UNIVERSITY PROFESSOR OF
COMPUTATIONAL MEDICINE

INFORMATION FOR APPLICANTS 2024

Who we are.

> Our faculty has changed a lot since it was founded almost 20 years ago and has grown to an impressive size.

– Dean Gernot Müller-Putz

TU Graz

Graz University of Technology is the oldest science and technology research and educational institute in Austria. For over 200 years, it has been an important university in the international research and education network of science. The university achieves top performances in its five Fields of Expertise and boasts intensive collaboration with other national and international research and educational establishments and with business and industry worldwide.

CS & BME

The Department of Computer Science and Biomedical Engineering is an internationally highly ranked department committed to excellence in research and teaching. The research at the department covers a broad spectrum of topics that are reflected in our main research areas Biomedical Engineering, Security and Safety, Artificial Intelligence, and Visual Computing. We are proud of our outstanding basic and applied research and encourage interdisciplinary projects. Moreover, we foster a close dialogue with industry and encourages and support the creation of spin-off companies.

Our Mission
We want to provide excellence in research and an excellent education to a broad group of students.

Events
Besides the annual summer party and Faculty Day, we also compete as a team in the Dragon Boat University Cup at the Graz Riverdays.

Job description

We are looking for a person with an excellent record of scientific accomplishments who will represent the field of Computational Medicine in research and teaching, and complement and diversify existing research strengths of the department.

The new professor will teach in the Bachelor's, Master's, and PhD programs in Biomedical Engineering and Computer Science, and be an engaged mentor for our students. At the Department of Computer Science and Biomedical Engineering, undergraduate courses are taught in German or English, graduate courses are taught in English. In addition, this person will actively participate in academic self-administration.

The applicant's research program should aim to advance healthcare by developing and/or applying theoretical and/or computer-based technologies to diagnose, manage, monitor, and understand human diseases. This includes, but is not limited to, computational models in any area of biomedicine, such as molecular biology, oncology, morphology, and pathology.

The professorship will be part of the Institute of Biomedical Informatics (BIOINFO), where the current research groups specialize in developing and applying bioinformatics approaches to address key problems in genomics. The institute is one of five dedicated biomedical engineering institutes within the Department of Computer Science and Biomedical Engineering.

The successful candidate is expected to collaborate within the Institute of Biomedical Informatics and the department, and we also expect engagement in interdisciplinary initiatives such as BioTechMed Graz and the new Cori Institute for Molecular and Computational Metabolism of the Austrian Academy of Sciences.

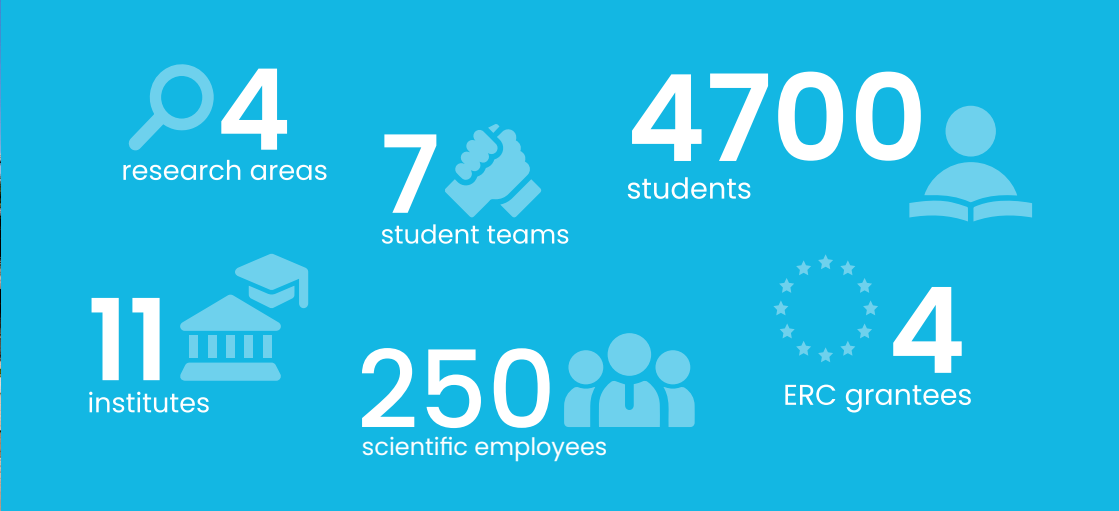*More information about Institute of Biomedical Informatics*

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Requirements

Employment Requirments:

- A completed doctoral degree (PhD) in a relevant field.
- A relevant habilitation (venia docendi) or an equivalent qualification.
- Excellent scientific achievements.
- Excellent didactic and pedagogical skills.
- Management and leadership abilities.
- Excellent command of English and command of German or the willingness to acquire it.

Selection Criteria:

- International experience and integration in the international research community.
- Experience with acquisition of research grants and/or industrial collaboration.
- Gender and diversity competences

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4 research areas

7 student teams

4700 students

11 institutes

250 scientific employees

4 ERC grantees

Our offer

The advertised position is a tenured full professorship with a competitive salary. The university will provide funding for one or more PhD students and the necessary research equipment. Graz University of Technology provides excellent working conditions in a vibrant scientific community, combined with the outstanding living quality of the Graz area. We also support your partner's career development through a dual career office and assist with the relocation process. A combination of national and European agencies provides an excellent funding landscape and ample opportunities exist to collaborate with industry.

Equal opportuntiy Employer

Graz University of Technology aims to increase the proportion of women, in particular in management and academic staff, and therefore qualified female applicants are explicitly encouraged to apply. In case of underrepresentation, preference will be given to women if applicants are equally qualified. Graz University of Technology actively promotes diversity and equal opportunities. Applicants are not to be discriminated in personnel selection procedures on the grounds of gender, ethnicity, religion and ideology, age, sexual orientation (anti-discrimination). People with disabilities, and who have the relevant qualification, are expressly invited to apply.

Our department

Our department ranks in the European top 30 for Computer Science and Biomedical Engineering, and is home to the university's most highly cited researchers. The department is among the top departments globally for selected areas. Three ERC grants speak for the research excellence of the department, and we have a broad portfolio of research grants in both basic and applied research.

Through research and teaching, the department is a driver of the Styrian economy. Well educated graduates and a close cooperation between the department and its industrial partners contribute to the growth of the local industry, the arrival of new companies, and a number of successful startups. Our research has motivated companies such as Microsoft, Amazon, and SGS to establish subsidiaries in Graz. The university encourages startups, and a large proportion of existing startups were started by our students.

For our students, we offer study programs at all levels including bachelor's, master's and PhD levels. The department teaches 4700 students overall, almost one-third of our university's student. All master's programs are taught in English. One of our greatest strengths is an atmosphere of mutual respect and collaboration between faculty, staff, and students.

Stremayrgasse 16
Five institutes and working groups from the Faculty of CSBME found a new, modern home in 2015.

Our Institute

The **institute of Biomedical Informatics** develops and uses bioinformatics approaches to understand the biology of gene regulation.

We are interested in:
- Advancing our knowledge of the structure, function, and evolution of regulatory sequences
- Gaining a predictive understanding of disease processes at the network level, to enable targeted and personalized therapeutic interventions.

Our current research at TU Graz is articulated along four main axes:
- The mechanisms by which cis-regulatory elements are involved in controlling gene expression
- The evolution of cis-regulatory elements and the consequences of genomic changes for adaptation and speciation
- The contribution of cis-regulatory variation to human diseases
- The dynamics of transcriptional regulatory networks during development and their impact on the proteome

HEAD OF INSTITUTE
Leila Taher

VICE-HEAD OF INSTITUTE
Gerhard Thallinger

More information about Institute of Biomedical Informatics

Why Graz?

Cultural and university town in the „Styrian Tuscany".

Sunny spots in cheery wine gardens, promenades in the historic city centre and narrow, atmospheric alleyways, combined with over 2,300 hours of sunshine convey a southern European flair.

University town since 1585
Know-how from Graz goes international. Six universities with more than 16 faculties form the basis of the excellent international reputation of Graz as a research and academical location. With nearly 60.000 students of 290.000 inhabitants, Graz more than other deserves the title "student town".

Where science meets art, culture and passion
Graz, the exciting city of culture, and particularly its historic city centre, offers the ideal location to stage seminars, trade fairs or conferences. It is not by chance that Graz is a UNESCO World Cultural Heritage Site. The historic city centre around Schlossberg hill has been growing for centuries and became a township well worthy of admiration. Organisers of scientific conferences in particular have appreciated Graz as a conference destination for many years. Every year, approximately 45000 conference guests make use of the historic and modern congress centres. They appreciate the city's easy accessibility, as much as its sophisticated cuisine and famous Austrian hospitality. A variety of supporting programmes and day excursions, served with Styrian delicacies and regional wines, add culinary value to any event.

Uhrturm
The clock tower, the symbol of Graz, majestically overlooks the city.

Mur
The Mur, which flows picturesquely through Graz, provides a charming scenery for walks.

UNESCO World Heritage Site
In 1999, the old town of Graz was declared a UNESCO World Heritage Site.

CS & BME

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Position identification number: **7000 / 2024 / 7639**

Interested applicants are requested to submit the **online application** including:

- a CV (with copies of diplomas);
- a list of publications highlighting the 5 most important publications;
- a research statement describing past and planned research activities (5 pages max.);
- a teaching statement (5 pages max.) and evaluations of past teaching activities (if available);
- a diversity statement (1 page max.) describing past and planned activities; and
- names and contact information of two references.

Deadline: November 15, 2024
Hearings: week of February 10, 2025

More information: **http://csbme.tugraz.at/go/applications/compmed**
For further question, please contact Laila Taher (**applications.csbme@tugraz.at**).

Errors and omissions expected in this brochure. The legally binding announcement for this position is published in TU Graz' Gazette at mibla.tugraz.at