

Professor in Natural Products Genome Mining

The Novo Nordisk Foundation Center for Biosustainability (DTU Biosustain)) at Technical University of Denmark invites applications for a position as Professor in Natural Products Genome Mining.

DTU Biosustain is a research centre with the overall mission of contributing to research, development, and innovation within the following scientific areas:

- Discovery of novel biosynthesis routes and exploration of compounds suitable for a sustainable bioproduction
- Reduce the costs and time of designing and manufacturing industrially-oriented cell factories.

The professor will be associated with the New Bioactive Compounds (NBC) section, headed by Scientific Director, Professor Sang Yup Lee, which aims at identifying novel antibiotics from actinomycetes.

Responsibilities and tasks

The position involves research, publication, and scientific dissemination at a very high level. More translational activities will also play a key role. In addition, assignments will include:

- Research leadership in order to strengthen and develop the research field
- Day-to-day management of the NBC Section operations including scientific guidance and mentoring of group members
- Development of the specific area
- Facilitation of technology transfer and spin-off activities
- External collaboration, e.g. with other research institutions and relevant industry
- Guidance and supervision of assistant professors, researchers and PhD students
- Academic assessment work.

Furthermore, the professor is expected to

- coordinate the activities of the NBC section with the other DTU Biosustain scientific sections and core facilities
- facilitate collaboration with colleagues internally at DTU Biosustain and at other DTU departments, e.g., in terms of joined research proposals, sharing of research infrastructures/technologies, and supervision of students.

This professorship at DTU Biosustain is expected to significantly contribute to developing novel in silico and experimental methods to use genomic data of antibiotics producers for the identification and exploitation of secondary metabolite biosynthetic pathways and use this information as a basis to develop and implement experimental methods for metabolic engineering of the hosts, primarily focusing on actinomycetes. Thus, the successful candidate is expected to have strong expertise in computational biology and bioinformatics related to natural product research and metabolic engineering.

The successful candidate will be responsible for supervising PhD students and is expected to be involved in other teaching activities related to bachelor and master level students.

Qualifications

Emphasis is placed on applicants having the potential to continue to develop the subject area and have documented original scientific production at international level. The qualification requirements are:

- A PhD degree in microbiology, bioengineering or similar field
- Relevant postdoctoral/group leader experience; experience in managing a research group covering topics like natural products, bioinformatics, and metabolic engineering
- A high level of original scientific production at international level that has contributed to the further development of the subject area in question.
- High productivity and profiling

- Significant input that contributes to the development of the subject area, including identification and cultivation of new fields of research
- Initiative and impact vis-à-vis sponsors, recipients, and partners
- Appreciable contribution to research-based programs and PhD supervision.

Assessment

In the assessment of the candidates', consideration will be given to

- scientific production at international level, research potential and ability to lead and develop a research team
- the ability to promote and utilize research results
- the ability to teach
- experience with innovation activities
- an all-round experience basis, including international experience
- the ability to contribute to the development of internal and external cooperation
- track record in attracting funding to the research area
- visions within the research area.

Consideration will also be given to:

- the ability to collaborate with major international partners within and outside of DTU Biosustain in order to enhance group capabilities
- a well-established network within the Natural Products and Metabolic Engineering research community and internationally leading research groups
- an experience in managing diverse research operations, including track record of attracting talented PhD and postdoc researchers
- a documented research experience and research leadership
- the experience in working with wet-lab- and bioinformatics-personnel
- documented ability to attract top tier funding (e.g. ERC grants or similar).

Salary and terms of employment

The appointment will be based on the collective agreement with the Confederation of Professional Associations. The allowance will be agreed with the relevant union.

Further information

Further information may be obtained from Chief Scientific Officer, Jens B. Nielsen +46 702 436 618 or Chief Operating Officer, Bo Skjold Larsen, +45 4525 8008.

You can read more about DTU Biosustain at www.biosustain.dtu.dk

Application procedure:

Please submit your online application no later than **31 May 2017**.

Applications must be submitted as **one pdf file** containing all materials to be given consideration. To apply, please open the link "Apply online," fill in the online application form, and attach **all your materials in English in one pdf file**. The file must include:

- Application (cover letter) addressed to the President
- CV
- Diploma (MSc/PhD)
- List of publications indicating scientific highlights
- H-index, and ORCID (see e.g. <http://orcid.org/>)
- Other documentation (e.g. in the form of a teaching portfolio)
- A plan for future research

All interested candidates irrespective of age, gender, disability, race, religion or ethnic background are encouraged to apply.

DTU Biosustain is an international research centre of excellence developing next-generation cell factories and bioprocesses for sustainable production of high-value chemical compounds as well as protein-based products. The centre uses advanced metabolic engineering techniques and computational biology ensuring efficient and cost-effective design and construction processes.

The centre's activities are a balanced mix of basic and translational research, complemented by an emphasis on business development to facilitate commercialization of new cell factories and associated technologies. DTU Biosustain offers state-of-the-art research facilities and assembles world leaders in the field thus offering a unique platform providing excellent talent development and career opportunities.

The Center is based upon a long-term grant from the Novo Nordisk Foundation to DTU and it was inaugurated in 2011. It has now more than 220 employees and is still growing.

DTU is a technical university providing internationally leading research, education, innovation and scientific advice. Our staff of 5,800 advance science and technology to create innovative solutions that meet the demands of society; and our 10,600 students are being educated to address the technological challenges of the future. DTU is an independent academic university collaborating globally with business, industry, government, and public agencies.