



Appointment specification

PROFESSOR OF MEDICAL ENGINEERING

Vacant post and its location

Applications are hereby invited for the position of Professor of Medical Engineering. The position is located in the Institute of Biomedicine and will be filled as a five-year fixed-term employment period.

Institute of Biomedicine is located at the heart of the Turku Medical and Biosciences campus and the candidate is expected to work in close collaboration with the groups of the Faculty of Medicine, as well as the Department of Future Technologies, Faculty of Science and Engineering located at the same campus area.

The duties of the professor are to carry out and supervise scholarly work, to provide education based on it and to keep abreast of academic developments, as well as to participate in societal interaction and international cooperation in his or her field.

Responsibilities of this position include, in addition to teaching and supervising students, acquiring substantial external funding, building collaborations within the campus, nationally and internationally – both within academia and industry.

The salary for this particular post is determined in accordance with the university salary system for teaching and research personnel.

Formal qualifications

For the position of Professor, we seek candidates who will have a distinguished career and an established international reputation in their fields, as well as an excellent publication record, and success in acquiring external research funding.

The requirements for a person to be appointed as a professor are a doctoral degree, high-level academic competence, experience in managing academic research, experience of international cooperation in the research field he or she represents, as well as the ability to provide high-level research-based education and to supervise final theses.

The applicants are expected to have background and good skills in interfacing medicine, technology and biosciences, and with track record in innovation. The professor is expected to work on the mentioned interface position between medicine and technology, in the area of medical technology. This includes working with biomedical data related to biomedical sensor and data fusion for health and well-being monitoring and diagnosis, medical signal processing, sensing and analysis of physiological data, data visualization, risk analysis, patient survival data analysis and pattern recognition. Knowledge in data sources and data analytics related existing health and biological information, such as patient records, laboratory measurements, bed-side and at-home measurements, self-documentation, best practices and care guidelines are highly appreciated.



Applicants must also have a strong record of research accomplishments commensurate with their rank, evidence of leadership and vision, proven ability to work in an interdisciplinary environment, and a strong interest in undergraduate and graduate education.

When evaluating the merits of the applicant, the following are taken into consideration: scholarly publications and other research results with academic value; teaching experience and pedagogical training; the ability to produce teaching materials; other accomplishments in teaching and a trial lecture, as well as participation in doctoral education. In addition, the applicant's active participation in the academic community, success in obtaining complementary funding for research as well as scholarly work abroad and international duties.

In appointing a professor to a post, which entails leadership duties, a prerequisite for the position is leadership experience, or a willingness to participate in leadership training commensurate with the post.

The person appointed to the post is required by a Government Decree (770/2009) to have an adequate mastery of the Finnish and Swedish languages. University teaching and research personnel should be proficient in the language, either Finnish or Swedish, in which the teaching is given. More detailed provisions can be found in the University of Turku Rules of Procedure. According to the University of Turku Rules of Procedure a person appointed to a University teaching and research position can demonstrate the mastery of the Finnish language, as enacted in the Government Decree, by: 1) education completed in Finnish; 2) a pass grade in the Finnish Matriculation Examination from the mother tongue test in Finnish; 3) minimum *cum laude approbatur* grade in the Finnish Matriculation Examination in Finnish as second language test; 4) a pass grade of a maturity test completed in Finnish from a higher education institution; 5) other separately approved method.

Foreigners and non-native Finnish citizens, can be appointed to the position without demonstrating the decreed mastery of the Finnish language.

Application procedure

This position will be advertised in the public domain. The application period is at least 30 days.

Applications are submitted through the eRekry online application system. The link to the eRekry online application system is at the end of the Call for Application.

Applications must include: (in English)

1) curriculum vitae

2) an academic portfolio drawn up in accordance with university practice (instructions: <http://www.utu.fi/en/university/come-work-with-us/Pages/Coming-to-Work-for-the-University.aspx>)

3) a numbered list of publications, categorized as follows:

1. Original articles in international peer-reviewed scientific journals
2. Reviews in international peer-reviewed scientific journals
3. Original articles in domestic peer-reviewed journals
4. Reviews in domestic peer-reviewed journals



5. International textbooks and chapters in textbooks
6. Domestic textbooks and chapters in textbooks
7. Other publications (optional)
8. Abstracts (optional)
9. Patents (optional)

4) a list of those publications (numbered, the maximum number of items is 20) which the applicant wishes to highlight to prove his/her qualifications and merit for the post (compiled according to the instructions below)

“20 most representative, self-ranked scientific publications of the applicant, including description of the importance of the publications (maximum of five lines), the impact factors according to the latest Science Citation Index as well as the number of citations of each publication. If so decided by the applicant, important pedagogical publications can also be included in this list of most representative publications.”

5) The 20 publications that are listed in item 4 (primarily submitted through the eRekry online application system). Publications must be numbered.

Only one enclosure can be added in each enclosure segment in the eRekry online application system. The file formats to be used can be found in the info file of each enclosure. Regarding the publications, it should be noted that the system only allows compressed file format (.zip). The .zip-folder may include multiple documents.

Applicants should state how they can be contacted during the selection process for the appointment, as well as give an email address and a postal address to which written communications should be sent.

Experts

The Faculty will request statements from at least two experts on the qualifications and competence of the applicants. The Dean will choose the experts. In the selection of the experts, due regard is paid to take into consideration the applicants' equal and unbiased treatment from the point of view of the post to be filled. The incapacity mentioned in Sections 27–29 of the Administrative Procedure Act (434/2003) refers to the experts. The applicants will be informed of the selection of the experts. The experts, once selected, may not participate in the subsequent stages of the appointment procedure.

The experts will receive the appointment specification, duplicates of the documents necessary for their task and the publications and other works included in the application. The experts are requested to submit their written statement of the applicants within two months.

In the statement, the expert is particularly asked to evaluate the academic competence and merit of each applicant. The statement is public, and must contain justifications about those applicants who, according to the expert, are primarily to be considered to the post, taking into account the post as professor to be filled, its qualification requirements and other circumstances affecting the evaluation of the merits of the applicants. The expert is also to rank these candidates in order of preference. If there are three or fewer applicants, the expert is required to submit reasoned evaluations of all of



them. However, the expert is required to submit reasoned evaluations only of those applicants whom he or she considers qualified candidates for the post of professor. The statement must explicitly state the criteria used for compiling the short list and reasons for the exclusion of any applicants not considered in detail.

The experts may consult with each other and may submit a joint statement. The experts' statements will be published once all of the statements of all of the experts concerning the recruitment task in question are delivered to the University.

Trial lecture

Following the submission of the expert statements, the Faculty may make arrangements to allow for the applicant to give a trial lecture to which members of the public are also admitted. The trial lecture will be evaluated.

Interview

The best ranked applicants can be invited for interview.

Preparatory group

The Dean establishes a preparatory group to prepare the proposal for the appointment of a professor. A chair and secretary will be appointed to the preparatory group at the outset. The Service Manager of the Faculty, or a person appointed by him/her, will be the secretary of the preparatory group. Invited members of the preparatory group will be between three and five professors or other teaching or research personnel who represent the field in question or a closely related field to which the professorial post belongs to. Other members may also be invited to join the group if considered necessary. The preparatory group may also include persons from outside the university. The members of the preparatory group and the secretary must be unbiased for the task.

The preparatory group can make a pre-selection of the applicants based on the application documents. The preparatory group will make a proposal to the Dean for the selection of experts and takes part in the evaluation of the trial lecture and interview. The preparatory group makes the appointment proposal.

Appointment proposal

Following the receipt of the expert statements and other useful submissions, the preparatory group will make a reasoned proposal for the Faculty Board on which of the applicants should be considered for the post and who should be selected for the appointment according to the preparatory group's opinion.

The Faculty Council will make a reasoned proposal for the Rector for the appointment to the post. The Faculty will send the proposal (employment contract in duplicate) with appendices to the Rector for decision-making.

The appointment to the post is made by the Rector. If necessary, the Rector can ask for further clarifications for the appointment from the Faculty.

An employment contract will be entered into with the recruited employee. The applicants will be informed about who has been selected for the post of professor.



Additional information

Further information concerning appointment procedure may be obtained from Mrs. Päivi Salonen, Faculty Services Manager, Tel: +358 50 435 1268, E-mail: pahasa@utu.fi

The following Finnish legislation applies to the procedures for this appointment:

The Constitution of Finland (731/1999)

The Universities Act (558/2009)

The Government Decree on Universities (770/2009)

The Administrative Procedure Act (434/2003)

The University of Turku Rules of Procedure

Dean

Pekka Hänninen

Faculty Services Manager

Päivi Salonen