



Instructions to expert advisors:

Description of assessment criteria of applicants for the position of **Professor** at the Faculty of Medicine, Umeå University

(Established by decision of the Board of the Faculty of Medicine 11-02-2019, The Swedish version has priority over this translated version).

In assessments of applicants for the position of Professor at the Faculty of Medicine, Umeå University, expert advisors shall assess competence and review and weigh assessment criteria set out in the **employment profile** for the relevant position. Additionally, as further guidance, this document contains a general description of the assessment criteria that may apply in relation to applicants for the position of Professor at the Faculty of Medicine.

Please note that:

- The employment profile is the most important guidance document in the assessment before an applicant is hired, and the descriptions below are only supplemental to the employment profile.
- The employment profile includes absolute competence requirements for the relevant position.
- The employment profile specifies *which* of the assessment criteria are applicable for the position and how these should be weighed against each other.
- The employment profile specifies whether anything specific should be considered in the assessment criteria for the relevant position, in addition to the general guidelines set out below.
- In addition to the employment profile, the general guidance below identifies the components that should be taken into account in the various assessment criteria that may apply (1 and 2 always apply according to the Higher Education Act).

The expert assessment must always include an account of how the gender equality aspect has been considered, unless this is obviously unnecessary because all the applicants are of the same gender. Differences in international merit systems should also be taken into account.

All assessment criteria that apply to the position in the employment profile must be assessed, however it is the overall assessment that is decisive.

Each of the scientific skills and the teaching skills have separate weights in the employment profile, (3, 2 or 1, where 3 weighs heaviest). Likewise, other assessment criteria can have a weight, or be weighed jointly with others, with the same numbering system.

1. Criteria in the assessment of scientific skills

A Professor at the Faculty of Medicine, Umeå University, is expected to demonstrate scientific independence, ongoing research and substantial scientific publication in internationally reputable scientific journals.

By way of guidance in relation to scientific production, individuals who were hired at the Faculty of Medicine, Umeå University, in the period 2013-2018 had a **median** of 44 original publications, of which 12 are as last author, and a median for h-index of 18.



The assessment of scientific skills should take into consideration the number of articles, but the greatest emphasis should be on quality and impact (nationally and internationally) for the area of research.

Criteria in assessment of scientific skills include according to Umeå University's employment procedure:

- A. Breadth and depth of research – quality and scope
- B. originality of research
- C. productivity
- D. contributions to the international research community
- E. assignments within the scientific community
- F. the ability to competitively obtain external research funding
- G. collaboration with the surrounding society

At the Faculty of Medicine, the following constitutes guidance on the contents of an assessment of the respective criteria for scientific skills:

A. Breadth and depth of research – quality and scope

The following is meritorious:

- works published in reputable international journals with a peer review system
- a significant proportion of work cited by other senior research fellows
- completed post-doctoral research at an academic institution other than where the applicant completed his/her third cycle studies

B. Originality of research

Much emphasis is put on original and innovative research.

The following is meritorious:

- formulating original and independent scientific questions
- using innovative and original research methods

C. Productivity

The following is meritorious:

- Prolific scientific activity with special emphasis on the previous eight years
- being senior and prolific as demonstrated by last authorship in a significant proportion of the scientific production

D. Contribution to the international scientific community

The following is meritorious:

- works published in reputable international journals with a peer review system
- invitations to author review articles in reputable international journals
- personal invitation as speaker/lecturer at international congresses
- participation in scientific committees

E. Assignments within the scientific community

The following is meritorious:

- review assignments for international journals
- membership of editorial committees
- opponent assignments
- being an expert advisor for governmental agencies or private foundations
- organisation of regional, national or international conferences
- membership and elected office in associations within the applicant's area of research



- representation of the applicant's organisation in national and international organisations and working groups, including prioritisation committees

F. Ability to competitively obtain external research funding

The following is meritorious:

- renewed research grants obtained in competition with the applicant as main applicant. Relevant ownership of research grants in national competition (e.g. Cancerfonden, Hjärt-Lungfonden, SSF, FORTE) or international competition (e.g. EU, NIH) where projects are subject to peer review.

G. Collaboration with society

Assessment as to whether the applicant has taken initiatives or participated in outreach information or made research results practically useful.

The following is meritorious:

- interaction with parties outside the academic world who may have an interest in the teacher's subject area, e.g. healthcare, county council, school and/or business
- ability to identify and process relevant problems and questions in society
- previous employment in companies, public authorities or other organisations with a medical orientation
- development of structured cooperation with a company to develop a project idea,
- patenting of research discoveries and/or development of products/methods for use within prevention, diagnostics or therapy
- assignment as scientific advisor to a research company
- initiation or participation in outreach information, e.g. contributions to popular science literature in various contexts

2. Criteria for assessment of teaching skills

The teaching experience is expected to be equivalent to the teaching qualification of Swedish level of 'docent' according to the Faculty of Medicine's assessment criteria for docentship (<https://www.aurora.umu.se/en/units/faculty-of-medicine/human-resources/academic-positions-and-docentship/>).

Criteria in assessment of teaching skills include according to Umeå University's employment procedure:

- A. an ability to plan, implement and evaluate teaching and an ability to supervise and examine students at every level of education
- B. an ability to vary teaching methods and examination formats in relation to expected study results and the nature of the subject
- C. experience of collaboration with the surrounding society in planning and implementation of education
- D. participation in the development of learning environments, teaching aids and study resources
- E. a reflective approach to student learning and one's own role as a teacher

At the Faculty of Medicine, the following constitutes guidance on the contents of assessment of the respective criteria for teaching skills:

A. Ability to plan, implement and evaluate teaching, and ability to supervise and examine students at all levels of education

A professor is expected to be the Principal Supervisor in the defence of at least two PhD students.

The following is meritorious:

- broad, thorough and up-to-date knowledge in the relevant teaching subject



- an ability to convey commitment and interest in the subject matter
- participation in third-cycle courses
- participation in seminars aimed at PhD students
- examiner in research training
- postdoctoral supervision
- prizes and awards relating to teaching

B. Ability to vary teaching methods and examination formats in relation to expected study results and the nature of the subject

The following is meritorious:

- experience from various teaching levels, teaching formats and examination formats

C. Experience of collaboration with the surrounding society in planning and implementation of education

The following is meritorious:

- demonstrated production of information and teaching materials, mainly aimed at parties outside the universities and with an interest in the relevant area

D. Participation in the development of learning environments, teaching aids and study resources

The applicant's international and national position within teaching medicine confirmed by scientific publications and contributions to national and international conferences.

The following is meritorious:

- ability to develop teaching materials to stimulate and improve learning
- spreading of methods and teaching approach leading to teaching models and teaching aids that can be used by others

E. A reflective approach to student learning and one's own role as a teacher

The following is meritorious:

- an approach permeated by promotion of learning, and work according to an informed educational ethos
- demonstrated relevant teaching and future development potential
- knowledge about the learning process
- an educational philosophy based on a scientific approach that promotes student learning
- that the teaching ability reflects a holistic approach

3. Criteria for assessment of administrative skills

Should only be considered where administrative skills have been specified as an assessment criterion in the employment profile for the position.

The following is meritorious:

- assignment as committee member or equivalent at university level, within a faculty, institution or county council/regional municipality
- administrative assignment at university level, within a faculty, institution or county council/regional municipality

4. Criteria for assessment of skills in academic leadership

Should only be considered where skills in academic leadership have been specified as an assessment criterion in the employment profile for the position.



The following is meritorious:

- recruitment and management of personnel
- assignment as dean, head of department/section or equivalent
- ability to plan and adapt operations according to applicable regulations and economic framework, and showing commitment to the faculty's or the university's long-term strategic work
- management of personnel and activities in other organisations
- assignments as coordinator of larger research project

5. Criteria for assessment of clinical skills

Should only be considered where clinical skills have been specified as an assessment criterion in the employment profile for the position.

Clinical skills are required for a position as professor associated with employment in healthcare.

As a guideline for a combined employment as a doctor, the applicant is expected to be a consultant/have on-call competence.

The following are criteria in an assessment of clinical skills at the Faculty of Medicine, Umeå University:

- quality of own clinical work
- management or investigative appointments within healthcare organizations
- development work in diagnostics, therapy, prevention and healthcare processes
- experience of quality improvement work on regional and national levels
- interdisciplinary or cross-speciality work on national and international levels
- national and international appointments, for example for the SBU or the National Board of Health and Welfare
- prizes and awards relating to clinical work