

PhD student in Biochemistry especially Bioinformatics (C)

Ref. No. SU FV-0332-17

Apply

at [Department of Biochemistry and Biophysics](#). Closing date: 28 February 2017.

The Department of Biochemistry and Biophysics is mainly located with the other Departments of Chemistry and Life Sciences in the Arrhenius Laboratories for Natural Sciences, which are situated in the northern part of the University Campus at Frescati. Presently more than 200 people are working at the department, of which around 80 are PhD students, engaged in internationally highly recognized research covering a broad range of subjects. The research projects span across a broad range of topics covering various aspects of structure and function of biological systems. A majority of these topics are centered around biological membranes, where many groups working within this area are part of the Center for Biomembrane Research, which is hosted by the department. The Science for Life Laboratory is also closely linked to the department. The combination of the highly interdisciplinary expertise and research projects at the department is unique in Sweden and also at an international level. This expertise ranges across cell biology, biochemistry, biophysics and theory. For more information about the department, see: www.dbb.su.se.

Project description

Your PhD studies will be in Biochemistry especially Bioinformatics program, specifically within the project "Evolution of protein structure". Project leader: Arne Elofsson arne@bioinfo.se. For an overview, go to: bioinfo.se/papers.

In 1973 Theodosius Dobzhansky wrote his famous essay "Nothing in Biology Makes Sense Except in the Light of Evolution". This is the fundamental principle of our work. Further, the most important recent change in life science has been the tremendous increase in sequence information available. Traditionally, evolutionary information has been used to identify specific conserved motifs, to detect homologs and to predict various features of proteins. However, today when it is common to have access to thousands of homologous protein sequences for a single protein family there is much more information available to be harvested. Also the availability of complete genomic sequence information provides unique opportunities to improve our understanding of not only the evolutionary history of a gene/protein but also provide clues to its interaction partners etc. Here, we try to answer fundamental questions on how proteins and proteomes of organisms evolved.

A general interest in proteins, programming and machine learning methods and a solid background in bioinformatics, physics or computer science is suitable for this position.

Qualification requirements

In order to meet *the general entry requirements*, the applicant must have completed a second-cycle degree, completed courses equivalent to at least 240 higher education credits, of which 60 credits must be in the second cycle, or have otherwise acquired equivalent knowledge in Sweden or elsewhere.

In order to meet *the specific entry requirements* for acceptance in the Biochemistry, especially Bioinformatics program, the applicant must have passed courses within the first and second cycles of at least 90 credits, in either a) Chemistry/Molecular Biology/Biotechnology, or b) Computer Science/Mathematics/Physics and at the second cycle level, 60 credits in Life Science, Computer Science Mathematics, Physics or Bioinformatics including a 30 credit Degree Project (thesis).

Only a person who will be or has already been admitted to a third-cycle programme may be appointed to a doctoral studentship. The primary assessment criteria in appointing a doctoral student should be the capacity to benefit from the training.

Selection

The selection among the eligible candidates will be based on their capacity to successfully complete the program. Important criteria when assessing this capacity are: documented knowledge and skill in the field of the thesis project, written and oral proficiency in English, the capacity for analytical thinking, the ability to collaborate, as well as creativity, initiative, and independence. The assessment will be based on previous experience and grades, the quality of the degree project, references, relevant experience, interviews, and the candidate's written motivation for seeking the position.

Admission Regulations for Doctoral Studies at Stockholm University are available at: www.regelboken.su.se.

Terms of employment

The term of the initial contract may not exceed one year. The employment may be extended for a maximum of two years at a time. However, the total period of employment may not exceed the equivalent of four years of full-time study.

Doctoral students should primarily devote themselves to their own education, but may engage in teaching, research, and administration corresponding to a maximum of 20 % of a full-time position.

Please note that admission decisions cannot be appealed.

Stockholm University strives to be a workplace free from discrimination and with equal opportunities for all.

Contact

For more information, please contact the project leader. General information about the PhD programs can be given by Stefan Nordlund, stefan@dbb.su.se, or Lena Mäler, Head of Department, lenam@dbb.su.se.

Union representatives

Anqi Lindblom-Ahlm (Saco-S) och Lisbeth Häggberg (Fackförbundet ST och Lärarförbundet), tfn 08-16 20 00 (vx), seko@seko.su.se (SEKO), samt doktorandrepresentant, doktorandombud@sus.su.se.

Application

Apply for the position at Stockholm University's recruitment system by clicking the "Apply" button. It is the responsibility of the applicant to ensure that the application is complete in accordance with the instructions in the job advertisement, and that it is submitted before the deadline.

Please include the following information with your application

- Your contact details and personal data
- Your highest degree
- Your language skills
- Contact details for 2–3 references

and, in addition, please include the following documents

- Cover letter
- CV – degrees and other completed courses, work experience and a list of degree projects/theses
- Research proposal (no more than 3 pages) describing:
 - why you are interested in the field/project described in the advertisement
 - why and how you wish to complete the project
 - what makes you suitable for the project in question
- Degree certificates and grades confirming that you meet the general and specific entry requirements (no more than 6 files)
- Degree projects/theses (no more than 3 files).

The instructions for applicants are available at: [Instructions – Applicants](#).

You are welcome to apply!

Stockholms universitet – hos oss ger utbildning och forskning resultat.

Closing date: 28/02/2017

URL to this page <http://www.su.se/english/about/vacancies/vacancies-new-list?rmpage=job&rmjob=2658&rmlang=UK>

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