



UMEÅ UNIVERSITET

QUALITY SYSTEM FOR RESEARCH Faculty of Medicine

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Introduction

This document describes the systematic quality enhancement occurring at the Faculty of Medicine at Umeå University and aimed at assuring and improving the quality of the Faculty's research.

Background

Since 2017, the Swedish Higher Education Authority (UKÄ) has been responsible for reviewing the quality assurance processes used by Swedish higher education institutions in both higher education and research. These reviews are based on *Guidelines for reviewing the HEIs' quality assurance processes for education and research*.

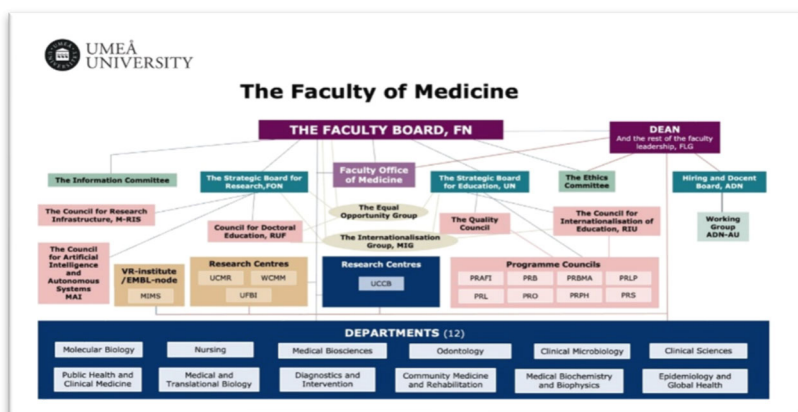
The Faculty of Medicine's quality system for research builds on the *Policy for quality enhancement and quality assurance of research at Umeå University*. This policy, in turn, is based on the joint framework for quality assurance and enhancement systems in research at higher education institutions, which was developed by the Association of Swedish Higher Education Institutions (SUHF), and on Umeå University's vision, which was adopted by the University Board on 3 April 2019.

Umeå University's policy covers the following four components of quality assurance procedures:

- A. Culture for quality in research**
- B. Resources for quality in research**
- C. Strategic choices and priorities for enhancing and renewing research**
- D. Follow-ups, analyses and evaluations**

Faculty of Medicine's organisation and governance documents

The Faculty's governance documents, such as rules of procedure and decision processes and delegation of authority rules, describe both the line organisation and the division of responsibilities and roles within the Faculty. The Faculty's current organisation and governance identify strengths, opportunities for improvements and weaknesses. One example of this is that Faculty Management is represented in several of the Faculty's meeting bodies, which closely links the Faculty and department levels and offers opportunities for discussions on research quality assurance and enhancement at different levels.



Alt-text: Organisation chart for the Faculty of Medicine



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The Faculty Board is responsible for quality enhancement and quality assurance of research within the Faculty's subject areas. The Faculty's budget and operational plan are closely linked, and resources are allocated and prioritised based on the needs identified through systematic quality assurance and enhancement procedures. Faculty-level and department-level financial statements and operational plans are also important components of strategic work.

The Strategic Board for Research (FoN) is responsible for:

- following developments in research both nationally and internationally;
- initiating and proposing measures to promote and develop the Faculty's competitiveness within its research areas;
- monitoring strategic questions for research and doctoral education;
- auditing the quality of the Faculty's research.

The chair of the Strategic Board for Research, who is also the Faculty's associate dean for research, is a member of the university-wide Strategic Council for Research and Doctoral Education (FOSTRA), which addresses issues of competitiveness and quality audits.

The Council for Doctoral Education (RUF) determines formats for quality assurance of doctoral education and is tasked with following up and supporting the work of departments with doctoral education and following developments in doctoral education, both nationally and internationally.

The Strategic Board for Education (UN) works with strategic questions and with promoting the Faculty's competitiveness in bachelor's and master's education.

The Faculty Ethics Committee provides support and other assistance to the dean. The Committee is described in more detail under Component A.

The Faculty's Hiring and Docent Board (ADN) is responsible for ensuring that the Faculty has transparent and fair processes for the promotion and recruitment of academically qualified teachers.

The Faculty also has the Advisory Board for Research Infrastructures (M-RIS), which assists in inventorying, prioritising, highlighting and making available research infrastructures, and the Council for AI and Autonomous Systems (MAI), which assists with identifying and developing the Faculty's AI-related research. Both M-RIS and MAI cooperate with central level bodies.

The Faculty's Information Committee is responsible for sharing information with the general public on research.

Given the importance of gender equality and internationalisation, the Faculty Board has established an equal opportunities group consisting of members of the Faculty's central strategic bodies. This group is tasked with monitoring these issues in the above bodies.

- The group provides expertise within the Faculty and works with strategies and measures for ensuring that all students and staff at the Faculty have equal rights, obligations and opportunities regardless of gender, transgender identity or expression, ethnicity, religion or other belief, functional diversity, sexual orientation or age, and

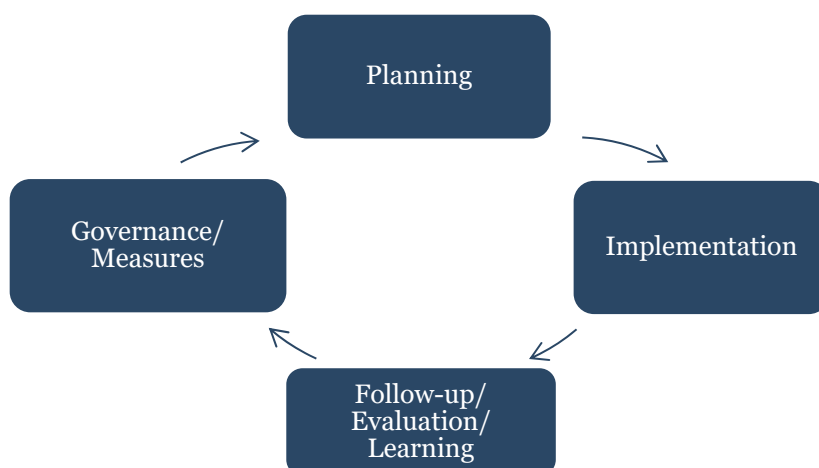


- An internationalisation group composed of members of the Faculty's central strategic bodies is tasked with monitoring the questions being discussed in these bodies. This group follows up the implementation of the *Mission Statement for Internationalisation at the Faculty of Medicine* and works for synergies and increased collaboration in internationalisation.

The Equal Opportunities Group organises training, primarily for heads of department and staff. In addition, the group organises an annual Equal Opportunities Award to encourage staff and students to work for equal opportunities. The Faculty also has both equal opportunities representatives and equal opportunities officers.

Quality assurance components

The Faculty's systematic quality assurance and enhancement procedures are dependent on the activities and processes described in this document, both to enable action based on follow-ups/evaluations conducted after an initiative or activity has been implemented and to learn from and enable dissemination of this information within the University as a whole.



Alt-text: Chart systematic improvement work (PDCA)



A. Culture for quality in research

Freedom of research

The core of quality assurance in research lies both in academic freedom and in previously well-established processes with various forms of peer review, such as reviews of grant applications, reviews of manuscripts, and reviews during seminars and defences of doctoral theses.

Quality assurance and quality enhancement of the Faculty's research requires the commitment of staff at every level. To stimulate this, Faculty Management has regular meetings with the heads of department and with teaching staff. The Faculty Board invites the Strategic Board for Research, the University Board and the Faculty's Hiring and Docent Board for strategic discussions on such questions as the budget, recruitment and quality in research. Preparatory bodies are responsible for organising seminars, research meetings and thematic workshops, both for teaching staff and for the heads of department with the intention of stimulating new collaborations and professional development. The heads of department, in turn, have departmental-level forums to support staff commitment. These include PI meetings and departmental research days.

The Faculty Board and the Strategic Board for Research use some direct government funding for research for non-earmarked calls, where faculty researchers apply for project grants for free research in competition with others. The Faculty also offers funding to stimulate translational/interdisciplinary and novel research and support researchers who would like to take a sabbatical as a visiting scientist at a foreign research institution to experience new environments and ideas.

The Faculty organises various forums to facilitate discussions on research, academic freedom in research, ethics, a culture of quality and research quality:

- The Strategic Board for Research regular events with different themes;
- Faculty Management's monthly heads of department meetings;
- Faculty Management's meetings with teaching staff;
- Faculty Board and Strategic Board for Research workshops with different themes for faculty heads of department.

Good research practice

The Faculty works in different ways and at different levels to promote good research practice and to prevent and deal with misconduct in research:

- The Faculty Ethics Committee is an advisory body to the dean and stays abreast of the latest developments in ethics. The committee plays an important role in promoting good research practice by organising training and seminars on relevant ethics questions for researchers and students.
- The Faculty has representatives in the university-wide Council for Good Research Practice (REDA). The Faculty is represented by the chair of the Ethics Committee and the chair of the Council for Doctoral Education (RUF).
- Compulsory ethics courses for doctoral students within the faculty-wide doctoral programme;
- The mandatory ethics course, *Ethics for Postdocs and Researchers in Medicine*, for researchers with foreign PhDs and who are active as a researcher at the Faculty;



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- The compulsory principal supervisor course *Postgraduate Supervision in Practice*;
- The Faculty provides a compulsory half-day course for principal supervisors on the regulations for doctoral education. Supervisors may only take on new doctoral students if they have completed the course within the previous five years.
- Research ethics questions are discussed by the Faculty Board and preparatory bodies, by teaching staff and in dialogue with the Faculty's heads of department.
- Each academic programme provides basic information on research ethics.

In its strategic efforts to attract, retain and develop talent, the Faculty strives to ensure its research environments achieve a critical mass, an aspect that is important for many reasons, including for department seminars, where research ethics are highlighted.

External review of the Faculty's ethics work is largely done by the Ethics Review Authority, which is tasked with protecting participants in human research. The Board for the Examination of Misconduct in Research collaborates with legal officers when examining complaints related to research misconduct.

The Vice-Chancellor has approved a procedure for examining suspected research misconduct. The Faculty's staff is also responsible for reporting suspected research misconduct.

Peer quality assurance processes and culture of quality

A culture of quality is ensured by the majority of representatives on the Faculty Board, in preparatory bodies and on the Strategic Board for Research coming from academically qualified teaching staff. Quality in research is a constant focus of these bodies. This is also an excellent way of identifying how the departments work with quality assurance and improving quality in research. The Strategic Council for Research and Doctoral Education (FOSTRA) addresses strategic questions on research quality and research infrastructure.

Peer review is a fundamental part of quality assurance and enhancement. Scholarly articles and national and international grant applications are externally peer reviewed.

The Faculty has an ongoing programme to improve and expand peer review at both departmental and faculty levels. To help its researchers to become even more competitive, the Faculty strongly recommends that grant applications be written in English and go through internal peer review at the relevant department and that the applicant can show that they have received a project grant or that they have applied for a grant in the past year from a state research council (Swedish Research Council; Swedish Research Council for Health, Working Life and Welfare (Forte); Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas); Vinnova). Applications to the Faculty's internal calls for grant proposals are submitted through the online application system Researchweb, which ensures a transparent process and simplifies the process for both applicants, reviewers and administrators.

To quality assure processes in the Faculty's larger calls for proposals, the Strategic Board for Research appoints experienced external reviewers. The same reviewers are often retained for several years, allowing them to follow trends and provide useful feedback to the relevant parties at the Faculty. When appointing review panels for grant applications, in addition to considering subject expertise, the Faculty also considers equal opportunities in terms of both gender and age.



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The Faculty Board and the Strategic Board for Research also appoint observers that report back to the committees on how the review processes have been conducted.

Further quality assurance of the Faculty's internal calls for grant applications occurs through the use of templates developed by the Strategic Board for Research and the Faculty Office of Medicine and through guidelines adopted by the dean. This provides a sustainable system that is not dependant on a single individual. The available templates and guidelines are:

- Process description for calls for internal research funding
- Checklist for observers
- Template for feedback from reviewers
- Template for information on requisitioning funds and grant periods
- Template for scholarly reports
- Form to apply for extending the grant period
- Guidelines for approving extended grant periods for awarded grants from the Faculty of Medicine

Experienced researchers contribute with peer review for larger applications, such as ERC and KAW. Work is ongoing to establish an appointed Faculty group tasked with contributing with this type of peer review.

The Strategic Board for Research organises workshops for heads of department to help with peer quality assurance processes and a culture of quality at the departments and to highlight good examples that help extend the reach of previously learnt lessons.

The Strategic Board for Research has appointed a reference group with a broad range of experienced researchers and academic leaders as important support with quality in research. Additionally, this group will also assist with the University's pilot evaluation of quality in research that University Management has approved for implementation both at department and faculty levels and a thematic evaluation that will cover the entire University. The reference group will also support faculty representatives in the university-wide working committee focused on evaluation of quality in research.

The Faculty Office of Medicine is responsible for the Faculty's weekly newsletter with information on current calls, seminars, research events and so on.

Engagement, collaboration and contribution to society

The Faculty of Medicine has good and continuous collaboration with the Northern Health Care Region (equivalent to *Collaboration Region Umeå* as per the Health Care Ordinance [2017:80], i.e. Region Västerbotten, Region Jämtland Härjedalen, Region Norrbotten and Region Västernorrland in co-operation) and Umeå Medical and Health Sciences Student Union. The Faculty Board has decided that all preparatory bodies are to have one external member from the regional health authority/municipality/private sector/public authority and at least one undergraduate/master's student and/or doctoral student. The external member of the Faculty's preparatory bodies is primarily to come from Region Västerbotten (the regional health authority).



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The importance of the discussions and collaboration occurring within and between the preparatory bodies and in the Faculty Board should not be underestimated.

Clinically combined/joint positions (assistant professorships, associate professorships, full professorships) and adjunct positions strengthen collaboration with Region Västerbotten and other regions in the Northern Healthcare Region. Collaboration also occurs in various consultative bodies, in the ALF committee, in the TUA committee, and in the Umeå University Health Board (NUSS). These collaborations expand opportunities for disseminating research findings and for greater utilisation of findings.

The Faculty also has close collaboration with municipalities in the northern region. An example is collaboration with Örnsköldsvik Municipality and the health authority Region Västernorrland in the project *STREAM - Strategy for research milieu in Örnsköldsvik*.

The Strategic Board for Research invites units for innovation from both the University and Region Västerbotten to gatherings and research meetings for increased collaboration.

The Faculty's collaborative activities are reported in annual financial reports and annual reports.

The Faculty's Information Committee regularly organises the popular and well-attended seminar series *Fika efter en forskare* (Fika after a researcher) when the Faculty's teachers hold talks of a more popular science nature for the public. The committee collects statistics on the number of attendees, age distribution and how attendees found out about the seminars.

The Faculty participates in the University's science lunches aimed at the general public and in Knowledge Week. Knowledge Week is organised to provide an important forum for upper-secondary teachers with opportunities for professional development.

The Faculty conducts several activities that promote collaboration, including open research meetings and workshops.

The Faculty's researchers contribute scientific perspectives to debates and discussions in the media. News on research findings is intended to disseminate information to the public and the scientific community.

Researchers that receive grants from the *Medicinsk forskning i Norrland* (Medical Research in Northern Sweden) fund are required to write a scientific report describing how the grant has been used. The purpose of this report is to keep donors informed.

Scientists who conduct clinical research collaborate with patient organisations (user participation).

See also section *Recruitment, career paths and career support*.

Linking research and teaching

Quality assurance within education, primarily doctoral education, also benefits the research conducted by the Faculty. The Faculty's quality system for education at the bachelor's and master's levels specifies that programme analyses conducted by the programme councils are to discuss how



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each programme is linked with scientific findings. The Faculty's upcoming quality system for doctoral education includes additional aspects related to research.

The Council for Doctoral Education (RUF) is responsible for preparing strategic questions within doctoral education. The Council closely collaborates with the Strategic Board for Research through the Council's chair serving as a permanent adjunct to the board and through joint meetings with strategic discussions. The Council for Doctoral Education organises seminars for doctoral students on postdoctoral acquisition of qualifications.

The Faculty closely cooperates with the Umeå Medical and Health Sciences Student Union. The student union has representatives in all faculty bodies.

Many degree students are able to conduct their degree projects as part of ongoing research projects. The Faculty allocates additional funding for degree projects conducted in top-quality research environments.

Doctoral students teaching undergraduate courses are to have completed the initial higher education teaching training.

Teachers/supervisors complete the University's supervisor/docent training courses. By giving teachers time for research as part of their employment, this ensures academically qualified teachers in the learning environment. The percentage of teachers with PhDs is tracked on an annual basis.

Students in every bachelor's programme are provided basic information on research methodology, the theory of science and research ethics. The Faculty's research trainee system (*forskaraspirantverksamheten*) offers students in all of the Faculty's bachelor programmes the opportunity to apply for positions that enable them to test what it is like to research. The purpose is to promote earlier completion of doctoral degrees to extend academic careers. Students outside the research trainee system can also test doing research during the summer months.

The Council for Doctoral Education is responsible for the faculty-wide doctoral programme that was established for doctoral students accepted for studies from 1 July 2021. The programme is to ensure equal opportunities for all doctoral students concerning the duration of their studies and access to good doctoral environments. The Faculty's Doctoral Programme Committee collects course evaluations from doctoral courses for analysis and discussion of possible improvement opportunities.

The Faculty announces internationalisation grants for stays abroad during doctoral studies and for preparation for a postdoctoral stay abroad.

The Faculty co-funds the National Research School in General Practice.

The Faculty offers targeted grants (known in Swedish as *Forskningslyftet*), both to strengthen research at departments/units/subjects identified as facing challenges in providing time for research and in their ability to attract research funding, and to ensure scientific expertise among the teachers in the relevant subjects.



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B. Resources for quality in research *and*

C. Strategic choices and priorities for enhancing and renewing research

Research funding

A bottom-up perspective on the enhancement and renewal of research is essential. This is why participation in the Faculty's various bodies that conduct the broader strategic discussions is important. These bodies provide the opportunity to collect and analyse information for decisions on priorities and strategic initiatives. These types of discussions are also held with heads of department in different contexts to strengthen both bottom-up perspectives and support.

The Faculty provides the necessary conditions both for basic allocations and strategic initiatives for the development and renewal of research and research environments. The departments define what forms these efforts take. A long-term approach in the budget process is important for improvement and renewal of research. The Faculty's decision-making bodies have joint strategic discussions on research strengths, development opportunities and weaknesses. Decisions on strategic initiatives are based on regular follow-up, including through the performance bonus. Through the performance bonus, part of the direct government funding for research is allocated based on bibliometrics and external grants, which helps drive performance. In addition, the performance bonus helps the Faculty identify those subject areas that have difficulties in competing for external grants. Faculty Management, the Faculty Board and such preparatory bodies as the Strategic Board for Research collaborate and implement strategic initiatives, such as support in the form of project funding, grant writing and peer review. External analysis is another important factor in identifying good examples that can be discussed and possibly implemented at the Faculty.

To provide stable conditions for teachers and research environments and to strengthen its research, the Faculty of Medicine allocates research grants in several different ways:

Through resource allocation of research grants for associate professorships/full professorships, departments are provided with the basic conditions that enable associate professors and full professors to conduct research. This means that, for the Faculty's teaching posts, the departments are allocated funds from the direct government funding for research that corresponds to a share of the teachers' salary costs (through the 2024 financial year, normally 20% per associate professorship and 50% per full professorship). Heads of department have a strategically important role in leading and organising the work of each department, including responsibility for the allocation of time for research within the framework of the teachers' working hours agreements.

Strategically targeted funds applied for through internal competition are awarded at different intervals, some annually and others at longer intervals. An annual cycle with information on upcoming internal calls for grant proposals is published each year on the website. The target groups and objectives for each call are determined by the Faculty Board and the Strategic Board for Research, which work together to identify research areas and categories of teachers who may be in need of support. The strategic initiatives aim to:

Improve the competitiveness of external grant applications for teachers with competitive research projects that currently lack significant local funding or large external grants. This type of call has proven to be essential in bridging grant funds from government research councils.



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Support early-career researchers in acquiring scholarly qualifications.

Support those departments/units/subjects facing challenges in providing time for research and in their ability to attract research funding, and to allow them to continue providing education clearly and closely linked to scientific findings.

Ensure that the relevant healthcare units obtain University Healthcare Unit Status (USV) and ensure that research and scientific expertise are available in the subjects included in the Faculty's programmes.

Support innovative research at the Faculty and strengthen the competitiveness of the Faculty's researchers in large national/international calls for research grant proposals by giving distinguished researchers more time for research and for writing research proposals. Another purpose is to stimulate research that will eventually lead to advances in medicine and health and/or be of other benefit to society.

Newly recruited assistant professors receive some operational support from both faculty and departmental levels.

Through a targeted initiative, the heads of department receive a special strategic allocation for research, which allows them to strengthen/support the researchers/research environments in need, such as by funding parts of doctoral/postdoctoral positions and research infrastructure. Faculty Management/the Faculty Office follow up how these funds are used with surveys and discussions at meetings with heads of department and in the Faculty Board and the Strategic Board for Research. It is clear from these follow-ups that this is a valued resource. Given how the heads of department utilise these funds, this initiative is in many ways an investment in the next generation of researchers. The resource allows heads of department to exercise strategic leadership and is a good incentive to actively work on the strategic development of research at the department.

The dean/Faculty Board has a strategic resource that can be utilised in connection with recruitment, flight risks, co-funding of research infrastructure and so on.

The Faculty allows teachers to apply for grants for shorter research sabbaticals. This is because clinically active teachers/researchers in particular find it difficult to take longer sabbaticals. URA agreements, which are to be signed prior to a sabbatical, have caused difficulties for individual researchers and their departments. The Faculty Office of Medicine has developed a procedure and templates to facilitate administering these agreements.

Grants for planning international postdoctoral periods, for stays abroad for acquisition of postdoctoral qualifications and for mini-symposiums are also offered annually.

To ensure the quality of project applications (KAW Project) and nominations (Wallenberg Academy Fellows (WAF), KAW Scholar and KAW Clinical Scholar), the Faculty has a well-established system of review groups. Cooperation with the Faculty of Science and Technology and the University centrally occurs in some parts of these processes. The review panel's chair and the associate dean for research meet with the Research Support and Collaboration Office ahead of the



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Vice-Chancellor's selection. One objective is for the review panel to appoint individuals among its own ranks as resources for the projects and nominations it has ranked highest. These individuals are tasked with supporting the projects and nominations until a possible final application.

The Faculty's researchers also collaborate with the Research Support and Collaboration Office on other types of application processes.

Recruitment, career paths and career support

The Faculty's resource allocation system now allocates all departments teacher salary funding from direct government funding for research to ensure the Faculty's teachers have equal opportunities, to ensure the basis for research and to ensure education is based on science. These funds are allocated not only for full professorships but also for associate professorships.

In its work to attract, retain and develop talent and to develop tomorrow's researchers at an early stage, the Faculty Board has introduced two strategic initiatives – a researcher trainee system and a faculty-wide doctoral education programme.

The overall goals with the researcher trainee system are:

to provide opportunities for undergraduate students to have early contact with research and thereby initiate an early start to their academic careers; *and*
to showcase possible career paths in academia to increase interest in an academic career.

The Faculty Board has decided that all doctoral students admitted from 1 July 2021 will participate in a faculty-wide doctoral education programme. The aim of the programme is to support individual progression towards the degree's national learning objectives, offer opportunities for exchange across disciplines and departments, and offer equal opportunities in doctoral studies. Upon completion of the programme, nine of the twelve national degree objectives and largely all local objectives will be fully or partially met, which contributes to the quality assurance of doctoral education and its equitable implementation. The programme is underpinned by the sustainability perspective and emphasises cross-disciplinary collaboration and interdisciplinary skills.

The Faculty sees a need for improved career planning for postdocs and awaits the report on a joint postdoctoral programme.

The Faculty's work on recruitment and promotion is based on the University's employment regulations for teachers. The Faculty's Hiring and Docent Board prepares matters, such as the hiring of associate professors and full professors. When the Faculty Management and heads of department identify difficulties in recruiting academically qualified teachers, the Faculty implements targeted initiatives, such as assistant professorships in combination with specialist training for medical doctors.

To improve attracting, retaining and developing talent and thereby also strengthen research, the Faculty announces assistant professorships in three open tracks – in any subject, in any subject in combination with a clinical position and in subjects facing special challenges. The interval for this type of call is not currently fixed. Additionally, the Faculty also invests in career development positions on the initiative of the departments, for example, assistant professorships are co-funded,



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sometimes combined with specialist training of a doctor or dentist, which is a nationally unique form of employment at Umeå University. This is done to ensure the supply of talent and expertise in subjects with a low number of applicants for higher teaching positions and/or in subjects that may be of strategic importance for the Faculty's competitiveness.

Newly recruited assistant professors receive some operational support at both the faculty-wide level and the departmental level.

When an assistant professor is appointed, one educational and (at least) one scientific mentor (one of whom is external to the department) is always appointed to support the new staff member, including in drawing up the individual's educational and scientific development plan. A clinical supervisor is also appointed for assistant professors also undergoing specialist training (ST) as a doctor or dentist. The Faculty Office provides an induction programme for the new recruit, the head of department and the relevant head of operations.

To strengthen high-quality clinical research with clear patient or population benefit, the Faculty of Medicine and the Northern Healthcare Region offer the following:

Appointments as university senior physicians, i.e. ALF-funded research appointments for docent-level senior physicians in the Northern Healthcare Region. These appointments include 33% guaranteed research time for three years within the permanent post in the relevant regional health authority, with the option of a three-year extension.

Research appointments for permanent employees with regulated professions (excluding doctors and dentists) in the Northern Healthcare Region. Appointments include 50% research time for four years.

The Faculty earmarks annual grants for early-career researchers in the *Strategic Research Grant Programme for Scientifically Young Researchers*.

On the initiative of the department, the dean recommends visiting professorships, which are then approved by the Vice-Chancellor.

Faculty researchers may participate in three levels of the University's REAL training courses for future researchers and research leaders. These courses are part of their professional development and career support. Departments nominate teachers for these programmes, and the Faculty Management reviews and ranks the nominees. This is an excellent way for management to gain a good overview of the Faculty's early-career researchers.

Faculty Management, together with the Faculty Office of Medicine, follows up departmental professional development plans.

Research infrastructure

Annually, the Faculty announces specifically allocated funds for research infrastructure, both for their acquisition and operation, with the aim of increasing access to high-quality research infrastructure and research environments, thereby contributing to excellence in research. These funds are intended to cover a broad spectrum within the Faculty. Research infrastructures



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awarded funding must be accessible to other research colleagues. Use of funds is followed up to confirm that they are used as defined in the application. Both financial and scholarly outcomes are to be reported to the Faculty. A more in-depth follow-up is carried out for the research infrastructures that have received faculty grants to determine the number of publications generated, the number and size of external grants generated and the number of users.

Work within the Faculty is coordinated by M-RIS in close cooperation with Region Västerbotten and the central Council for Research Infrastructure (RIS). M-RIS continually strives to promote and make available existing research infrastructures, such as technology platforms, biobanks and patient registries, both within the University and Region Västerbotten. Several of these research infrastructures (at both Umeå University and Region Västerbotten) offer researchers quality-assured training and regulatory support to conduct research in accordance with current regulations, such as ICH-GCP, the Biobanks Act, training in statistics and structured processes, and application procedures for and training in handling personal data/health data. Work is underway to raise the profile of national research infrastructures to increase the proportion of Umeå University users and to develop forms and potential for obtaining support for local core facilities.

RIS assists the Faculty to inventory, prioritise, make visible and make available research infrastructures.

The Faculty works closely with the Faculty of Science and Technology. For example, the faculties coordinate their calls for internal research infrastructure grant proposals and collaborate on the distribution of these funds.

Research support

The research environments provide some of the support to teachers in the form of staff, research infrastructure, recruitment, financial follow-up of projects and so on.

The Department of Biobank Research (EBF) supports researchers in accessing registry data and biobank samples and provides advice on study design and collaborations.

Under the ALF scheme, researchers receive support for statistical calculations and writing applications.

The Faculty Office of Medicine provides support to Faculty Management, the Faculty's meeting bodies and the departments for issues related to research infrastructure, internal calls for research grant proposals, funding, and staff and for communication of findings, publications, research funding and prizes. In addition, the office is responsible for compiling information about current research findings, upcoming internal and national calls and activities in the Faculty's weekly newsletter.

At the central level, examples of ways researchers can be supported in their research include:

University Library – publication agreements, open access publishing, research data management and so on.



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Research Support and Collaboration Office – support and skills development in writing proposals and applying to potential funding organisations.

Legal Affairs Office– contracts, GDPR and research ethics.

Human Resources Office – leadership training courses, professional and career development, and work environment.

D. Follow-ups, analyses and evaluations

Regular follow-up and internal analysis

Part of the Faculty's direct government funding for research is allocated annually to the departments in the form of a performance bonus based on bibliometrics, where extra funds are allocated if publication occurred in a level 2 publication as defined in the Norwegian List, and external grants, where extra funds are allocated if early-career researchers have competed for external funding. The performance bonus enables annual follow-up and analysis by the Faculty Board and the Strategic Board for Research and allows them to identify both the subject areas excelling in research and the subject areas not competing as well for external grants and that may need targeted support.

Operational plans and budgets at both faculty and departmental levels are followed-up and evaluated at least twice a year.

The University's annual financial report presents several research and doctoral education performance indicators, including student completion, scientific production and ability to attract external funding. This allows the Faculty to track trends on which they can make strategic decisions. The Faculty reports activities within quality assurance and enhancement, good research practice, collaboration, and the link between research and doctoral education.

Faculty Management holds discussions with departments that include exploring quality assurance procedures in research at the departmental level. Strategic discussions are also held with the teaching staff, the heads of department group and the relevant preparatory bodies.

The Strategic Board for Research tracks the quality assurance procedures of the departments. Intervals for this are not predefined. Ongoing pilots with self-evaluation at departmental level will influence future analyses of departmental quality assurance procedures.

In the Faculty Management's discussions with University Management, deviations and extraordinary events are reported to help with follow-up, quality development and learning.

The Strategic Board for Research and the Faculty Board track the outcomes of external funding received in competition from the major funding organisations and collect information on who sits on the various review panels. The departments and Faculty Management are active and nominate individuals to review panels for such organisations as the Swedish Research Council (VR), Forte and the Heart-Lung Fund. This is important for improving understanding of the strengths, improvement opportunities and weaknesses in applications from the Faculty's teachers.



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The Strategic Board for Research and the Faculty Board follow up the Faculty's internal calls for research grant proposals in terms of transparency, equal access and purpose to improve call, preparation and allocation processes. Observers from the Faculty Board/Strategic Board for Research attend review group meetings to identify strengths and weaknesses in the review process. The results of some calls are also followed up through surveys of those recipients of competitive research grants. Long-term evaluations are conducted of outcomes for external funding, publications, citations and impact on society. Teachers who have received research grants from the Faculty's internal calls are required to submit a scientific report to the Faculty Office of Medicine just over three years after the funds have begun to be paid out.

Before the end of their term of office, the review bodies produce final documents containing analyses of the decisions and activities conducted during the term.

The Strategic Board for Research follows up how the research strategy of the heads of department has been utilised. This is done through surveys and discussions at departmental meetings and in the Strategic Board for Research and the Faculty Board.

The Faculty can initiate specific reviews of research environments.

For recruitment and promotion, the applicant's scholarly output is scrutinised.

The number of applicants, their gender balance, and outcomes of recruitments are tracked for the Faculty's internal calls for research grant proposals and for recruitments.

The fact that the majority of the members of RUF are the departmental directors of doctoral education is an excellent way of assuring the quality of the Faculty's doctoral education through follow-up and analysis. The Programme Committee collects course evaluations from doctoral courses for analysis and discussion of possible improvements.

External peer reviews

Centres of excellence are evaluated by the Swedish Research Council and FORTE, and clinical research and university healthcare units are evaluated by the Swedish Research Council and the National Board of Health and Welfare. The process is at least as important as the outcome for the parties being evaluated, as both strengths and improvement opportunities are analysed.

In some of the Faculty's internal calls for research grants, applications are assessed by external reviewers who write assessments for the applicants who pass the initial assessment.

It is yet unclear what the University's upcoming pilot evaluations of research quality will lead to in terms of new forms of external peer review and how often they will be conducted.



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