

A close-up photograph of a violin's scroll and pegbox, showing the intricate woodwork and the dark, polished wood. The scroll is in the foreground, and the pegbox is visible behind it. The background is dark, making the wood stand out.

# Performer's Health: Integrating Health Resources into the Music Library

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Louisiana State University

## Notes:

In 1988, Martin Fishbein conducted a study among 2212 symphony orchestra musicians and found that a staggering 82% of them experienced performance related injuries; similar studies show that the number is on the rise. Students in performing arts programs are at particularly high risk of developing an injury due to the sudden increase in practice time, change in repertoire difficulty level, and performance-related stress. This presentation introduces some of the most helpful health resources for performers and demonstrates ways to incorporate them into a music library collection.



# Common Health Issues

## Physical:

- **Musculoskeletal pain and Overuse Injuries**
- **Entrapment and Peripheral Neuropathies**
- **Focal dystonia**

## Mental:

- **Performance Anxiety/Stress**

### Notes:

Musculoskeletal pain and Overuse Injuries: usually caused by excessive repetition

Entrapment and Peripheral Neuropathies: nerve entrapments manifest, for example, as one of the –tunnel syndromes (e.g. carpal tunnel)

Focal dystonia: career ending injury with no known cause or treatment (though cognitive behavior therapy can help); affects the primary body part used for performance (such as the hand for pianists, e.g. Leon Fleischer)



# Providing Health Information to Musicians

Why Seek Health Information in the Music Library?

Prevention

Response

Recovery

Notes:

Prevention: Gathering of information on how to avoid an injury.

Response: Gathering of information on a medical problem or diagnosed injury, including general information and treatment options.

Recovery: Gathering of information on how to avoid injuries in the future.



# Providing Health Information to Musicians

Why Seek Health Information in the Music Library?

Prevention

Response

Recovery

Reference Interview Aspects:

Performer Level

Instrument

Notes:

A successful reference interview will take into account:

The performer level of the student: undergraduate/graduate; major/minor/amateur; length and intensity of study; practice time; etc.

The instrument: what instrument does the student play; changes in the instrument (e.g. has the student recently upgraded to a differently sized violin); changes in the approach to the instrument (e.g. beginning Alexander Technique); etc.

# Types of Health Resources

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Websites



## Websites

Performing Arts Medicine Association (PAMA): <http://www.artsmed.org>

- Extensive Bibliography of Resources related to Medical Injuries in Performers (Updated 2013)
  - Articles published in *Medical Problems of Performing Artists* Journal are free to members
- Doctor Finder and Referral Service
- Extensive list of links/resources to other sites



**PERFORMING ARTS MEDICINE ASSOCIATION**  
*Dedicated to the health of performing artists*



**Referrals**

[Home](#) | [Symposium](#) | [Membership](#) | [Literature](#) | [News](#) | [Events](#) | [Education](#) | [Members Area](#)

# Performing Arts Medicine Association

## Search the PAMA Bibliography

To search the Bibliography, fill in desired boxes, enter text string to search for, then click the Search button. Not all boxes need to be filled in; only completed rows, in order from top to bottom, will be searched. For more assistance, please read our [Bibliography Search Tips](#) and view the [list of journals](#) and the [list of keywords](#).

PAMA does not have the capability to make copies of articles in the bibliography. For information regarding access to articles listed in the PAMA website, please read our [Guidelines to Access Articles](#).

Updated: June 2014      Number of entries: 14,200+

Search for:

<input type="checkbox"/>	Author	<input type="text"/>
<input type="checkbox"/>	Title	<input type="text"/>
<input type="checkbox"/>	Publication	<input type="text"/>
<input type="checkbox"/>	Keyword	<input type="text"/>

Limit by: Topic:  Sort by: [Default]

### Notes:

PAMA features an extensive bibliographic database searchable by Author, Title, Publication, and Keyword. Its emphasis is clinical problems and scientific research related to performing arts medicine. Articles from both music and non-music oriented publications are indexed if they fit within the scope of the organization.

# Performing Arts Medicine Association

## Search the PAMA Bibliography

To search the Bibliography, fill in desired boxes, enter text string to search for, then click the Search button. Not all boxes need to be filled in; only completed rows, in order from top to bottom, will be searched. For more assistance, please read our [Bibliography Search Tips](#) and view the [list of journals](#) and the [list of keywords](#).



Mens en Melodie	Michigan Medicine	Military Med
Mind	Minnesota Med	Missouri J Res Mus Educ
MMW Fortschr Med (Ger)	Modern Drummer	Molec Psychiatr
Monatsschr Ohrenheilkd Laryngorhinol (Ger)	Motor Control	Mount Sinai J Med
Mov Disord	MTNA e-journal	Munch Med Wochenschr (Ger)
Mus America	Mus Clubs Magazine	Mus Educ J
Mus Educ Res	Mus Forum (Aust)	Mus in Educ
Mus J	Mus Letters	Mus Percept
Mus Perform	Mus Perform Res	Mus Qtrl



# Performing Arts Medicine Association

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To search the Bibliography, fill in desired boxes, enter text string to search for, then click the Search button. Not all boxes need to be filled in; only completed rows, in order from top to bottom, will be searched. For more assistance, please read our [Bibliography Search Tips](#) and view the [list of journals](#) and the [list of keywords](#).

pathogenesis	pathomechanics	pathophysiology	pedagogy
pelvis	perception	percussion	performance
performance anxiety	performer	performing arts	personality
pharmacology	pharynx	physics	physiology
piano	Pilates	pointe	popular music
posture	pregnancy	presbyopia	prevention
psychiatry	psychodynamics	psychology	psychotherapy
reed	rehabilitation	relaxation	renal

# Performing Arts Medicine Association

## Related PAM Websites



Use the following links for listings per category:

1. [Performing Arts Medicine Organizations](#)
2. [Performing Arts Medicine Clinics](#)
3. [Recommendations for Music Schools](#)
4. [Educational Opportunities in Performing Arts Medicine](#)
5. [Performing Arts Organizations](#)
6. [Occupational Health](#)
7. [Hearing](#)
8. [Mental Health](#)
9. [Musculoskeletal System](#)
10. [Nutrition](#)
11. [Voice](#)
12. [Health and Safety Support for Performing Artists](#)
13. [Related Literature](#)
14. [Somatic-based Educational Resources](#)

### About these Links

These links were collected largely through the collaboration of the PAMA Liaison Committee and do not represent any endorsement of PAMA.

**PAMA POLICY** - We will list links that represent a current PAMA member and non-profit organizations that serve as a resource for PAM members and performers. Links to clinics or services owned by individuals who are not PAMA members will not be listed.

### Notes:

PAMA maintains an extensive list of links to performer-health related websites organized by general area of interest (e.g. Performing arts organizations) and by subject (e.g. Hearing).

# Performing Arts Medicine Association



PERFORMING ARTS MEDICINE ASSOCIATION  
*Dedicated to the health of performing artists*



Referrals

[Home](#) | [Symposium](#) | [Membership](#) | [Literature](#) | [News](#) | [Events](#) | [Education](#) | [Members Area](#)

## Referrals

*NOTE: This list belongs to the Performing Arts Medicine Association and is offered as a service to the public. It is unlawful for anyone to use this data for any other purpose, and violators will be punished according to the law.*

**THIS SERVICE IS NOT INTENDED FOR EMERGENCY NEEDS.**

Country  OR State  (US, Canada, UK, Australia only)

*Only countries and states with PAMA members currently in them are displayed.*

Professional Area

Active in PAM Research?  ("checked" will show only members active in PAM research)

**Please select from the above criteria.**

### Patient Referrals - Find a Physician or Professional

Performers seeking health care for their performance-related injuries or problems may search for PAMA members in geographical locations or find specialists who care for performers in particular areas of the performing arts.

**THIS SERVICE IS NOT INTENDED FOR EMERGENCY NEEDS.**

### How to Search the Directory

Performers can search for doctors and other healthcare specialists for their medical problems using this database. A recommended first step is to search by:

- State (your location)

Notes:

The patient referral service allows performers to search for medical professionals active in the treatment of performing artists.



## Websites

International Association for Music & Medicine (IAMM): <http://www.iammonline.com/>

- Founded in 2009
- Journal: *Music and Medicine*

### National Organizations

- British Association for Performing Arts Medicine, Deutsche Gesellschaft für Musikphysiologie und Musikermedizin, Médecine des Arts

### Instrument Specific Organizations

- National Flute Association, Percussive Arts Society, American Guild of Organists

### Injury Specific Organizations and Resources

- Association of Adult Musicians with Hearing Loss, Musician's Focal Dystonia

# Types of Health Resources

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Databases





# Music Databases

## Resource Databases:

- RILM (*Répertoire International de Littérature Musicale*):
  - Includes Music and Medicine as a minor area of interest
  - E.g. *Music and Medicine*, *MPPA*, *Medical Problems of Performing Artists*, *Médecine des arts: Approche médicale et scientifique des pratiques artistiques*, *Music Performance Research*
  - Search strategy: Music Subject (e.g. piano playing) and broader Medical Term (e.g. medicine or therapy) gives best results
- CAIRSS for Music(Computer-Assisted Information Retrieval System): <http://ucairss.utsa.edu>
  - Bibliographic database developed by University of Texas and SMU
  - Indexes and cites articles from 18 primary journals in music education, music psychology, music therapy, and music medicine

## Notes:

The last update for CAIRSS seems to have been in 2004.

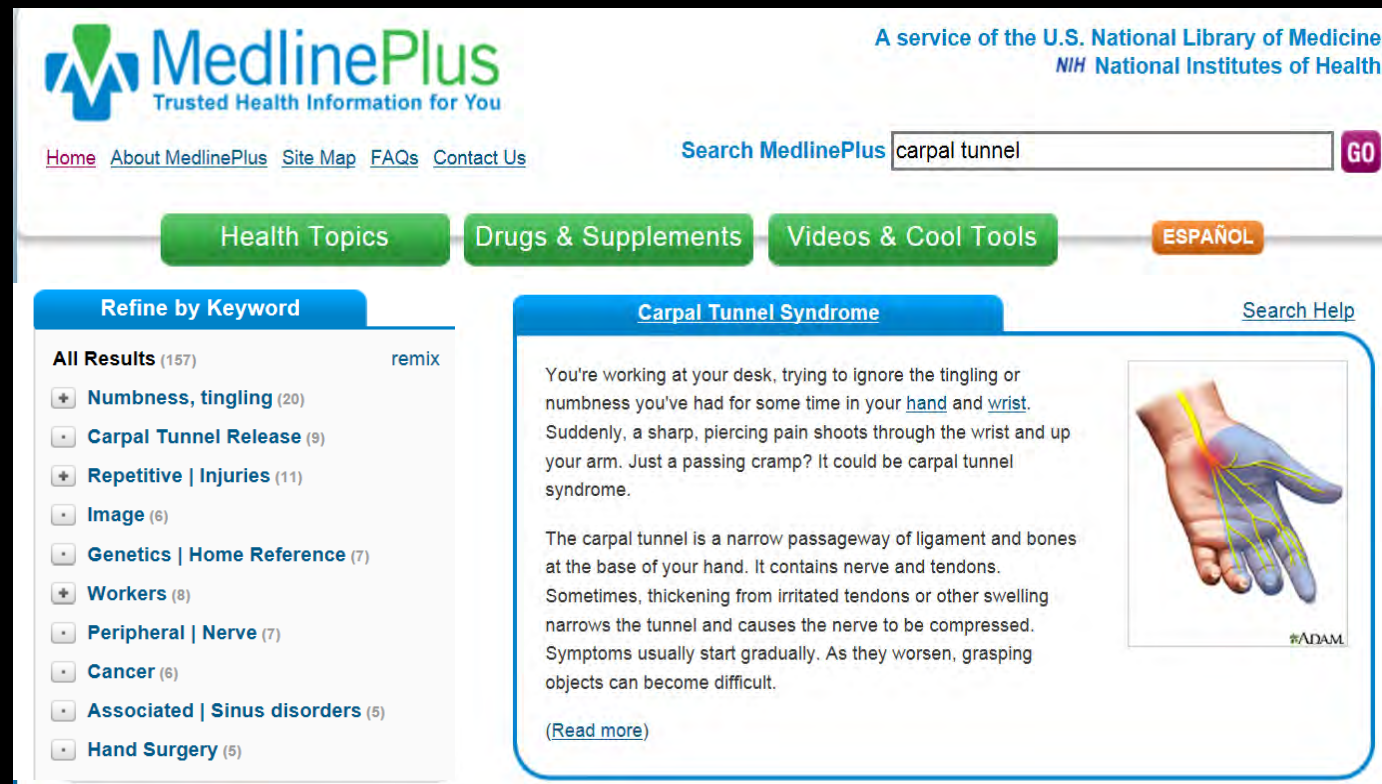


# Health Resources

## Resource:

- Medline/PubMed and MedlinePlus
  - Database of the National Center for Biotechnology and U.S. National Library of Medicine
  - Available online for free
  - Includes in-depth citations to journal articles, books, reviews, newspapers, etc. on topics of biomedicine and health, life sciences, behavioral sciences, chemical sciences, and bioengineering; abstracts and full text when available

# MedlinePlus: Consumer Health Information



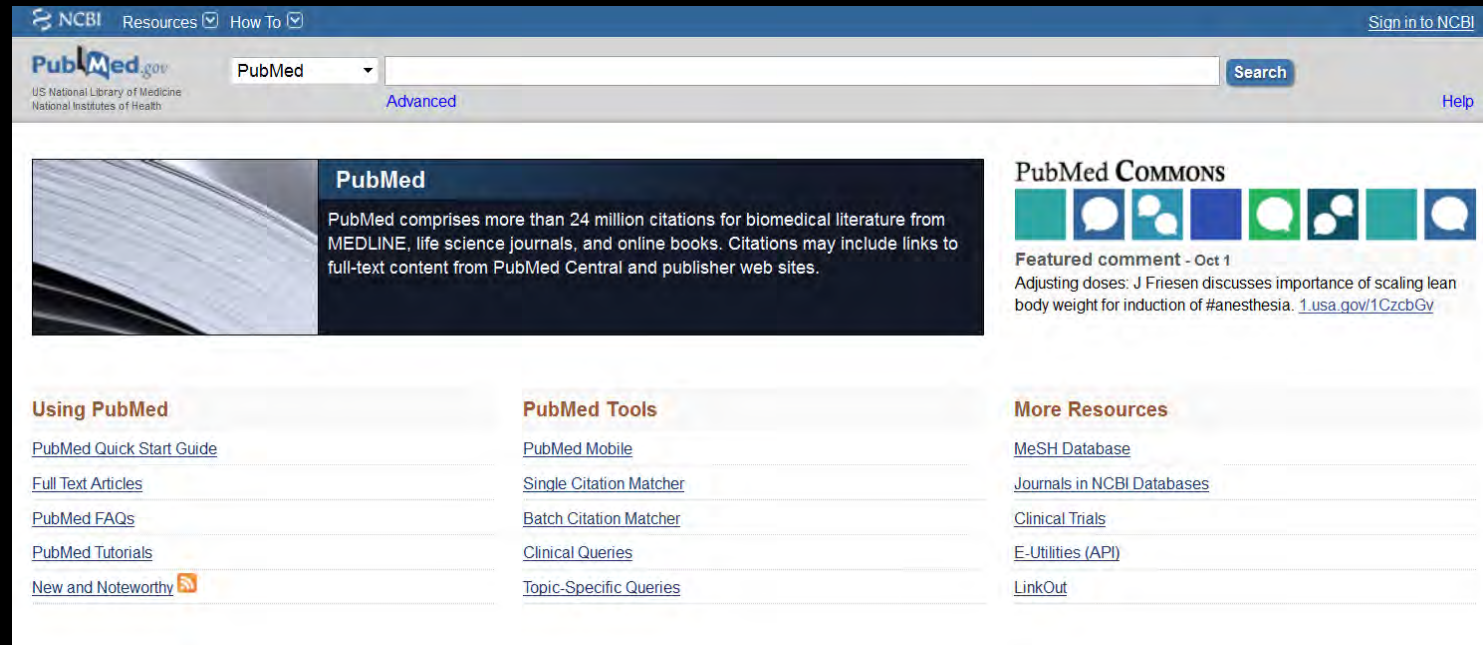
The screenshot displays the MedlinePlus website interface. At the top left is the MedlinePlus logo with the tagline "Trusted Health Information for You". To the right, it states "A service of the U.S. National Library of Medicine NIH National Institutes of Health". Below the logo are navigation links: Home, About MedlinePlus, Site Map, FAQs, and Contact Us. A search bar contains the text "carpal tunnel" and a "GO" button. Below the search bar are three green buttons: "Health Topics", "Drugs & Supplements", and "Videos & Cool Tools", along with an "ESPAÑOL" button. The main content area is divided into two sections. On the left, under "Refine by Keyword", there is a list of categories with counts: "All Results (157)", "Numbness, tingling (20)", "Carpal Tunnel Release (9)", "Repetitive | Injuries (11)", "Image (6)", "Genetics | Home Reference (7)", "Workers (8)", "Peripheral | Nerve (7)", "Cancer (6)", "Associated | Sinus disorders (5)", and "Hand Surgery (5)". On the right, under "Carpal Tunnel Syndrome", there is a text block describing the condition and an illustration of a hand with a red area on the wrist and yellow lines indicating nerve pathways. A "Search Help" link is visible in the top right corner of the content area.

## Notes:

MedlinePlus is NIH/NLM's consumer health resource. It contains accessible and quality (that is verified and accurate) health information and should be the first stop for performers seeking advice on injuries and treatment methods. It uses patient friendly vocabulary (heart attack instead of myocardial infarction). The search results will provide links to information resources, treatment information, clinical trials, and other material of interest, as well as pre-formulated search strategies for use in the PubMed/Medline database.



# Medline/PubMed: Medical Literature



The screenshot shows the PubMed website interface. At the top, there is a navigation bar with "NCBI Resources" and "How To" menus, and a "Sign in to NCBI" link. Below this is the "PubMed.gov" logo and a search bar with a "Search" button. The main content area features a "PubMed" section with a description: "PubMed comprises more than 24 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites." To the right of this is a "PubMed COMMONS" section with a row of social media icons and a "Featured comment" dated "Oct 1" about adjusting doses. Below these are three columns of links: "Using PubMed" (Quick Start Guide, Full Text Articles, FAQs, Tutorials, New and Noteworthy), "PubMed Tools" (Mobile, Single Citation Matcher, Batch Citation Matcher, Clinical Queries, Topic-Specific Queries), and "More Resources" (MeSH Database, Journals in NCBI Databases, Clinical Trials, E-Utilities (API), LinkOut).

## Notes:

NIH/NLM's PubMed/Medline database is oriented towards the information specialist. It requires a search strategy to produce the best results, but gives access to a wealth of medical literature in the form of indexed and abstracted article citations.

# PubMed: MeSH Headings

MeSH  Save search Limits Advanced

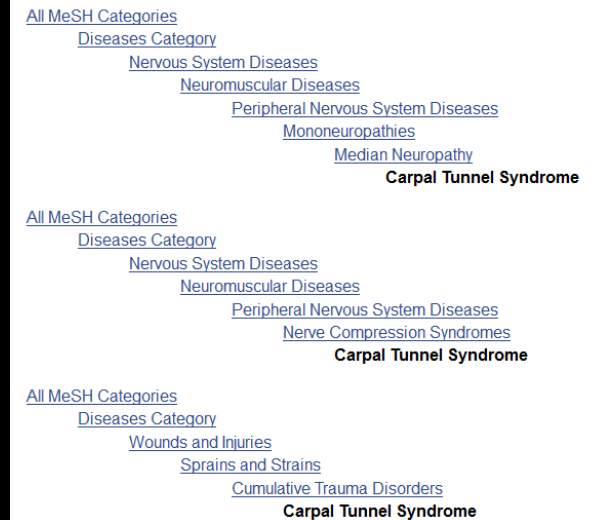
Display Settings: Full Send to:

### Carpal Tunnel Syndrome

Entrapment of the MEDIAN NERVE in the carpal tunnel, which is formed by the flexor retinaculum and the CARPAL BONES. This syndrome may be associated with repetitive occupational trauma (CUMULATIVE TRAUMA DISORDERS); wrist injuries; AMYLOID NEUROPATHIES; rheumatoid arthritis (see ARTHRITIS, RHEUMATOID); ACROMEGALY; PREGNANCY; and other conditions. Symptoms include burning pain and paresthesias involving the ventral surface of the hand and fingers which may radiate proximally. Impairment of sensation in the distribution of the median nerve and thenar muscle atrophy may occur. (Joynt, Clinical Neurology, 1995, Ch51, p45)  
Year introduced: 1965(1963)

PubMed search builder options  
Subheadings:

<input type="checkbox"/> analysis	<input type="checkbox"/> ethnology	<input type="checkbox"/> physiopathology
<input type="checkbox"/> anatomy and histology	<input type="checkbox"/> etiology	<input type="checkbox"/> prevention and control
<input type="checkbox"/> blood	<input type="checkbox"/> genetics	<input type="checkbox"/> psychology
<input type="checkbox"/> chemically induced	<input type="checkbox"/> history	<input type="checkbox"/> radiography
<input type="checkbox"/> classification	<input type="checkbox"/> immunology	<input type="checkbox"/> radionuclide imaging
<input type="checkbox"/> complications	<input type="checkbox"/> metabolism	<input type="checkbox"/> radiotherapy
<input type="checkbox"/> congenital	<input type="checkbox"/> microbiology	<input type="checkbox"/> rehabilitation
<input type="checkbox"/> cytology	<input type="checkbox"/> mortality	<input type="checkbox"/> statistics and numerical data
<input type="checkbox"/> diagnosis	<input type="checkbox"/> nursing	<input type="checkbox"/> surgery
<input type="checkbox"/> drug therapy	<input type="checkbox"/> organization and administration	<input type="checkbox"/> therapy
<input type="checkbox"/> economics	<input type="checkbox"/> parasitology	<input type="checkbox"/> ultrasonography
<input type="checkbox"/> embryology	<input type="checkbox"/> pathology	<input type="checkbox"/> veterinary
<input type="checkbox"/> enzymology	<input type="checkbox"/> physiology	<input type="checkbox"/> virology
<input type="checkbox"/> epidemiology		



## Notes:

Medline uses MeSH headings (medical subject headings) to index articles. These provide a convenient entry point into the database and can be searched by selecting "MeSH" from the dropdown menu of the search bar. The above example shows a sample MeSH search result for the heading "carpal tunnel syndrome." It gives a definition of the heading, shows the various subheadings that may be attached to it, and situates it within the MeSH tree structure.

# PubMed: MeSH Headings

## Carpal Tunnel Syndrome

Entrapment of the MEDIAN NERVE in the carpal tunnel, which is formed by the flexor retinaculum and the CARPAL BONES. This syndrome may be associated with repetitive occupational trauma (CUMULATIVE TRAUMA DISORDERS); wrist injuries; AMYLOID NEUROPATHIES; rheumatoid arthritis (see ARTHRITIS, RHEUMATOID); ACROMEGALY; PREGNANCY; and other conditions. Symptoms include burning pain and paresthesias involving the ventral surface of the hand and fingers which may radiate proximally. Impairment of sensation in the distribution of the median nerve and thenar muscle atrophy may occur. (Joynt, Clinical Neurology, 1995, Ch51, p45)

Year introduced: 1965(1963)

PubMed search builder options

[Subheadings:](#)

- |  |                                       |  |
|--|---------------------------------------|--|
| <input type="checkbox"/> analysis              | <input type="checkbox"/> ethnology    | <input type="checkbox"/> physiopathology           |
| <input type="checkbox"/> anatomy and histology | <input type="checkbox"/> etiology     | <input type="checkbox"/> prevention and control    |
| <input type="checkbox"/> blood                 | <input type="checkbox"/> genetics     | <input type="checkbox"/> psychology                |
| <input type="checkbox"/> chemically induced    | <input type="checkbox"/> history      | <input type="checkbox"/> radiography               |
| <input type="checkbox"/> classification        | <input type="checkbox"/> immunology   | <input type="checkbox"/> radionuclide imaging      |
| <input type="checkbox"/> complications         | <input type="checkbox"/> metabolism   | <input type="checkbox"/> radiotherapy              |
| <input type="checkbox"/> congenital            | <input type="checkbox"/> microbiology | <input checked="" type="checkbox"/> rehabilitation |

## PubMed Search Builder

"Carpal Tunnel Syndrome/rehabilitation" [Mesh]

Add to search builder AND ▾

Search PubMed

[YouTube Tutorial](#)

## Related information

[PubMed](#)

[PubMed - Major Topic](#)

[Clinical Queries](#)


[NLM MeSH Browser](#)

[MedGen](#)

## Notes:

Using the PubMed Search builder on the right allows for easy combination of the heading with a subheading. Checking the box next to the desired subheading (in this case "rehabilitation") and clicking the "Add to search builder" button constructs a useable search strategy. Clicking the button "Search PubMed" will run the search in PubMed/Medline and display the results.

# PubMed: Sample Search Result



**PubMed.gov**  
US National Library of Medicine  
National Institutes of Health

PubMed

[RSS](#) [Save search](#) [Advanced](#)

[Show additional filters](#) [Display Settings:](#)  Summary, 20 per page, Sorted by Recently Added [Send to:](#)

[Clear all](#)

**Article types**  
 **Clinical Trial (36)**  
More ...

**Text availability**  
Abstract (34)  
Free full text (3)  
Full text (32)

**Publication dates**  
5 years (8)  
10 years (19)  
Custom range...

**Species**  
Humans (36)

[Clear all](#)  
[Show additional filters](#)

**Results: 1 to 20 of 36** << First < Prev Page 1 of 2 Next > Last >>

**Filters activated:** Clinical Trial. [Clear all](#) to show 148 items.

- [Effect of carpal tunnel syndrome on grip and pinch strength compared with sex- and age-matched normative data.](#)  
1. Baker NA, Moehling KK, Desai AR, Gustafson NP.  
Arthritis Care Res (Hoboken). 2013 Dec;65(12):2041-5. doi: 10.1002/acr.22089.  
PMID: 23925936 [PubMed - indexed for MEDLINE]  
[Related citations](#)
- [Massage therapy as an effective treatment for carpal tunnel syndrome.](#)  
2. Elliott R, Burkett B.  
J Bodyw Mov Ther. 2013 Jul;17(3):332-8. doi: 10.1016/j.jbmt.2012.12.003. Epub 2012 Dec 23.  
PMID: 23768278 [PubMed - indexed for MEDLINE]  
[Related citations](#)
- [Randomized controlled trial comparing acupuncture with placebo acupuncture for the treatment of carpal tunnel syndrome.](#)  
3. Yao E, Gerritz PK, Henricson E, Abresch T, Kim J, Han J, Wang K, Zhao H.  
PM R. 2012 May;4(5):367-73. doi: 10.1016/j.pmrj.2012.01.008. Epub 2012 Mar 7.  
PMID: 22405683 [PubMed - indexed for MEDLINE]  
[Related citations](#)



# Constructing a Successful Pubmed Search: General Inquiries

**Sample Query:** I am looking for resources for prevention of performance or practice injuries.

Suggested MeSH Topics:

General:            Music [MeSH Major Topic]  
                         Occupational Injuries or Occupational Diseases  
                         Prevention and Control

Sample Search: "music"[MeSH Major Topic] AND ("occupational injuries/prevention and control"[MeSH Terms] OR "occupational diseases/prevention and control"[majr])

Notes:

PubMed/Medline includes "Music" as a MeSH major topic but not heading. If the emphasis is on retrieving specifically music related materials, the major topic can be combined with a more specific clinical subject heading to retrieve applicable results. Individual instruments are not available as headings or topics, but can be searched as free text.

# Sample Results

PubMed.gov  
US National Library of Medicine  
National Institutes of Health

PubMed 

RSS Save search Advanced Help

- [Intervention program in college instrumental musicians, with kinematics analysis of cello and flute playing: a combined program of yogic breathing and muscle strengthening-flexibility exercises.](#)  
Lee SH, Carey S, Dubey R, Matz R.  
Med Probl Perform Art. 2012 Jun;27(2):85-94.  
PMID: 22739821 [PubMed - indexed for MEDLINE]  
[Related citations](#)
- [Strategies to promote health and prevent musculoskeletal injuries in students from the high conservatory of music of Salamanca, Spain.](#)  
Martín López T, Fariás Martínez J.  
Med Probl Perform Art. 2013 Jun;28(2):100-6.  
PMID: 23752285 [PubMed - indexed for MEDLINE]  
[Related citations](#)
- [Some thoughts on the prevention of complaints in musicians and dancers.](#)  
Rietveld AB, Macfarlane JD, de Haas GJ.  
Clin Rheumatol. 2013 Apr;32(4):449-52. doi: 10.1007/s10067-013-2195-5. Epub 2013 Mar 7. Review.  
PMID: 23468385 [PubMed - indexed for MEDLINE]  
[Related citations](#)
- [The value of health screening in music schools and conservatoires.](#)  
Clark T, Williamon A, Redding E.  
Clin Rheumatol. 2013 Apr;32(4):497-500. doi: 10.1007/s10067-013-2203-9. Epub 2013 Feb 16. Review.  
PMID: 23417346 [PubMed - indexed for MEDLINE]  
[Related citations](#)
- [Health promotion and prevention in higher music education: results of a longitudinal study.](#)  
Zander MF, Voltmer E, Spahn C.  
Med Probl Perform Art. 2010 Jun;25(2):54-65.  
PMID: 20795333 [PubMed - indexed for MEDLINE]  
[Related citations](#)
- [Musician health and safety: Preventing playing-related musculoskeletal disorders.](#)  
Foxman I, Burgel BJ.  
AAOHN J. 2006 Jul;54(7):309-16. Review.

Filters: [Manage Filters](#)

**New feature**  
Results currently sorted by Relevance -  
[Sort by Recently Added](#)

**Find related data**  
Database: Select

**Search details**  
"music"[MeSH Major Topic] AND  
("occupational  
injuries/prevention and  
control"[MeSH Terms] OR  
"occupational diseases/prevention  
and control"[majr])  
 [See more...](#)

## Notes:

PubMed displays the strategy it used to search in the box to the right of the screen. From it, useful search terms can be extracted; for example, if heart attack was the initial search term, it would display the actual MeSH heading (myocardial infarction) there.

# Sample Results

Med Probl Perform Art. 2013 Jun;28(2):100-6.

## Strategies to promote health and prevent musculoskeletal injuries in students from the high conservatory of music of Salamanca, Spain.

Martin López T<sup>1</sup>, Farias Martinez J.

### Author information

#### Abstract

**OBJECTIVES:** The present investigation was intended to evaluate the effectiveness of a course on health and the prevention of musculoskeletal injuries in future professional musicians, specifically designed for superior-grade students at the High Conservatory of Music of Salamanca, Spain.

**METHODS:** Students were taught how to evaluate the possible risks associated with the practice of their instruments. They were provided with information about the most frequent medical problems of musicians, warm-up habits, postural hygiene, effective prevention strategies, and different treatment options for these pathologies. The students were randomly divided into two groups: a control group (n=56) who did not take the course and was evaluated with a questionnaire at the beginning of the academic year and 1 year later, and an experimental group (n=90) who did take the course and was evaluated with three questionnaires (at the beginning of the course, 6 months later, and 12 months after the start of the course).

**RESULTS:** While the students in the experimental group improved their body awareness by 91% and the frequency of their injuries decreased by 78%, there was no improvement in the students from the control group at the end of the experiment.

**CONCLUSIONS:** The results of our study have demonstrated the effectiveness of this type of course and show that such courses should be included in the academic curriculum of superior conservatories.

PMID: 23752285 [PubMed - indexed for MEDLINE]



Publication Types, MeSH Terms

Save items

★ Add to Favorites

#### Related citations in PubMed

Health promotion and prevention in higher music education: results of ; [Med Probl Perform Art. 2010]

Long-term analysis of health status and preventive behavior in music stu [Med Probl Perform Art. 2014]

Playing-related musculoskeletal disorders in music students-associater [Eur J Phys Rehabil Med. 2012]

[Review](#) [Young musicians: do they need prevention ?]. [Praxis (Bern 1994). 2013]

[Review](#) Hearing loss in students at a conservatory. [Audiology. 1994]

See reviews...

See all...

#### Recent Activity

Turn Off Clear

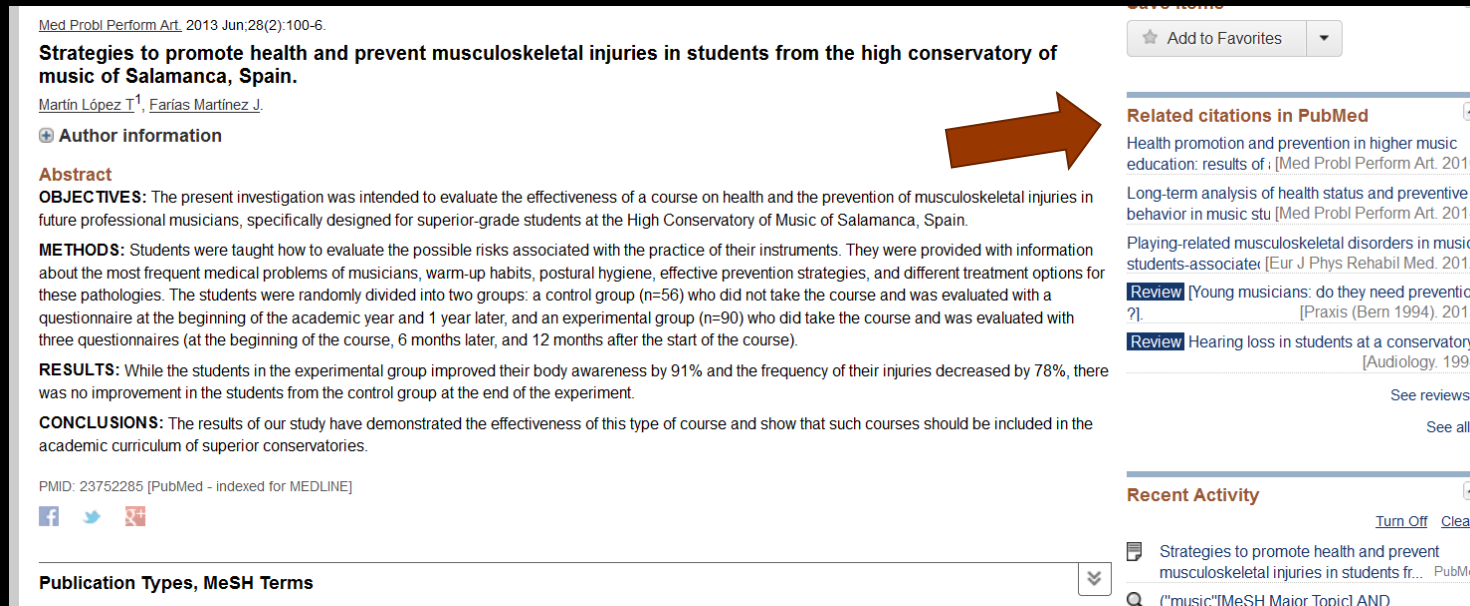
Strategies to promote health and prevent musculoskeletal injuries in students fr... PubMed

Q ("music"[MeSH Major Topic] AND

Notes:

A sample record contains the bibliographic information for the article and, when available, an abstract and full text link.

# Sample Results



Med Probl Perform Art. 2013 Jun;28(2):100-6.

**Strategies to promote health and prevent musculoskeletal injuries in students from the high conservatory of music of Salamanca, Spain.**

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PMID: 23752285 [PubMed - indexed for MEDLINE]

**Publication Types, MeSH Terms**

**Related citations in PubMed**

Health promotion and prevention in higher music education: results of ; [Med Probl Perform Art. 2010]

Long-term analysis of health status and preventive behavior in music stu [Med Probl Perform Art. 2014]

Playing-related musculoskeletal disorders in music students-associater [Eur J Phys Rehabil Med. 2012]

**Review** Young musicians: do they need prevention ?. [Praxis (Bern 1994). 2013]

**Review** Hearing loss in students at a conservatory. [Audiology. 1994]

See reviews...

See all...

**Recent Activity**

Strategies to promote health and prevent musculoskeletal injuries in students fr... PubMed

("music"[MeSH Major Topic] AND

Notes:

A "related citation" box to the right displays citations for articles similar to the one selected.





## Health Databases

May also be useful:

- CINAHL Database or ProQuest Nursing and Allied Health Source; ProQuest Health & Safety Science Abstracts; Science Direct Databases
- ERIC (US Department of Education)

### EXAMPLE

CINAHL (Cumulative Index for Nursing and Allied Health Information)

- **SEARCH STRATEGY:**

- combine “performing arts” or “performing artists” with medical or occupational subject headings, e.g. “sprains and strains” and “therapy”

# Organizing Health Resources

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The Physical Collection





# Organization of the Special Collection

- **Barriers to a Collection of Health Resources for Performers:**
  - Music and Medical Resources classed separately: scatters resources and confuses patrons
  - Conventional Subject Headings (LC and MeSH headings) not conducive to natural language searching
- **Goals for such a Collection:**
  - simplifies complex health information searching and item retrieval
  - easy-to-use
  - utility and functionality based shelving and classification system
  - layperson accessible subject headings, controlled vocabulary, and simplified medical terminology

## Notes:

Performers love physical resources and being able to browse the shelves to find the information they need. But only a small portion of health related items is housed in music libraries, because most health related resources are classified differently and shelved elsewhere. The following slides explore how these resources may be brought into the music library using various classification systems, and offer a real world solution in the form of a local, provisional, series trace.



# Library of Congress Classification

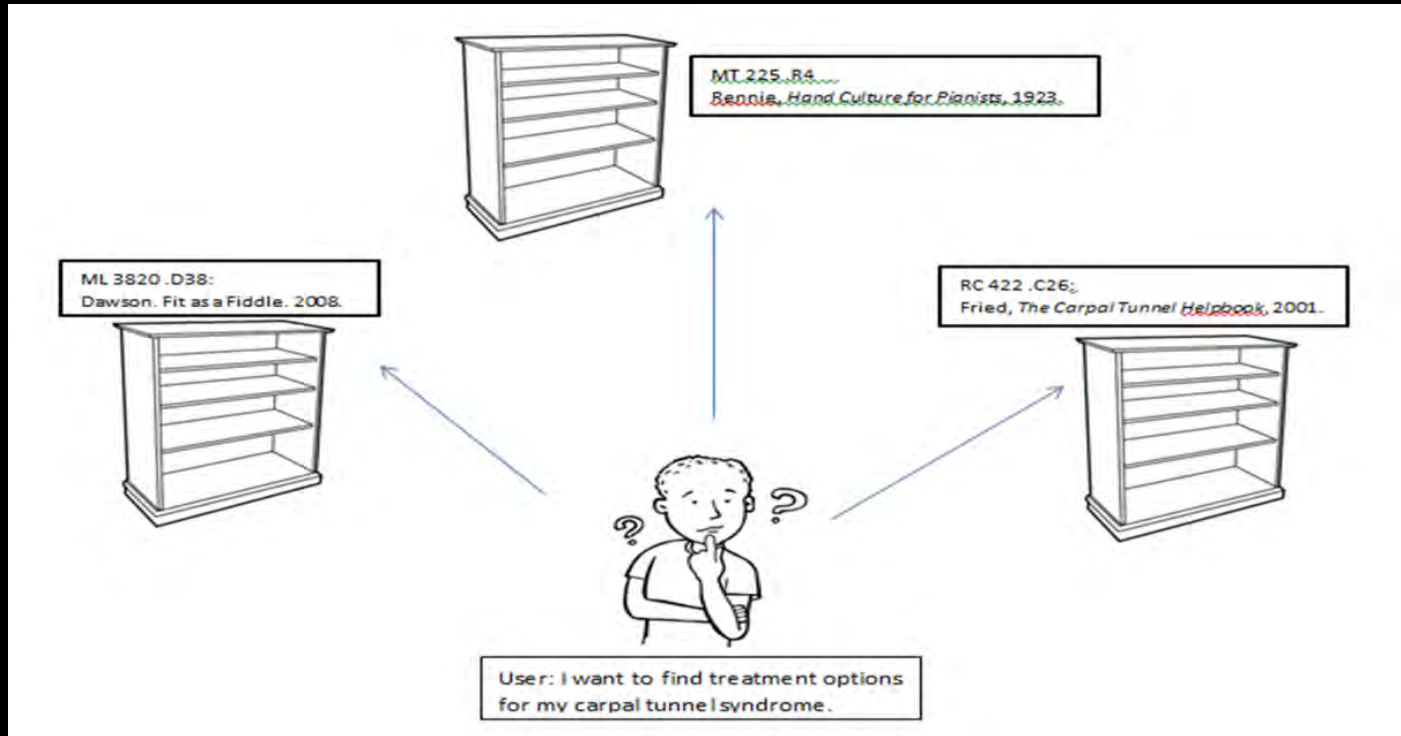
- Standard for most academic institutions
- Music Resources with Health Emphasis cataloged in various classes, e.g. ML 3820 and 3830 (Physiological and Psychological Aspects), MT 820 (singing and vocal technique)
- Medical Resources cataloged in Class R

Pros	Cons
<ul style="list-style-type: none"><li>• Easy to integrate; familiar to patrons</li></ul>	<ul style="list-style-type: none"><li>• R classification may deter patrons who are used to M classifications only</li></ul>
<ul style="list-style-type: none"><li>• Works with LC subject headings</li></ul>	<ul style="list-style-type: none"><li>• lack of subject specificity</li></ul>
<ul style="list-style-type: none"><li>• Cataloging information easily available through OCLC ; limited staff training needed</li></ul>	<ul style="list-style-type: none"><li>• Materials will be scattered across various sections of the library</li></ul>

## Notes:

Using a strict LC classification system for the collection has the benefit of being familiar to users, but it will divide the music from the health resources either across various shelves, or even floors, of the library.

# LC Sample User Analysis



Thinking-clip-art: Located at <http://www.clker.com/clipart-9358.html> Bookshelf Clip-art: Located at <http://www.clker.com/clipart-24776.html>



# National Library of Medicine Classification

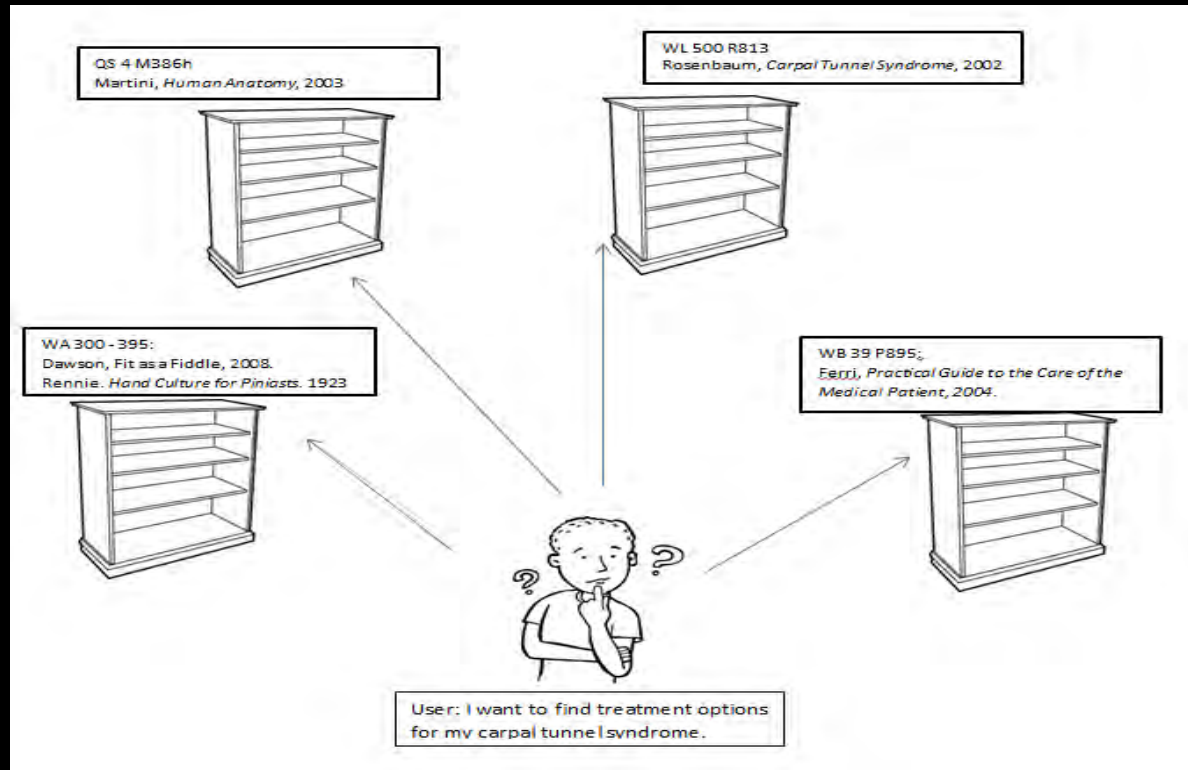
- standard for most academic health sciences libraries
- Coverage: Field of medicine and related sciences
- Uses two schedules not part of LC (QS-QZ and W-WZ):
  - QS-QZ = Preclinical Sciences (e.g. QS Human Anatomy)
  - W-WZ = Medicine and Related Subjects (e.g. WA Public Health)

Pros	Cons
<ul style="list-style-type: none"><li>• Could potentially supplement LC system</li></ul>	<ul style="list-style-type: none"><li>• Schematic organization scatters materials rather than groups them</li></ul>
<ul style="list-style-type: none"><li>• MeSH headings staple of medical research and information retrieval</li></ul>	<ul style="list-style-type: none"><li>• Not intended for cataloging of consumer health collection (very technical)</li></ul>
<ul style="list-style-type: none"><li>• Schedules available online; yearly update</li></ul>	<ul style="list-style-type: none"><li>• Staff training necessary; patrons will need health-information literacy to use</li></ul>

## Notes:

Using NLM for the collection gives two options: converting M and MT classes into NLM classification (as shown here) or maintaining the M and MT LC classes and adding other items according to NLM schedules. Either way, materials would be even more spread out.

# NLM Sample User Analysis





## Planetree Classification Scheme

- Developed for consumer health libraries by medical librarians
- Similar topics are grouped under major subdivisions that mirror common areas of inquiry
- Alphanumeric classification system: FE Cancer; FE 200 Cancer Guide

PROS	CONS
<ul style="list-style-type: none"><li>• Supports browse-ability of information on a given subject</li></ul>	<ul style="list-style-type: none"><li>• Potential barrier for patrons not used to non-academic classification systems</li></ul>
<ul style="list-style-type: none"><li>• Patient-driven vocabulary (herniated disc instead of intervertebral disk replacement)</li></ul>	<ul style="list-style-type: none"><li>• Cost and staff training (\$225 for system)</li></ul>
<ul style="list-style-type: none"><li>• Can be paired with either LC or MeSH headings</li></ul>	<ul style="list-style-type: none"><li>• requires re-classifying resources, current &amp; future</li></ul>





## Planetree Subject Categories

- Subjects Categories encompass the most frequent types of user inquiries:
  - AB – AC: **Medical Reference**
  - BA – BE: **Health Promotion/Disease Prevention**
  - CA – CF: Mental Health/Mental Disorders
  - DA – DD: **Medical Treatment and Therapies**
  - EA: Complementary and Alternative Medicine
  - FA – FP: **Body Systems/Diseases**

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  - GA – GL: Life Stages
  - HA – HC: Health Care Rights and Responsibilities
  - IA – IB: Health Care Field
  - [JA: Animal Health (not included in collection)]

### Notes:

The Planetree classification scheme is compact enough to be displayed next to the collection and can be adapted or changed based on its needs and purpose. It groups items (regardless of whether they are health or music items) by major focus, such as treatment and therapies, making it easy for users to find exactly the information they need in one spot.

# Planetree Sample User Analysis

## Medical Treatment/Therapies

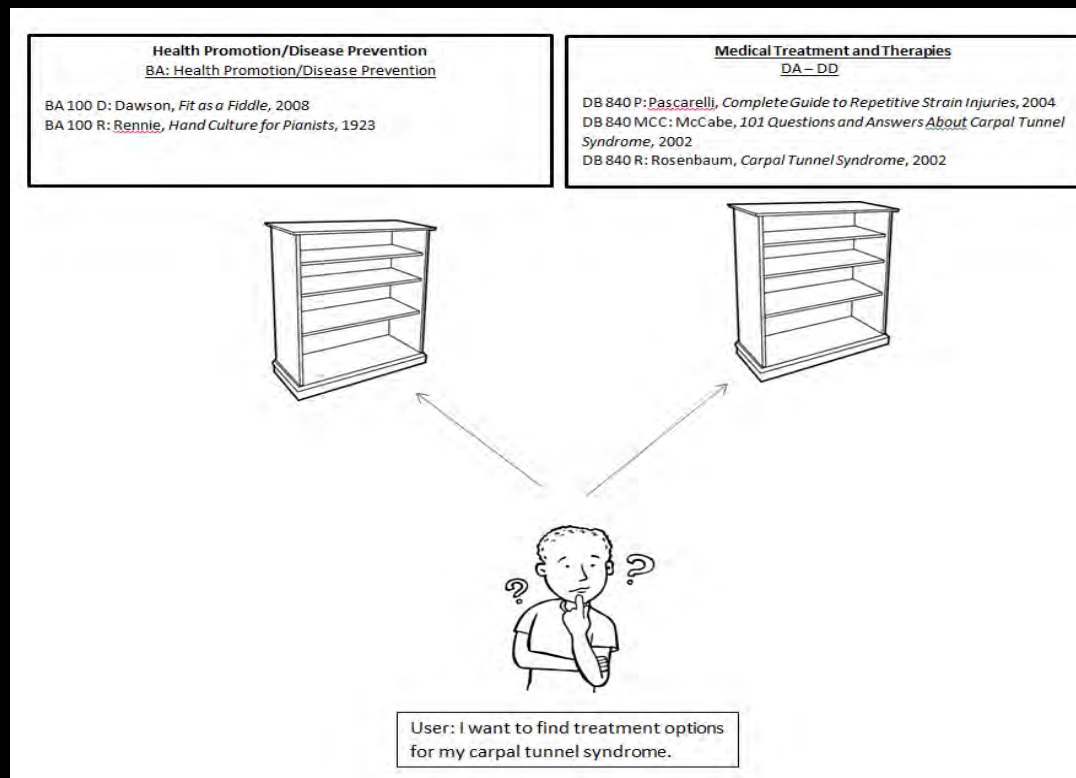
DA-DD

DB 840 P: Pascarelli, *Complete Guide to Repetitive Strain Injuries*, 2004  
DB 840 MCC: McCabe, *101 Questions and Answers About Carpal Tunnel Syndrome*, 2002  
DB 840 R: Rosenbaum, *Carpal Tunnel Syndrome*, 2002



User: I want to find treatment options for my carpal tunnel syndrome.

# Planetree Sample User Analysis



Notes:

It also allows for easy identification of other helpful resources based on their general focus (like disease prevention).

# Searching and Access

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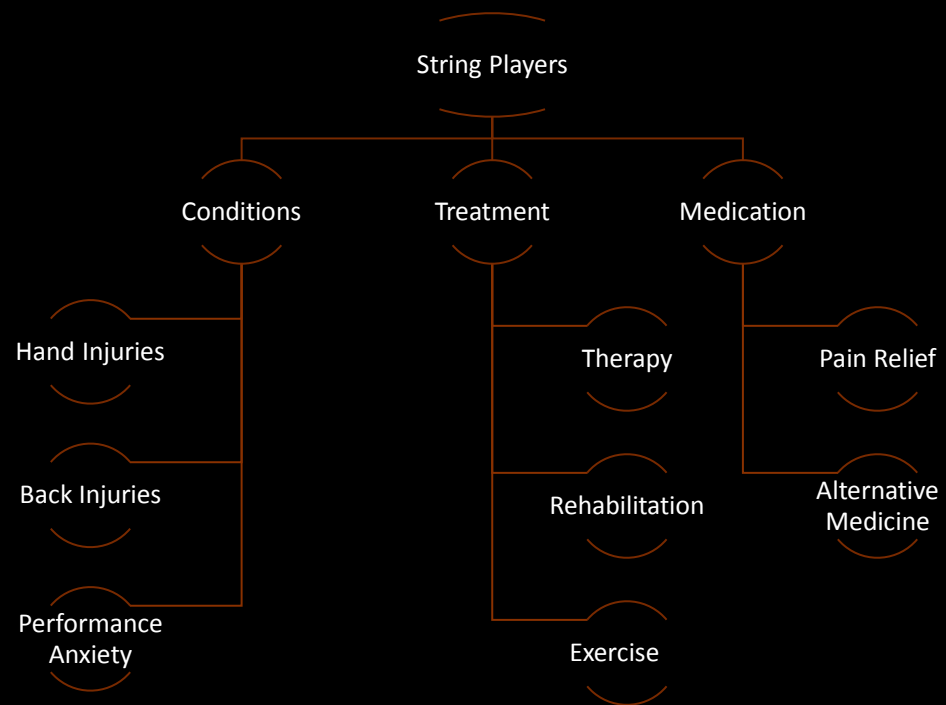




## Searching the Collection

- Subject headings (LC) do not offer convenient enough access points
  - Too broad or technical to be helpful
  - User unfamiliarity with using them in searches
- Recommendation:
  - Offer health-information literacy instruction
  - Promote resources through collaboration with music studios and library-liaison work
  - Design and implement health-resource specific search tree and vocabulary

# Sample Search Tree for Health Resources



## Search Tree continued

- Clicking on a specific branch of the search tree will lead the user to either the MeSH or LC headings without having to have specific medical knowledge:

Example: String Players – Conditions – Hand Injuries:

Applicable MeSH headings	Applicable LC Headings
<ul style="list-style-type: none"><li>• Neuromuscular Diseases<ul style="list-style-type: none"><li>• Peripheral Nervous System Diseases<ul style="list-style-type: none"><li>• Nerve Compression Syndromes<ul style="list-style-type: none"><li>• <b>Carpal Tunnel Syndrome</b></li><li>• <b>Cubital Tunnel Syndrome</b></li><li>• <b>Ulnar Nerve Compression Syndrome</b></li></ul></li></ul></li></ul></li></ul>	<ul style="list-style-type: none"><li>• Stringed Instrument Players<ul style="list-style-type: none"><li>• Wounds and Injuries<ul style="list-style-type: none"><li>• <b>Overuse injuries</b></li></ul></li><li>• Entrapment Neuropathies<ul style="list-style-type: none"><li>• <b>Carpal Tunnel Syndrome</b></li></ul></li></ul></li></ul>

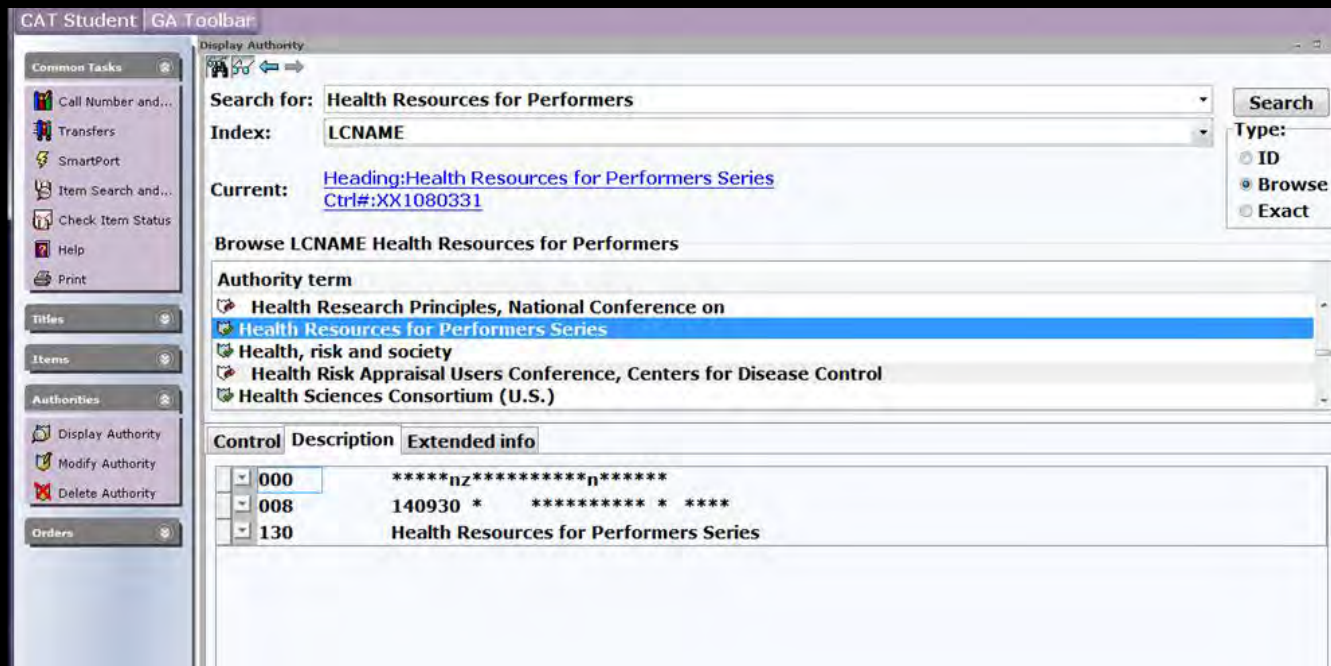
# A Real World Solution

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# A Solution for the Real World: Local, Provisional, Series Authority



The screenshot displays the 'CAT Student | GA Toolbar' interface. The main window is titled 'Display Authority' and shows a search for 'Health Resources for Performers' using the 'LCNAME' index. The current results are 'Heading:Health Resources for Performers Series' and 'Ctrl#:XX1080331'. A list of authority terms is shown, with 'Health Resources for Performers Series' selected. Below the list is a table with columns for Control, Description, and Extended info.

Control	Description	Extended info
000	*****nz*****η*****	
008	140930 * ***** * ****	
130	Health Resources for Performers Series	

## Notes:

One solution that easily allows collocation of materials that may be of interest to performers, is the addition of a local, provisional series authority to the cataloging record (490/830 fields) of applicable items. In this case, I have created a local, provisional series authority entitled Health Resources for Performers. I then went into the catalog record of various resources that fit within the scope of this topic (items I thought might be of interest to performers looking for health information) and added a local 490/830 field.

# A Solution for the Real World

The screenshot shows a library catalog interface. On the left is a sidebar with navigation options: Call Number and..., Transfers, SmartPort, Item Search and..., Check Item Status, Help, Print, Titles (Add Title, Modify Title), Items, Authorities (Display Authority, Modify Authority, Delete Authority), and Orders. The main area displays search results for 'Health Resources for Performers Series'. The search criteria are: Search for: Health Resources for Performers Series, Index: Series, Library: ALL. The current record is 'Fraser, Alan, 1955- --- The craft of piano playing : a new approach to piano technique / Alan Fraser ; illus. --- MT220 .F8 2003 ---'. Below this is a table of 7 records in the series:


Title	Author	Pub. Year
<a href="#">The craft of piano playing : a new approach to piano technique / Alan Fraser ; illus.</a>	Fraser, Alan, 1955-	2003
<a href="#">The carpal tunnel helpbook : self-healing alternatives / Scott M. Fried.</a>	Fried, Scott M.	2001
<a href="#">Music therapy and neurological rehabilitation [electronic resource] / David Aldridge.</a>	Aldridge, David, 1947-	2005
<a href="#">Fit as a fiddle : the musician's guide to playing healthily / William J. Dawson.</a>	Dawson, William J.	2008
<a href="#">Dr. Pascarelli's complete guide to repetitive strain injuries / Emil F. Pascarelli.</a>	Pascarelli, Emil F., 1930-	2004
<a href="#">A prevention and early intervention protocol for carpal tunnel syndrome / Lai-Kuen Ivy Tam.</a>	Tam, Lai-Kuen Ivy.	1997

Below the table is a detailed record for the selected item, 'The craft of piano playing : a new approach to piano technique / Alan Fraser ; illus. --- MT220 .F8 2003 ---'. The record includes fields for Description, Call Number/Item, Natl bibliography #, ISBN, Local system #, Cataloging Source, Authentication code, Local holdings, LC Call Number, Dewey Decimal Classification Number, Personal Author, Title, Publication info, Physical description, Series Statement, Bibliography note, and Subject term.

## Notes:

As a result, the catalog can now be searched by the series title, regardless of their actual classification. It allows easy collocation of health materials even if they are not specifically music related.

# A Solution for the Real World



1.	<input type="checkbox"/> Keep	<b>The craft of piano playing : a new approach to piano technique</b> Fraser, Alan, 1955- MT220 .F8 2003	2003
2.	<input type="checkbox"/> Keep	<b>The carpal tunnel helpbook : self-healing alternatives for carpal tunnel and other repetitive strain injuries</b> Fried, Scott M. RC422 .C26 F75 2001	2001
3.	<input type="checkbox"/> Keep	<b>Music therapy and neurological rehabilitation [electronic resource] : performing health <i>1st American pbk. ed.</i></b> Aldridge, David, 1947- AVAILABLE ONLINE <a href="#">URL</a>	2005
4.	<input type="checkbox"/> Keep	<b>Fit as a fiddle : the musician's guide to playing healthy</b> Dawson, William J. ML3820 .D38 2008	2008
5.	<input type="checkbox"/> Keep	<b>Dr. Pascarelli's complete guide to repetitive strain injury [electronic resource] : what you need to know about RSI and carpal tunnel syndrome</b> Pascarelli, Emil F., 1930- AVAILABLE ONLINE <a href="#">URL</a>	2004
6.	<input type="checkbox"/> Keep	<b>A prevention and early intervention protocol for carpal tunnel syndrome in work settings [microform]</b> Tam, Lai-Kuen Ivy. MICROFICHE 9555	1997
7.	<input type="checkbox"/> Keep	<b>Carpal tunnel syndrome Rev. 2003.</b> National Mine Health and Safety Academy. L 38.8/2:23/2003	2003

## Notes:

Students are able to use the series as a search term, and thus can easily retrieve a full list of health resources available to them. Such a project would require collaboration between music librarian and cataloger to identify appropriate resources within the library that may be of interest to performers. Of course, the users have to be made aware that the series exists in the library's catalog (since it is not an official series), perhaps either through a subject guide or instruction sessions.



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