

Building a Liberated/Open Online Collaborative Pathology Knowledge Base

July 2014

Michael Bonert

BASc, MASc, MD, FRCPC, DABP

Memorial University of Newfoundland Assistant Clinical Professor

Eastern Health Staff Pathologist

Disclosures



I am the founder & CEO of *Libre Pathology*.

Libre Pathology (librepathology.org), formerly *Online Pathology* (onlinepathology.org), is a wiki-based open access pathology knowledge base without advertisements and without commercial sponsorship. It is licensed with a creative commons license.

Bottom line: There is no direct personal financial gain.

Overview

Pathology information dissemination.

What is a wiki?

Librepathology.org.

Discussion.



St. John's, NL

Dissemination of Pathology Information

Textbooks are still considered the standard secondary source.

Web resources:

- Uncommonly link internally.
- Rarely interlink.
- Infrequently have powerful search capabilities.



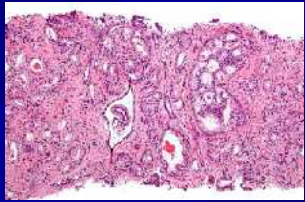


Wiki is “quick” or “fast”

Websites that are quickly editable.

A tool used to create and manage content.

- Open editorship or closed editorship.
- Private/limited access or public.
- Multitude of wiki software, e.g. MediaWiki, PBworks.



Wikipedia - wide reach

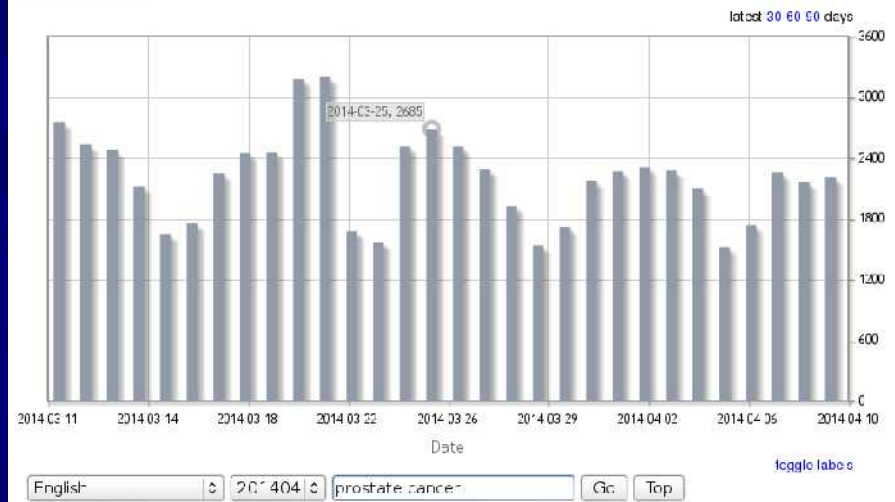
Wikipedia article traffic statistics

[pathology](#) has been viewed 123456 times in the last 60 days. This article ranked 6383 in traffic on en.wikipedia.org.



Wikipedia article traffic statistics

[prostate cancer](#) has been viewed 88237 times in the last 60 days. This article ranked 4553 in traffic on en.wikipedia.org.



~60,000 hits/month for “pathology”
~65,000 hits/month for “prostate cancer”

Wikis can have a wide reach

Wikipedia is so big it is seen as a tool to educate the public about health issues, as it is often used as a source of medical information by the public.

Wikipedia is often used as a source of medical information by physicians.

~ 70% of junior physicians use WP [Hughes et al.]

~ 50% of physicians use WP [Comer].

J Med Internet Res. 2011 Jan 31;13(1):e14.

Wikipedia: a key tool for global public health promotion.

Heilman JM, Kemmann E, Bonert M, Chatterjee A, Raqar B, Beards GM, Iberri DJ, Harvey M, Thomas B, Stomp W, Martone ME, Lodge DJ, Vondracek A, de Wolff JF, Liber C, Grover SC, Vickers TJ, Meskó B, Laurent MR.

University of Saskatchewan, Saskatoon, SK, Canada.

Abstract

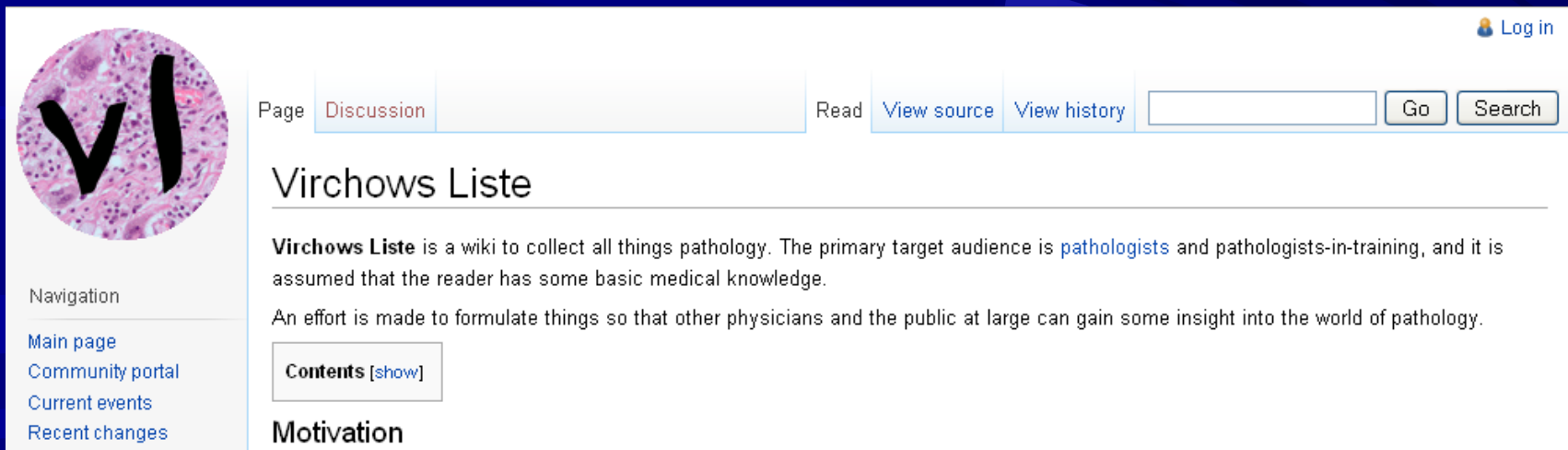
The Internet has become an important health information resource for patients and the general public. Wikipedia, a collaboratively written Web-based encyclopedia, has become the dominant online reference work. It is usually among

Librepathology.org - Beginnings

A wiki started in 2010 to collect nuggets of wisdom *and* find them when I need them.

Initially used to study for exams & link to images (Wikipedia uploads, others).

Evolved into notes on things I've seen, things I have read about and how to approach cases.



The screenshot shows the Librepathology.org wiki page for "Virchows Liste". The page features a circular logo on the left with a histological image and the letters "V" and "L" overlaid. The main content area includes a navigation menu, a search bar, and a description of the wiki's purpose. The description states that the primary target audience is pathologists and pathologists-in-training, and that the effort is made to formulate things so that other physicians and the public at large can gain some insight into the world of pathology. A "Contents" button is visible below the description.

Navigation

- Main page
- Community portal
- Current events
- Recent changes

Page [Discussion](#) Read [View source](#) [View history](#)

Virchows Liste

Virchows Liste is a wiki to collect all things pathology. The primary target audience is [pathologists](#) and pathologists-in-training, and it is assumed that the reader has some basic medical knowledge.

An effort is made to formulate things so that other physicians and the public at large can gain some insight into the world of pathology.

[Contents](#) [\[show\]](#)

Motivation

Overview – Why Libre Pathology?

Comprehensive pathology content.

Pathology images – large number.

Fully searchable.

Summary boxes & sign out reference.

External linking/references.

Data organization – changeable views.

Update-able & edit-able.

Community participation.



The screenshot shows the main page of the Onlinepathology wiki. At the top right, there is a user profile for 'Michael' with links for 'Talk', 'Preferences', 'Watchlist', 'Contributions', and 'Log out'. Below this is a navigation bar with 'Page' and 'Discussion' tabs, and buttons for 'Read', 'Edit', and 'View history'. A search box is also present. The main content area features a 'Main Page' heading, a welcome message: 'Welcome to Onlinepathology! A wiki that's looking for editors!', and a news item: 'Onlinepathology news: Presentation at the Provincial Laboratory Medicine Rounds'. At the bottom, there are two columns: 'The Collection' with a link to 'An introduction to pathology' and 'By Area' with a link to 'Breast pathology'. A sidebar on the left contains a circular image of a histological slide, the site name 'Onlinepathology', and links for 'Main page', 'Recent changes', 'Random page', and 'Tools' (What links here, Related changes, Special pages).

Comprehensive pathology content

All common things, most uncommon things and many rare things are found - over 1250 diagnoses covered!

Category:Diagnosis - Libre Pathology - Iceweasel

File Edit View History Bookmarks Tools Help

librepathology.org/wiki/index.php/Category:Diagnosis

LP Category:Diagnosis - Libre P... +

Log in

Category Discussion Read View source View history Search

Category:Diagnosis

The category collects redirects and articles that are a distinctive **diagnosis**.

Pages in category "Diagnosis"

The following 200 pages are in this category, out of 1,252 total.

(previous 200) (next 200)

A

- *Abetalipoproteinemia*
- Ablated endometrium
- Abusive head trauma
- *Acanthosis nigricans*
- Achalasia
- *Acinar cell carcinoma of the pancreas*
- Acinic cell carcinoma

A cont.

- Amebiasis
- *Ameloblastic fibroma*
- Ameloblastoma
- *Amniotic rupture sequence*
- *Ampullary adenocarcinoma*
- *Amyotrophic lateral sclerosis*
- Anal fistula

B cont.

- Basal cell adenocarcinoma
- *Basal cell adenoma*
- Basal cell carcinoma
- *Basal cell hyperplasia of the prostate*
- Basal crypt dysplasia
- *Basal skull fracture*
- *Basaloid squamous cell carcinoma*

Libre Pathology

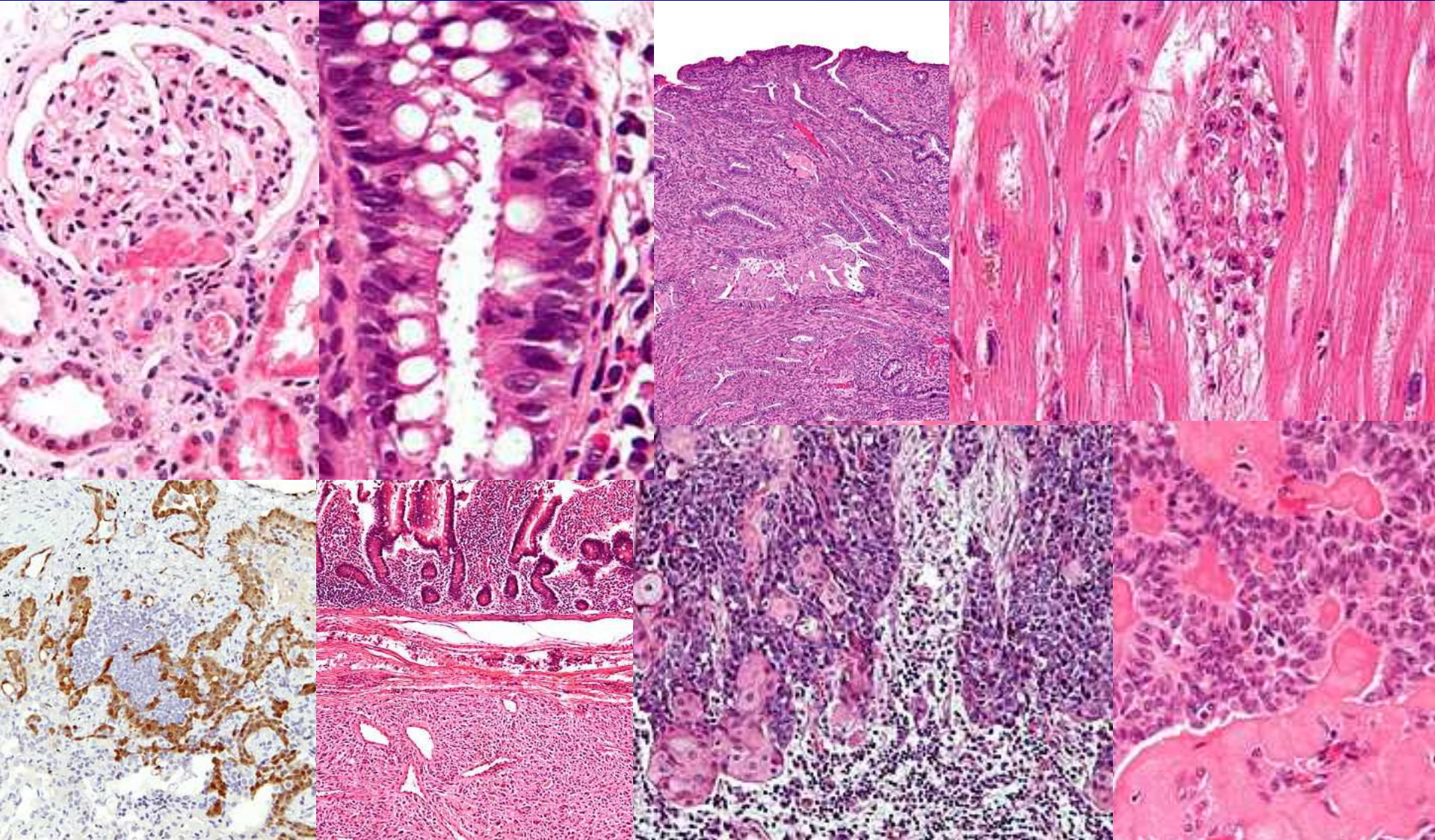
Main page
Recent changes
Random page
Help

Tools

- What links here
- Related changes
- Special pages
- Printable version
- Permanent link
- Page information

2000+ quality pathology images

Often with low and high magnification views, some gross images



Strong search capability

Search box on every page.

Special page

Search results

[Content pages](#) [Multimedia](#) [Help and Project pages](#) [Everything](#) [Advanced](#)

Showing below 27 results starting with #1.

There is a page named "[Psammoma bodies](#)" on this wiki.

Page title matches

[Psammoma bodies](#)
...rst2 = TY. | last3 = Ali | first3 = SZ. | title = Significance of **psammoma bodies** in serous cavity fluid: a cytopathologic analysis. | journal = Cancer | vol ==Conditions with **psammoma bodies**==
2 KB (236 words) - 17:42, 2 June 2012

Page text matches

[Gynecologic cytopathology](#)
*+/-[[**Psammoma bodies**]]. ...inella | first2 = R. | last3 = Reilly | first3 = J.C. | title = Crystalline **bodies** in cervical smears. Clinicocytologic correlation. | journal = Acta Cytol |
40 KB (5,144 words) - 15:46, 30 January 2014

[Cytopathology](#)
| Perinuclear blue **bodies**
(not seen in lymphoid cells) | Lymphoglandular **bodies**,
dyscohesive
24 KB (3,174 words) - 22:44, 20 March 2014

[Duodenum](#)
*+/-[[**Psammoma bodies**]] - suggestive of [[somatostatinoma]] and [[NF1]].<ref name=pmid21437171>{{

Searching - alternate terms linked & similar ones disambiguated

”Redirects” of synonyms simplify searches.

Page Discussion Read View source View history Search

Creeping fat

Creeping fat is a **small bowel and/or large bowel gross pathology finding**.^[1] It is closely associated with Crohn's disease. It is also known as **fat wrapping** and **fat hypertrophy**.^[2]

Contents [hide]

- General

Creeping fat

(Redirected from **Fat wrapping**)

Creeping fat is a **small bowel and/or large bowel gross pathology finding**.^[1] It is closely associated with Crohn's disease. It is also known as **fat wrapping** and **fat hypertrophy**.^[2]

Contents [hide]

“Disambiguate” similar names.

Paget disease

May refer to:

- Paget disease of the breast.
- Paget disease of the bone:
- Extramammary Paget disease - refers to non-bone, non-breast Paget disease.

Diagnosis summary & Sign out reference

Designed for quick reference

Sessile serrated adenoma

Diagnosis in short



SSA. H&E stain.

Synonyms sessile serrated lesion, sessile serrated polyp, sessile serrated adenoma/polyp

LM serrated epithelium, crypt base dilation, crypt branching, boot-shaped glands, horizontal glands

LM DDx hyperplastic polyp, tubular adenoma (when with dysplasia)

Site colon - usually cecum or ascending colon

Associated Dx colorectal adenocarcinoma, hyperplastic polyp

Syndromes serrated polyposis syndrome, MUTYH polyposis syndrome

Prevalence common

Endoscopy flat, usually > 5 mm, mucinous cap

Clin. DDx normal, hyperplastic polyp, other intestinal polyps

Sign out [\[edit\]](#)

POLYP, CECUM, POLYPECTOMY:
- SESSILE SERRATED ADENOMA.
-- NEGATIVE FOR DYSPLASIA.

POLYP, ASCENDING COLON, POLYPECTOMY:
- SESSILE SERRATED ADENOMA.
-- NEGATIVE FOR DYSPLASIA.

POLYP, HEPATIC FLEXURE OF COLON, POLYPECTOMY:
- SESSILE SERRATED ADENOMA.
-- NEGATIVE FOR DYSPLASIA.

Dysplasia present [\[edit\]](#)

POLYP, ASCENDING COLON, POLYPECTOMY:
- SESSILE SERRATED ADENOMA WITH DYSPLASIA.

Note:

- The above exactly mirrors the Canadian consensus.^[7]

Micro [\[edit\]](#)

The section shows a small polypoid fragment of colonic mucosa with a serrated epithelium that focally extends to the crypt base. Several dilated crypt bases are seen. One horizontal crypt and one boot-shaped crypt are present. The epithelium matures to the surface. A small amount of submucosa is present and contains a benign lymphoid aggregate.

References [\[edit\]](#)

1. ↑ Huang, CS.; Farraye, FA.; Yang, S.; O'Brien, MJ. (Feb 2011). "The clinical significance of serrated polyps.". *Am J Gastroenterol* **106** (2): 229-40; quiz 241.

- (Nov 2012). "Serrated polyps of the colon: how reproducible is their classification?". *Virchows Arch* **461** (5): 495-504. doi:10.1007/s00428-012-1319-7

External resources - speedy

If you want more info or images... you'll usually find links!

Nephrogenic adenoma

(Redirected from Mesonephric adenoma)

Nephrogenic adenoma, also known as **mesonephric adenoma**,^[1] and **nephrogenic metaplasia**, is a rare lesion that is classically in the urinary bladder and can mimic adenocarcinoma.

It should **not** be confused with *metanephric adenoma*.

Contents [hide]

- 1 General
- 2 Microscopic
 - 2.1 Images
- 3 IHC
- 4 Sign out
- 5 See also
- 6 References

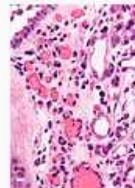
General [edit]

Features:^[2]

- Benign.
 - May mimic adenocarcinoma!
 - Classic location is the urinary bladder.
 - Also reported in ureter and prostatic urethra.
 - It is thought to result from displacement of renal tubular cells, as this entity in renal transplant recipients is graft derived.^[3]

Nephrogenic adenoma

Diagnosis



Nephrogenic adenoma

LM

tubule
micro
lined
+/-thi
basal
usual
chron

LM Ddx

urothe
micro
varian
adeno
adeno

IHC

CK7
-ve, C
(<5%)

Site

urothe
bladd

N Engl J Med. 2002 Aug 29;347(9):653-9.

Derivation of nephrogenic adenomas from renal tubular cells in kidney-transplant recipients.

Mazal PR¹, Schaufler R, Altenhuber-Müller R, Haitel A, Watschinger B, Kratzik C, Krupitza G, Regele H, Meisl FT, Zechner O, Kerjaschki D, Susani M.

Author information

Erratum in

N Engl J Med 2002 Oct 24;347(17):1390.

Abstract

BACKGROUND: Nephrogenic adenomas are benign, tumor-like lesions within the urothelial mucosa of the urinary tract that are not uncommon in renal-transplant recipients. We investigated the origin of nephrogenic adenomas in renal-transplant recipients.

METHODS: Tissue sections were analyzed by fluorescence in situ hybridization with the use of

Cases. *Br. Med. J.* 1991;303(7):765-70.
doi:10.1136/bmj.303.701.MP.0000019578.51568.2
4. PMID 12118115.

3. ↑ Mazal, PR.; Schaufler, R.; Altenhuber-Müller, R.; Haitel, A.; Watschinger, B.; Kratzik, C.; Krupitza, G.; Regele, H. et al. (Aug 2002). "Derivation of nephrogenic adenomas from renal tubular cells in kidney-transplant recipients.". *N Engl J Med* 347 (9): 653-9.
doi:10.1056/NEJMoa013413.
PMID 12200552.

4. ↑ Doddamani, D.; Ansari, M.C.; Gupta, NP.; Aron, M.; Singhi, T.; Datta Gupta, S. (2002). "Mesonephroid adenocarcinoma of the

Keratocystic odontogenic tumour

External resources

EHVSC 10179 [10178](#)

Wikipedia keratocystic odontogenic tumour

Pathology topic/mandiblemaxillakeratocyst

Outlines

CLICK

CLICK

External links box

Data organization

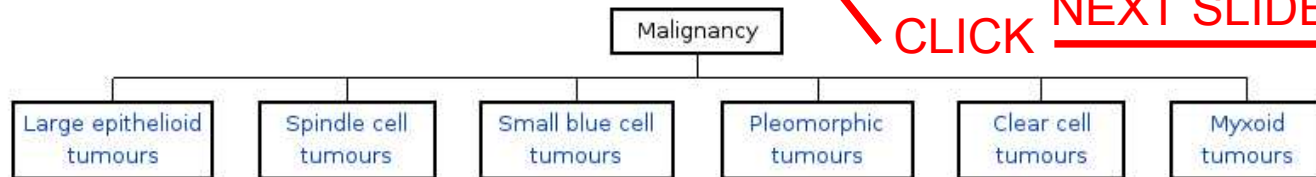
System-based, organ-based, morphological.

A practical histomorphologic differential diagnosis of malignancy

General morphologic DDx of malignancy



Modified general morphologic DDx of malignancy



The above is more useful than the *general clinico-histomorphologically motivated differential diagnosis of malignancy*.

Differential diagnosis by site

Main article: Short power list

It is essential to have a concept of what is common. The *short power list* gives a short differential diagnosis for the common sites.

Main article: Long power list

The *long power list* is a longer list for the common sites.

Data Organization – long lists

“Smart” tables in a long morphologic differential diagnosis.

A long differential diagnosis of small blue cell tumours

Adapted from *Miller* with modifications.^[3]

Tumour	Group	Notes/comments
Acinar cell carcinoma	carcinoma	
Adenoid cystic carcinoma	carcinoma	
Adenosarcoma	sarcoma	glandular component may not be sampled
Angiomyofibroblastoma	soft tissue lesions	
Basaloid carcinoma / Basal cell carcinoma	carcinoma	
Carcinoma not otherwise specified	carcinoma	
Central neurocytoma	neural tumours	

CLICK

A long differential diagnosis of small blue cell tumours

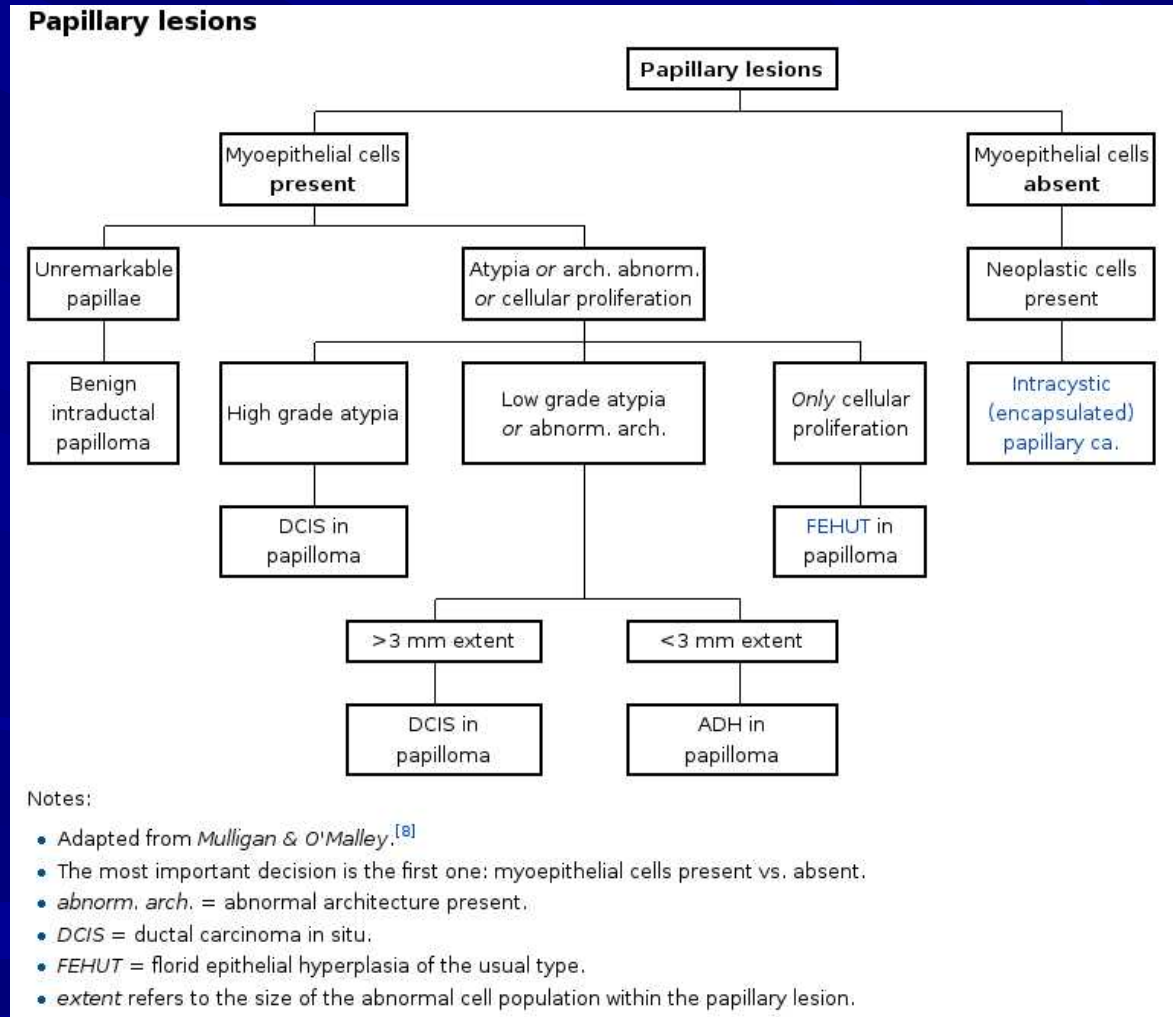
Adapted from *Miller* with modifications.^[3]

Tumour	Group	Notes/comments
Acinar cell carcinoma	carcinoma	
Adenoid cystic carcinoma	carcinoma	
Basaloid carcinoma / Basal cell carcinoma	carcinoma	
Carcinoma not otherwise specified	carcinoma	
Islet cell tumour (carcinoid)	carcinoma	
Medullary thyroid carcinoma	carcinoma	
Merkel cell carcinoma	carcinoma	
Small cell carcinoma	carcinoma	
Small cell mesothelioma	carcinoma	[4]
Mesenchymal chondrosarcoma	chondro-osseous tumours	
	chondro-osseous	

CLICK

Data organization - trees with links

Approaches to problems – quick access to detail knowledge



Community updates & review and discussion

Page Discussion **CLICK** Read Edit **View history** ☆ Search

Revision history of "Presentation at the Provincial Laboratory Medicine Rounds"

[View logs for this page](#)

Browse history

From year (and earlier): 2014 From month (and earlier): all Tag filter:

Go

Diff selection: Mark the radio boxes of the revisions to compare and hit enter or the button at the bottom

Legend: **(cur)** = difference with latest revision, **(prev)** = difference with preceding revision, **m** = minor edit

Compare selected revisions **CLICK**

- (cur | prev) 14:54, 11 April 2014 Michael (Talk | contribs) **m** .. (739 bytes) (-4) .. (undo)
- (cur | prev) 14:05, 11 April 2014 Michael (Talk | contribs) .. (743 bytes) (+129) .. (undo)
- (cur | prev) 08:40, 11 April 2014 Michael (Talk | contribs) .. (614 bytes) (-4) .. (undo)
- (cur | prev) 08:39, 11 April 2014 Michael (Talk | contribs) .. (618 bytes) (+81) .. (undo)
- (cur | prev) 07:45, 11 April 2014 Michael (Talk | contribs) .. (537 bytes) (0) .. (undo)
- (cur | prev) 07:45, 11 April 2014 Michael (Talk | contribs) .. (537 bytes) (+493) .. (fix) (undo)
- (cur | prev) 07:44, 11 April 2014 Michael (Talk | contribs) .. (44 bytes) (-35) .. (Redirected page:Onlinepathology news) (undo)

Page Discussion Read Edit View history ☆ Search

Difference between revisions of "Presentation at the Provincial Laboratory Medicine Rounds"

Revision as of 07:45, 11 April 2014 (edit) Michael (Talk | contribs) ← Older edit

Latest revision as of 14:54, 11 April 2014 (edit) (undo) Michael (Talk | contribs) **m**

(3 intermediate revisions by one user not shown)

Line 1:

The "'Provincial Laboratory Medicine Rounds"' in Newfoundland and Labrador on April 15th, 2014 from 13:00 to 14:00 NDT will be the venue for a talk titled:

Line 7:

Line 1:

The "'Provincial Laboratory Medicine Rounds"' in Newfoundland and Labrador **held at "Memorial University - Health Science Center in Lecture Theatre A"** on April 15th, 2014 from 13:00 to 14:00 NDT will be the venue for a talk titled:

Line 7:

The details of all edits are kept (1) who changed it, (2) what was changed, (3) when it was done.

Virtual case simulator

Formerly “Onlinepathology.org”

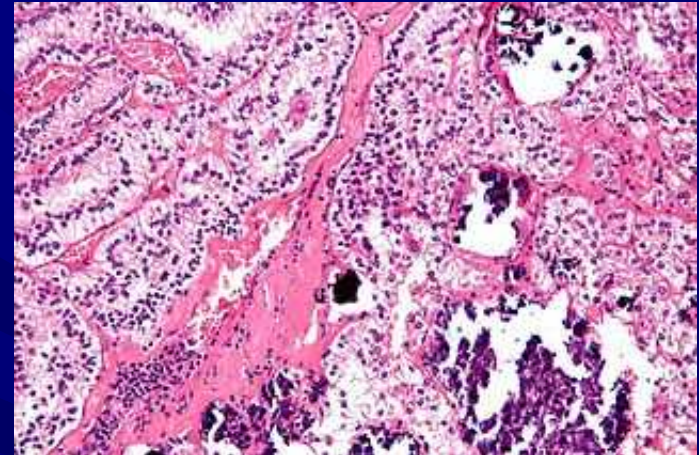
Objectives:

- Learning/continuing medical education.
- Maintenance of competence.
- Share interesting cases.

Designed to reproduce the decision-making in anatomical pathology.

Virtual ordering of stains, IHC molecular tests – with instant results.

Currently ~ 75 cases.




PAX8	[Expand]
PCNA	[Expand]
PNL-2C	[Expand]
Synaptophysin	[Expand]
TFE3	[Collapse] POSITIVE
Toxoplasma	[Expand]
Ubiquitin	[Expand]
Ulex Europaeus	[Expand]
WT1	[Expand]

Translocations Chr X & Y [Collapse]	
Test	Result
t(X;1) PRCC-TFE3	NOT IDENTIFIED [Collapse]
t(X;17) TFE3-ASPL	PRESENT [Collapse]
t(X;18) SYT-SSX	[Expand]

Virtual case simulator

Case 2

Clinical history [edit](#)
 35-year-old male, 35-year-old male.
 Primary image [edit](#)



Low magnification (0.2x) [\[Expand\]](#)
 Intermediate magnification [\[Expand\]](#)
 Very high magnification [\[Expand\]](#)

Additional tests [edit](#)

More history [edit](#)

Ask a colleague [edit](#)

Stains [edit](#)

Alcian [\[Expand\]](#) | Coloidal iron [\[Expand\]](#) | Gallyas [\[Expand\]](#) | JMS to [\[Expand\]](#)
 blue/PAS to Bilirubin [\[Expand\]](#) | to Fontana-Masson [\[Expand\]](#) | to Gromelius [\[Expand\]](#) | Mucicarmine [\[Expand\]](#)
 Oil red O [\[Expand\]](#) | Reticulin [\[Expand\]](#)
 to Prussian blue [\[Expand\]](#) | to Ziehl-Neelsen [\[Expand\]](#)

More history [edit](#)

More history [edit](#)
 History of hemangioblastoma

Ask a colleague [edit](#)

Stains [edit](#)

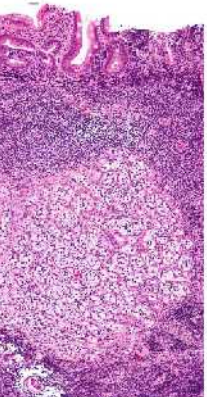
Alcian [\[Expand\]](#) | Coloidal iron [\[Expand\]](#) | Gallyas [\[Expand\]](#) | JMS to [\[Expand\]](#)
 blue/PAS to Bilirubin [\[Expand\]](#) | to Fontana-Masson [\[Expand\]](#) | to Gromelius [\[Expand\]](#) | Mucicarmine [\[Expand\]](#)
 Oil red O [\[Expand\]](#) | Reticulin [\[Expand\]](#)
 to Prussian blue [\[Expand\]](#) | to Ziehl-Neelsen [\[Expand\]](#)

IHC [edit](#)

Test	Result
alpha-1AT	[Expand]
alpha-fetoprotein	[Expand]
BR	[Expand]
CAM5.2	[Expand]
CDX2	[Expand]
CEA-m	[Expand]
	[Collapse]

Epithelial markers [\[Expand\]](#)

Chromograin



Very high magnification

More history [edit](#)

Chromograin

CK5/6 [\[Expand\]](#)
 CK7 [\[Expand\]](#)

Additional tests [\[edit\]](#)

More history [\[edit\]](#)

More history [\[Collapse\]](#)
 History of hemangioblastoma.

Ask a colleague [\[edit\]](#)

Ask a colleague [\[Expand\]](#)

Stains [\[edit\]](#)

Alcian [\[Expand\]](#) | Coloidal iron [\[Expand\]](#) | Gallyas [\[Expand\]](#) | JMS to [\[Expand\]](#) | Oil red O [\[Expand\]](#) | Reticulin [\[Expand\]](#)
 blue/PAS to Bilirubin [\[Expand\]](#) | to Fontana-Masson [\[Expand\]](#) | to Gromelius [\[Expand\]](#) | Mucicarmine [\[Expand\]](#) | to Prussian blue [\[Expand\]](#) | to Ziehl-Neelsen [\[Expand\]](#)

IHC [\[edit\]](#)

Undiff. [\[Expand\]](#) | Epithelial [\[Expand\]](#) | Mesenchymal & [\[Expand\]](#) | Lymphoid [\[Expand\]](#) | Other [\[Expand\]](#) | Viral & [\[Expand\]](#)
 Markers [\[Expand\]](#) | markers [\[Expand\]](#) | neural markers [\[Expand\]](#) | markers [\[Expand\]](#) | markers [\[Expand\]](#) | endocrine markers [\[Expand\]](#)

Differential diagnosis [\[edit\]](#)

Differential diagnosis [\[Expand\]](#)

Diagnosis [\[edit\]](#)

Diagnosis [\[Collapse\]](#)
 Paranglioma

Note: Further clinical information not provided was... the individual has von Hippel-Lindau disease!

Other cases [\[edit\]](#)

Case navigation box

Number	1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10 · 11 · 12 · 13 · 14 · 15 · 16 · 17 · 18 · 19 · 20 · 21 · 22 · 23 · 24 · 25 · 26 · 27 · 28 · 29 · 30 · 31 · 32 · 33 · 34 · 35 · 36 · 37 · 38 · 39 · 40 · 41 · 42 · 43 · 44 · 45 · 46 · 47 · 48 · 49 · 50 · 51 · 52 · 53 · 54 · 55 · 56 · 57 · 58 · 59 · 60 · 61 · 62 · 63 · 64 · 65 · 66 · 67 · 68 · 69 · 70 · 71 · 72 · 73 · 74 · 75
Subspecialty (Difficulty)	Autopsy pathology (jr, sr, f/e) · Breast pathology (jr, sr, f/e) · Cardiovascular pathology (jr, sr, f/e) · Cytopathology (jr, sr, f/e) · Dermatopathology (jr, sr, f/e) · Endocrine pathology (jr, sr, f/e) · Forensic pathology (jr, sr, f/e) · Gastrointestinal pathology (jr, sr, f/e) · Genitourinary pathology (jr, sr, f/e) · Gynecologic pathology (jr, sr, f/e) · Hematopathology (jr, sr, f/e) · Head and neck pathology (jr, sr, f/e) · Lymph node pathology (jr, sr, f/e) · Medical kidney pathology (jr, sr, f/e) · Molecular pathology (jr, sr, f/e) · Neuropathology (jr, sr, f/e) · Pediatric pathology (jr, sr, f/e) · Pulmonary pathology (jr, sr, f/e) · Placental pathology (jr, sr, f/e) · Soft tissue pathology (jr, sr, f/e)
Difficulty	1 · 2 · 3 · 4 · 5 · 6 · 7

Category: Cases

Virtual case simulator

Cases organized by system and difficulty.

Do cases at your level!

Target audience:

- General pathologists/community pathologists.
- Residents (junior & senior).
- Fellowship trained pathologists looking at their subspecialty.

Category: Cases in gastrointestinal pathology

This category collects all the gastrointestinal pathology cases. It is hidden.

Subcategories

This category has the following 3 subcategories, out of 3 total.

C

- Cases in gastrointestinal pathology - fellow and expert
- Cases in gastrointestinal pathology - junior
- Cases in gastrointestinal pathology - senior

Pages in category "Cases in gastrointestinal pathology"

The following 15 pages are in this category, out of 15 total.

C	C cont.	C cont.
• Case 10	• Case 2	• Case 39
• Case 12	• Case 23	• Case 40
• Case 14	• Case 34	• Case 48
• Case 15	• Case 35	• Case 49
• Case 17	• Case 38	• Case 9

CLICK

Pages in category "Cases in gastrointestinal pathology - senior"

The following 6 pages are in this category, out of 6 total.

C

- Case 14
- Case 17
- Case 2
- Case 35
- Case 40
- Case 9

Libre Pathology – today & beyond

- Librepathology.org – today.
- Current site objectives.
- Raising awareness.
- Getting involved.
- Vision.
- Discussion.



Librepathology.org - Today

- 1200+ content pages (over 5400 pages).
- 1250+ unique diagnoses.
- 1000s of references with external links.
- Over 500 pathology pages have at least one pathology image.
- Over 2000 pathology images.
- 75 interactive virtual cases.
- Creative Commons license.
- Links to external images.
- Mobile device/smart phone friendly view.
- Information/diagnosis summary boxes.



Current site objectives



- Excellent free (ergo “*libre*”) secondary source (no original research).
- Further evidence-based medicine.
- Inclusive (community & academia) with flat hierarchy.
- Neutral point of view - significant minority views welcome (e.g. WHO vs. EIN system).
- Readable/“consume-able” by an “educated” general audience.

Nodular hyperplasia of the prostate gland	
<i>Diagnosis in short</i>	
	
Nodular hyperplasia of the prostate gland. H&E stain.	
Synonyms	benign prostatic hyperplasia, benign prostatic hypertrophy (misnomer)
LM	stromal and/or glandular hyperplasia
Gross	enlarged prostate gland, nodularity
Site	prostate gland
Signs	hematuria, weak urine stream, incomplete urinary emptying, post-void dribbling, prolonged voiding, intermittency, hesitancy
Symptoms	increased frequency of urination, straining
Prevalence	very common, esp. elderly
Blood work	+/-elevation of PSA (mild)
Prognosis	benign
Clin. DDx	other causes of hematuria (urothelial carcinoma, renal cell carcinoma, cystitis), other causes of obstruction (prostate carcinoma, urothelial carcinoma)
Treatment	medical, TURP


Raising awareness

“Open access” the site. (July)

Present at Informatics Group at CAP meeting in Toronto (Today).

Platform presentation at the CAP meeting – on the virtual case simulator (Monday).

Add grossing guide for Genitourinary specimens (August/September).



The screenshot shows the main page of the Onlinepathology wiki. At the top right, there are user navigation links: Michael, Talk, Preferences, Watchlist, Contributions, and Log out. Below these are action buttons: Read, Edit, View history, and a search box. The 'Discussion' tab is highlighted with a red circle. The page title is 'Main Page'. The main content area contains a welcome message: 'Welcome to Onlinepathology! A wiki that's looking for editors!'.

Getting involved

Try it out – if you have used Wikipedia: the skills are transferable.

Spread the word.

Send me an email (michael@librepathology.org) with suggestions.

Try editing – I can set you up in a minute.

Vampire recruitment (planned).



The screenshot shows the LibrePathology website interface. At the top, there are navigation tabs for 'Page' and 'Discussion'. To the right, there are buttons for 'Read', 'Edit', and 'View history', with the 'Edit' button circled in red. A search bar is also visible. Below the navigation, the main heading is 'Genitourinary pathology'. A welcome message reads: 'Welcome to genitourinary pathology! We're always looking for help!'. The content is organized into two columns: 'The Collection' and 'By Area'. Under 'The Collection', there are links for 'An introduction to GU pathology', 'Anatomy of the GU tract', and 'Histology of the GU tract'. Under 'By Area', there is a sub-section for 'Urinary' with links for 'Kidney', 'Kidney tumours', and 'Pediatric kidney tumours'.

Long term vision

Make up-to-date easy-to-access pathology information freely available to all that are interested ... all you need is an internet connection!



Rocky Harbour, NL

Acknowledgments

Martin Bonert, MBA (Toronto - SIMS)

Prof. Edward Brown (MUN - Computer Science)

Dr. William Dubinski (Toronto)

Dr. Yuan Gao (MUN)

Dr. Serge Jothy (Toronto)

Dr. Stephen S. Raab (MUN)

Dr. Frank X. Torres (Eastern Health)

Others ...



WIKIS AND THE DISSEMINATION OF PATHOLOGY KNOWLEDGE

Michael Bonert and Serge Jothy
Department of Laboratory Medicine St. Michael's Hospital & Department of Laboratory Medicine and Pathobiology University of Toronto, Toronto, Ontario, Canada.



Background

Wikis are websites to create, revise and disseminate content with interlinked web pages that are edited with a WYSIWYG (what-you-see-is-what-you-get) interface.

Numerous wiki software exists (e.g. MediaWiki, DokuWiki, PmWiki).

The largest wiki is Wikipedia (WP), which often ranks highly in search engine results, and is often used as a source of medical information by the lay public [Heiman et al.] and physicians [Hughes et al.] [Comer et al.].




Wiki	Language	Pages	Editors	Notes
Pathology Resident Wiki <small>Pathology Resident Wiki</small>	English	482	11 (active)	Started by US Pathology Resident on Pathology Wiki
PathoWiki.org <small>PathoWiki.org</small>	German	397	11 (registered)	University of Magdeburg, several editors integrated
Pathologie.wiki.book <small>Pathologie.wiki.book</small>	German	195 A4 pages (printed version)	2 (active)	Printed only - 1200 pages - 10000 words - created by original author on www.pathologie.wiki

Photo credits

- 2 - Official Creative Commons icon - <http://commons.wikimedia.org/wiki/File:Cc.logo.circle.svg> - Public Domain
- 3 - Bonert - St. John's - CC BY-NC-SA version 3.0
- 4 - Matthias Kabel - http://commons.wikimedia.org/wiki/File:Handtiegelpresse_von_1811.jpg - CC BY-SA version 3.0
- 5 - AngMoKio - http://commons.wikimedia.org/wiki/File:Formel3_racing_car_amk.jpg - CC BY-SA version 2.5
- 6 - Nephron - http://commons.wikimedia.org/wiki/File:Prostate_cancer_with_Gleason_pattern_4_low_mag.jpg - CC BY-SA version 3.0
- 11 - Nephron - all -
http://commons.wikimedia.org/wiki/File:Acute_thrombotic_microangiopathy_-_very_high_mag.jpg - CC BY-SA version 3.0
http://commons.wikimedia.org/wiki/File:Cryptosporidiosis_-_very_high_mag_-_cropped.jpg - CC BY-SA version 3.0
http://commons.wikimedia.org/wiki/File:Atypical_polypoid_adenomyoma_-_add_-_intermed_mag.jpg - CC BY-SA version 3.0
http://commons.wikimedia.org/wiki/File:Rheumatic_heart_disease_-_3a_-_very_high_mag.jpg - CC BY-SA version 3.0
http://commons.wikimedia.org/wiki/File:Malignant_epithelioid_mesothelioma_-_calretinin_-_high_mag.jpg - CC BY-SA version 3.0
http://commons.wikimedia.org/wiki/File:Gastrointestinal_stromal_tumour_-_superf_-_intermed_mag.jpg - CC BY-SA version 3.0
http://commons.wikimedia.org/wiki/File:NUT_midline_carcinoma_-_high_mag.jpg - CC BY-SA version 3.0
http://commons.wikimedia.org/wiki/File:Sex_cord_tumour_with_annular_tubules_-_2_-_very_high_mag.jpg - CC BY-SA version 3.0
- 14 - Nephron - http://commons.wikimedia.org/wiki/File:Sessile_serrated_adenoma_3_very_high_mag.jpg - CC BY-SA version 3.0
- 15 - Nephron - http://commons.wikimedia.org/wiki/File:Nephrogenic_adenoma_-_very_high_mag.jpg - CC BY-SA version 3.0
- 20 - Nephron - http://commons.wikimedia.org/wiki/File:Xp11.2_translocation_renal_cell_carcinoma_-_high_mag.jpg - CC BY-SA version 3.0
- 21 - Nephron - http://commons.wikimedia.org/wiki/File:Paraganglioma_-_low_mag.jpg - CC BY-SA version 3.0
http://commons.wikimedia.org/wiki/File:Paraganglioma_-_intermed_mag.jpg - CC BY-SA version 3.0
http://commons.wikimedia.org/wiki/File:Paraganglioma_-_chromo_-_high_mag.jpg - CC BY-SA version 3.0
- 24 - Emmanuelm - http://commons.wikimedia.org/wiki/File:Renal_oncocytoma.jpg - CC BY-SA version 3.0
- 25 - Haymanj - http://commons.wikimedia.org/wiki/File:Breast_cancer.JPG - PD
http://commons.wikimedia.org/wiki/File:Secondary_tumor_deposits_in_the_liver_from_a_primary_cancer_of_the_pancreas.jpg - PD
- 26 - Nephron - http://commons.wikimedia.org/wiki/File:Nodular_hyperplasia_of_the_prostate.jpg - CC BY-SA version 3.0
- Rama - <http://commons.wikimedia.org/wiki/File:oupe-binoculaire-p1030891.jpg> - CC BY-SA version 2.0
- 27 - Nephron - http://commons.wikimedia.org/wiki/File:Prostatic_adenocarcinoma_with_perineural_invasion.JPG - CC BY-SA version 3.0
- 29 - Bonert - Close to Rocky Harbor, NL - CC BY-NC-SA version 3.0

Screen shots

All screen shots of librepathology.org – CC BY-SA-NC version 3.0

Content otherwise: Michael Bonert (c) 2014, CC BY-SA-NC version 3.0

See: <http://creativecommons.org/licenses/by-nc-sa/3.0/> <http://creativecommons.org/licenses/by-sa/3.0/>

Questions?

<http://librepathology.org>
michael@librepathology.org



The screenshot shows the main page of the Libre Pathology wiki. On the left is a sidebar with a circular image of a histological slide and the text "Libre Pathology". Below this are links for "Main page", "Recent changes", and "Random page". The main content area has a top navigation bar with "Page" selected, "Discussion", "Read", "View source", and "View history" buttons, and a search box. Below the navigation is the heading "Main Page" and a large welcome message: "Welcome to Libre Pathology! A wiki that's looking for editors!". At the bottom, there is a news section titled "Libre Pathology news: Presentations at the 2014 Annual Meeting of the Canadian Association of Pathologists".