Bernard Becker Medical Library

Delivering knowledge, informing decisions

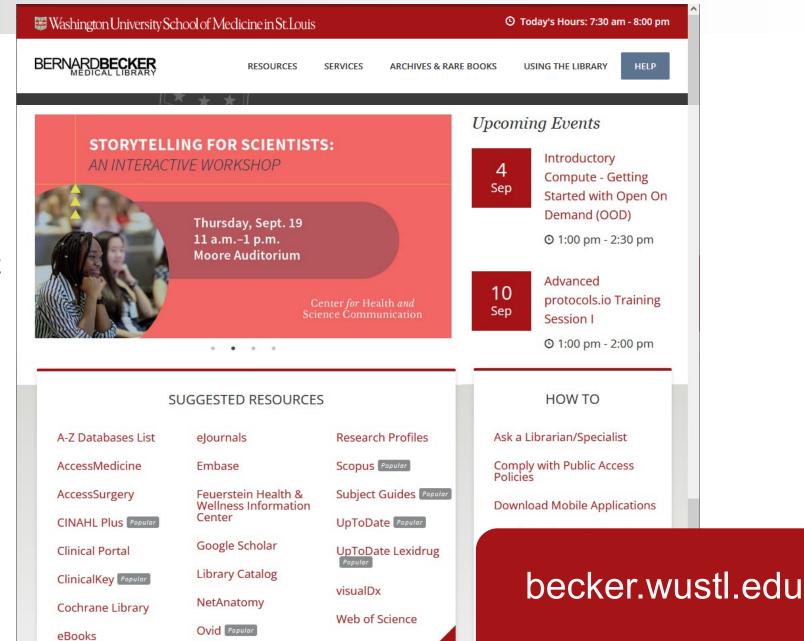
Michelle Doering, Clinical Librarian mmdoering@wustl.edu

Bernard Becker Medical Library

Starting from our homepage will correctly link out to our subscriptions.

Off campus, it will prompt for your wustl key.

Most items under Suggested Resources

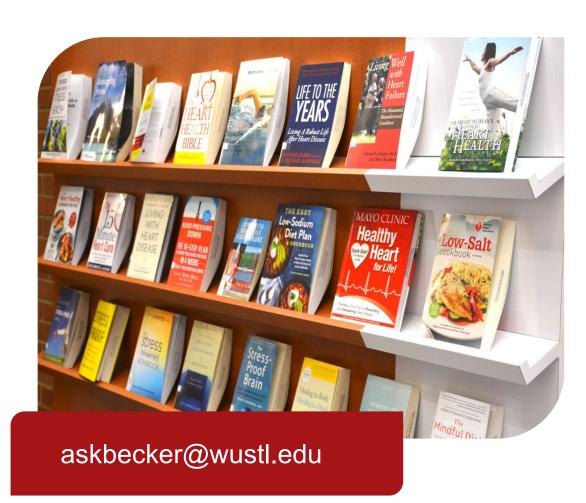


PubMed Popular



Visiting the library

- The library building is accessible at any time to School of Medicine students and faculty via controlled-access (medical school ID badge swipe)
- Chargers available for checkout at the service desk
- Desktop computers and non-free printing options
- Books
 - Lower level: Print Textbooks
 - Course Reserves Request Form
 - Consumer health books, mindfulness, Diversity Equity and Inclusion topics, some novels





Face-to-Face Events

- Health and Science Communication: SciComm Journal Club: Sept. 12th, 3:00 – 4:00 pm
- Storytelling for Scientists: An Interactive Workshop: Sept. 19th, 11:00 am – 1:00 pm
- Exploring Medical History: Spotlight on East Asia: Oct. 8, 1:30 pm – 4:00 pm, ophthalmology topics
- Changing Landscapes: Reproductive Health: Past, Present, Future: Oct. 31, 8:30 am – 12:30 pm



https://becker.wustl.edu/events/

Software on the Research Pods

- ArcGIS (PCs only)
- GraphPad Prism
- JMP Pro
- Mathematica
- MATLAB
- PyMOL
- RStudio
- SAS (PCs Only)
- SPSS

Other software

- Adobe Creative Cloud Apps
- EndNote



Free Software

Software Title/Suite	How to Access
ArcGIS	Free download to the WashU community via a University site license
ChemOffice Professional	Free download for WashU community via Olin Library licensing – click for details
COMPBIO	Web-based, freely available courtesy of Genome Technology Access Center (GTAC@MGI) at WashU
<u>LabArchives</u>	Web-based – Sign in at <u>labarchives.com</u> by selecting Washington University in St. Louis from the institution drop-down menu and logging in with your WUSTL Key username and password.
<u>OpenSpecimen</u>	Web-based, freely available to WashU investigators and their labs after training
Reaxys	Web-based, freely available from any WashU network computer via Becker Library/Olin Library licensing
RStudio	Open source version available at <u>Rstudio</u>

Purchase License

Software Title/Suite	How to Access
GraphPad Prism	Purchase licenses via <u>Becker Library</u>
Ingenuity Pathway Analysis (IPA)	Web-based, purchase a license via Becker Library
JMP Pro	Purchase via WUIT Software Licensing
Lasergene Core Suite	Download, purchase licenses via Becker Library
<u>Mathematica</u>	Purchase via WUIT Software Licensing
MATLAB	Purchase via WUIT Software Licensing
Partek Flow	Web-based, purchase a license via Becker Library
PyMOL	Purchase a license via Becker Library
SAS	Purchase via WUIT Software Licensing
SnapGene	Download, purchase licenses via Becker Library
<u>SPSS</u>	Purchase via WUIT Software Licensing

Other Software

Software Title/Suite	How to Access
Adobe Creative Cloud Apps	Purchase via WUIT Software Licensing
EndNote	Purchase via WUIT Software Licensing
Mendeley	Open source version available at Mendeley, PDF storage limit
Microsoft Office	Becker Library Research Pod and any other WUIT-managed computer
Zotero	Free, open source version available at Zotero



Research Computing

Becker offers free workshops for researchers new to programming.

Computing basics classes Wednesdays in Sept.:

- Introductory Compute Getting Started with the Command Line:
 Sept. 11, 1:00 pm 2:30 pm
- Introductory Compute Getting Started with High Performance Computing: Sept. 18, 1:00 pm – 2:30 pm
- Introductory Compute Getting Started with the RIS Scientific Compute Platform: Sept. 25, 1:00 pm – 2:30 pm

MATLAB, Python, R: Sign up for email for upcoming classes, view recordings of past workshops.

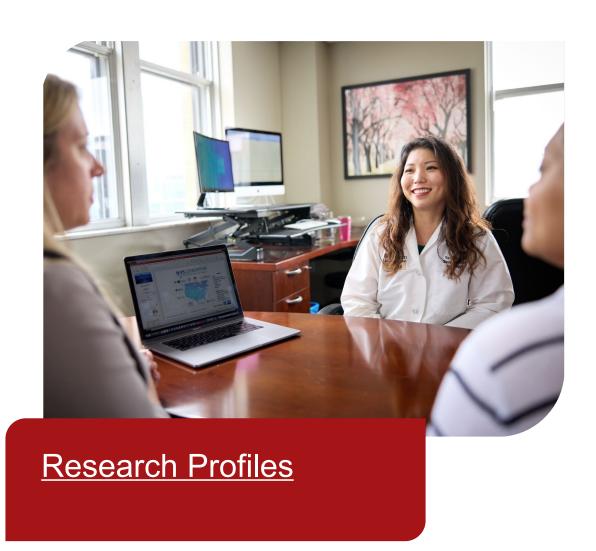


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Get Connected

- Collaborate with a librarian on a Systematic Review or Scoping Review search strategy
- Research Profiles:
 - Highlight your research contributions to School of Medicine researchers, as well as those outside the university and in their research communities.
 - Find collaborators in your field
 - Request an update



Compliance and Research Impact Support

- NIH Biosketch, My Bibliography and SciENcv support
- Compliance with public access policies
- Request classes for groups
- Publication/citation reports for tenure or grant applications
- Subject Guides:
 - <u>Selecting a Journal</u> for Publication
 - NIH Public Access Policy: <u>link</u>



Open Access

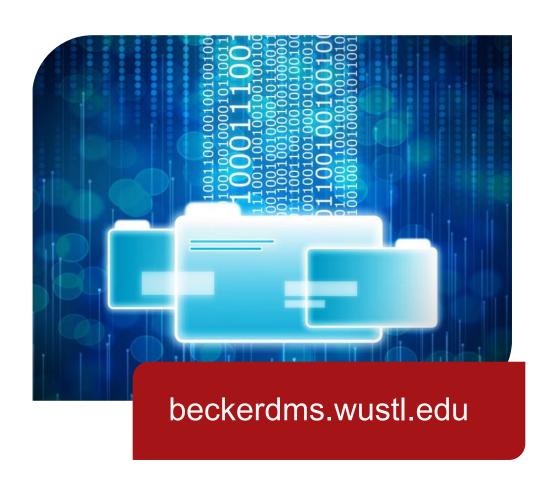
- Digital Commons@Becker institutional repository, creates DOI
- Upcoming Events
 - Scientific Publishing and Openness:
 Perspectives from Insiders, Oct. 1, 3:00 4:00 pm
 - Being Open about Open Educational Resources: Perceptions, Use, and Impact, Oct. 14, 1:00 - 2:00 pm
 - How Open Science Can Advance Equity for People with Disabilities, Oct. 23, 3 – 4:00 pm
 - Framing Public and Open-Access
 Scholarship for Professional Advancement,
 seminar on the main campus, Oct. 30, noon
 1:30 pm





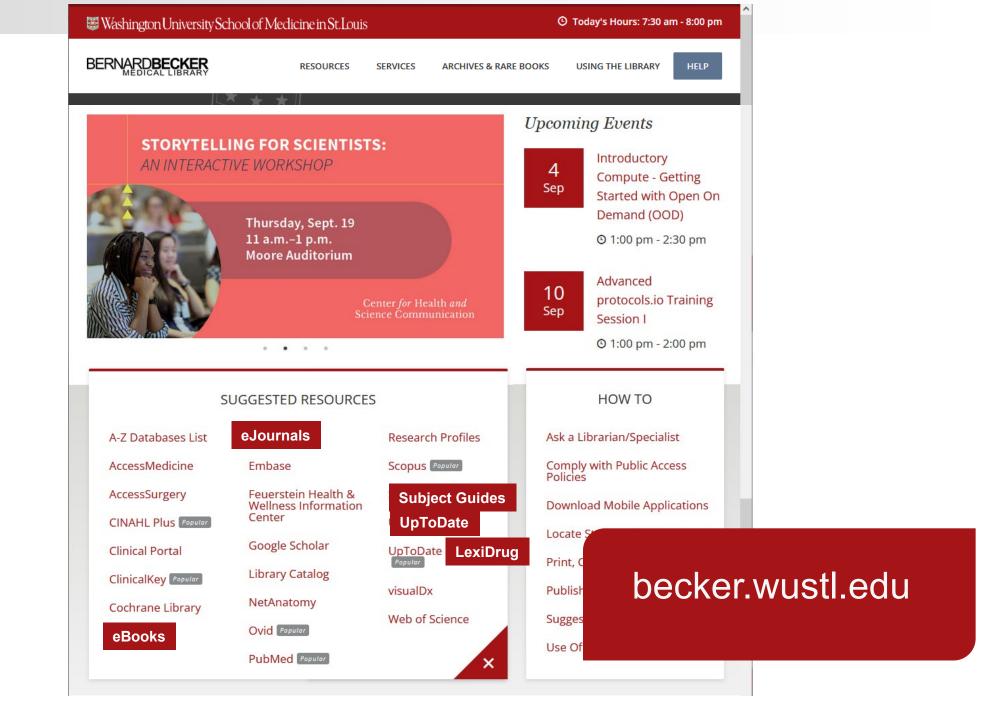
Data Management Plans

- NIH requires all NIH grant submissions to include a two page Data Management and Sharing plan
- Webinars and one-on-one consultations for data management and sharing, <u>review of</u> <u>plans</u>.
- Training and support for, <u>DMPTool</u>, create data management and sharing plans that meet requirements and promote research
- <u>Protocols.io</u>, open access repository for protocols: <u>link</u>
 - Training Series, Session II: Sept. 24, 1:00-2:00 pm





- UpToDate: pointof-care medical resource
- LexiDrug: clinical drug information
- Subject Guides: Lists of links to resources based on topic
- eBooks
- eJournals



eJournals

- Search by title
- Article search using DOI
- Article search using <u>Citation Linker</u>

eBooks

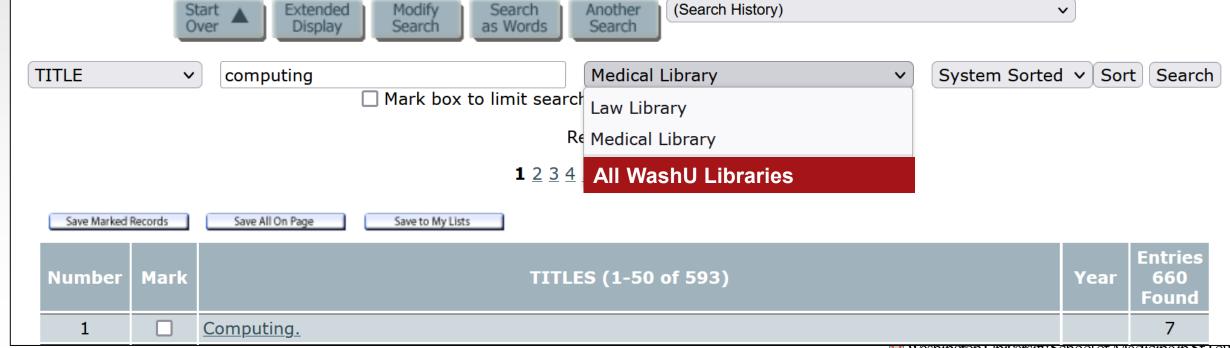
- Search by title
- Search by <u>subject</u>
- Newest Ebooks
- Some of the best textbooks are only available in print



SUGGESTED RESOURCES

- 1. Library Catalog
- 2. Switch to All WashU Libraries

Research Profiles A-7 Databases List elournals AccessMedicine **Embase** Scopus Popular AccessSurgery Feuerstein Health & Subject Guides Popular Wellness Information Center CINAHL Plus Popular UpToDate [Popular] Google Scholar Clinical Portal UpToDate Lexidrug Popular **Library Catalog** ClinicalKey Popular visualDx





Subject Guides

- Biostatistics: <u>link</u>
- DBBS education resources: link
 - Lab techniques videos
 - Links to resources curated by class instructors
- Images: <u>link</u>
- Mobile Apps: <u>link</u>
- Radiology: <u>link</u>
- Selecting a Journal for Publication: Questionable Indicators: <u>link</u>
- Journals and Newspapers: <u>link</u>
- Text and Data Mining: <u>link</u>



beckerguides.wustl.edu/

Subject Guides > Biostatistics Guide > Power Analysis & Sample Size

Validated Calculators (free online tools)

Validated Calculators (Free Online Tools)

Note: Ensure reproducibility of your calculations; take pictures or screenshots and properly cite.

• Sample Size Calculators for Designing Clinical Trials

UCSF offer **online** and easy to use calculators of sample size for a variety of analyses with binary, continuous, and time to event measurements, as well as pediatric growth and posterior probability of disease

Power and Sample Size

Online and easy to use calculator of sample size for analyses of binary, means, and time to event measurements.

 <u>Sealed Envelope</u> (scroll up to the 'POWER CALCULATORS' menu at the top right)

Online tools to estimate sample size for superiority, equivalence, and non-inferiority clinical trials for binary and continuous measurements.

Downloadable Software (free and for purchase)

Downloadable Software (Free and For Purchase)

Note: Ensure reproducibility of your calculations; take pictures or screenshots and properly cite.

G*Power

Free downloadable software that is easy to use with a helpful manual. Supports broad range of calculations for proportions, means, and linear, logistic, and Poisson regression.



• PS Power and Sample Size Calculation

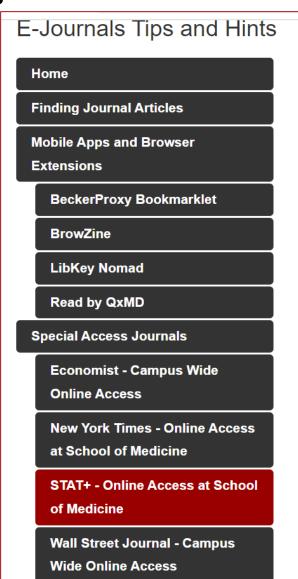
Free downloadable software with a manual to calculate sample size for binary, continuous, and time to event measurements.

Power and Precision

For purchase software that is easy to use for power and precision analysis. Supports a very broad range of calculations for various hypotheses and scenarios involving proportions, means, correlations, and survival times, and linear, polynomial, and logistic regression.

DACC Dower Analysis & Cample Size

Subject Guides > E-Journals Tips and Hints > Special Access Journals



STAT+ (STAT) Plus

STAT+ (STAT Plus) offers original reporting and analysis of breaking news in the life sciences and pharmaceutical industry.

You must have a @wustl.edu email and be affiliated with WUSM or on the WUSM campus to register for STAT+.

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Search

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 - Click "Continue" and STAT+ will re-direct you to confirmation page and send you a welcome email
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 - You should see the following message: You're now a STAT+ subscriber affiliated with Washington University School

Database searching PubMed

- Includes biomedical journals indexed in Medline
- Automatic term-mapping
- Search Tips: <u>Video</u>; <u>Subject Guide</u>



BERNARDBECKER MEDICAL LIBRARY

RESOURCES

SERVICES

ARCHIVES & RARE BOOKS

USING THE LIBRARY

HELP

STORYTELLING FOR SCIENTISTS:

AN INTERACTIVE WORKSHOP



Thursday, Sept. 19 11 a.m.–1 p.m. Moore Auditorium

0 0

Center for Health and Science Communication

Upcoming Events

4 Sep Introductory Compute - Getting Started with Open On Demand (OOD)

O 1:00 pm - 2:30 pm

10 Sep Advanced protocols.io Training Session I

1:00 pm - 2:00 pm

SUGGESTED RESOURCES

CINAHL Plus Popular

ClinicalKey Popular

Ovid Popular

PubMed

Scopus Popular

Subject Guides Popular

UpToDate Popular

UpToDate Lexidrug Popular

SERVICES

Author Analytics & Support

Classes & Workshops

Clinical Rounding

Health Literacy & Communication

Research Computing

Search & Reference

Software Licensing

Systematic Reviews

HOW TO

Ask a Librarian/Specialist

Comply with Public Access Policies

Download Mobile Applications

Locate Study o

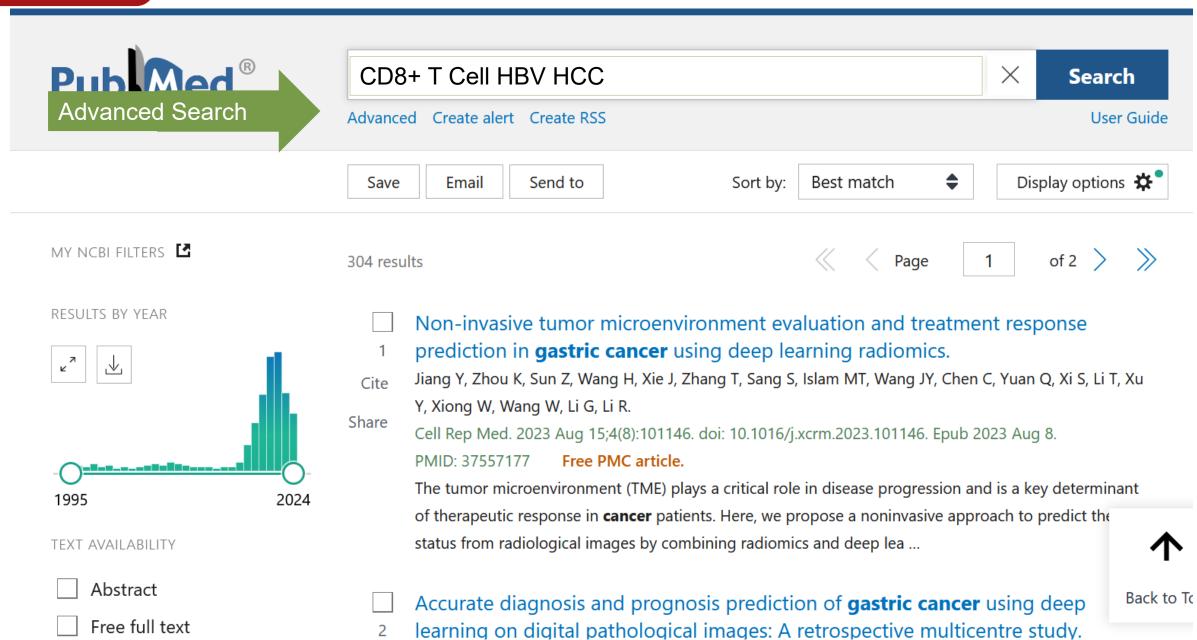
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Suggest a Pur

Use Off-Camp



History and Search Details m Delete ↓ Download Search Actions Details Query Results Time Details Carrot #12 Search: CD8+ T Cell HBV HCC 21:26:45 ("cd8 positive t lymphocytes"[MeSH Terms] OR ("cd8 positive"[All Fields] AND "t lymphocytes" [All Fields]) OR "cd8 positive t lymphocytes" [All Fields] OR "cd8 t cell"[All Fields]) AND "HBV"[All Fields] AND "HCC"[All Fields] **Translations Mesh Term** CD8+ T Cell: "cd8-positive t-lymphocytes"[MeSH Terms] OR ("cd8positive"[All Fields] AND "t-lymphocytes"[All Fields]) OR "cd8-positive tlymphocytes"[All Fields] OR "cd8 t cell"[All Fields]



Entry Terms

- CD8-Positive T-Lymphocytes
- **CD8-Positive Lymphocytes**
- T8 Cells
- T8 Lymphocytes
- CD8-Positive Suppressor T-Lymphocytes
- CD8-Positive Suppressor T-Cells

Medical Subject Heading Tree

```
All MeSH Categories
      Anatomy Category
            Cells
```

Blood Cells Leukocytes

> Leukocytes, Mononuclear Lymphocytes T-Lymphocytes

> > **CD8-Positive T-Lymphocytes**

<u>T-Lymphocytes, Cytotoxic</u>



Entry Terms

- Hepatocellular Carcinoma
- Hepatoma
- Adult Liver Cancer
- Liver Cell Carcinoma

Medical Subject Heading Tree

All MeSH Categories

Diseases Category

Neoplasms

Neoplasms by Histologic Type

Neoplasms, Glandular and Epithelial

Carcinoma

Adenocarcinoma

Carcinoma, Hepatocellular

All MeSH Categories

Diseases Category

<u>Neoplasms</u>

Neoplasms by Site

Digestive System Neoplasms

Liver Cancer

Carcinoma, Hepatocellular





No MeSH? Try spelling terms out:

Instead of: CD8+ T Cells HBV HCC: 83 results

Use: CD8+ T Cells AND Hepatitis B virus AND hepatocellular carcinoma

= 163 results

Instead of: EHR: 13,000

Use: Electronic health record: 74,000

Instead of: lab test

Use: laboratory test

Instead of: Cgmp

Use: Cyclic gmp

Mesh Database: <u>link</u>

Entry terms:

Guanosine Cyclic 3,5 Monophosphate Guanosine Cyclic-3',5'-Monophosphate

Guanosine Cyclic Monophosphate

PubMed Advanced Search Builder



▼ Restrict field to title or journal

All Fields

Liver cancer OR HCC OR cirrhosis



Show Index

Query box

((liver cancer OR HCC OR cirrhosis) AND ((PD-1+ t cells OR CD8+ t cells))) AND (Hepatitis B virus)



restrict search to
that journal
• Add synonyms
using the OR
between the words

Restrict search to

a journal title to

the title field or add

 Add searches together

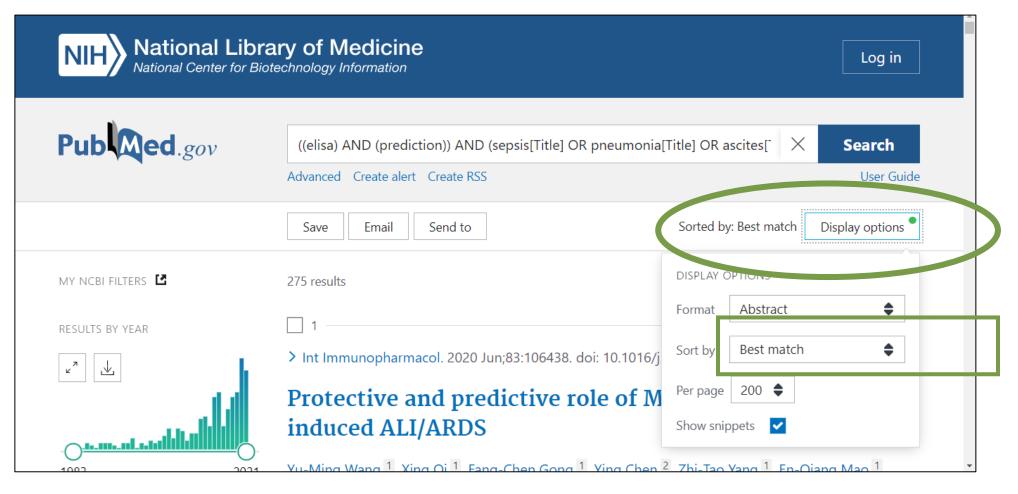
▼ Add together individual searches together



Search	Actions	Details	Query	Results	Time
#27	•••	>	Search: liver cancer OR HCC OR cirrhosis	766,367	22:05:30
#26	•••	>	Search: (PD-1+ t cells OR CD8+ t cells)	116,461	22:04:48
#25	•••	>	Search: Hepatitis B virus	62,581	22:04:17
#24	•••	>	Search: (t cells) AND Hepatitis B virus AND (cirrhosis OR hepatocellular carcinoma)	572	22:03:31
#23	•••	>	Search: (t cells) AND Hepatitis B virus AND hepatocellular carcinoma	408	22:00:47
#22	•••	>	Search: (t cells OR RNA) AND Hepatitis B virus AND hepatocellular	2.383	22:00:34

Jniversity School of Medicine in St. Louis





The ratio of calprotectin to total protein as a diagnostic and prognostic marker for spontaneous bacterial peritonitis in patients with liver cirrhosis and ascites

Philipp Lutz, Kenneth Pfarr, Hans Dieter Nischalke, Benjamin Krämer, Felix Goeser, Andreas Glässner, Franziska Wolter, Pavlos Kokordelis, Jacob Nattermann, Tilman Sauerbruch, Achim Hoerauf, Christian P Strassburg, Ulrich Spengler

PMID: 26035112 DOI: 10.1515/cclm-2015-0284

Abstract

> Proceed to details

Background: Diagnosis of spontaneous bacterial peritonitis (SBP) is based on a differential ascites
leukocyte count which does not provide prognostic information. We performed a pilot study to access
calprotectin in ascites as an alternative diagnostic

calprotectin to total protein as a
diagnostic and prognostic marker for

Publication types, MeSH terms, Substances + expan



66 Cite

Share

patients with liver cirrhosis and ascites. Clin Chem Lab Med. 2015 Nov;53(12):2031-9. doi: 10.1515/cclm-2015-0284. PMID: 26035112.

spontaneous bacterial peritonitis in



Download .nbib Format: NLM 🗢







Store citations

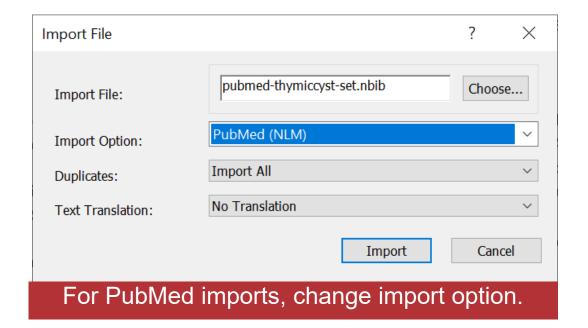
- Database-provided lists: Create log-in
- Use "export" or "send to" button
- Chrome has export buttons available

Citation Managers:

- Use Cite While you Write to format reference list based on the journal's format, organize folders, store PDFs
- Endnote: \$50, unlimited PDF storage, purchase through WUSM
- Mendeley: Free but limit to PDF storage
- Zotero: Free

PubMed to Endnote

 Change "Import Option" when importing from PubMed



PubMed to Mendeley

- Get the <u>Mendeley Web Importer</u>
- View 200 citations in PubMed
- Can only grab 200 at a time



Scopus and Web of Science

Index more journals than PubMed, including IEEE, science outside of biomedical, including engineering, computing, and chemistry. Can sort by citation count.

	PubMed	Web of Science	Scopus
RNA transport	59,000	38,000	106,000
Machine Learning	125,000	370,000	500,000
Machine Learning AND Emergency	13,000	3,000	6,600
Flow cytometry	273,000	202,000	442,000

Search for: imag* AND (neural-network* OR deep-learning)

Sort by: Cited by (highest)

374,71	.6 documents found			№ Analy	/ze results ⊅
All	✓ Export ✓ Download Citation overview ••• More	e Show all abstracts	Sort by Date (newest)) ~	⊞ ≔
	Document title	Authors	Source	Year	Citations
	Article				
1	A Smart Application as Solution for Diagnosis of Rice Diseases in Pakistan: An Image Processing Approach	Mumtaz, A., Noor, A.S.M., Farzeen, S., Khan, M.R., Afzaal, M.	Journal of Advanced Research in Applied Sciences and Engineering Technology , 49(1), pp. 63–76	2025	0
	Show abstract V WWW. Full Text@Becker 7 View at Publisher 7	Related documents			
	Article • Open access				
2	Enhancing Image Segmentation Accuracy using Deep	Kiran Sree, P.,	Journal of Advanced	2025	0
	Learning Techniques	Usha Devi N., S.S.S.N.,	Research in Applied		
		Margala, M.,	Sciences and		
		Chakraharti D	Engineering		

Search for: imag* AND (neural-network* OR deep-learning)

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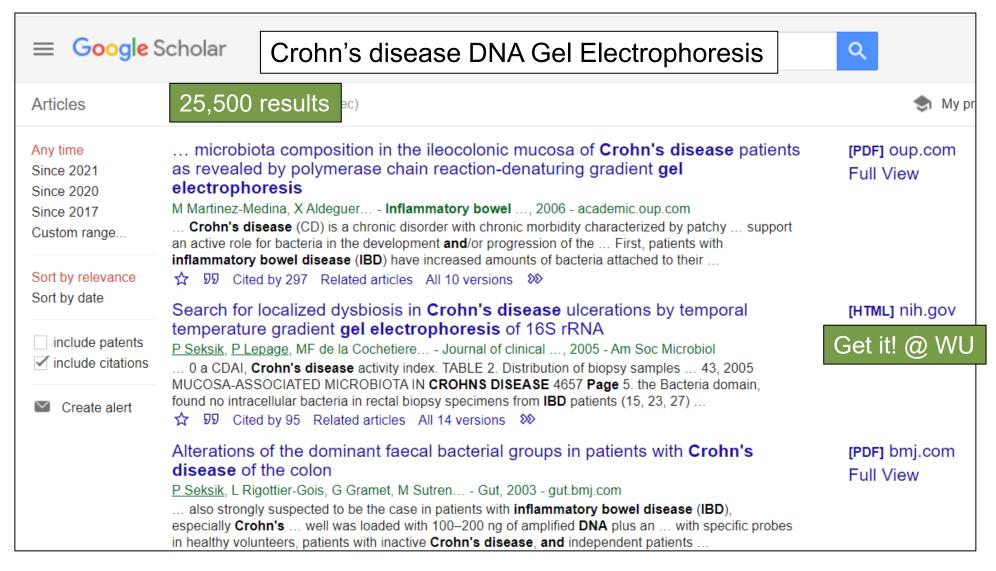
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<u> </u>	Conference Paper • Open access Deep residual learning for image recognition	He, K., Zhang, X., Ren, S., Sun, J.	Proceedings of the IEEE Computer Society Conference	2016	150,330	
	Show abstract V Swan Full Text@Becker 7 View at Publisher 7	Related documents				
2	Conference Paper ImageNet classification with deep convolutional neural networks	Krizhevsky, A., Sutskever, I., Hinton, G.E.	Advances in Neural Information Processing Systems,	2012	80,104	
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More sources

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- Preprints: BioRxiv, MedRxiv, OSF
- Clinicaltrials.gov: trials that aren't completed or published yet
- Google Scholar: Start from our homepage



Google Scholar



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Amy Suiter, author analytics and support: asuiter@wustl.edu

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