YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Articles

NLM Search Engine Results Display Redesigned
e6 2017 February 22 [posted]

MeSH Identifiers in OCLC Records
e5 2017 February 09 [posted]

Beta Version of ClinicalTrials.gov Available for Testing
e4 2017 February 01 [posted]

Updated Algorithm for the PubMed Best Match Sort Order
e3 2017 January 31 [posted]
2017 February 02 [Editor's note added]
2017 February 09 [Editor's note added]

NLM Classification 2017 Winter Edition Now Available
e2 2017 January 27 [posted]

PubMed for Librarians: Six Free Continuing Education Classes
e1 2017 January 06 [posted]

In Brief

NNLM Webinar: Five Questions You Can Answer Using the NCBI Gene Database
b12 2017 February 22 [posted]

TOXMAP Now Includes TRI 2015 Data
b11 2017 February 16 [posted]

Updated SNOMED CT to ICD-10-CM Mapping File
b10 2017 February 13 [posted]

NCBI Genomics Hackathon on March 20-22, 2017
b9 2017 February 06 [posted]

NCBI Minute Webinar: Finding Gene, Protein and Chemical Names, Aliases and Synonyms on February 8, 2017
b9 2017 February 02 [posted]

January 2017 Release of SNOMED CT International Edition Available for Download
b8 2017 January 31 [posted]

Two New Digital Collections: Incunabula and World War II U.S. Government Documents
b7 2017 January 19 [posted]

NLM Webinar Series: "Insider's Guide to Accessing NLM Data: EDirect for PubMed"
b6 2017 January 17 [posted]

Two Updated SNOMED CT Mapping Files Released
b5 2017 January 17 [posted]

NLM Tox Town Gets a Facelift for 2017
b4 2017 January 09 [posted]

NLM Webinar: "2017 MeSH Highlights" on January 27, 2017
b3 2017 January 06 [posted]
2017 February 06 [Editor's Note Added]

Free Online Class: Discovering TOXNET
b2 2017 January 06 [posted]

NNLM Webinars: Teaching Topics—Classroom Assessment on the Fly
b1 2017 January 06 [posted]

NLM News Announcements

NLM Director Dr. Patricia Flatley Brennan Appointed Interim NIH Associate Director for Data Science
2017 January 11

Updated Web Resources

NISO Recommended Practice PIE-J: Presentation & Identification of E-Journals
2017 January 09

Most Popular

Beta Version of ClinicalTrials.gov Available for Testing

NNLM Webinar: Five Questions You Can Answer Using the NCBI Gene Database March 9, 2017

Updated Algorithm for the PubMed Best Match Sort Order

2017 JANUARY–FEBRUARY No. 414

Issue in Process

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.
Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 23 February 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

NNLM Webinar: Five Questions You Can Answer Using the NCBI Gene Database

NNLM Webinar: Five Questions You Can Answer Using the NCBI Gene Database. NLM Tech Bull. 2017 Jan-Feb;(414):b12.

2017 February 22 [posted]

The Gene resource at the National Center for Biotechnology Information (NCBI) is a central hub for accessing nearly all molecular and literature resources for a particular gene. You can easily answer the most common questions and perform the most common tasks by starting in Gene.

In this Webinar you will learn about the structure and contents of the Gene resource and how to use Gene to answer the following questions about a gene:

- Where is the gene located (chromosome and position) in the genome assembly?
- What are the Reference genomic, transcript and protein sequences for the gene?
- What variations are present in the gene and are they associated with disease?
- In what tissues and under what conditions is the gene expressed?
- What are the equivalent genes (homologs) in other species?

Presenters:

Peter Cooper and Bonnie Maidak, NCBI

Date and time: March 9, 2017, 1:00 PM - 2:00 PM EST

To register: https://nnlm.gov/class/five-questions-you-can-answer-using-ncbi-gene-database/7094

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.
Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 22 February 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

TOXMAP Now Includes TRI 2015 Data

TOXMAP Now Includes TRI 2015 Data. NLM Tech Bull. 2017 Jan-Feb;(414):b11.

2017 February 16 [posted]

[Editor's Note: This is a reprint of an announcement published as an NLM Toxicology and Environmental Health Information email update from the NLM Division of Specialized Information Services. To automatically receive news on resources, services, and outreach in toxicology and environmental health please see the subscribe page.]

The National Library of Medicine TOXMAP now includes 2015 Toxics Release Inventory (TRI) data.

This corresponds to the most recent Toxics Release Inventory National Analysis published by the US Environmental Protection Agency (EPA).

TOXMAP maps the TRI chemicals reported to the EPA, as required by the Emergency Planning and Community Right to Know Act (EPCRA).

A complete list of TRI chemicals required to be reported to the EPA can be found on their Web site.

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.

Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 17 February 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

Updated SNOMED CT to ICD-10-CM Mapping File

Updated SNOMED CT to ICD-10-CM Mapping File. NLM Tech Bull. 2017 Jan-Feb;(414):b10.

2017 February 13 [posted]

The National Library of Medicine is pleased to announce the release of an updated SNOMED CT to ICD-10-CM mapping file.

The purpose of the SNOMED CT to ICD-10-CM map is to support semi-automated generation of ICD-10-CM codes from clinical data encoded in SNOMED CT for reimbursement and statistical purposes. This updated mapping file is derived from the September 2016 SNOMED CT United States (US) Edition and the 2017 version of ICD-10-CM. There are a total of 100,340 SNOMED CT concepts mapped in this updated release.

The updated release can be downloaded now as a standalone file with your UTS login. Additionally, the mapping file will be packaged as part of the March 2017 SNOMED CT US Edition, set to be released in March.

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.
Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 13 February 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

NCBI Genomics Hackathon on March 20-22, 2017

NCBI Genomics Hackathon on March 20-22, 2017. NLM Tech Bull. 2017 Jan-Feb;(414):b9.

2017 February 06 [posted]

On March 20 - 22, 2017, NCBI will host a genomics hackathon on the NIH campus. This hackathon will focus on advanced bioinformatics analysis of next generation sequencing data and metadata. This event is for students, postdocs and investigators, or other researchers already engaged in the use of genomics data or pipelines for genomic analyses from next generation sequencing data. However, there are projects available to other non-scientific developers, mathematicians, or librarians. The event is open to anyone selected for the hackathon who is able to travel to NIH.

Date and time: March 20-22, 2017

To apply: https://goo.gl/forms/T7I3oKKfPpctiioD2

Applications are due by **February 22, 2017 at 1:00 PM EST.**

Full details for the hackathon are available in the NCBI News: http://go.usa.gov/x96qg

Please contact ben.busby@nih.gov with any questions.

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.
Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 07 February 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

NCBI Minute Webinar: Finding Gene, Protein and Chemical Names, Aliases and Synonyms on February 8, 2017

NCBI Minute Webinar: Finding Gene, Protein and Chemical Names, Aliases and Synonyms on February 8, 2017. NLM Tech Bull. 2017 Jan-Feb;(414):b9.

2017 February 02 [posted]

On February 8, 2017, NCBI staff will discuss the systems in the NCBI Gene and PubChem resources that identify and correlate various names used for genes, proteins, and chemicals.

Date and time: February 8, 2017 12:00 PM EST

To register: https://attendee.gotowebinar.com/register/6498213056303481858

After registering, you will receive a confirmation email with information about attending the Webinar. After the live presentation, the Webinar will be uploaded to the NCBI YouTube channel. Any related materials will be accessible on the Webinars and Courses page; you can also learn about future Webinars on this page.

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.
Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 02 February 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

January 2017 Release of SNOMED CT International Edition Available for Download

January 2017 Release of SNOMED CT International Edition Available for Download. 2017 Jan-Feb;(414):b8.

2017 January 31 [posted]

The January 2017 release of SNOMED CT International Edition is available now for download by UMLS Licensees. The SNOMED CT International Edition contains SNOMED CT files in Release Format 2 (RF2) only, distributed in a zipped file.

Please note the new file naming convention of the International Edition:

- SnomedCT_InternationalRF2_Production_20170131T120000.zip

The March 2017 US Edition will follow the new file naming convention as well.

The Release Notes and OWL Resource file have been separated from the International Edition release package. They can be downloaded from the NLM International Release of SNOMED CT page.

Additional information about release file changes, including deprecation and withdrawal of support for RF1, can be found on the IHTSDO Web site. Please visit the IHTSDO Known Issue Register, which details any known issues with the SNOMED CT International Edition release.

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.

Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 31 January 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

Two New Digital Collections: Incunabula and World War II U.S. Government Documents

Two New Digital Collections: Incunabula and World War II U.S. Government Documents. NLM Tech Bull. 2017 Jan-Feb;(414):b7.

2017 January 19 [posted]

[Editor's Note: This is a reprint of an announcement published on the NLM Web site on January 12, 2017. To be notified of announcements like this subscribe to the NLM-Announces email list.]

The National Library of Medicine (NLM), the world's largest medical library and a component of the National Institutes of Health, is pleased to announce the addition of two new collections to NLM Digital Collections, the Library's free online repository of biomedical resources including books, still images, videos, and maps.

Incunabula: A collection of books and broadsides printed in Europe before 1501 includes over forty items from the Library's world-renowned collection of more than 580 incunabula on subjects relating to science and medicine, from printed classical works of Galen and Hippocrates to materials on the plague and other "pestilences." Incunabula (from the Latin for "cradle") are books and other materials produced with movable type on a printing press between the mid-1450s through the end of 1500 — the infancy of the age of printing. This digital collection will grow over time as the Library scans more incunabula titles.

Highlights of this new collection include:

- *De pollutione nocturna* by Jean Gerson (Cologne, 1466), considered the oldest medical book published in the West;
- the oldest known printed illustration of conjoined twins, from Jacob Locher's *Carmen heroicum de partu monstrifero* (Ingolstadt, 1499);
- *Herbarius latinus* (1485) and *Ortus sanitatis* (1491), two popular and treasured herbals, each with hand-colored illustrations of medicinal plants;
- a hand-colored copy of *Astrolabium planu[m] in tabulis ascendens* by Johannes Angelus (Augsburg, 1488), with over 400 woodcut illustrations and 80 miniatures depicting the influence of the 12 signs of the zodiac on everyday life (see Figure 1).

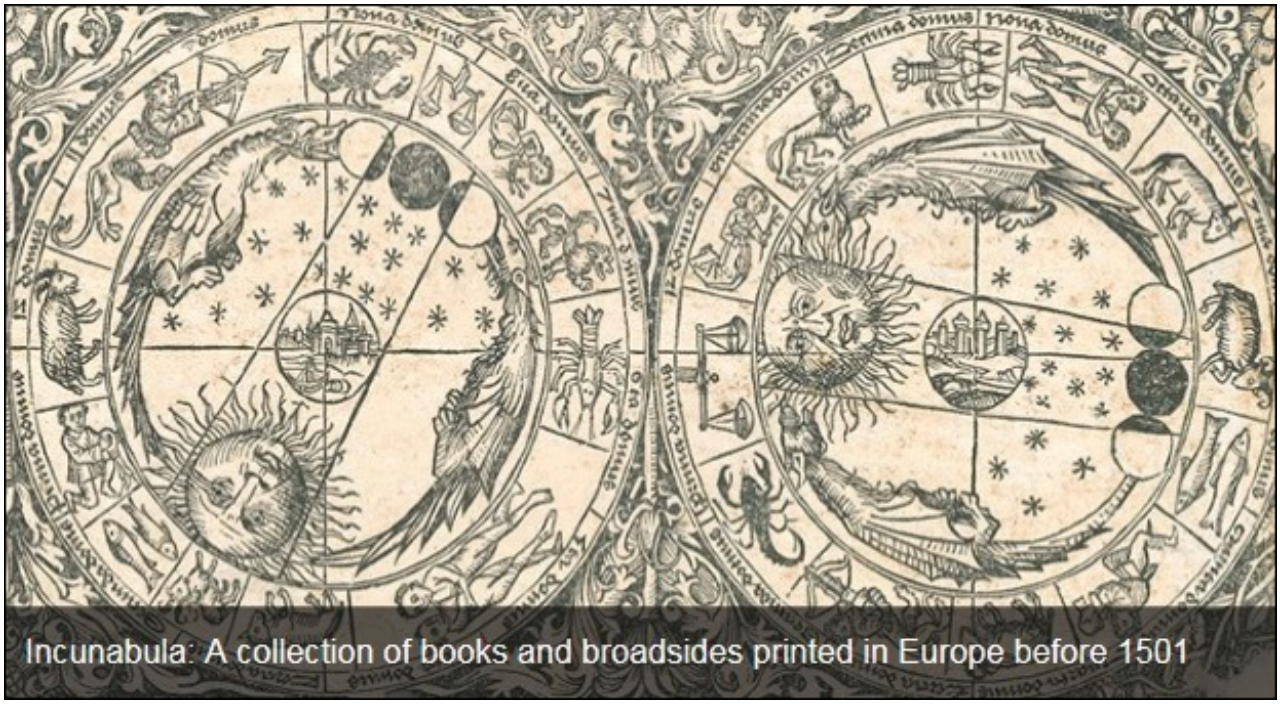

Figure 1: An item from the Incunabula collection.

World War 2, 1939-1949: A collection of U.S. government documents includes more than 1,500 federal, state, and local government publications. Among the variety of materials included are government reports, first aid manuals, informational pamphlets, and recruitment materials that demonstrate the efforts of government, military personnel, health professionals, and scientists, among others, on the home front and overseas during and immediately following the Second World War.

Highlights of this new collection include:

- publications on the challenges introduced by the new weaponry of chemical warfare, including an illustrated field manual entitled; *Defense against chemical attack*, released by the U.S. Army in 1940;
- a 1945 self-care guide entitled Keep well! Here's How published by the War Shipping Administration that warns of the dangers of malaria, dysentery, and venereal disease;
- recruitment brochures, reports, and other materials that display the changing role and status of the military nurse during and after the war;
- *Final report of the Committee on Medical and Hospital Services of the Armed Forces* (1949), and other documents originally classified as "Restricted" that now bear "Unclassified" stamps, many of which were signed by Dr. Frank B. Rogers, director of the Library from 1949 until 1963 (see Figure 2).

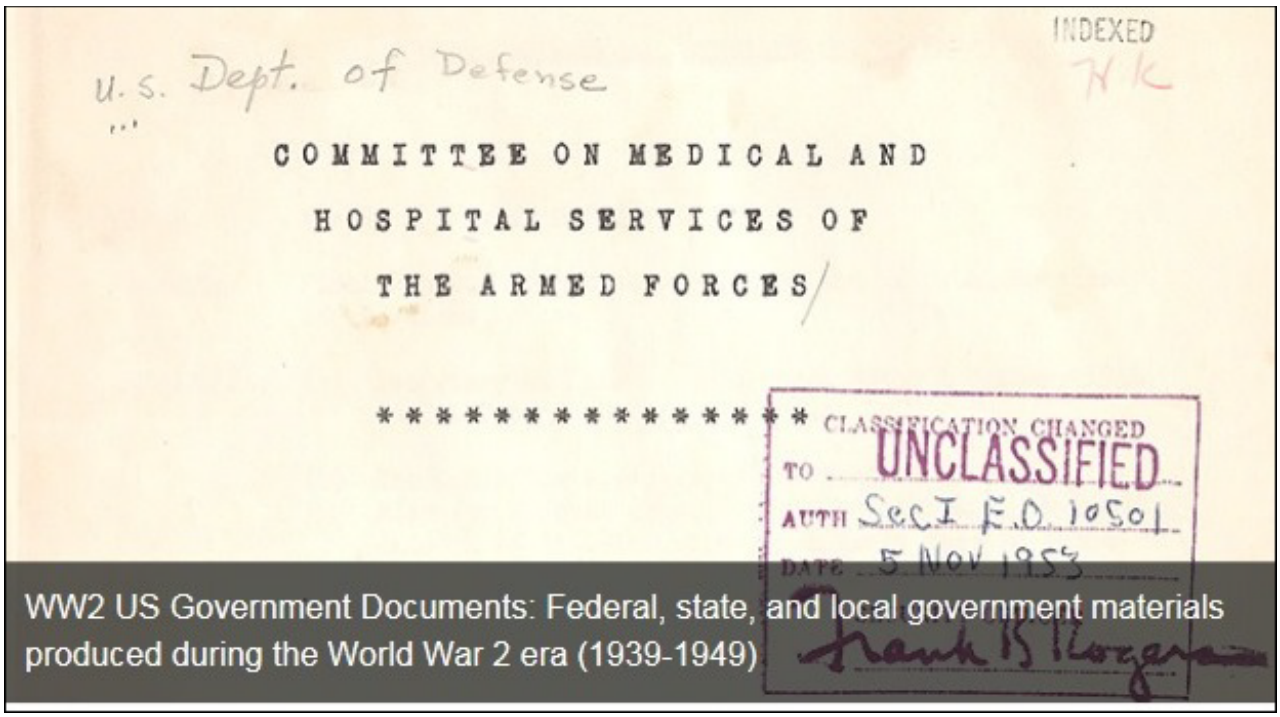

Figure 2: An item from the World War 2, 1939-1949 collection.

All of the content in NLM Digital Collections is freely available worldwide and, unless otherwise indicated, in the public domain. As with all printed materials added to the NLM Digital Collections, items from these new collections will also be included in the Internet Archive, and as part of the Medical Heritage Library through the ongoing collaboration with that international digital curation collaborative.

For more information about the content of these two new digital collections, please contact the History of Medicine Division Reference Desk at hmdref@nlm.nih.gov.

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.

Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players

U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894

National Institutes of Health *NIH...Turning Discovery into Health*®

U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 19 January 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

NLM Webinar Series: "Insider's Guide to Accessing NLM Data: EDirect for PubMed"

NLM Webinar Series: "Insider's Guide to Accessing NLM Data: EDirect for PubMed". NLM Tech Bull. 2017 Jan-Feb;(414):b6.

2017 January 17 [posted]

Beginning February 21, 2017, the National Library of Medicine (NLM) will present the three-part Webinar series, "Insider's Guide to Accessing NLM Data: EDirect for PubMed."

This series of workshops will introduce new users to the basics of using EDirect to access exactly the PubMed data you need, in the format you need. Over the course of three 90-minute sessions, students will learn how to use EDirect commands in a Unix environment to access PubMed, design custom output formats, create basic data pipelines to get data quickly and efficiently, and develop simple strategies for solving real-world PubMed data-gathering challenges. No prior Unix knowledge is required; novice users are welcome!

This series of classes involves hands-on demonstrations and exercises, and we encourage students to follow along. Before registering for these classes, we strongly recommend that you:

- Watch the first Insider's Guide class "Welcome to E-utilities for PubMed" or be familiar with the basic concepts of APIs and E-utilities
- Be familiar with structured XML data (basic syntax, elements, attributes, etc.)
- Have access to a Unix command-line environment on your computer (see our Installing EDirect page for more information)
- Install the EDirect software (see our Installing EDirect page for more information)

Due to the nature of this class, registration will be limited to 50 students per offering.

Registration is currently open for the February/March 2017 series:

- Part 1: Getting PubMed Data, Tuesday, February 21, 1:00 PM - 2:30 PM EST
- Part 2: Extracting Data from XML, Tuesday, February 28, 1:00 PM - 2:30 PM EST
- Part 3: Building Practical Solutions, Tuesday, March 7, 1:00 PM - 2:30 PM EST

Students are expected to attend Part 1, Part 2, and Part 3 in a single series.

To register, and for more information, visit: https://goo.gl/EBALrx.

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.
Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 17 January 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

Two Updated SNOMED CT Mapping Files Released

Two Updated SNOMED CT Mapping Files Released. NLM Tech Bull. 2017 Jan-Feb;(414):b5.

2017 January 17 [posted]

NLM is pleased to announce the availability of two updated SNOMED CT mapping files:

1. ICD-9-CM Diagnostic Codes to SNOMED CT map
   The map is derived from versions ICD-9-CM 2013 and September 2016 US Edition of SNOMED CT. The goal of this mapping file is to facilitate the translation of legacy data and the transition to prospective use of SNOMED CT for patient problem lists.

2. ICD-9-CM Procedure Codes to SNOMED CT map
   The map is derived from versions ICD-9-CM 2013 and September 2016 US Edition of SNOMED CT. This map is designed to support a transition from the use of legacy ICD-9-CM procedure codes to SNOMED CT.

The mapping files are available for download by UMLS licensees from the UMLS Terminology Services (UTS).

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.
Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 17 January 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

NLM Tox Town Gets a Facelift for 2017

NLM Tox Town Gets a Facelift for 2017. NLM Tech Bull. 2017 Jan-Feb;(414):b4.

2017 January 09 [posted]

[Editor's Note: This is a reprint of an announcement published as an NLM Toxicology and Environmental Health Information email update from the NLM Division of Specialized Information Services. To automatically receive news on resources, services, and outreach in toxicology and environmental health please see the subscribe page.]

Tox Town is updated with an easier to navigate homepage and new color scheme.

Engaging photo-realistic neighborhoods are now programmed with HTML 5 so you can easily view the site on your computer and hand-held devices. Come explore our neighborhoods where you will find the same trusted information you have come to expect from Tox Town.

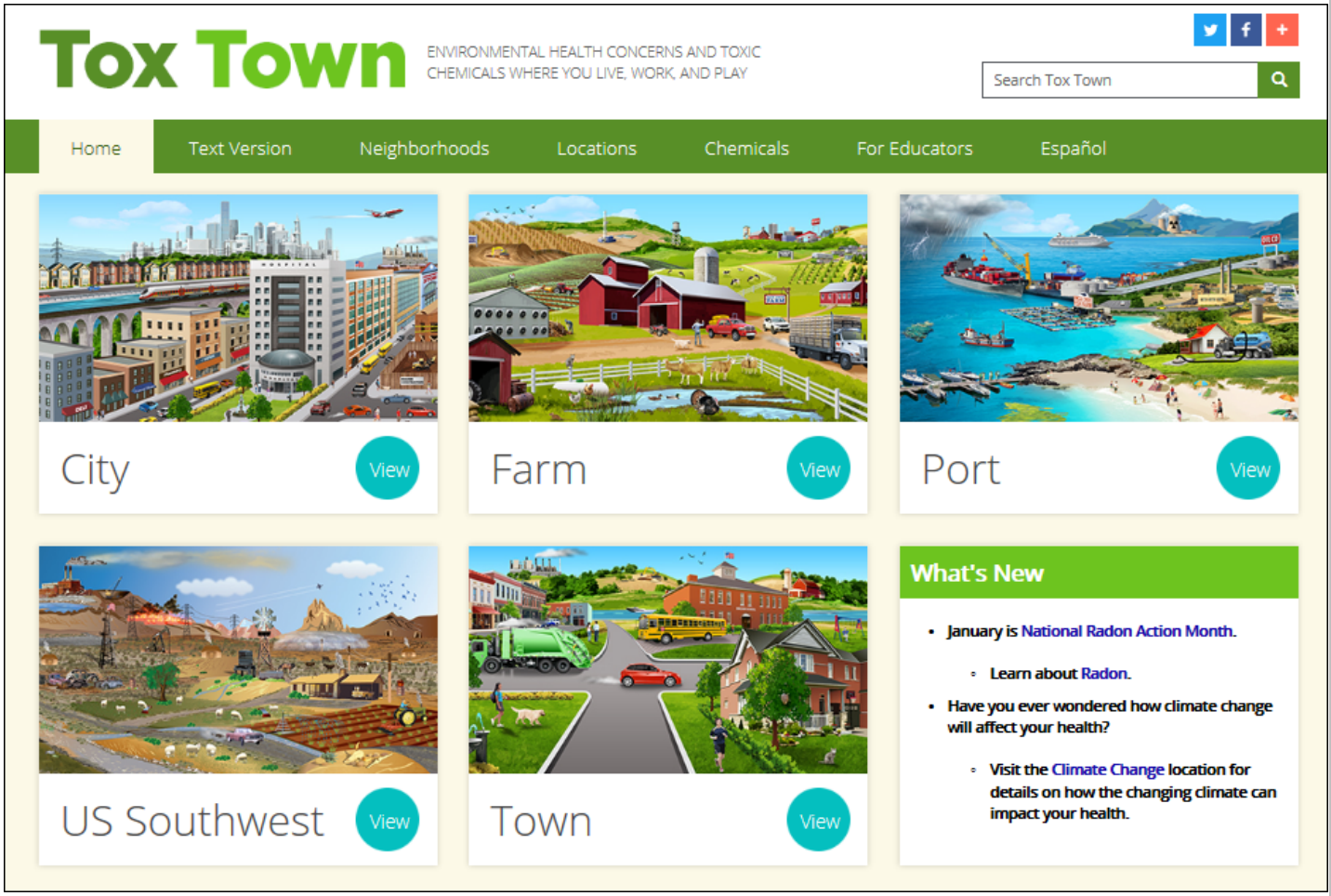

Figure 1: Redesigned Tox Town homepage.

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.

Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health®*
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 09 January 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

NLM Webinar: "2017 MeSH Highlights" on January 27, 2017

NLM Webinar: "2017 MeSH Highlights" on January 27, 2017. NLM Tech Bull. 2017 Jan-Feb;(414):b3.

2017 January 06 [posted]
2017 February 06 [Editor's note added]

[Editor's note added February 6, 2017: A recording of the Webinar is available.]

On January 27, 2017, join NLM staff for a highlights tour of the 2017 Medical Subject Headings (MeSH). A 30-minute presentation will feature a new subheading; new protein classes; additional dietary supplement concepts; changes to both the phenomena and technologies trees; and a new MeSH Browser. Following the presentation, Indexing and MeSH experts will be available to answer your questions.

Date and time: Friday, January 27, 2017, 12:00 pm EST

To register, go to: https://nih.webex.com/nih/onstage/g.php?MTID=e706f945f19ca2f42b59b9aaeb78418cc

A recording of the presentation will be posted following the event.

For more information about 2017 MeSH, see *What's New for 2017 MeSH* and the Introduction to MeSH - 2017.

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.
Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 06 February 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

Free Online Class: Discovering TOXNET

Free Online Class: Discovering TOXNET. NLM Tech Bull. 2017 Jan-Feb;(414):b2.

2017 January 06 [posted]

Discover TOXNET and other NLM environmental health databases with a guided, self-paced, online course. TOXNET is a Web-based system of databases covering hazardous chemicals, environmental health, toxic releases, chemical nomenclature, poisoning, risk assessment, regulations plus occupational safety and health.

Discovering TOXNET is taught online in thirteen independent modules. The modules cover TOXLINE, ChemIDplus, TRI, TOXMAP, Hazardous Substances Data Bank, IRIS, Haz-Map, LactMed, WISER, CHEMM, REMM, and a short introductory module.

Students work on their own over a period of 4 weeks to complete any modules of interest. Variable MLA Continuing Education credit is available. Each module offers from 0.5 to 2.0 credit hours, for a total of up to 12 hours. This course is offered through the Moodle course management system and includes guided interactive online tutorials, videos, and discovery exercises. Instructors will be available to answer questions via email and provide assistance throughout the course.

Dates: March 1, 2017 to March 1, 2017
To register: https://nnlm.gov/class/discovering-toxnet/6698

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.
Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 06 January 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

NNLM Webinars: Teaching Topics—Classroom Assessment on the Fly

NNLM Webinars: Teaching Topics—Classroom Assessment on the Fly. NLM Tech Bull. 2017 Jan-Feb;(414):b1.

2017 January 06 [posted]

How can we use assessment effectively in the classroom? Join us for a one-hour program on classroom assessment techniques. After a brief review of the types assessment out there, we will review a number of different methods you can use for instantaneous feedback. From low tech polling to one-minute papers, you will leave this session with new ideas for assessing learning "on the fly" – no gradebook required.

Date and time: Wednesday, Jan 11, 2017, 1:00 PM - 2:00 PM EST
To register: https://nnlm.gov/class/teaching-topics-classroom-assessment-fly/6653

Date and time: Wednesday, Feb 15, 2017, 1:00 PM - 2:00 PM EST
To register: https://nnlm.gov/class/teaching-topics-classroom-assessment-fly/6654

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.
Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 06 January 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

NLM Search Engine Results Display Redesigned

Chan K., Dine B. & Widzer J. NLM Search Engine Results Display Redesigned. NLM Tech Bull. 2017 Jan-Feb;(414):e6.

2017 February 22 [posted]

On February 16, 2017, the National Library of Medicine (NLM) released a new design for its main Web site search engine results page. The new design is responsive and is a result of usability testing, analytics, and user feedback. Searches for health topics will feature a MedlinePlus result on the right (see **A** in Figure 1). Search results from PubMed and the LocatorPlus catalog record will display separately, also on the right (see **B** and **C** respectively in Figure 1). Searches for an NLM product or service will highlight a curated result in the "NLM Recommended Resources" box (see Figure 2).

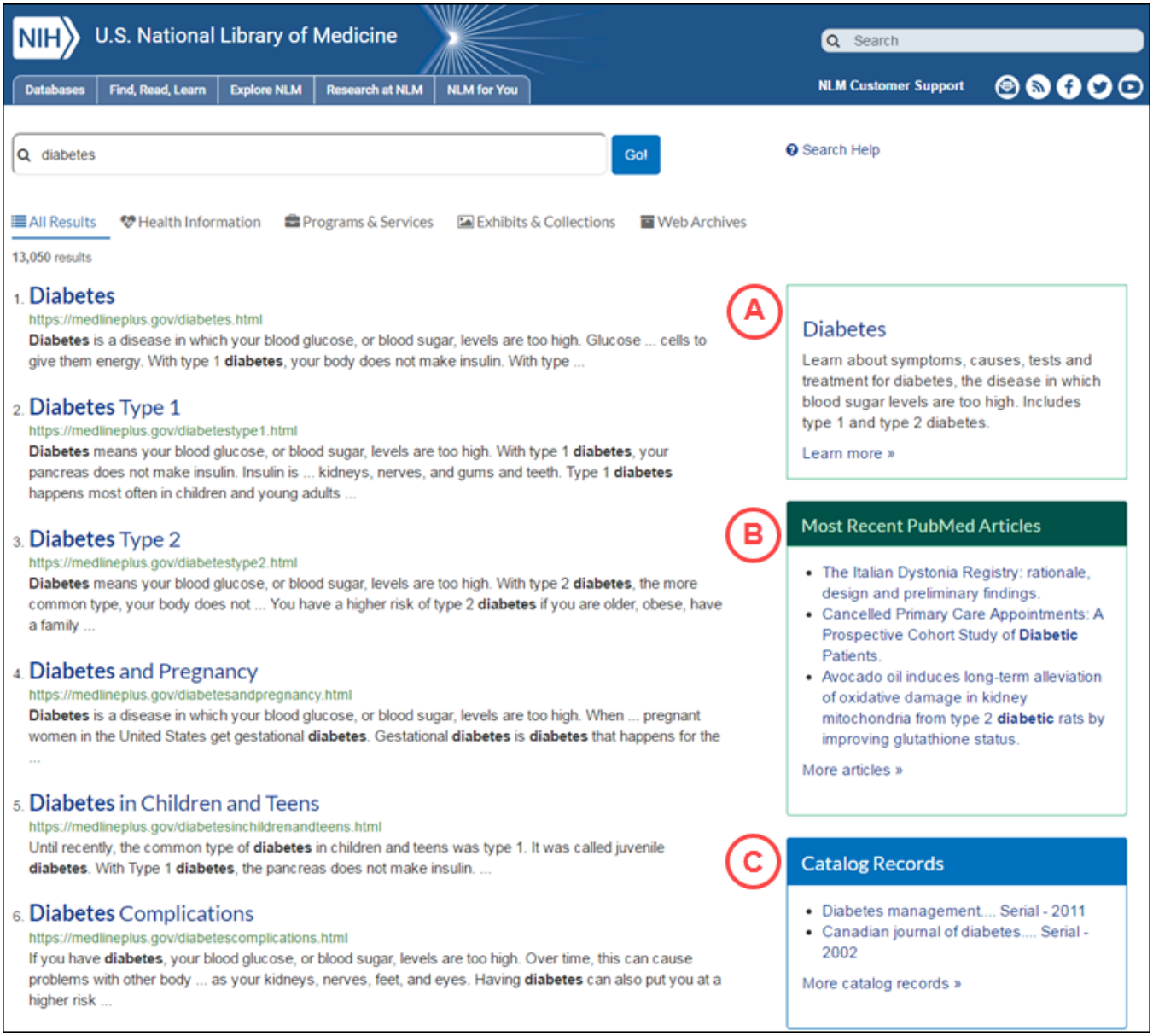

Figure 1: Highlighted results for MedlinePlus, PubMed, and LocatorPlus catalog.

The facets have been combined into four basic categories and now can be found above the results display (see Figure 2). They include:

- **Health Information:** MedlinePlus encyclopedia pages, drug monographs, health topic pages, supplement pages, and MedlinePlus Magazine pages.
- **Programs and Services:** NLM main Web site pages including NCBI and SIS.
- **Exhibits and Collections:** History of Medicine Division exhibition sites and the Digital Collections records.
- **Web Archives:** older Web pages from the NLM main Web site.

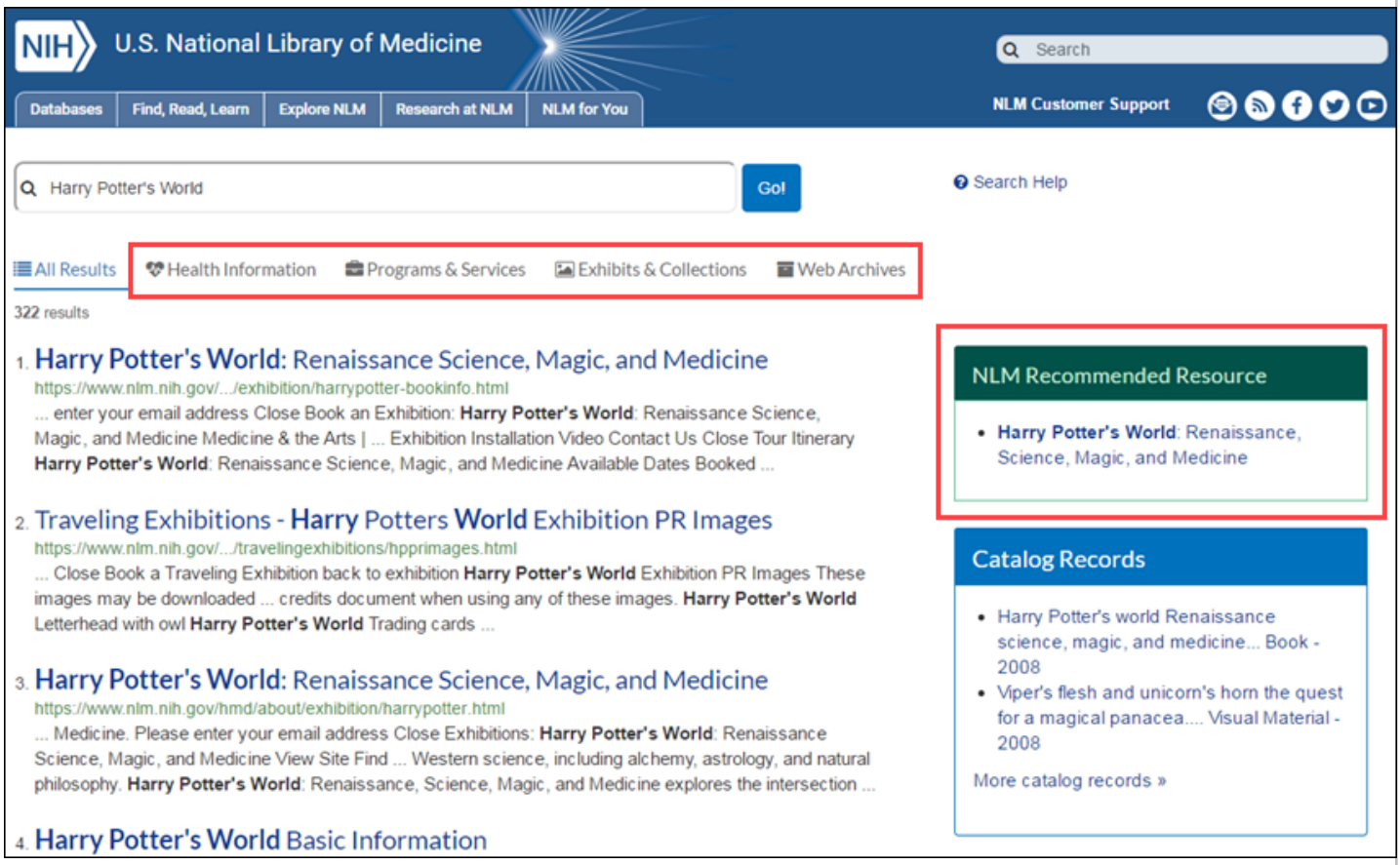

Figure 2: Search facets and NLM Recommended Resource results.

By Katie Chan, Brooke Dine, and Joanna Widzer
Reference and Web Services Section

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.

Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 22 February 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

MeSH Identifiers in OCLC Records

Boehr D. MeSH Identifiers in OCLC Records. NLM Tech Bull. 2017 Jan-Feb;(414):e5.

2017 February 09 [posted]

Users of OCLC Connexion® may have noticed that some records containing Medical Subject Headings (MeSH) subjects (MARC tag 650 with a second indicator of 2) include a subfield $0 with a MeSH authority control number.

Example: 650 #2 Lung Neoplasms $0(DNLM)D008175

This comes from a recent OCLC process to systematically control MeSH headings in records new to or newly replaced in WorldCat, based on data supplied in NLM MeSH-MARC files. When a heading is controlled, a link is made between the bibliographic record and the MeSH authority record, so if the MeSH changes, all the associated linked bibliographic records are updated as well.

Since 2016, users of WorldShare Record Manager are also able to control a MeSH heading as part of the cataloging process. In Record Manager, a controlled heading appears as underlined and in blue in the bibliographic record, and when you mouse over the controlled heading, the MeSH authority control number is displayed.

Example:650 #2 Lung Neoplasms
($0(DNLM)D008175 presented as mouse over)

Connexion users are not able to control MeSH headings, but any MeSH heading that is controlled in Record Manager will display in Connexion with a subfield $0 containing the MeSH authority control number. This subfield $0 should not be removed from the master records in WorldCat.

By Diane Boehr
Cataloging & Metadata Management Section

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

Beta Version of ClinicalTrials.gov Available for Testing

Tse T. Beta Version of ClinicalTrials.gov Available for Testing. NLM Tech Bull. 2017 Jan-Feb;(414):e4.

2017 February 01 [posted]

A new beta version of ClinicalTrials.gov is available for user testing. The test site can be accessed from a link on the homepage (see Figure 1) or directly at https://clinicaltrials.gov/beta/. The beta site will be available for at least one month to obtain feedback from the public. The new version of ClinicalTrials.gov was developed to provide new features to support searching for clinical studies.

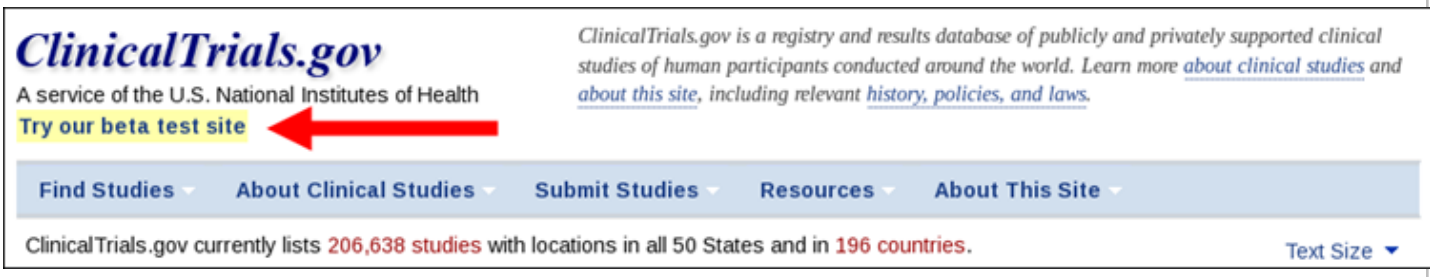

Figure 1: Link to beta testing from ClinicalTrials.gov homepage.

Key features of the beta version include:

- "Filters" for refining search results
- "Show/Hide Columns" for customizing the display of search results
- "Saved Studies" for storing and retrieving particular study records of interest

Additionally, "Basic Search" has been replaced with "Fielded Search," which provides more options for searching specific categories such as Conditions/Diseases and Study Location.

The new beta version accesses the same data as the operational version of ClinicalTrials.gov and allows users to compare the search functionality between the two systems.

Note: The content under the "Find Studies" menu item, including the "How to Search" pages on the beta version, have not yet been updated to reflect all of the new features and will remain "under construction" during the beta test period.

We welcome your comments, questions, and suggestions on this new beta version of ClinicalTrials.gov. Please respond to the online survey by clicking on the "Give Us Feedback" link in the top right corner on the beta site (see Figure 2).

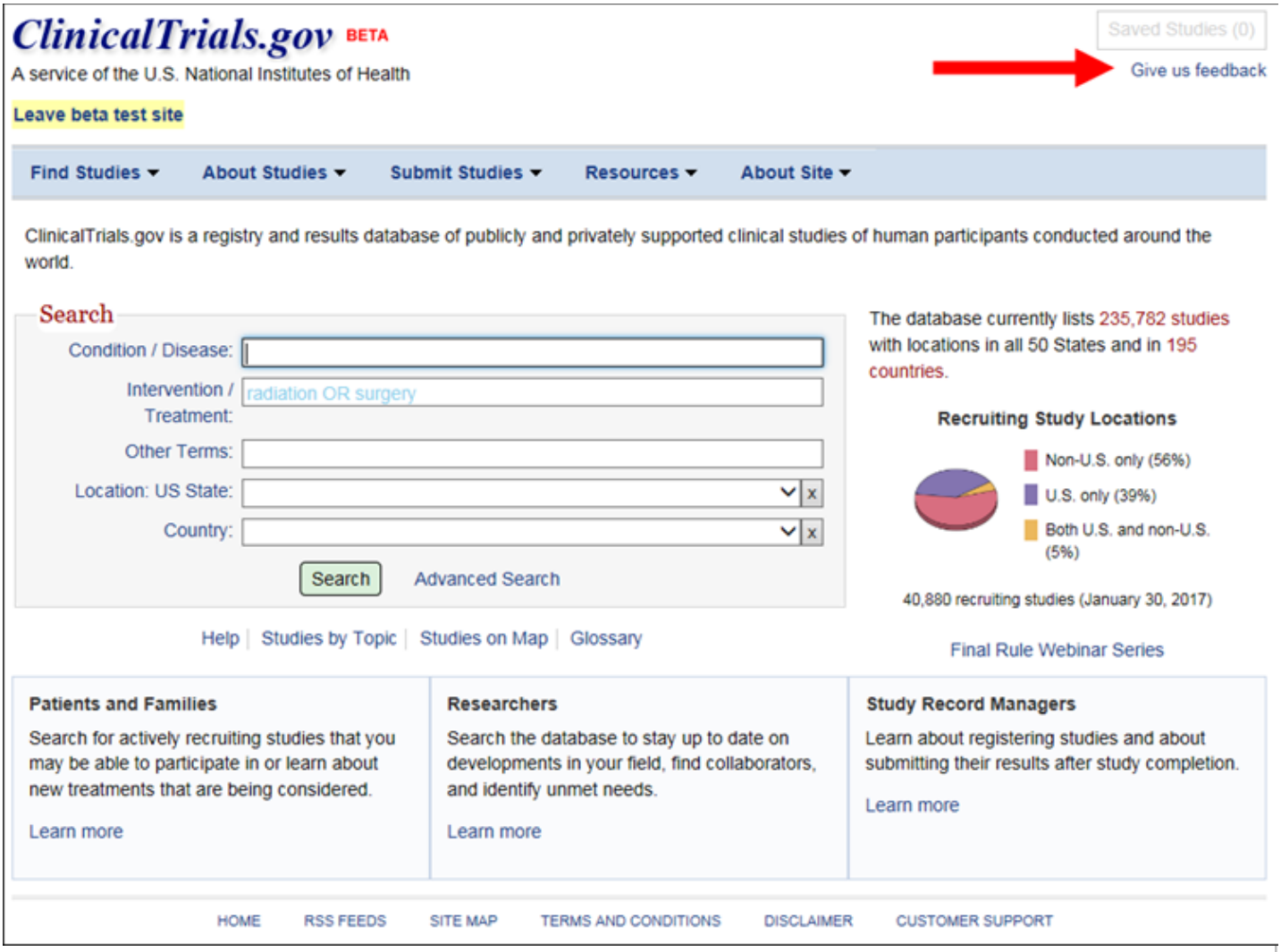

Figure 2: "Give Us Feedback" link on ClinicalTrials.gov beta site.

By Tony Tse
National Center for Biotechnology Information

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.

Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 01 February 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

Updated Algorithm for the PubMed Best Match Sort Order

Collins M. Updated Algorithm for the PubMed Best Match Sort Order. NLM Tech Bull. 2017 Jan-Feb;(414):e3.

2017 January 31 [posted]
2017 February 02 [Editor's note added]
2017 February 09 [Editor's note added]

An enhanced relevance algorithm for the Best Match sort order is coming to PubMed. The new algorithm incorporates machine learning to re-rank the top articles returned for improved relevance. When you select the Best Match option (see Figure 1, A), your total number of results might change.

Figure 1: PubMed search results sorted by Best Match.

The standard PubMed Best Match sort is based on a weighted term frequency algorithm. This approach calculates the frequency with which terms appear in PubMed records. Those frequencies are then applied in a weighted fashion to return a ranked list of PubMed citations that match your query terms.

The new relevance algorithm includes machine learning to re-rank the top articles returned. This algorithm combines over 150 signals that are helpful for finding best matching results. Most of these signals are computed from the number of matches between the search terms and the PubMed record, while others are either specific to a record (e.g., publication type; publication year) or specific to a search (e.g., search length). The new ranking model was built on relevance data obtained from anonymous PubMed search logs that were aggregated over an extended period of time. See PubMed Help for more information on the standard relevance algorithm and machine learning.

Because the Best Match results are calculated using a new machine learning environment, you might notice a slight change in total search results when sorting by "Best Match." *[Editor's note: The following sentence was updated on February 9, 2017 to clarify the limit for the best matching results.]*Users who sort by "Best Match" are typically clicking through citations on the first page of retrieval; therefore, we limit the list of best matching results to 10,000 citations when applicable. The new machine learning system achieves significant improvement in retrieval performance over the weighted term frequency algorithm alone.

Additionally, the "Search details" portlet will be replaced with "Best match search information" (see Figure 1, B and Figure 2) that will display translations to MeSH, etc., and additional synonyms under the "See more…" link (see Figure 1, C and Figure 2). The Search button will not be available for the new portlet used for Best Match results.

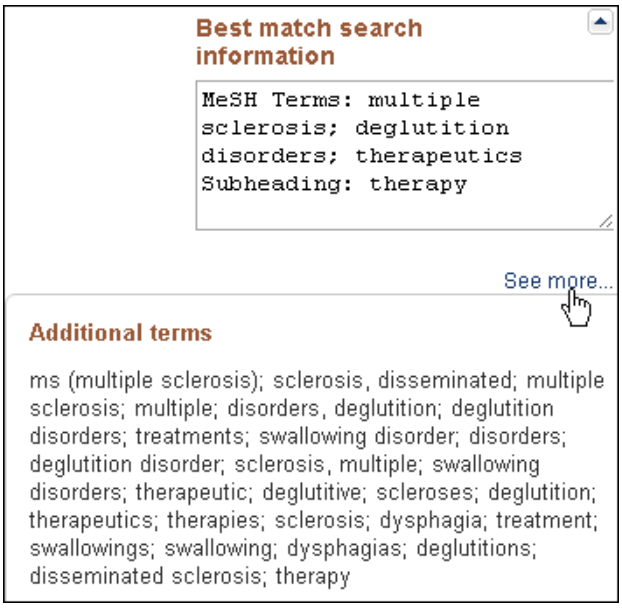

Figure 2: "Best match search information" portlet.

[Editor's note: This clarification was added on February 2, 2017.]
Please note that the "Best match search information" portlet will display only when the Best Match sort display is selected. If the other sort orders are selected, then the "Search details" portlet will display.

If you would like to use Best Match as your default sort order for PubMed results, you may change your preferences in My NCBI.

By Marie Collins
National Center for Biotechnology Information

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.

Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 09 February 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

NLM Classification 2017 Winter Edition Now Available

Willis SR. NLM Classification 2017 Winter Edition Now Available. 2017 Jan-Feb;(414):e2.

2017 January 27 [posted]

As of 2017, the *NLM Classification*, available online at http://www.nlm.nih.gov/class/, has moved from an annual spring update to twice-yearly updates.

Scope of Revision of the 2017 Winter Edition

The 2017 MeSH (Medical Subject Headings) vocabulary was evaluated for inclusion in the *Classification* index. Several additions and changes were made to the Index and Schedules based on this review. All main index headings are now linked to the 2017 vocabulary in the MeSH Browser. Additional minor updates were made to the Index and Schedules.

Summary Statistics for the 2017 Winter Edition

- 92 index main headings added (82 from 2017 MeSH)
- 137 index entries modified
- 10 index headings deleted
- 5 class numbers added
- 44 class number captions or notes modified
- No class numbers canceled

Examples of Additions and Changes Based on MeSH 2017

Addition of *Person* Terms

The majority of the new Category M (Persons) terms from MeSH 2017 were added to the *Classification* index. For new specialist terms, the corresponding specialty terms in the index were modified. Also, notes were added to the Schedules to clarify the classification of the specialist/specialty only in the form number for the profession and the classification of the specialty and disease in the general works number. For example, the information about biography was removed from the index term *Cardiology* and added to the new term, *Cardiologists*. Instructional notes were added to WG 21 (Profession), WG 100 (General works) and WG 140 (Cardiovascular diseases) clarifying the classification practice of specialty and/or disease.

Changes to Main Index Headings

Numerous main index entries and cross references were modified to reflect changes in the MeSH vocabulary.

For example:

- *Dislocations* was changed to *Joint Dislocations*.
- *Renal Osteodystrophy* was changed to *Chronic Kidney Disease-Mineral and Bone Disorder*.
- *Pharmacists' Aides* was changed to *Pharmacy Technicians*. [The caption at QV 21.5 was also updated to reflect the change in terminology]
- The cross reference *Gays* was removed from *Homosexuality* and added to the new MeSH 2017 term, *Sexual Minorities*.

Deletion of *Processes* Terms

With MeSH 2017, most G tree "Processes" headings were deleted and made cross references to the parent "Phenomena" heading. For example, the index entry for *Biophysical Processes* was deleted and the term was made a cross reference to *Biophysical Phenomena*.

Class Numbers Added —2017 Winter Edition

New Number	Class Name
WG 180	Cardiac rehabilitation
WM 420.5.E3	Emotion-focused therapy
WM 425.5.A5	Anger management therapy
WM 425.5.A7	Applied behavior analysis
WZ 112.5.V4	Veterinarians

2017 Summer Edition

The 2017 summer version will be published in mid-to-late August 2017, and will encompass the ongoing systematic review of particular classification schedules and other miscellaneous updates. The PDF version will be published annually in conjunction with the summer version. To learn more about the *NLM Classification* see the Fact Sheet.

By Sharon Willis
Cataloging and Metadata Management Section, Technical Services Division

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.

Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 27 January 2017

YOUR SOURCE FOR THE LATEST SEARCHING INFORMATION
NLM TECHNICAL BULLETIN
U.S. NATIONAL LIBRARY OF MEDICINE | NATIONAL INSTITUTES OF HEALTH

Table of Contents: 2017 JANUARY–FEBRUARY No. 414

PubMed for Librarians: Six Free Continuing Education Classes

PubMed for Librarians: Six Free Continuing Education Classes. NLM Tech Bull. 2017 Jan-Feb;(414):e1.

2017 January 06 [posted]

Join the National Network of Libraries of Medicine Training Office (NTO) for our PubMed for Librarians series. Details and links to registration are below. All times are Eastern.

PubMed for Librarians: Introduction
Learn about the difference between PubMed and MEDLINE, how to run a basic PubMed search, assess your search results, analyze search details, customize PubMed with My NCBI, search for a known citation; plus, brief introductions to MeSH, automatic term mapping, search tags and subheadings.
Date and time: Thursday, January 19, 2017, 1:00 PM - 2:30 PM EST
To register: https://nnlm.gov/class/pml_intro/369

PubMed for Librarians: MeSH
Learn about the National Library of Medicine Medical Subject Headings (MeSH) database. We will talk about the four different types of MeSH terms and how searchers can benefit from using MeSH to build a search. We will investigate the structure of the MeSH database and look at the components of a MeSH record.
Date and time: January 25, 2017, 1:00 PM - 2:30 PM EST
To register: https://nnlm.gov/class/pml_mesh/370

PubMed for Librarians: Automatic Term Mapping
Learn about how PubMed uses Automatic Term Mapping (ATM) to map your keyword searches to the controlled vocabulary of the MeSH database. Learn how ATM helps you search effectively with keywords. We will also look at the explosion feature, what is and isn't included in Search Details, and we will explore how to search for phrases in PubMed.
Date and time: February 1, 2017, 1:00 PM - 2:30 PM EST
To register: https://nnlm.gov/class/pml_atm/371

PubMed for Librarians: Building and Refining a Search
This class will focus on using some of the tools and features built into PubMed that are designed to help you search more effectively. We will learn how to use MeSH terms the way Indexers do and we will explore the Index feature to build a search and explore a topic. We will explore the Filters Sidebar and Topic-Specific Queries.
Date and time: February 8, 2017, 1:00 PM - 2:30 PM EST
To register: https://nnlm.gov/class/pml_building/374

PubMed for Librarians: Using PubMed's Evidence-Based Search Features
This class will explore Medical Subject Headings (MeSH) used for indexing study design. We will look at three PubMed features that facilitate evidence-based searching, and demonstrate how to customize My NCBI Filters to quickly locate specific publication types.
Date and time: February 16, 2017, 1:00 PM - 2:30 PM EST
To register: https://nnlm.gov/class/pml_ebm/373

PubMed for Librarians: Customization with My NCBI
Learn about the advantages of creating a My NCBI account, managing and manipulating settings in your My NCBI account, identify available filters in your My NCBI account, and create a custom filter.
Date and time: February 23, 2017, 1:00 PM - 2:30 PM EST
To register: https://nnlm.gov/class/pml_ncbi/372

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.

ISSN 2161-2986 (Online) Content not copyrighted; freely reproducible.
Trademarks Copyright Privacy Accessibility NLM Customer Support Viewers and Players
U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894
National Institutes of Health *NIH...Turning Discovery into Health*®
U.S. Department of Health and Human Services Freedom of Information Act

Last updated: 06 January 2017