

CASE STUDY

# Embase®

Alysha Sapp, Nursing & Nurse Anesthesia Librarian at  
Texas Christian University

“Embase does an amazing job in supporting  
rigorous systematic reviews.”



## BUILDING SYSTEMATIC REVIEWS

The faculty of the Harris College of Nursing & Health Sciences of Texas Christian University undertake multiple systematic reviews each year. Integral to these reviews is database expert and librarian Alysha Sapp, who met with Elsevier to discuss how Embase empowers her work on systematic reviews and provides help with more routine student studies.

# “I teach students and new faculty members how to get the most from research databases.”

– Alysha Sapp, Nursing & Nurse Anesthesia Librarian at Texas Christian University



## Biography

Alysha Sapp, Nursing & Nurse Anesthesia Librarian at Texas Christian University (TCU), Fort Worth, USA, provides support to both the Nursing Department and the Anesthesia Department. In addition to her 9 years of experience as a medical librarian, she works as a trainer for the Joanna Briggs Institute, the international research collaboration based at the University of Adelaide, South Australia.

## What does your job at TCU involve?

I am the Nursing & Nurse Anesthesia Librarian, which means I am the liaison for the library to those two departments. As the librarian, I support the departments by buying and subscribing to the books, journals and databases required by each department. Additionally, I teach students and new faculty members how to get the most from research databases.

I'm involved in at least one, and as many as three, systematic reviews a year, working with research assistants and other researchers. I'm working on two systematic reviews at the moment: as the second author for one, doing the meta-analysis and writing; and as the fourth author on the other, more as an advisor.

## What do you enjoy most about your work?

I enjoy meeting with students and showing them how to search properly. I generally see more than 10 students in a week, each usually for the first time. Most are doctoral or other graduate students. Because most people have become accustomed to searching the Internet with full-text sentence strings, students are frequently surprised to find that far more relevant database searches are possible when they follow the appropriate rules for the database.

## What are the main challenges of the job?

Time management is by far my major challenge. In addition to my research role, I'm also embedded in college orientation sessions and have daily appointments with students to help them with all their regular problems.

## How much of your work involves using online research solutions, such as Embase?

The large majority. I use Embase for systematic reviews, with researchers for general research and with graduate-level students in support of their articles. For undergraduate students, who are doing less specific searches, I tend to use databases with full-text searches, since the rules are easier.

## What are the challenges faced when working with researchers to build systematic reviews?

The length of time it takes from start to publication is certainly an issue. One major frustration is when we've already done most of the work and then we find that somebody else has already published in the same area. Having the idea taken by another group before the protocol is published has also happened.

Protocols take a few weeks to a month to prepare, then they are published to avoid others using the same protocol. Many of our protocols are submitted to the peer-reviewed journal *JBI Database of Systematic Reviews and Implementation Reports* to undergo review and publication. Then the process of the systematic reviews takes 6 months to a year to complete.

Another challenge can be “hand searching” for papers. This involves finding a source of information that has been suggested in other found publications, but is not as readily available. In particular, I'm thinking of the literature that hasn't been published yet—in press articles and so on.

**How many people are involved in the average systematic review?**

The JBI and Cochrane group require a minimum of two researchers. I usually work with another researcher to form a team of two, but as I mentioned, one current project involves four people

**How do you usually structure your systematic review questions?**

I use the PICO (population, intervention, comparison and outcome) process for quantitative reviews or the PIC (participants, phenomena of interest and context & type of studies) process for qualitative reviews. I always use PICO methodology to get keywords. Emtree® is excellent for producing keywords, especially as you can see which keywords will return which results in Embase.

After verifying keywords, I then review databases to check that nobody else is already doing the work. For example, I look at the databases for the JBI, Cochrane Collaboration and Campbell Collaboration and check the free-access journal Systematic Reviews.

**What databases do you use for systematic reviews?**

Embase does an amazing job in supporting rigorous systematic reviews so I always use Embase, particularly for the more European search “rules” that seem to cover more publications. I also routinely use MEDLINE®, ClinicalKey® and Trip (a PICO searcher).

I recommend to students that they use 3–4 databases for their searches. For my own research, I have extended this to 6 databases for one of my current studies, which is exceptional. Nursing topics tend to be more variable on the number of databases used because they may need to extend beyond traditional medical areas and include fields such as psychology or sociology.

**Have you found important references in Embase that you didn’t find elsewhere?**

Certainly. I’ve had too many examples to be specific, but in general, the different algorithm used in Embase seems to output slightly different results to US-based databases, presumably due to the more European search style.

**You mentioned your work with students. What are the challenges of teaching students how to use those solutions?**

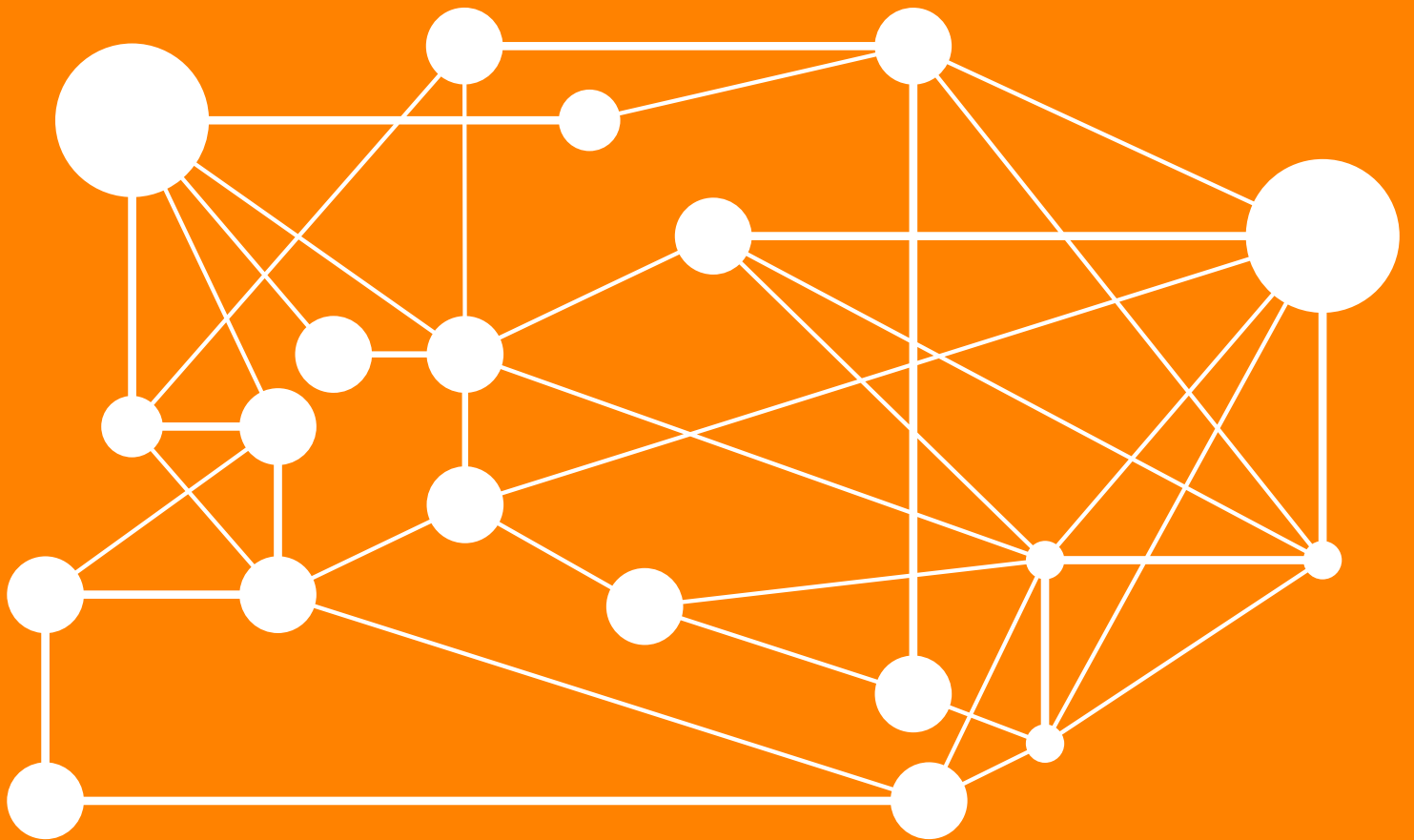
In my experience, students frequently become frustrated that so few articles are returned. Sometimes, this is due to their misunderstanding of the search functions of the database, but often the number of articles is genuinely low. They need to learn to construct the right searches—and to accept that volume of results isn’t as important as relevance.

Students find the different rules across databases frustrating, for example, whether to use an asterisk or question mark for truncation of a search term or the effects of variable spelling, such as with “anesthesia” and “anaesthesia”. There’s certainly a learning curve associated with using multiple databases.

Most students keep inadequate records of their search criteria. The search needs to be reproducible, so every search term and filter needs to be documented. Personally, I find taking a screen shot of the database with all terms visible on the screen to be the best practice. Embase also allows saving of searches and export of search results with search terms. That’s very useful.

**Would you recommend Embase to another researcher?**

Yes, I would definitely recommend Embase for nurses and medical researchers. It’s one of the best-structured databases for systematic reviews in evidence-based medicine.



## LEARN MORE

To request information or a product demonstration, please visit [elsevier.com/embase](http://elsevier.com/embase) or email us at [embase@elsevier.com](mailto:embase@elsevier.com).

Visit [www.elsevier.com/online-tools/corporate](http://www.elsevier.com/online-tools/corporate) or contact your nearest Elsevier office.

### ASIA AND AUSTRALIA

Tel: + 65 6349 0222

Email: [sginfo@elsevier.com](mailto:sginfo@elsevier.com)

### JAPAN

Tel: + 81 3 5561 5034

Email: [jpinfo@elsevier.com](mailto:jpinfo@elsevier.com)

### KOREA AND TAIWAN

Tel: +82 2 6714 3000

Email: [krinfo.corp@elsevier.com](mailto:krinfo.corp@elsevier.com)

### EUROPE, MIDDLE EAST AND AFRICA

Tel: +31 20 485 3767

Email: [nlinfo@elsevier.com](mailto:nlinfo@elsevier.com)

### NORTH AMERICA, CENTRAL AMERICA AND CANADA

Tel: +1 888 615 4500

Email: [usinfo@elsevier.com](mailto:usinfo@elsevier.com)

### SOUTH AMERICA

Tel: +55 21 3970 9300

Email: [brinfo@elsevier.com](mailto:brinfo@elsevier.com)