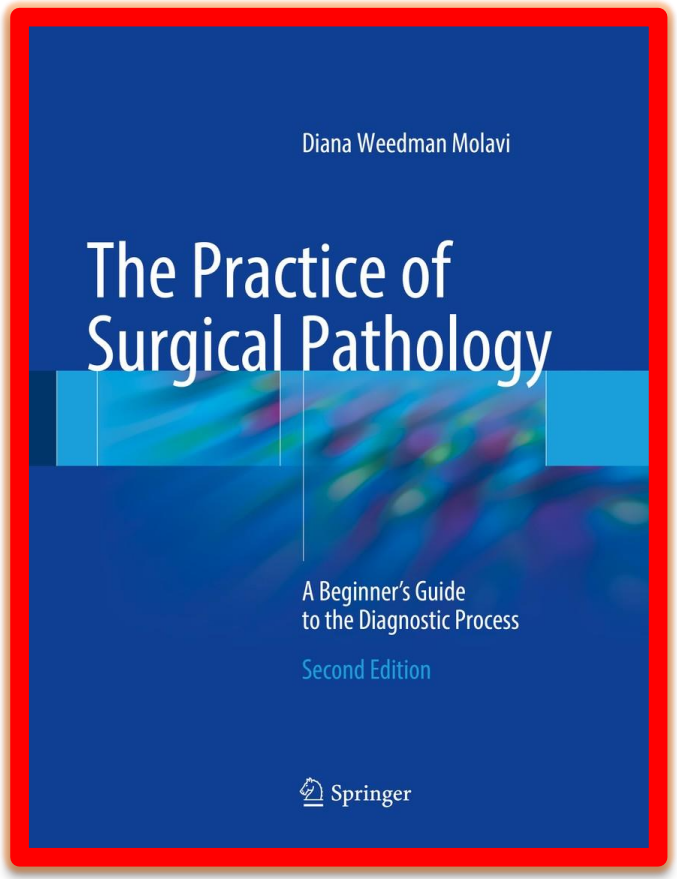
Holistic Studying

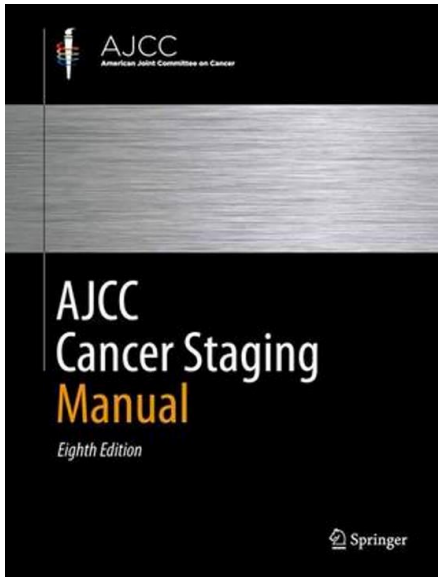
- Structured to cover ***all*** aspects of surgical pathology

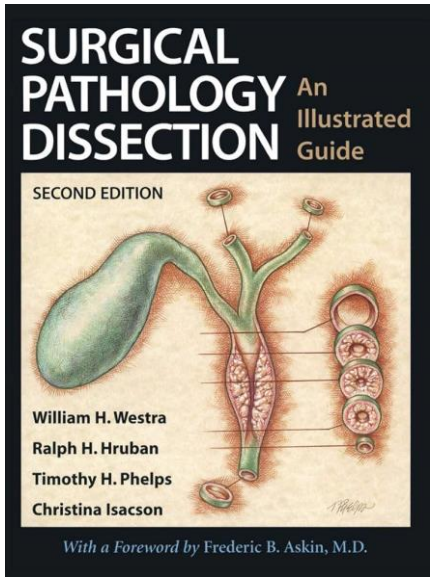
Case-specific

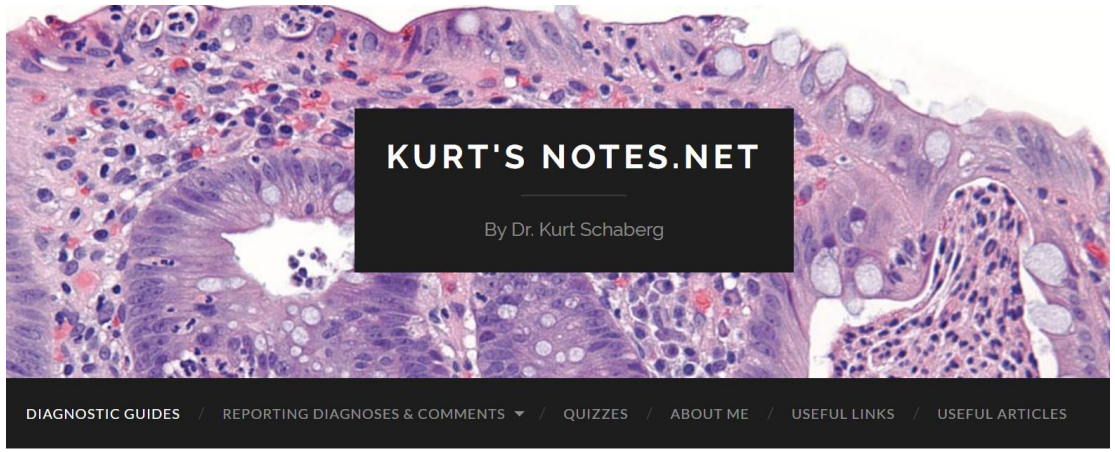
- Based on cases you encounter in daily practice

Holistic Studying Resources for First/Second Years

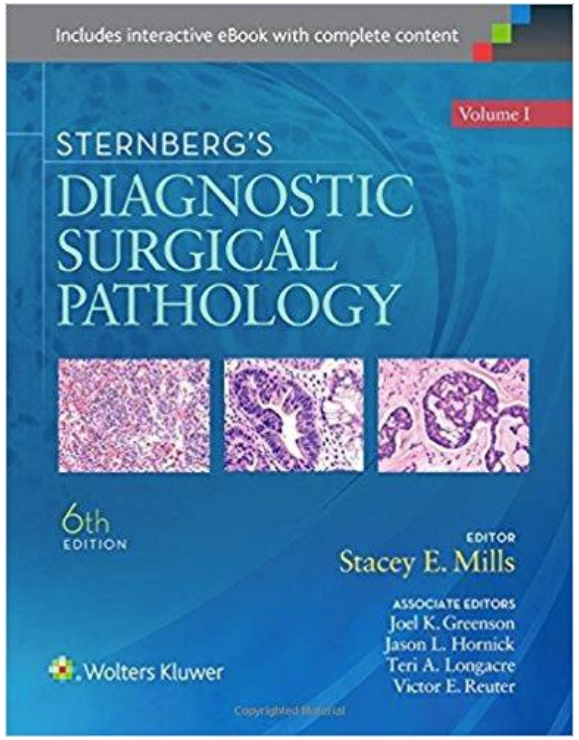


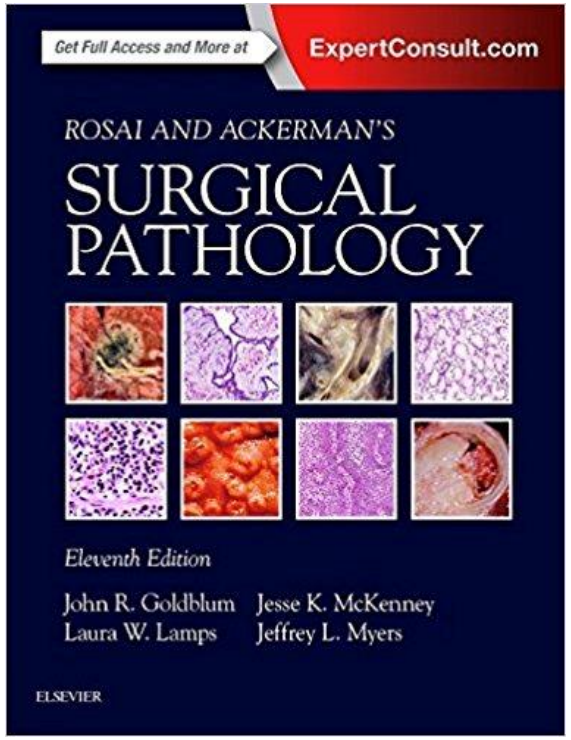


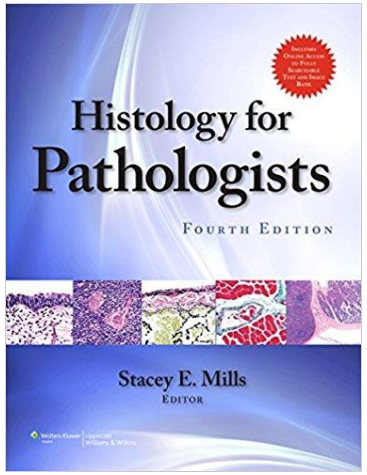


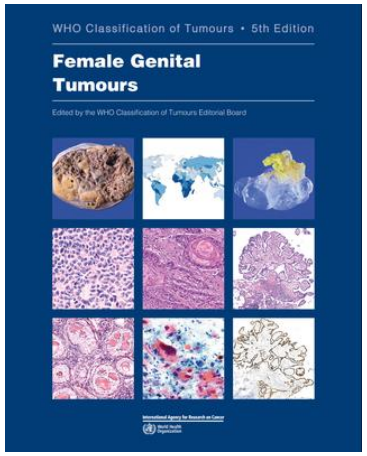


Holistic Studying Resources for Third/Fourth Years

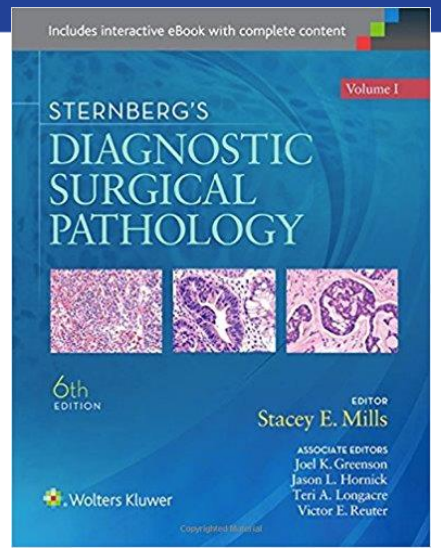


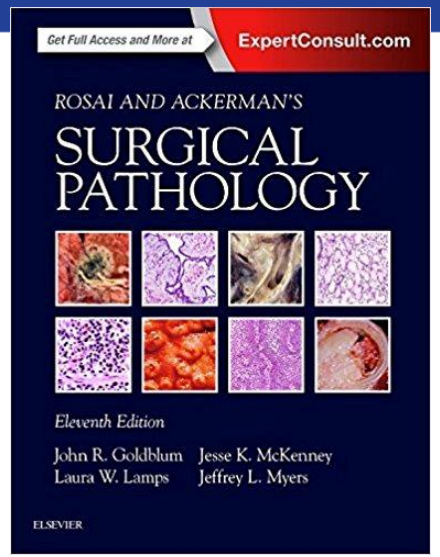


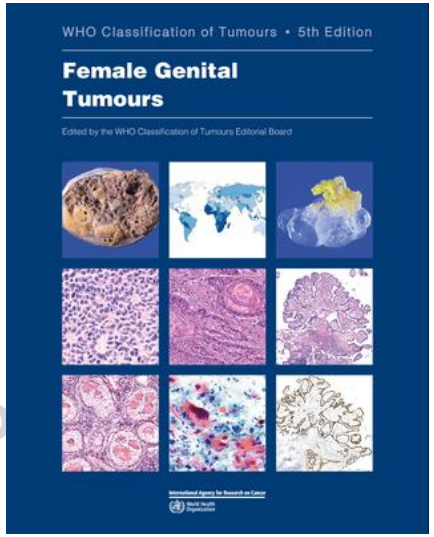


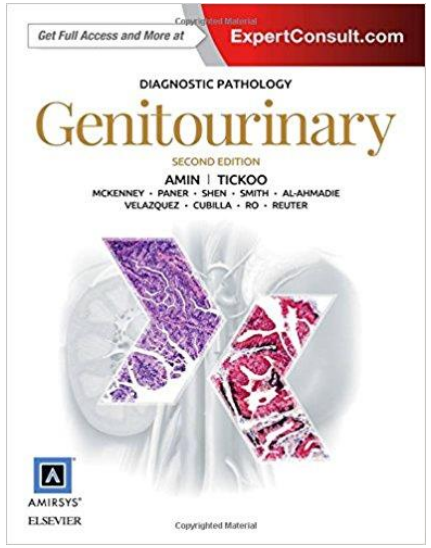


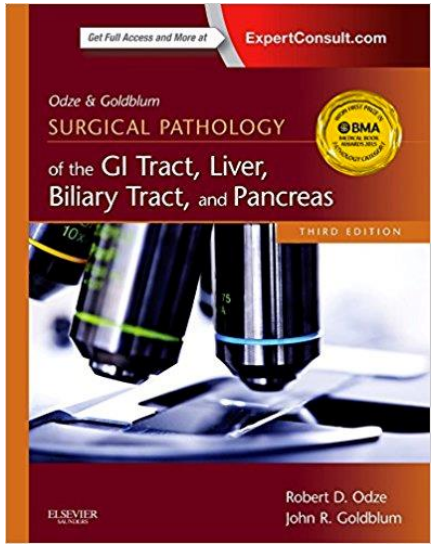
Case-specific Studying









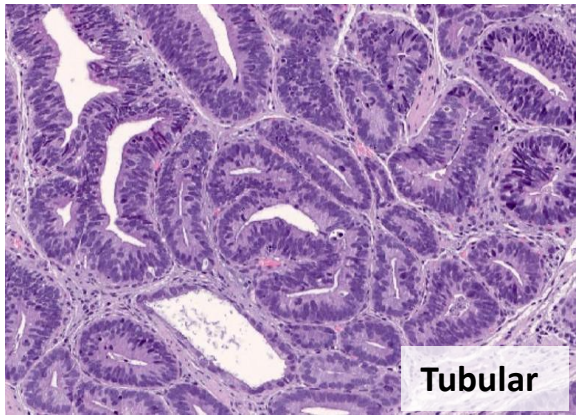


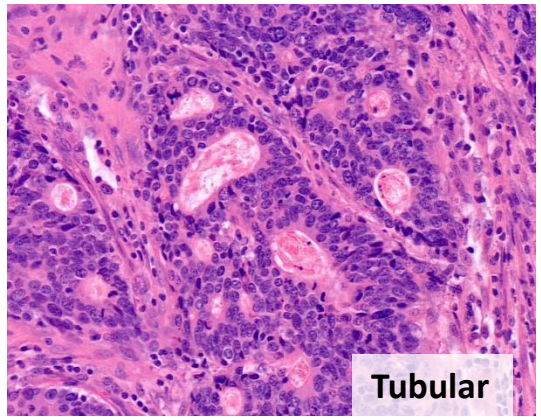
Morphology

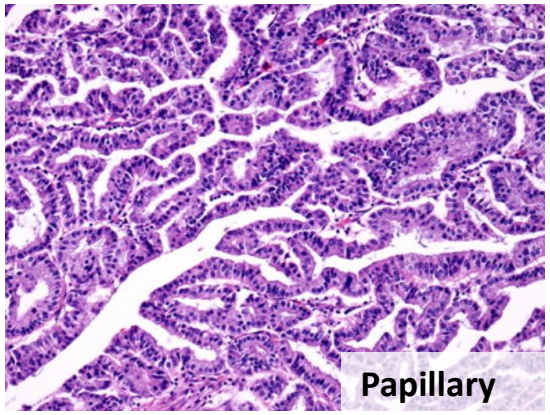
- First learning priority: classic histologic appearance of each disease entity
  - Be able to recognize the classic morphology as soon as possible
  - You don’t want to still be learning the classics in your last year, when you should be learning the morphologic spectrum or more esoterica
- Unfortunately, cases frequently stray from the classic look
  - Learn morphologic Heterogeneity
  - Learn morphologic Spectrum

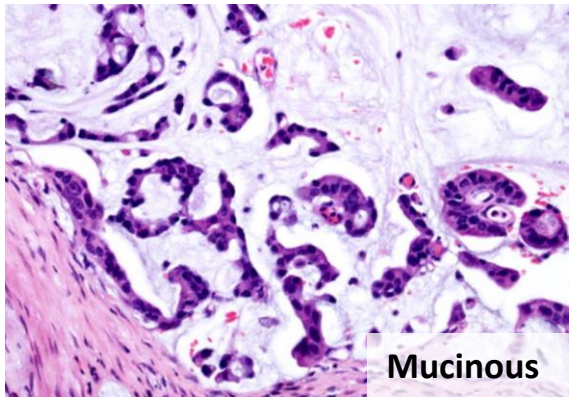
Gastric Cancer Morphologic Spectrum

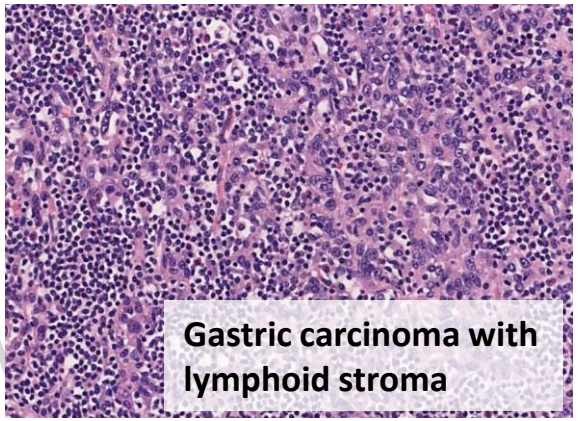
- As you advance and know the classic appearances, you will begin to learn the spectrum allowed for a diagnostic entity

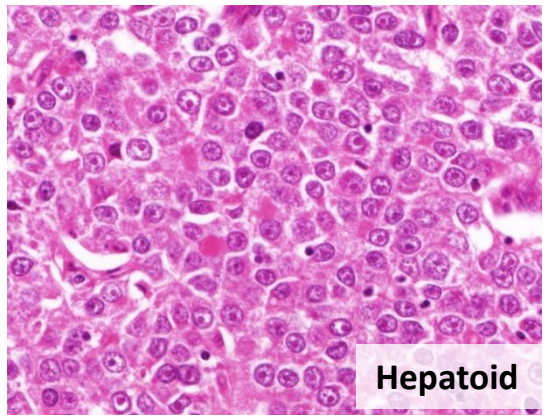


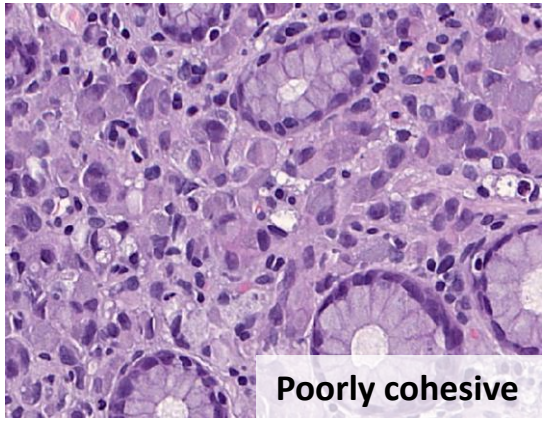


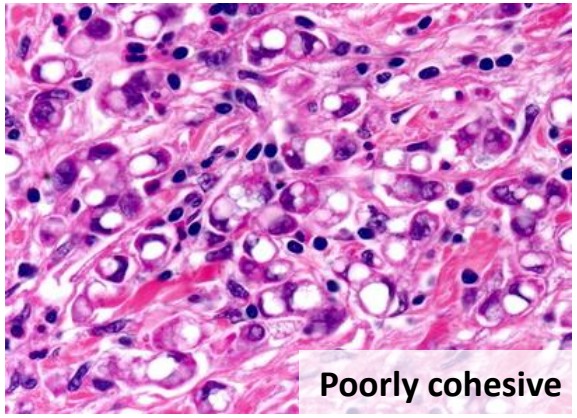










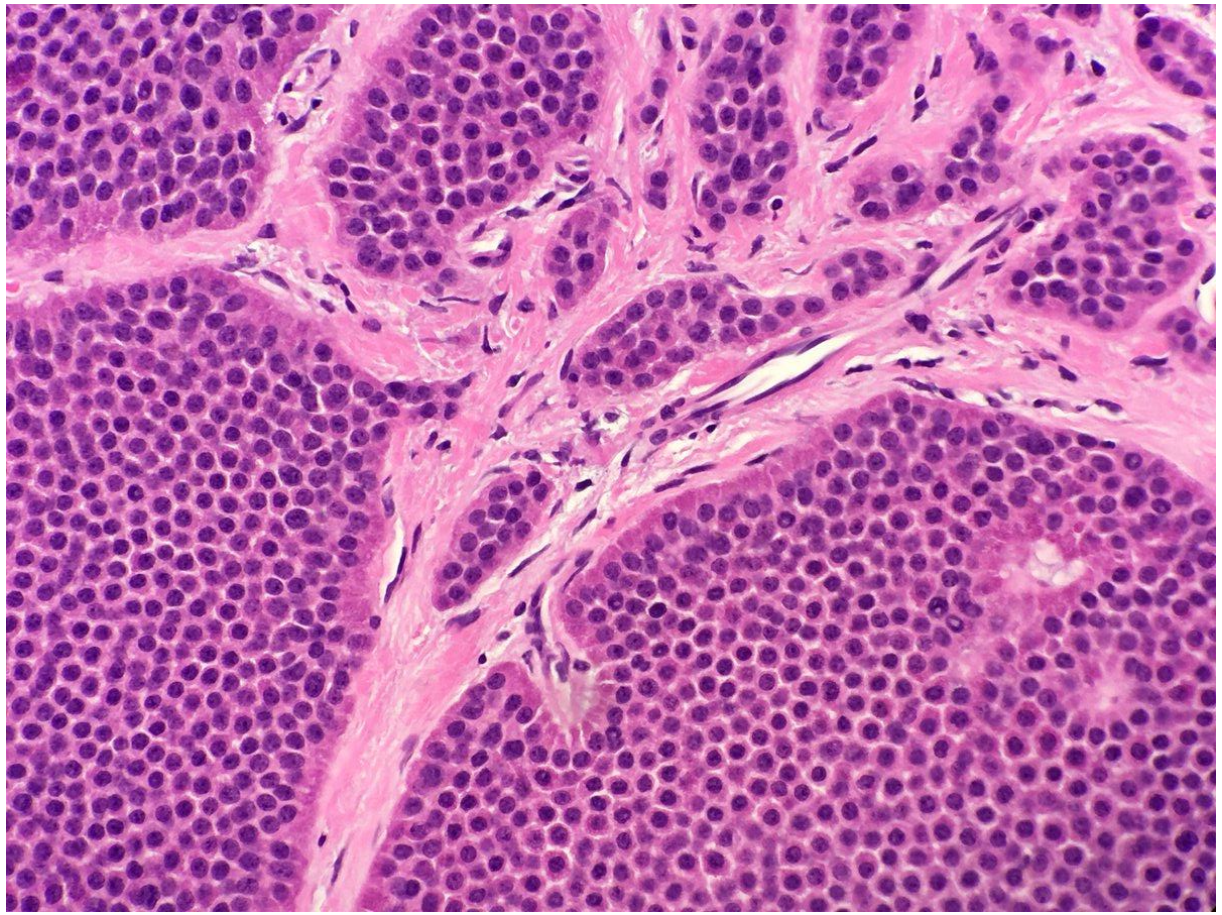


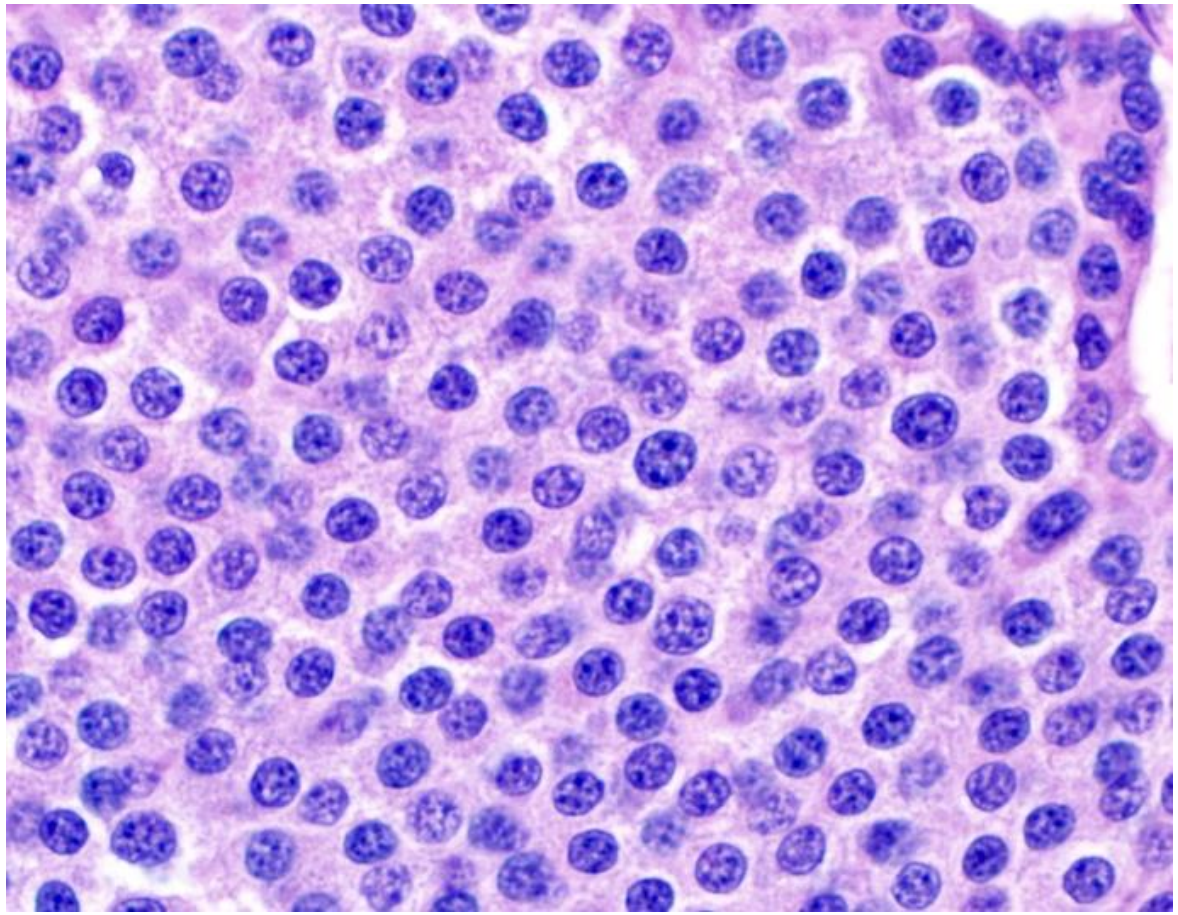
How do we learn classic morphology?

- <u>On your own:</u> *(effortful study!)*
  - Surgical cases
    - Previewing and making diagnoses BEFORE sign-out
  - Textbooks
  - Be on the lookout for good cases (and share them)!!!!!!!!
- Unknown conference
- Didactic lectures

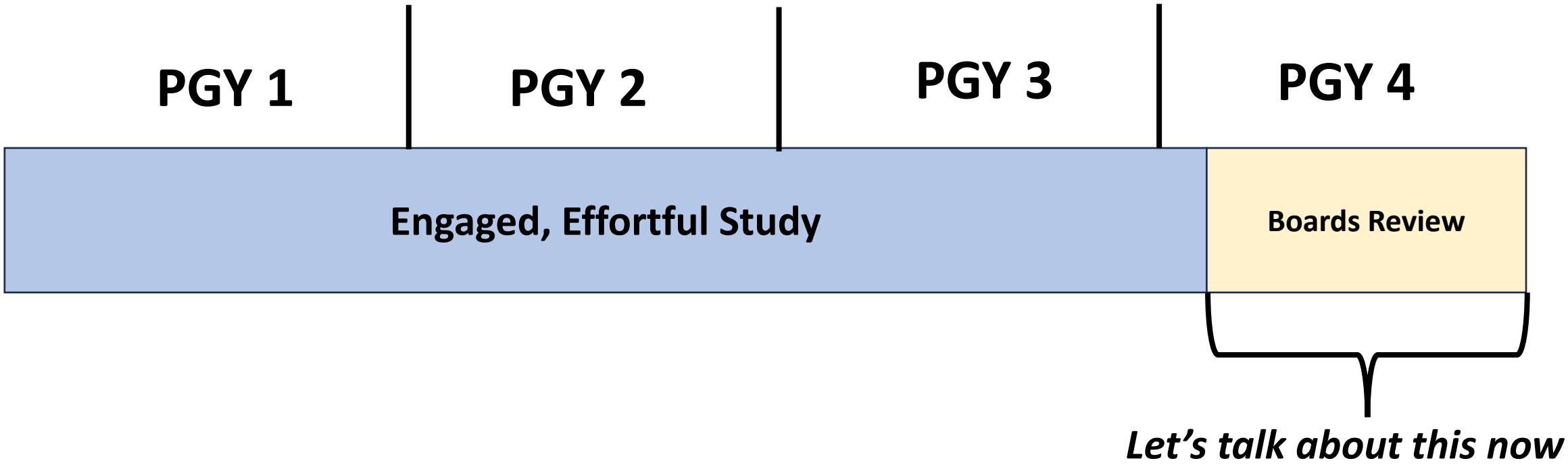
The Goal: Morphologic Independence

- You can recognize things with no history or site (out of context)





Study timing



When should I start studying?

"How far in advance of the exam did you begin studying?"

- 7.7% of respondents began studying 1 to 2 months prior to the exam.
- 52.1% of respondents began studying 3 to 6 months prior to the exam.
- 32.5% of respondents began studying 7 to 12 months prior to the exam.
- 7.7% of respondents began studying more than 12 months prior to the exam.

"During the time you were actively studying, about how many hours per week did you spend studying on average?"

- 14.4% spent 1 to 5 hours
- 26.8% spent 6 to 10 hours
- 22.2% spent 11 to 15 hours
- 19.6% spent 16 to 20 hours
- 17% spent more than 20 hours

cap

***Almost* Everything You Wanted to Know About Pathology Board Exams but Were Afraid to Ask**

Boards Review

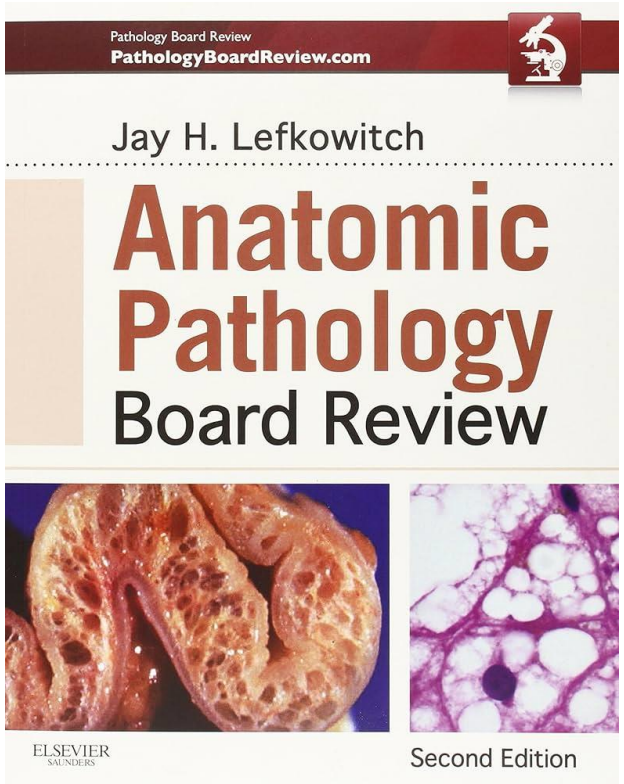
- Think of this as consolidation, review, and filling in gaps.
- Build on your strong foundation from continuous engagement.
- Use “holistic” resources to put on the finishing touches.
- Focus on weaknesses and consider the “blueprint.”

Broad Strokes

- Pick resources that work for *you*, everyone learns differently
  - “Ride the horse that got you here”
  - Books vs Questions vs Lectures vs Flashcards, etc…
- Look at lots of interesting cases/study sets throughout your training
  - Scope sessions are invaluable practice
  - “See as much glass as you can”

High Yield AP Resources (for Boards)

- Anatomic Pathology Board Review, 2nd Edition
  - By Jay H. Lefkowitch



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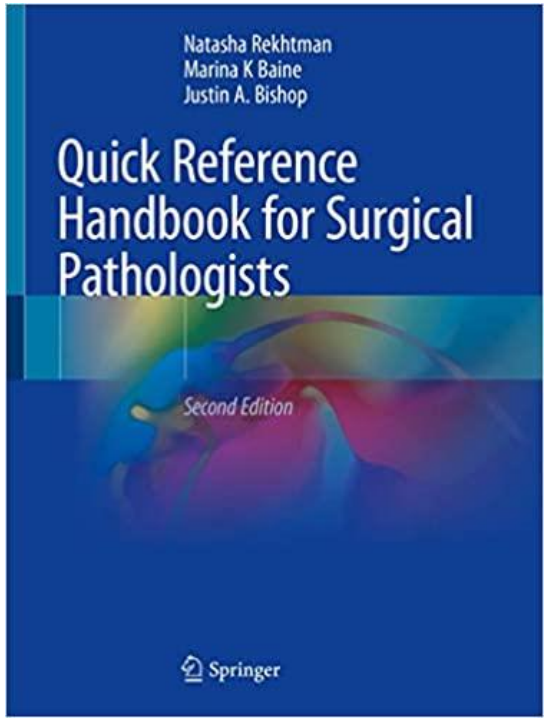

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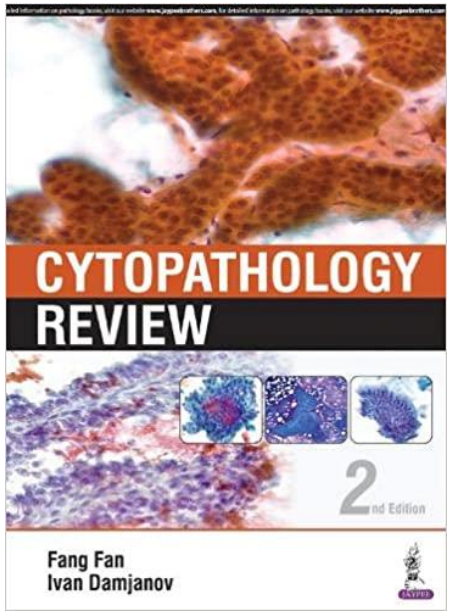

High Yield AP Resources

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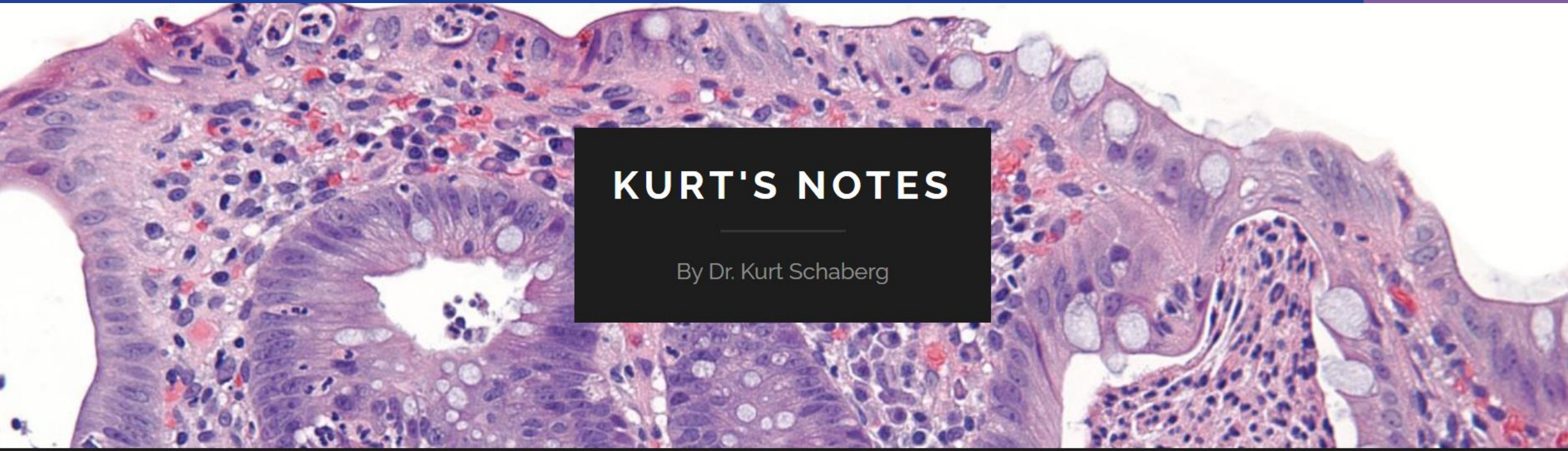
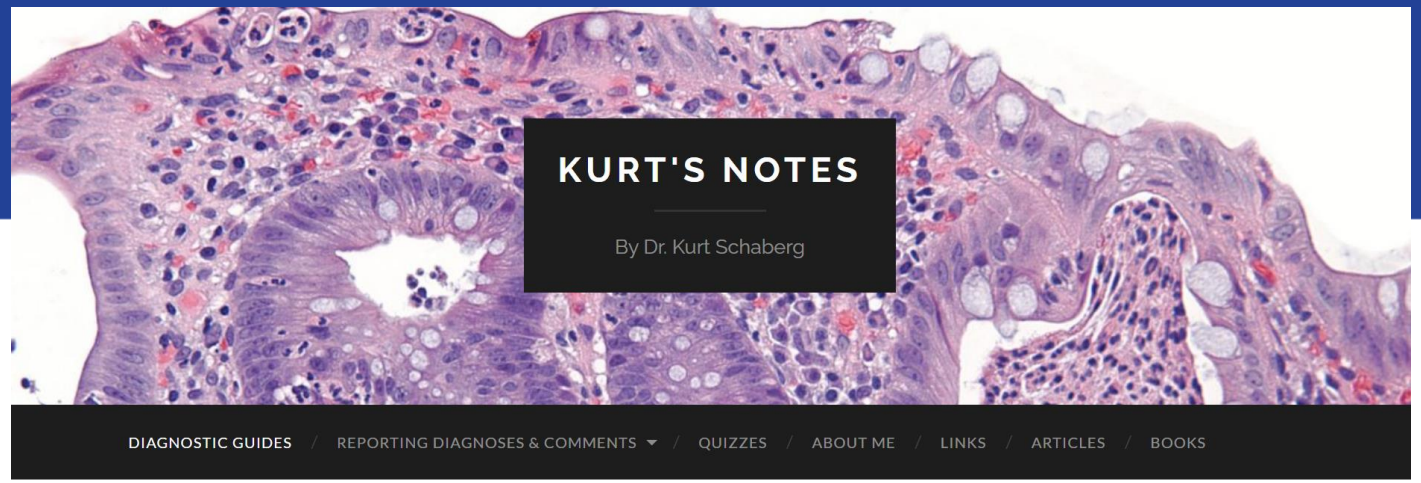
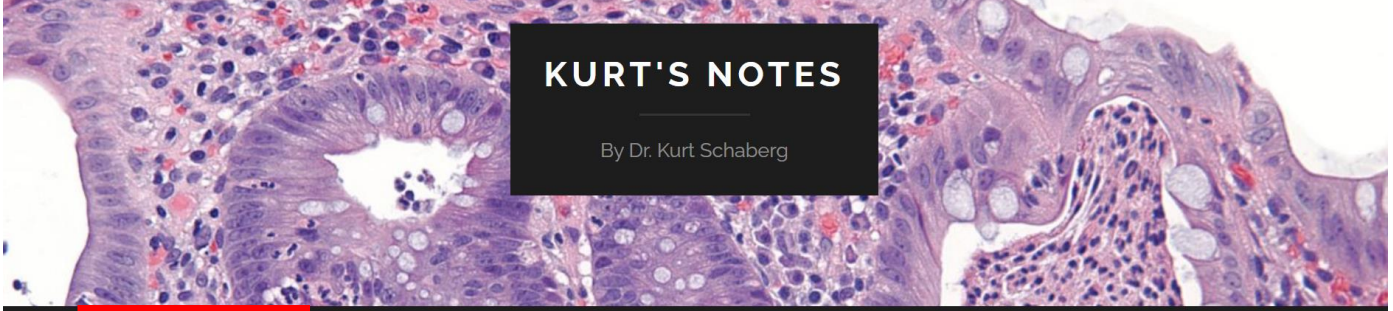
- Quick Reference Handbook for Surgical Pathologists 2nd ed.
  - by Natasha Rekhtman MD PhD
- Cytopathology Review 2nd ed. Edition
  - by Fang Fan MD
- Biopsy Interpretation Series *(focus on pictures and figures)*
  - Particularly: Breast, Prostate, Bladder, GI tract



http://kurtsnotes.net/


KURT'S NOTES
By Dr. Kurt Schaberg
DIAGNOSTIC GUIDES / REPORTING DIAGNOSES & COMMENTS / QUIZZES / ABOUT ME / LINKS / ARTICLES / BOOKS



KURT'S NOTES

By Dr. Kurt Schaberg

Last updated: 9/22/2020

Prepared by Kurt Schaberg MD

Prostate Tumors

Acinar Adenocarcinoma

(The most common/default type of "Prostate Cancer")

An invasive adenocarcinoma consisting of neoplastic prostatic epithelial cells with secretory differentiation arranged in a variety of patterns, typically without basal cells.

Most common cancer in men and second leading cause of cancer death in the U.S.A.

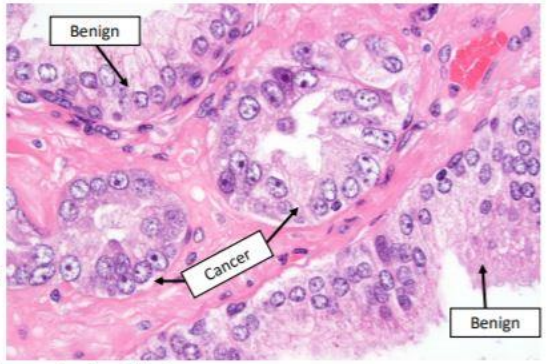
Prevalence is strongly correlated with age (older = higher prevalence)
Majority are **multifocal**, often with 2-3 separate tumors in each prostate.
Most commonly located in **posterior/posterolateral peripheral** gland.
Early tumors are often asymptomatic. Locally advanced prostate cancer mimics BPH with urinary symptoms. Bone very common site of metastasis → bone pain and pathologic fractures

Morphology: Always use *multiple* features (there is no single feature to Dx!)

Nuclear Features:
- Prominent nucleoli
- Nuclear enlargement
- Nuclear hyperchromasia
- Mitotic figures
- Apoptotic bodies

Cytoplasmic features:
- Amphophilic cytoplasm
- Sharp luminal borders

Luminal contents:
- Blue-tinged mucin
- Pink amorphous secretions
- Crystalloids

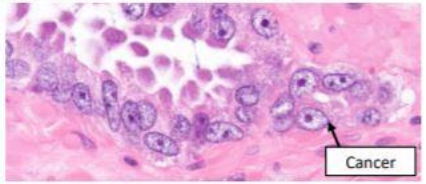


Architecture:
- Crowded small glands
- Linear row of atypical glands spanning the width of a core
- Small glands on both sides of a benign gland
- Haphazard, infiltrative pattern

Absent basal cell layer (can highlight with IHC, as fibroblasts may mimic basal cells)

Usually lack desmoplastic stroma. When present, often associated with high-grade carcinoma.

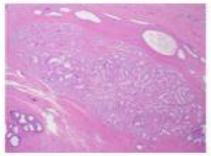
Findings more common in benign glands:
- Atrophic cytoplasm
- Merging with benign glands
- Corpora amylacea
- Inflammation
- Lipofuscin



Gleason Grading

Based on architecture at low power (using 4x or 10x objective).

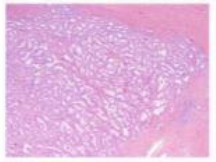
1



Circumscribed nodule of closely packed but separate, uniform, rounded to oval, medium-sized acini

Should **not** be diagnosed regardless of the type of specimen, with extremely rare exceptions

2

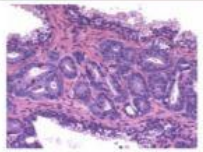


Fairly circumscribed, yet at the edge of the tumor nodule there may be minimal infiltration

Do not diagnose on biopsy, rarely diagnosed regardless of specimen.

Glands are more loosely arranged and not quite as uniform as Gleason pattern 1

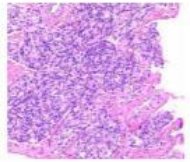
3

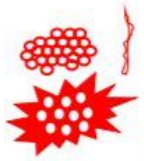


Well-formed glands *(with lumina)*
Separate, discrete, Non-fused

Infiltration

4



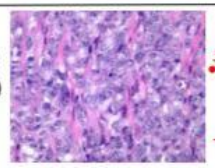


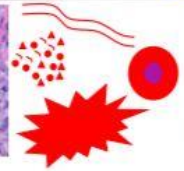
Ill-defined, poorly formed glands
Gland fusion
ALL cribriform glands
Hypernephromatoid
Glomerulations

Ductal Adenocarcinoma (without necrosis)

Often Disqualifies from Active Surveillance

5





Essentially **no glandular differentiation:**
- Solid sheets
- Cords
- Single cells
- Linear arrays

Comedocarcinoma with central necrosis

Notes: Given the importance of distinguishing between patterns 3 and 4 for active surveillance, getting levels can be helpful to differentiate tangential sectioning of small well-formed glands (pattern 3) from poorly-formed glands (pattern 4).

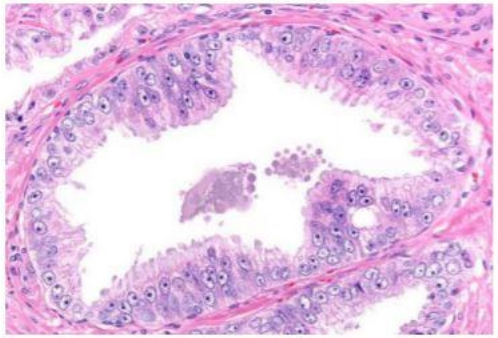
Intraductal Tumors

Non-invasive tumors growing within ducts

High-grade Prostatic Intraepithelial Neoplasia ("HGPIN")

Pre-invasive neoplastic proliferation.
Often multifocal.

Cytologic changes resembling cancer:
- **Nuclear enlargement**
- **Prominent nucleoli**
- **Hyperchromasia**
- **Clumped chromatin**



Although non-invasive, basal cells may be patchy (so be careful interpreting IHC!)

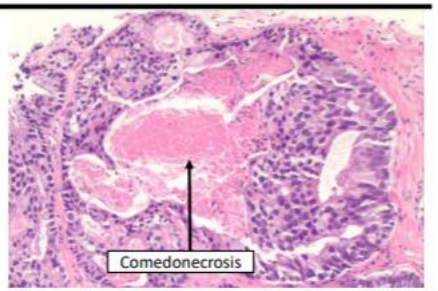
Four main architectures: tufting, micropapillary, cribriform, and flat

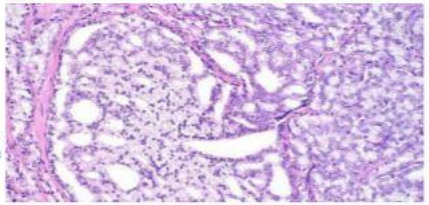
Often cytoplasmic AMACR staining

Clinical importance: associated with subsequent detection of cancer (more HGHPIN→ higher risk)

Intraductal Carcinoma

Diagnostic requirement:
Malignant epithelial cells filling large acini and prostatic ducts, with preservation of basal cells with either:
- Solid or dense cribriform pattern, or
- A loose cribriform or micropapillary pattern with either:
  - Marked nuclear atypia (nuclei 6x normal or larger)
  - Comedonecrosis



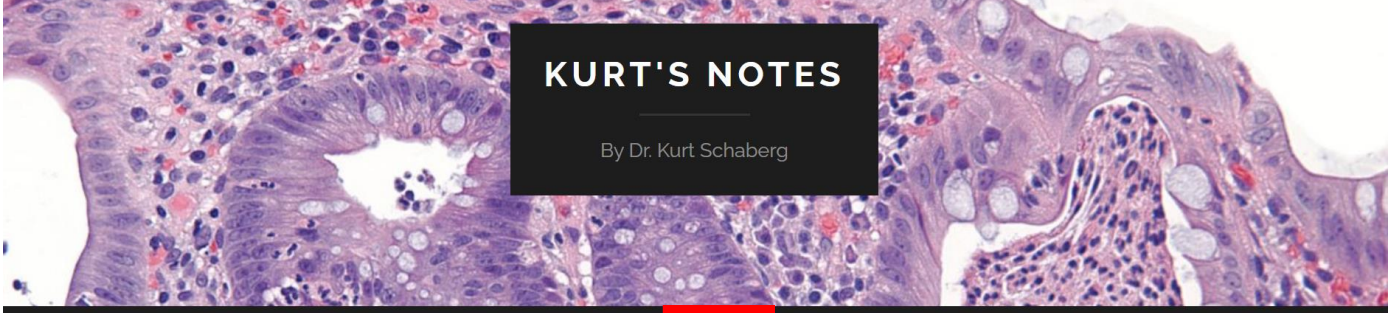


Can be seen in two scenarios:
1) Intraductal spread of a high-grade invasive cancer (majority of cases)
2) Distinct precursor lesion (separate from HGPIN) with high risk of progression to cancer

IHC often required for diagnosis to demonstrate basal cells. Can show loss of PTEN (rarely seen in HGPIN)

If seen on biopsy→ often treat with radical prostatectomy as highly associated with cancer and multiple adverse factors (high Gleason grade, high tumor volume, etc..). Sometimes repeat biopsy immediately.

If a lumen-spanning atypical lesion morphologically falls short of Intraductal Carcinoma, best to call ***"Atypical Intraductal Proliferation"*** and recommend immediate repeat biopsy.



Quizzes

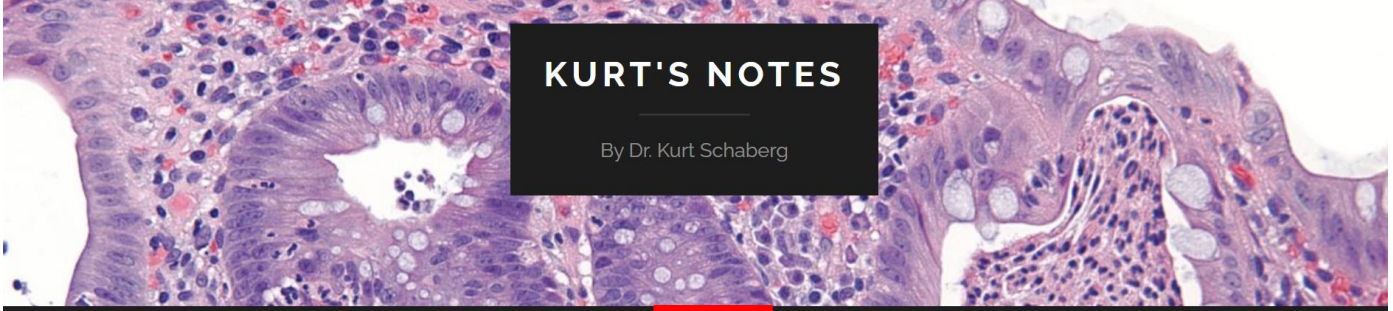
Here are some practice quizzes that I've made using the amazing PathPresenter website:

Practice Board Exams (1/2 Length):

Multiple choice, like the boards. Record your diagnoses on the website, which will grade your answers when you're done. You can then review your selections with the answer sheet after submission to see the answers to the questions you got wrong.

The real AP boards slide exam is 85 slides, for which you have 3.75 hours, so for each 43 question practice test, you should finish in a little less than 2 hours to be "on pace" for the real thing. Or, of course, you could try to do both in 3.75 hours.

Exam #1



PathPresenter | Assessments | Practice Board Exam

Assessment Summary Attachments

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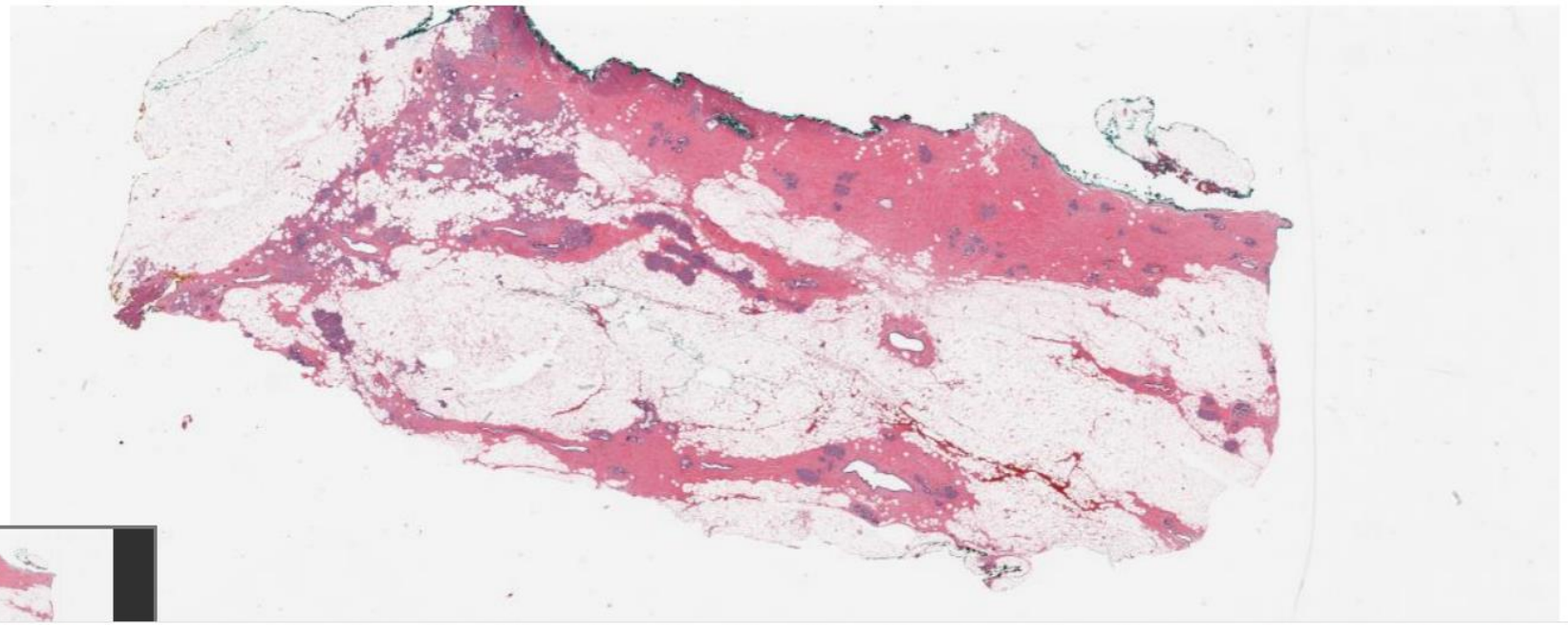

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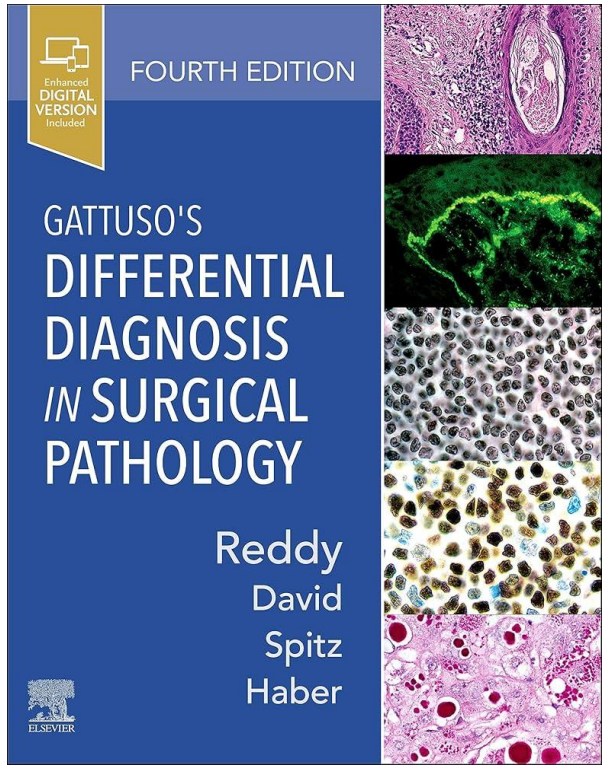
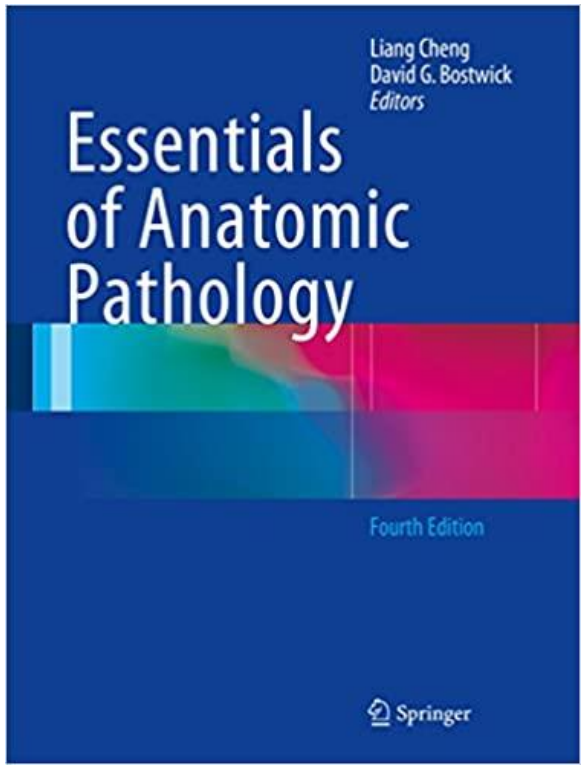
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

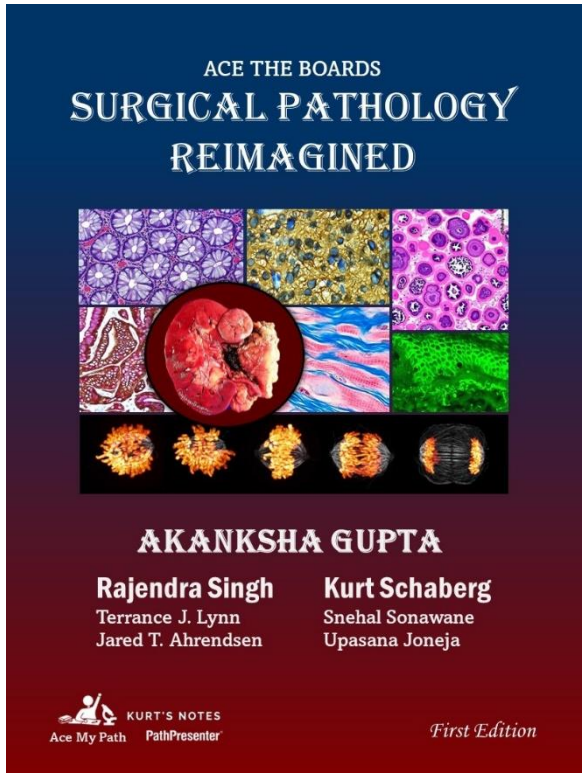
Next

Answered Selected

Other Resources







Question Banks

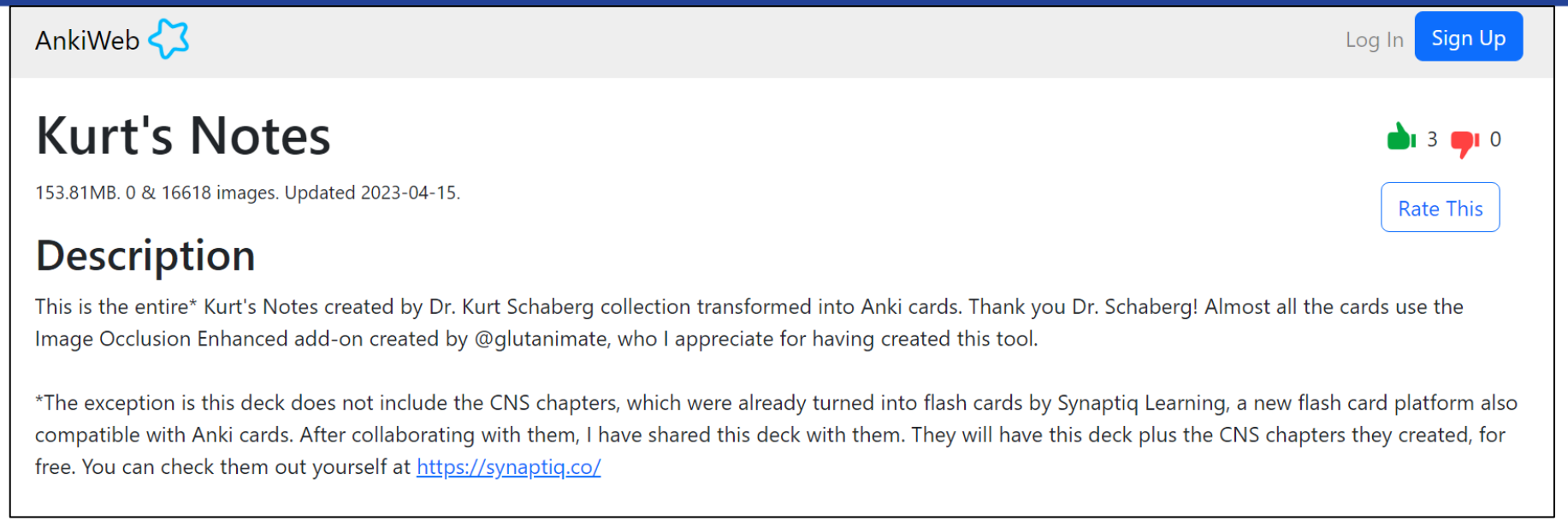
- PathDojo
- PathPrimer
- ASCP PRISE

- If you’re a question person, do as many as you can.
- Do whichever your program supplies.

Interactive Question #2

- What Q bank would you most recommend?
  A. ASCP PRISE
  B. PathPrimer
  C. PathDojo
  D. Other
  E. They’re all good/equivalent

Anki Decks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0
153.81MB. 0 & 16618 images. Updated 2023-04-15.
Rate This
Description
This is the entire* Kurt's Notes created by Dr. Kurt Schaberg collection transformed into Anki cards. Thank you Dr. Schaberg! Almost all the cards use the Image Occlusion Enhanced add-on created by @glutanimate, who I appreciate for having created this tool.
*The exception is this deck does not include the CNS chapters, which were already turned into flash cards by Synaptiq Learning, a new flash card platform also compatible with Anki cards. After collaborating with them, I have shared this deck with them. They will have this deck plus the CNS chapters they created, for free. You can check them out yourself at https://synaptiq.co/


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Pathology

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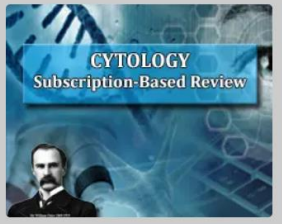
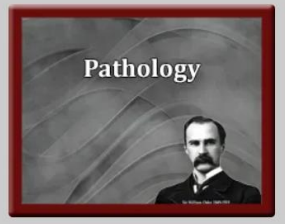


Cytology 2023 Subscription-Based Review

$650.00 – $850.00



Pathology Review Sept. 22-28, 2024 Hybrid

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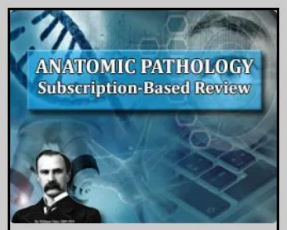


Anatomic Pathology 2024 Subscription-Based Review

$675.00 – $1,000.00

Clinical Pathology 2024 Subscription-Based Review

$675.00 – $1,000.00

The mock oral sessions and recorded videos were outstanding. It helped me organize my thoughts and approach, the most challenging part of preparing for this exam.

(Spring 2023 Ophthalmology candidate)

Review Courses

Review Courses

- Almost half (47.9%) of respondents had taken a review course.
- 60% of respondents would recommend utilizing the resources from a review course without attending the live sessions.

Those who took a review course were asked to rate the helpfulness of the live review course(s) from "Not helpful at all (1)" to "Extremely helpful (5)"

Course	Sample size	Average Score
Osler Pathology Board Review Course	71	3.72
ASCP Review course	38	3.61
CMEinfo Path Board Review ('10 and '11)	3	3.00
UHC Seminar in Pathology (Dr. Chinmay Datta) Course	3	3.67
Other (including Internal board review/Dr. Paola Gattuso and John Hopkins Surgical Pathology Cases Online)	3	3.67

Interactive Question #3

- Did you take a review course?
  - A. No
  - B. Yes, digitally, it was helpful
  - C. Yes, in person, it was helpful
  - D. Yes, but I don’t think it’s necessary

Review Courses

Selected Comments:

- "Find your areas of weakness and focus on those topics at the review."
- "I think review courses are helpful if you are the kind of person who can learn from sitting in lectures. I learn best by reading, answering questions, and assimilating information from various resources. On the other hand, the study material from the review courses is variably useful, depending on the lecturer."
- "Study on your own first, then take the review course."
- "The most valuable aspect of the review course is the organization of material. It allows you to visualize what topics need to be covered."

Interactive Question #4

- What resource did you find most helpful for studying?
  - A. Books
  - B. Q banks
  - C. Review Course
  - D. Study sets
  - E. Did/do it all!

The Test itself

- The exam is **Pass/Fail**
- It's **multiple choice** (currently only up to 5 choices)
- The exam is very **practical** and is designed to make sure you'll be "**safe**."
- On the AP portion, many questions are simply "**What is this?**"
- Questions don't come from this month's issue of issue of a journal.
  - (So textbooks and review materials work fine for exam preparation)

The Boards: Broad Strokes

- The lesion will be **obvious**.
  - Not looking for a single mitosis or viral inclusion.
- It will be a **classic** example that all reasonable pathologists should agree on.
  - They choose diagnoses with good interobserver reproducibility
  - They won't choose a borderline case of ADH vs UDH, but may choose classic DCIS or UDH
- They love benign mimics of malignancy (and vice versa).
- Fairly direct questions (not second or third order, like in many question banks)

Test day

One Day (10.4 hours/625 mins)			
Time	**Section**	**Number of Items**	**Comments**
(20 min)	Tutorial/Honor Code		
(69 min)	Combined Section A	69	1 min per item
(15 min)	*Break*		
(90 min)	Virtual Microscopy I	30	3 min per item
(15 min)	*Break*		
(68 min)	Combined Section B	68	1 min per item
(60 min)	*Long Break*		
(90 min)	Virtual Microscopy II	30	3 min per item
(15 min)	*Break*		
(68 min)	Combined Section C	68	1 min per item
(15 min)	*Break*		
(90 min)	Virtual Microscopy III	30	3 min per item
(10 min)	Exam Survey		

3 "Combined" Sections (~68 min each)
"Combined" = "Written" + "Practical"

68 min for 68 items → 1 min per item

3 Virtual Microscopy Sections (90 min each)

90 min for 30 items → 3 min per item

Most people finish in plenty of time!

Anatomic Pathology Exam Blueprint	Approximate %	
	Written/Practical	Virtual Microscopy
AP Management & General Pathology Principles	3	0
Breast	8	9
Genitourinary	9	14
Cardiovascular	2	1
Lymph Nodes and Spleen	4	6
Bone Marrow	4	2
Head and Neck	4	7
Alimentary Canal, Pancreas, Liver, Extrahepatic Biliary Tree, Gall Bladder	12	13
Endocrine	5	6
Gynecologic and Placenta	8	7
Medical Kidney	1	2
Respiratory, Pleura, Mediastinum	6	7
Central and Peripheral Nervous System	3	6
Soft Tissue and Bone	5	6
Skin	5	10
Molecular Techniques	1	0
Forensic/Autopsy	3	2
Cytopathology	15	2
Management & Informatics-General	2	0
Total Percentage	**100**	**100**
Total Number of Questions in Each Section	**205**	**90**
Total Hours Allotted for Each Section	**3 Hrs 25 Mins**	**4 Hrs 30 Mins**

Anatomic Pathology Exam Blueprint	Approximate %	
	Written/Practical	Virtual Microscopy
AP Management & General Pathology Principles	3	0
Breast	8	9
Genitourinary	9	14
Cardiovascular	2	1
Lymph Nodes and Spleen	4	6
Bone Marrow	4	2
Head and Neck	4	7
Alimentary Canal, Pancreas, Liver, Extrahepatic Biliary Tree, Gall Bladder	12	13
Endocrine	5	6
Gynecologic and Placenta	8	7
Medical Kidney	1	2
Respiratory, Pleura, Mediastinum	6	7
Central and Peripheral Nervous System	3	6
Soft Tissue and Bone	5	6
Skin	5	10
Molecular Techniques	1	0
Forensic/Autopsy	3	2
Cytopathology	15	2
Management & Informatics-General	2	0
Total Percentage	**100**	**100**
Total Number of Questions in Each Section	**205**	**90**
Total Hours Allotted for Each Section	**3 Hrs 25 Mins**	**4 Hrs 30 Mins**

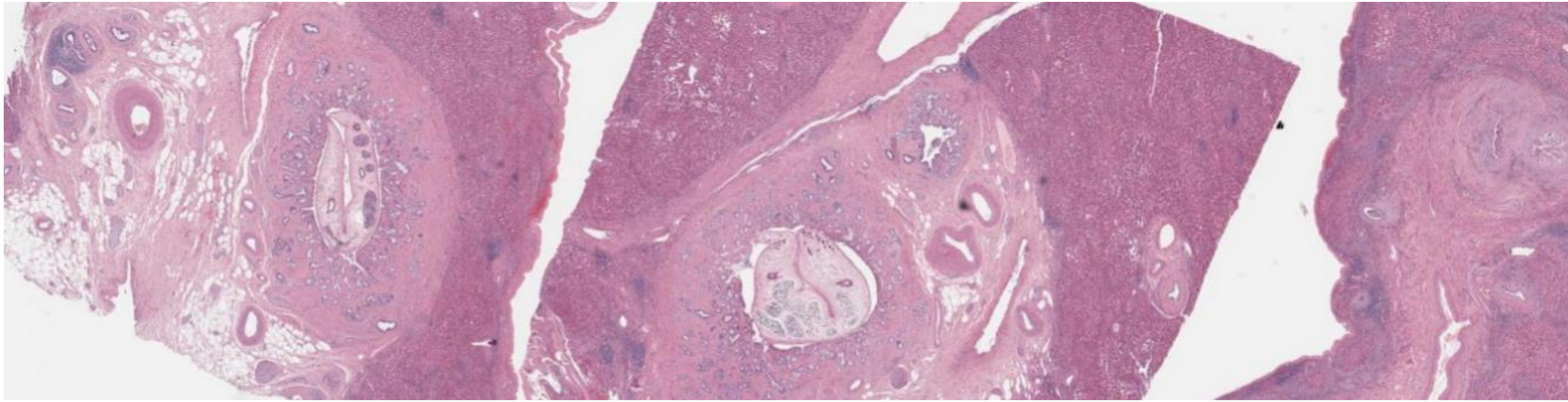
Higher yield areas

Anatomic Pathology Exam Blueprint	Approximate %	
	Written/Practical	Virtual Microscopy
AP Management & General Pathology Principles	3	0
Breast	8	9
Genitourinary	9	14
Cardiovascular	2	1
Lymph Nodes and Spleen	4	6
Bone Marrow	4	2
Head and Neck	4	7
Alimentary Canal, Pancreas, Liver, Extrahepatic Biliary Tree, Gall Bladder	12	13
Endocrine	5	6
Gynecologic and Placenta	8	7
Medical Kidney	1	2
Respiratory, Pleura, Mediastinum	6	7
Central and Peripheral Nervous System	3	6
Soft Tissue and Bone	5	6
Skin	5	10
Molecular Techniques	1	0
Forensic/Autopsy	3	2
Cytopathology	15	2
Management & Informatics-General	2	0
Total Percentage	**100**	**100**
Total Number of Questions in Each Section	**205**	**90**
Total Hours Allotted for Each Section	**3 Hrs 25 Mins**	**4 Hrs 30 Mins**

Lower yield areas

Virtual Microscopy Questions

- “What is the best diagnosis?”



“Combined” Written/Practical Questions

- “Written”
  - Questions without pictures
  - Frequent topics: Lab management, IHC stains, Billing, Molecular
- “Practical”
  - Questions with static image(s)
  - Frequent topics: Cytology, Forensics, (and anything else surg path ;-)

Made up Written Question:

- Which of the following immunohistochemical stains is most likely to be useful in identifying desmoplastic melanoma?
  - A. Pancytokeratin
  - B. CD45 (LCA)
  - C. SOX10
  - D. Melan-A
  - E. Factor XIIIa

Made up Practical Question:

- What is the best diagnosis?
  - A. Negative for Intraepithelial Lesion/Malignancy (NILM)
  - B. Herpes infection
  - C. Low-grade squamous intraepithelial Lesion (LSIL)
  - D. High-grade squamous intraepithelial lesion (HSIL)
  - E. Adenocarcinoma

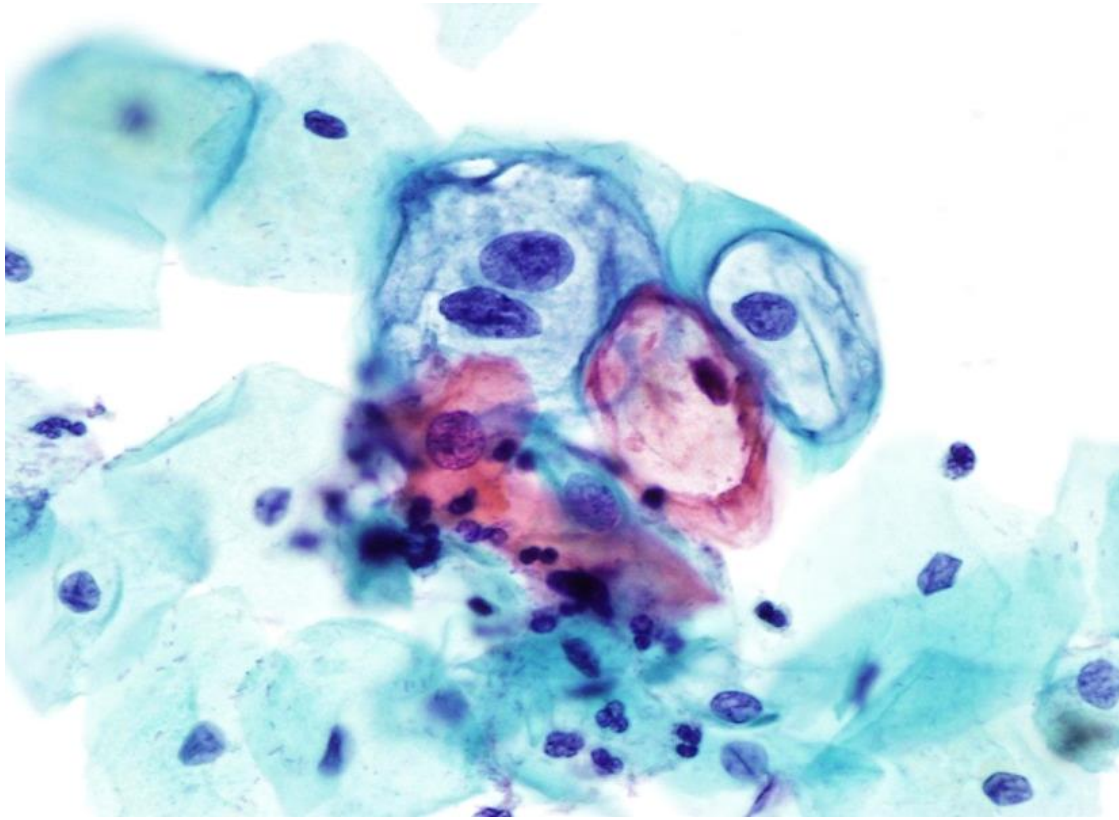


Image quality

Brian Cox, MD, MAS
@Dr_Brian_Cox

The AP boards are finished.

I am extremely dissatisfied with the histology quality offered by @TheABPath. Slides were poorly stained or completely oversaturated. Cytology and heme were 'low power only' from pixelation.

We can and should do (much) better in 2021.

4:46 PM · May 5, 2021 from Culver City, CA

22 18 131 3

Image quality

Elise Venable, MBBS @VenableMBBS · May 6, 2021

There were also some spelling errors in the questions and/or answer choices😳

1 2

Brian Cox, MD, MAS @Dr_Brian_Cox · May 6, 2021

Yeah I commented on those too

1

Fnu Sakshi/Sakshi Gupta @sakshis47885611 · May 5, 2021

I hear you @Dr_Brian_Cox ! We put so much of effort and time to prepare for this day and exam. And, at the end of the day, it is not fair to test people on poor quality pictures and badly stained slides with low resolution.

3 17

Brian Cox, MD, MAS @Dr_Brian_Cox · May 5, 2021

I spent the last four months studying and literally couldn't make out a single cell type on hemepath questions...

2 1 8

Show replies

Image quality

American Board of Pathology @TheABPath · May 6, 2021

We hear your concern and are working with Pearson VUE to investigate the issue. Please know we will also review all of the feedback that is submitted during the exam.

3 1 20

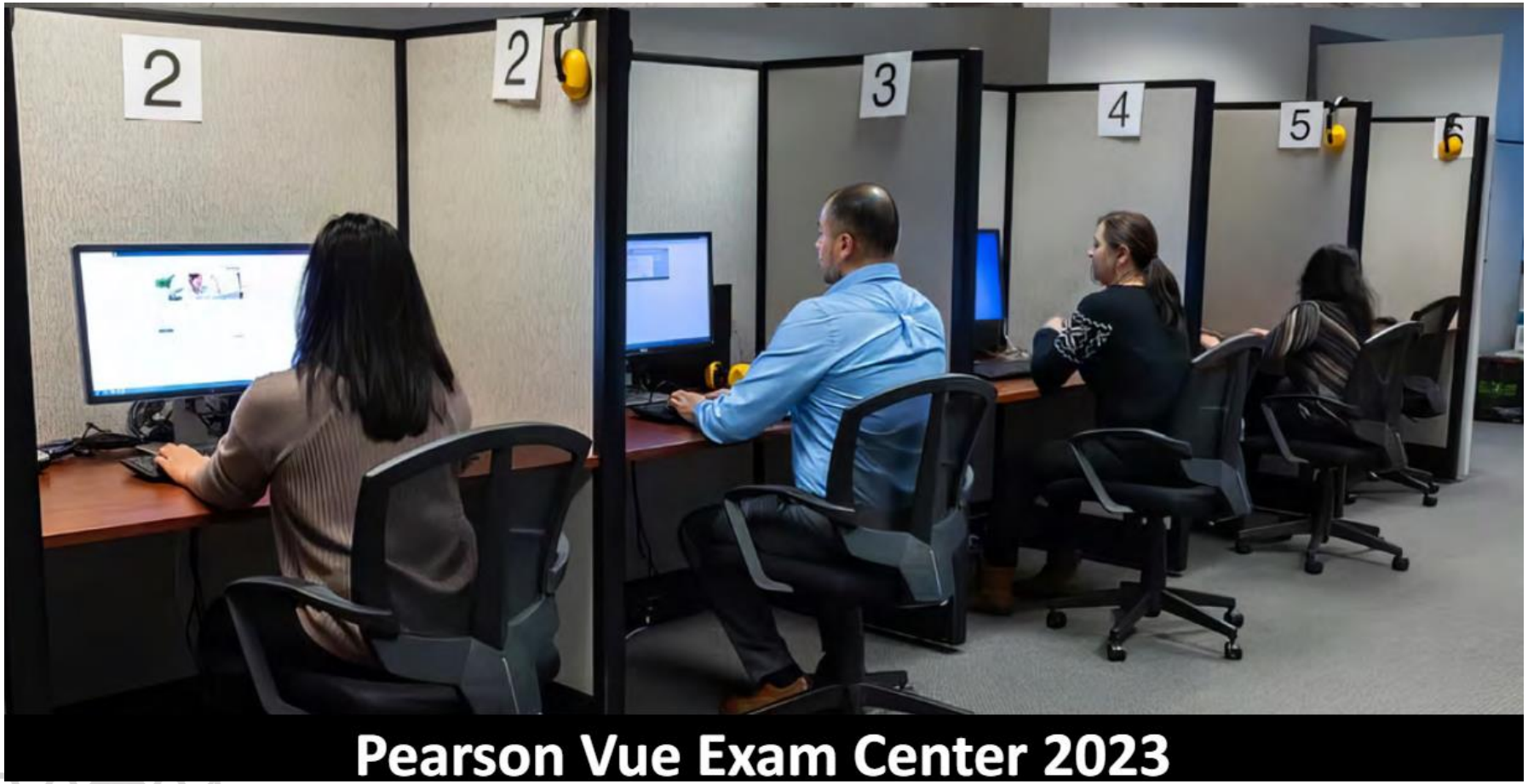
Brian Cox, MD, MAS @Dr_Brian_Cox · May 6, 2021

Thank you for reaching out. I left direct comments on most of the questions I thought lacked reasonable histology. We can discuss directly or during the next Advisory Meeting if that suits.

3

Then

Now



Pearson Vue Exam Center 2023

Primary Certification Examinations

2023 Primary Examination

	Total Candidates			First-Time Takers			Repeaters		
	#	# Pass	% Pass	#	# Pass	% Pass	#	# Pass	% Pass
AP	703	549	78%	567	488	86%	136	61	45%
CP	586	542	92%	544	520	96%	42	22	52%

First time Test Takers:
AP: 86% (mid-low 80s)
CP: 96% (mid-90s)

5-Year Certified Report

Primary	2019	2020	2021	2022	2023
APCP	451	397	533	490	479
AP only	58	73	105	98	76
CP only	40	25	55	54	55
APNP	10	8	17	7	5

Primary Exam Pass Rates (% Pass = Spring exam pass rate)

Primary	2019 % Pass	2020 % Pass	2021 % Pass	2022 % Pass	2023 % Pass
AP only	82*	85	82	84*	82
CP only	85*	88	94	94*	94

**New criterion standard applied*

Primary Certification Examinations

2023 Primary Examination

	Total Candidates			First-Time Takers			Repeaters		
	#	# Pass	% Pass	#	# Pass	% Pass	#	# Pass	% Pass
AP	703	549	78%	567	488	86%	136	61	45%
CP	586	542	92%	544	520	96%	42	22	52%

Repeaters ~50%

5-Year Certified Report

Primary	2019	2020	2021	2022	2023
APCP	451	397	533	490	479
AP only	58	73	105	98	76
CP only	40	25	55	54	55
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Primary Exam Pass Rates (% Pass = Spring exam pass rate)

Primary	2019 % Pass	2020 % Pass	2021 % Pass	2022 % Pass	2023 % Pass
AP only	82*	85	82	84*	82
CP only	85*	88	94	94*	94

**New criterion standard applied*

Am I going to pass?

Senior Pathology Resident In-Service Examination Scores Correlate With Outcomes of the American Board of Pathology Certifying Examinations

Henry M. Rinder, MD,[1] Margaret M. Grimes, MD, MEd,[2] Jay Wagner, MBA, MLS(ASCP),[3] and Betsy D. Bennett, MD, PhD[4]; for the RISE Committee of the American Society for Clinical Pathology and the American Board of Pathology

Table 2

Quartiles for Overall 2008 and 2009 RISE Scores for Graduating Residents vs Their Rate of Passing All 2008 and 2009 American Board of Pathology Certifying Examinations

	2008 Graduates (n = 454)		2009 Graduates (n = 424)	
RISE Score Quartile	Examination Pass Rate (%)	RISE Score Range	Examination Pass Rate (%)	RISE Score Range
1st	97	≥565	100	≥533
2nd	92	532-564	99	500-532
3rd	86	505-531	94	473-499
4th	46	<505	66	<472

RISE, Resident In-Service Examination.

Am J Clin Pathol 2011;136:499-506

Final Words

- Be ***engaged*** and study for ***practice*** throughout your training***.***
- Be the pathologist on your cases, just like the medicine residents are the primary physicians for their patients.
- Choose a few high-yield resources that work for your learning style.
- Be sure to put particular emphasis on the most common organ systems/specimens.
- Look at as many cases as you can.

Interactive Question #5

- **Any other advice you'd give to those studying AP and/or preparing for the boards?**

Final Words

- Relax and try your hardest.
- You will not know everything.

Thank you!

Questions?