Research Support Services: Literature Searching

The research support services team of the University of Bern Medical Library supports students, researchers and clinicians through consultations and reference services, and provides teaching and learning opportunities through lectures, workshops and seminars on literature search techniques and academic writing. Our medical information specialists are experts in conducting systematic literature searches, teaching best practices in literature research, and are continually enhancing their knowledge and skills through professional education.

Services of the medical information specialists at the Medical Library include:
- Individual research consultations
- Courses and workshops
- Comprehensive literature searches
- Librarian-assisted literature searches

This policy covers services offered to both internal and external clients (students, researchers, staff members, etc.). We prioritize service requests from members of the Medical and Dentistry faculty.
1. Advisory services and individual research consultation

The Medical Library of University of Bern offers an advisory and individual research consultation service for literature search inquiries.

The medical information specialist provides the following support:
- Advises on adapting the search strategy to different databases
- Consults on and support of search strategy development
- Feedback on the framing of the research question
- Feedback on initial search strategy / peer reviews the search strategy
- Suggests appropriate sources to search (databases, trial registries, grey literature)
- Refers clients to relevant handbooks and guidance documents for each type of review
- Sets up search alerts for new publications

During the research consultation, the client meets one-on-one with a medical information specialist to discuss the design of the research question, search tool formats, and search strategies. Our staff explains how to use biomedical databases and how to request peer review of search strategies. The service deepens the client’s understanding of literature searching.

During the research consultation, our medical information specialist explains how to create and conduct a literature search but does not conduct the search for the client.

1.1 Contact

To access our advisory service in literature searching, please contact the research support services team by email: support_med.ub@unibe.ch.

- Individual research consultations with a medical information specialist are available by appointment. Please make your requests via our online form and include the following information:
  o Brief description of the aim of the research and your research question
  o Time frame for the literature search
  o Study design and the main concepts of your search topic

A medical information specialist will review the form and email the client within 2 working days to schedule a consultation.

1.2 Language

The sessions are offered in German, English or Spanish.

1.3 Time frame

The initial phone or email consultation will last no more than 30 minutes. To prepare students for searching, we encourage them to attend our courses. We also encourage faculty members, researchers, and external clients to book an individual research consultation or work collaboratively with the medical information specialist to conduct a comprehensive literature search. An individual research consultation can last from 1-2 hours. Additional appointments may be scheduled for complex searches and to resolve any outstanding questions.

1.4 Fees

We offer the same services for individual research consultations whether clients are internal or external, but costs differ.
- Affiliates of University of Bern and Insel hospital (Students, Professors, Post-docs, scientific collaborator): free
- Employees of the public administration of Canton Bern: CHF 88 per full hour
- External clients (non-affiliates of University of Bern): CHF 114 per hour; partial hours charged pro rata
2. Librarian assisted search services

The Medical Library of University of Bern offers librarian-assisted literature searching services. Librarian-assisted searches assist clients in exploring and researching their topics, in increasing their own knowledge, in improving the quality of the literature sources they use for research projects, presentations or teaching.

The medical information specialist will not conduct a complete literature search for students who need to integrate the search into their master’s thesis or dissertation. Students are instead encouraged to attend our courses, workshops and/or make appointments for individual research consultations.

Librarian-assisted searches dedicate a **maximum of two hours to each research project**. Requests are answered in the order they are received. These searches deliver a set of relevant references in an agreed-upon format (generally a compressed EndNote library and XML or RIS format). We deliver only references and not full-text articles.

If you have a literature search request from which you expect to produce systematic or scoping review, please refer to our Systematic Review Services / Evidence Synthesis Services. These types of reviews must follow established guidelines and standards, consist of exhaustive and reproducible literature searches, and require a substantial time investment.

2.1 Contact

To request an assisted search service from a medical information specialist, please fill out our [online form](#) and provide the following information:

- Brief summary of your research question and topic
- Inclusion and exclusion criteria
- Available references closely related to your topic (i.e. core articles that will be included in your review)
- A good description of your field

2.2 Time frame

Librarian-assisted literature searches dedicate a maximum of 2 hours. Requests that exceed this will be treated as a comprehensive literature search service (see 4.0).

2.3 Fees

Librarian-assisted literature searches that exceed 2 hours will be treated as comprehensive literature searching services (see 4.0).

We offer the same services for individual research consultations whether clients are internal or external, but costs differ.

- Affiliates of University of Bern and Insel hospital (Students, Professors, Post-docs, scientific collaborators, etc.): free
- Employees of the public administration of Canton Bern: CHF 88 per full hour
- External clients (non-affiliates of University of Bern): CHF 114 per hour; partial hours charged pro rata
3. **Courses and workshops**

The Medical Library of the University of Bern is committed to teaching students and researchers how to improve their research skills and raise the quality of their publications. We offer introductory and advanced literature searching to promote sound practice of evidence-based medicine. Our courses prepare attendees for a career in research or clinical practice.

Our courses in literature searching and evidence-based medicine include:
- Curricular courses for the faculties of Medicine and Veterinary Science
- Customized courses to meet the needs of your institution, department, or group

Our medical information specialist will consult with you on course assignments, content, and learning objectives. If you wish to offer ECTS credits, this decision must involve the person responsible for the curriculum.

3.1 **Contact**

For course offers in literature searching, please contact: support_med.ub@unibe.ch

3.2 **Time**

Courses comprise a lecture of a minimum of one hour lecture and a one-hour hands-on session. Class size for the hands-on session should not exceed 18 attendees. Our medical information specialist will consult with you on course length and times.

3.3 **Language**

We offer sessions in either English or German.

3.4 **Fees**

- Affiliates of University of Bern and Inselspital Bern (Students, Professors, Post-docs, scientific collaborators, etc.): free
- Courses for public administration of Canton Bern: per complete hour and group, CHF 255
- Customized courses for external institutions, departments, or groups: per complete hour and group, CHF 330
4. Systematic Review Services / Evidence Synthesis Services

The Medical Library supports researchers, clinicians, and external clients in designing and conducting thorough and complex literature searches for systematic or scoping reviews, HTAs, and clinical guidelines. Our medical information specialist works collaboratively with clients based on guidelines and standards set forth by Cochrane Collaboration, PRISMA, JBI, Campbell Collaboration, and the National Academy of Medicine (formerly known as IOM).

Services include:
- Consulting with and guiding the client through the steps in a systematic review
- Collaborating with the client to describe the search concepts and devise the initial search strategy
- Selecting databases and choosing grey or unpublished literature sources
- Submitting the first search strategy to the author
- Revising the search strategy until it receives final approval
- Running searches in the agreed-upon databases
- Completing the search
- Peer-reviewing search strategies
- Free access to systematic review software Covidence for the projects that uses our Systematic Review Services / Evidence Synthesis Services
- Delivering results delivered in the agreed-upon format
- Thoroughly documenting search strategies, databases, limits, and numbers of results for inclusion in the appendix of a manuscript and in a PRISMA flowchart
- Writing the description of the search methodology for the manuscript

Additional services in comprehensive literature searching may be negotiated.

4.1 Request for comprehensive literature searching

The comprehensive literature search request form must be submitted via our online form or emailed to support_med.ub@unibe.ch. We respond to requests in the order in which they are received. Along with the request form, you will need to submit the following:
- A summary of your preliminary search and the final version of your study protocol. (See this example of a systematic review protocol or for scoping review protocols; we suggest you register your protocol in PROSPERO)
- A summary of your research question
- Inclusion and exclusion criteria
- A minimum of five references closely related to your topic (core references that set a pattern for the kind of references you would like to include in your review). The more core references you can provide, the better we can optimize your search
- A good description of your field
- An approximate timeline for completing your systematic review project

Until the needed documents are provided, the request will be placed on our waiting list.

4.2 Timelines

Comprehensive searches are iterative, time-intensive processes, so it is best to contact us as soon as you complete a draft protocol. The time the search takes will depend on its complexity, the types and number of databases searched, the number of iterations required, and the length of time it takes to resolve all of your questions. The medical information specialist will discuss timelines and delivery dates before work commences.
4.3 Fees and agreement with cost estimation

After you submit the form, we may contact you with follow-up questions. After our initial consultation with the PI, we will send them an agreement form.

Fees are based on the specific services requested. Generally, the following fees apply:
- Affiliates of University of Bern (Students, Professors, Post-docs, scientific collaborators): CHF 120 per full hour
- Clients of Insel hospital (see 4.3.1) and employees of the public administration of Canton Bern: CHF 120 per full hour
- External clients (non-affiliates of University of Bern): CHF 150 per hour; partial hours charged pro rata

4.3.1 Systematic Review Services for Researchers and Clinicians of Insel hospital

Systematic Review Services Projects from Insel are partly financed by the Insel hospital and thus free, except for the following:
- Systematic literature searching for students working on master's projects. We encourage students to attend courses, workshops, and/or our individual research consultations.
- Manual searching and searching grey literature.

4.3.2 Capacity Consideration for Project Support

In the interest of managing our resources effectively and ensuring equitable access to our services, the following capacity consideration has been established:
- Due to limited resources, support is provided for up to two projects per clinic per calendar year. This guideline is intended to fairly distribute our services across departments.
- If additional capacity becomes available, we may extend support to more than two projects per clinic in a given year, subject to mutual agreement and based on a case-by-case evaluation.

This structure allows us to maintain a balance between supporting a wide range of research and clinical projects and managing the limitations of our resources.

We will process review support requests in the order in which we receive them.

4.4 Provision of services by the medical information specialist

The services include all steps outlined in the agreement. Conducting a systematic review is a team effort, so we advise including our medical information specialist in your team meetings so they understand the rationale and development of the review.

Before our medical information specialist can create an initial search strategy, you must provide a completed draft of your systematic review protocol or have already submitted it to a publication or registry. If you are at the draft stage, our medical information specialist can advise you on protocol standards and registration. We strongly recommend investigators register their protocol to reduce the risk of duplicating efforts.
The PI must approve the final draft of the search strategy (generally, in Ovid Medline) before our medical information specialist can complete searches in the specified databases. Our specialist will document the search for inclusion in the appendix of your manuscript and your PRISMA flowchart.

Any changes to systematic review procedures must be immediately shared with our medical information specialist and reflected in an amendment to the agreement.

Our medical information specialist will deliver search results in an agreed-upon format (generally, a compressed EndNote library, and as XML or RIS). The research team must save these completed search results in a secure location, since we are not responsible for data loss after delivery. We do not deliver full-text articles, but many articles are available in full text via UB e-journals (accessible to all clients with a University of Bern Campus account). Other articles may not be available in the electronic databases of the UB. The UB Document Delivery service can help you obtain these articles.

When accepting our services, the PI/lead author also agrees to send the finalized manuscript and search strategy documentation to our medical information specialist for review and feedback. This must be done before submitting the article, protocol, conference proceeding, or other document in which the search is described. Our medical information specialist must review their contributions.

Upon the client’s request, another of our medical information specialists can peer review the search strategy according to the PRESS Checklist, a guideline information specialists use to evaluate search strategies.

### 4.5 Authorship

Including information specialists as co-authors is “correlated with significantly higher quality reported search strategies”\(^1\).

According to the International Committee of Medical Journal Editors, authorship must be based on meeting all of these four criteria:

1. Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work
2. Drafting the work or revising it critically for important intellectual content
3. Final approval of the version to be published
4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

We recommend teams clarify all roles and contributions in the initial stages of the project. If the client wishes not to engage the medical information specialist as a co-author (work-for-hire), they should acknowledge their contribution in the appropriate section of the manuscript, but medical information specialists often qualify as authors. They (1) design and implement search strategies that substantially contribute to the study and the acquisition of data. (2) Writing the search methodology falls under drafting the work, and we also provide feedback and revise descriptions of our work in the draft. (4) We issue final approval of our contributions and methods in the manuscript. Many journal publishers request contributor disclosure statements for publication submission.

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\(^1\) Rethlefsen ML, Farrell AM, Trzasko LC, Brigham TJ. Librarian co-authors correlated with higher quality reported search strategies in general internal medicine systematic reviews. Journal of clinical epidemiology. 2015 Jun 1;68(6):617-26.
4.6 Grants

Researchers who receive grant funding for their projects are expected to include library efforts in the grant. If the researcher qualifies for free search support, the medical information specialist should be credited as an unpaid expert consultant.

4.7 Questions

If you have any questions about this policy, please contact the head of the Medical Library, Dr. Michelle Schaffer at Michelle.Schaffer@unibe.ch

4.8 Information specialists

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