



UMEÅ UNIVERSITET

GRANTS FOR RESEARCH INFRASTRUCTURE for 2024¹

General Information

The Faculty of Medicine at Umeå University hereby announces 1-year funding support for:

- a) costs for establishing, including for example: new purchases, further development, or upgrading/supplementing of research infrastructure at the Faculty of Medicine,
- b) operating of established research infrastructure.

The call aims to strengthen the competitiveness and quality of the Faculty's research. Previous calls have resulted in grants in the range of 200-1500 kSEK. For **2024 a total of up to 6 000 000 SEK is announced. The application deadline is 31 Januari, 2024.**

Eligibility and other requirements

The funds are intended to help establish and maintain research infrastructure (namely equipment, installation, database, knowledge banks, or other resource with affiliated staff), that is in demand and necessary to conduct high-quality research.

The research infrastructure must be openly accessible for use by the Faculty's researchers, and made visible on UmU-webpages in accordance with the UmU's Rules for Research Infrastructure. One may apply for and receive grants within both category **a** and **b**, although it requires a separate application in each category.

Researchers at the Faculty of Medicine (individual and groups) are welcome to apply for:

- a) **establishment costs, including for example: new purchases, further development, or upgrading/supplementing of infrastructure** that will benefit several research groups at the Faculty of Medicine, and Umeå University.

The application should represent both breadth and competence and should demonstrate that the funding is expected to produce synergy effects regarding quality and activity for the Faculty's research.

All or part of the costs of the infrastructure can be applied for and co-financing must be specified. Equipment is expected to have a depreciation period (*avskrivningstid*) of three to eight (3-8) years and is to be managed by the respective department.

Note that these funds cannot be used for operating costs or accessibility of the infrastructure (for example salaries for operation, regular service agreements etc.).

The future costs of the specified infrastructure must, as far as possible, be financed through user fees and external grants.

- b) **budget support for operating of established research infrastructure.** Funds can be applied for costs related to operating, such as service agreements or personnel, that currently cannot be covered via user fees. These funds cannot be used to upgrade an existing infrastructure.

The need for funding support must be clearly motivated, and the future needs as well as an action plan should be described. The application should demonstrate accessibility, usage, output, and benefit of the research infrastructure as well as demonstrate that the funding invested by the Faculty is expected to deliver synergies in quality and activity of the research at the Faculty. It is vital that the application includes description of the infrastructure

¹ This document has been translated from Swedish to English. In case of divergence of meaning between the versions, the Swedish wording shall prevail.



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activities, a comprehensive budget, and a financing plan.

If the infrastructure has previously received grants from earlier calls from the Faculty, for category a), or b), then a clear accounting of how those funds have been utilized must be presented.

Note that the national research infrastructures that are co-funded by the University, and the Faculty, to cover the salaries and operating costs for the national parts of the facilities are not eligible to apply for budget support for these costs in category b. Should the application concern local participation of a national research infrastructure, it should then be clarified.

Application procedure

Note that the application instructions differ for categories **a)** and **b)**.

Application should be in English and follow the given instructions. The main application may submit only one application in each category. The number of co-applicants per application is limited to five (5).

Application is made in the Faculty's portal in ResearchWeb – <https://researchweb.org/is/umu> – **latest by 31 Januari 2024, 14.00 CET.**

Applications that aren't complete, or not per the instructions will not be considered.

Assessment and Decision

Applications will be assessed and prioritized by a review panel appointed by the Faculty's Strategic Board for Research (FON). The review panel evaluates the applications per the following criteria (scoring scale in parenthesis):

- **Potential and Quality (1-7)** Is the infrastructure unique? State-of-the-art? Useful for scientific output? Will it increase quality and impact of research at the faculty? Can similar data be obtained by other, already present, infrastructure at UmU, or nationally?
- **Feasibility (1-7)** Is it realistic that new users will have access and can utilize the infrastructure? Do the applicants have the competence and experience to establish and operate the infrastructure? Is the organization realistic for the infrastructure to be sustainable and accessible? Is the financial plan sustainable and are the user-fees fair?
- **Breadth (1-5)** Will the research infrastructure benefit a large number of research projects? Are several Faculty research areas dependent on the infrastructure?

A decision on fund allocation will be made within three months of the application deadline.

For questions concerning the call contact the Faculty Office of Medicine via:

research.med@umu.se.



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Application instructions for Categories A and B

The application should be in English.

Your CV, personal details, and the publication list will be added to the application from your ResearchWeb profile. Ensure therefore that your profile in ResearchWeb is updated.

Incomplete applications or applications that do not follow instructions will be deemed ineligible.

Instructions for CATEGORY A), Grant for Establishment of Research Infrastructure, for 2024

Appendix A

Selection of publications

Select a total of 10 publications from applicant(s), with relevance to the application. You should state, for each of the ten most important publications, your contributions to the publication (this must not exceed four lines per publication).

Mark your name in the list of authors in bold. Include number of citations for the publication, and the Impact Factor for the journal during the year of the intended publication.

Appendix B

Description of the Research Infrastructure and its usefulness for research (max 4 A4 pages, font Arial 11, single spaced)

Here, the research infrastructure, its potential, and its area of application are described, as well as the benefit for research in various areas.

The description should clarify how the funds applied for will strengthen research at the Faculty of Medicine.

Appendix C

Organization and accessibility (max 2 A4 pages, font Arial 11, single spaced)

In this appendix, the following should be covered:

- Is the research infrastructure applied for already available in Umeå? Is it available to researchers at the Faculty of Medicine through other national research infrastructure?
- How is this research infrastructure coordinated with any similar, already existing, infrastructure?
- Is the research infrastructure an integral part of one or more research groups, or is it meant to function as a separate service unit?
- Briefly describe the research infrastructure organization, for example by specifying:
 - o Management/*ledning* (incl. name and function of persons)
 - o Control/*styrning* (including name and function of persons)
 - o Responsible/*ansvariga* (including name and function of persons)
 - o Expected number of users of the research infrastructure
 - o How to create accessibility (e.g., systems for booking, prioritization, waiting times and infrastructure utilization)
 - o How to educate users of the research infrastructure
 - o How the service is managed by the research infrastructure
 - o Where and how data is available to the user
 - o Follow-up of activities



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Appendix D

Description and motivation of financing (max one A4 page, font Arial 11, single spaced).

Motivate and describe budget items.

The financial conditions for co-financing of purchases and future financing of operations should be detailed. In particular, it should be specified how operating costs and personnel necessary for the use of the infrastructure will be financed.

Brief description of the researchers or facilities supporting the application and in which way the applied research infrastructure is expected to strengthen their research. Also clarify what funds the supporting researchers/facilities have at their disposal and to what extent they will co-finance the research infrastructure.

Appendix E

Financing Plan (max one A4 page, font Arial 11, single spaced).

Here, the total financial plan (for years 2024-2028) for the purchase/buildup as well as operation of the infrastructure, should be specified.

Describe the expected costs and the available funds that will be used to cover the costs (approved grants, funds applied for, other funds from department, faculty or university, and user fees).

Describe using the following headings:

- **Depreciation costs** per year for purchase/build-up of infrastructure
- **Salary costs**, including *LKP* and OH (Salary costs for personnel staff, manager, director etc.)
- **Operating costs** including *LKP* and OH (Travel costs, conferences, IT service/support, reagents, consumables)
- **Rental costs and upkeep**

Appendix F

Attestation from the main applicant's Head of Department certifying that:

- the application is supported,
- the application has undergone peer-review at the department.



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Instructions for CATEGORY B), Grant for Operating of Established Research Infrastructure, for 2024

Appendix A

Description of the Research Infrastructure and its activities and availability (max 4 A4 pages, Arial 11, single spaced)

The description should include the following:

- A brief general description of the infrastructure and main activities. Also describe here if the research infrastructure functions as an integral part of one or more research projects or if it is meant to function as a separate service unit.
- Describe if similar research infrastructures are available at Umeå University or at other universities, and if it is available to researchers at the Faculty of Medicine. If so, how are these infrastructures coordinated?
- A description of the current infrastructure organization, steering and management.
- A description of equipment within the infrastructure and/or non-equipment material that is accessible by or through the infrastructure (e.g., blood samples, tissues, collected data, computer programs, processes, etc.)
- A list and description of personnel working within the infrastructure.
- A description of the services that are offered.
- A description of the availability of the infrastructure and how booking of services is organized.
- Describe if there are any restrictions on availability for different types of users or if availability depends on prioritization and if so, how the prioritization is done.
- A description of planned future developments.

Appendix B

Description of the usefulness of the infrastructure for research at the Faculty of Medicine (max 2 A4 pages, font Arial 11, single spaced)

The description should include the following:

- A description of users and relevant projects during 2020-2022 specified by university (UmU, SLU or external), faculty, department, Region Västerbotten and Principal Investigator.
- A list of publications where the platform is mentioned in Acknowledgements during the last 5 years (2019-2023).
- A list of publications where personnel employed on the platform are included as co-authors during the last 5 years (2019-2023).
- If necessary, a list of other relevant publications during the last 5 years (2019-2023).
- Other activities, such as courses, arrangement of conferences, teaching activities during the last 3 years (2021-2023).

Appendix C

Motivation of Financing plan, and the budget support applied for (max one A4 page, font Arial 11, single spaced).

The description should include the following:

- Brief description and motivation of the financing plan.
- A specification and motivation of the requested budget support from the Faculty of Medicine for 2024 with indication of what costs the support should cover and why this cannot be covered by other means.
- If funds within category a) and/or b) have been previously approved by the Faculty, describe how these funds have been utilized.



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Appendix D

Balance Sheet (*Bokslut/Resultat*) for 2023, for the infrastructure; to be included as one document.

Appendix E

Financing Plan Financing plan for 2024-2028 is obligatory and should be submitted according to template in ResearchWeb. Here, the total budget of the infrastructure should be specified. Please note that there are four sections – *Financing Plan, Personnel costs, Equipment costs, Applied amount*.

Appendix F

Attestation from the main applicant's Head of Department certifying that:

- the application is supported,
- the application has undergone peer-review at the department.



ASSESSING RESEARCH INFRASTRUCTURE THAT IS NOT A PHYSICAL EQUIPMENT

Introduction and Aim

Applications for funding for research infrastructures (RI) may concern, for example, registers, databases, and biobanks. These are difficult to describe, evaluate, and prioritize based on criteria designed for physical research facilities and analytical equipment.

The aim of this annex is to facilitate the evaluation and ranking of applications for these types of RI. The call's criteria are therefore discussed here based on aspects that are specific to these infrastructures.

There is a concern that the evaluators overstress on aspects that are discussed in this help-text. Note therefore that what is discussed here is special. What is most important is in many cases common for all types of infrastructure. For example, "unique" and "state-of-the-art" are important aspects but are not discussed here.

The criteria used in the call concern: i) Potential and Quality, ii) Feasibility, and iii) Breadth.

About these research infrastructures

It can be difficult to distinguish an RI that is a database, or biobank, from a research project. This is because a database of sensitive personal data must usually be included in a research project to comply with legal requirements in the GDPR and the ethical review legislation (*Etikprövningslagen SFS 2003:460*). Additionally, something that has been initiated as an individual research project can sometimes transform into an infrastructure. The three criteria, however, provide an opportunity to evaluate how well what is proposed in the application, can serve as research infrastructure. Per UmU's Rules for Research Infrastructure, an infrastructure must be usable by more than one research group. Accessibility (under Feasibility) and Breadth are therefore important criteria in this context.

Discussion of the evaluation criteria, as outlined in the call-text

Potential and quality (1-7) Is the infrastructure unique? State-of-the-art? Useful for scientific output? Will it increase quality and impact of research at the faculty? Can similar data be obtained by other, already present, infrastructure at UmU, or nationally?

Evaluating the potential of these research infrastructures is not much different from a research facility or an analytical instrument, but some aspects worth discussing are:

Market analysis

An analysis of the research landscape is important for assessing the potential. The evaluators need to assess the application based on which similar registers, databases, biobanks, or others that already exist or are being built. This applies locally, nationally, and internationally, as data and knowledge can be accessed from farther distances than physical infrastructures. A data, or knowledge-based, infrastructure in Umeå can therefore have great international potential. On the other hand, to fulfil a function, it may also need to be justified in the context of the national and international infrastructures that exist.

Questions to ask are: What gap does the proposed research infrastructure fill? Why can't existing registers, databases, and biobanks be used?



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Enrichment

This type of infrastructure becomes more valuable if additional data and knowledge is acquired, for example through ongoing data collection or research projects using the infrastructure, provided that this data is made available to users of the infrastructure. An assessment of plans for enrichment of the infrastructure should be carried out, as this affects whether it will be unique and/or state-of-the-art in the future.

Scientific production

The evaluators should assess the probability of significant scientific output from the proposed RI. It is advantageous if there is already proven scientific production, but it is not always reasonable to demand it, if the RI is under construction. The evaluators should provide an evaluation based on what is required for the RI to lead to significant scientific production, apart from access and usability (included under *Feasibility*). For example, is it necessary to establish scientific collaborations with certain types of researchers? Will additional data need to be added in the future? Will other financiers have to pay for investments outside the current application? Is it imperative that key competences are retained or replaced? It is up to the applicants to describe this in a way that can be assessed.

Feasibility (1-7) Is it realistic that new users will have access and can utilize the infrastructure? Do the applicants have the competence and experience to establish and operate the infrastructure? Is the organization realistic for the infrastructure to be sustainable and accessible? Is the financial plan sustainable and are the user-fees fair?

The questions above are relevant. The first point is very much based on the other three. Aspects of these three are discussed below:

Competence, experience and organization for data management and ethical responsibility

For establishments that handle personal data, it is necessary to master data management and ethical responsibility. Will consents and ethical approvals cover what the infrastructure intends to do? Can collaboration with new users be managed? Can international collaborations be managed? Is there sufficient expertise and experience to ensure that the functioning of the RI is not rendered impossible by legal obstacles to data processing?

Finances: longer perspective and overlap with research

A sustainable financial plan should be presented. As these infrastructures often have a long lifespan, a long-term plan should also be presented, including other sources of funding and user fees. Where appropriate, it should be clarified how the RI's finances are separated from the research project. In view of the risks above, the evaluators should consider that even risky projects may be worth the investment, provided that the potential is great.

Breadth (1-5) Will the research infrastructure benefit a large number of research projects? Are several Faculty research areas dependent on the infrastructure?

This criterion emphasizes the use of the RI for a large number of research projects. The assessment of breadth should be based on both the present and the future. Since the heading is *Breadth*, it can be assumed that it is not only the number of research projects that are to be assessed, but also the breadth of different subjects, research groups, etc.