



**Okinawa Institute of Science and Technology
Senior Computational Biologist (Staff Scientist)
in Biological Systems Unit (Goryanin Unit)**

The Okinawa Institute of Science and Technology Graduate University (OIST; see www.oist.jp) is a dynamic new graduate university of science and technology in Okinawa Prefecture, Japan. The university is located on 85 hectares of protected forestland overlooking beautiful shoreline and coral reefs. The campus is striking architecturally, and the facilities are outstanding ([OIST campus video tour](#)). There are no academic departments, which facilitates multidisciplinary research. Outstanding resources and equipment are provided and managed to encourage easy access and collaboration. English is the official language of the University, and the university research community is fully international, with more than 50 countries represented. OIST is rapidly gaining recognition in the worldwide academic community as a model for excellence in Qualitative modelling of dynamics of microbial community composition and functions. Identification of the functional core of the community and its variable part. Modelling of the community evolution and identification of factors that can control.

Position summary:

We seek for Senior Computational Biologist (Bioinformatician) to work on metagenomes data for 3 years.

Unit summary:

<https://groups.oist.jp/bsu>

Responsibilities

Bioinformatics Researcher is available in the Biological Systems Unit at the newly established Okinawa Institute of Science and Technology (OIST) to work on metagenomes data analysis for environmental and antimicrobial applications.

Microbial fuel cells (MFCs) are devices that can use bacterial metabolism to produce electrical current from a wide range of organic substrates. Research and development have increased in the last few years all over the world. MFCs have started to be used in practice, but for large-scale applications cost reductions and higher power output are required. To further enhance the technology a better understanding of the environmentally derived microbiological communities as a system is necessary. We also wish to enhance the ability of electrogenic microbial communities to utilize and degrade wastes and toxic chemicals. Our primary R&D focus is on a better understanding of microbial communities in MFCs as a system, together with further community optimization and tuning of the MFC technology for different



applications.

The position holder will be responsible for the development and support of bioinformatics pipeline(s) and databases as well as development and implementation of methods and tools for metagenomic and other omics data analysis.

Other responsibilities

Collect, process, document and analyze high throughout experimental data. Document experimental and computational procedures and results. Preparation of research publications. Primary R&D focus for the position will be computational methods for a better understanding of microbial community composition, function and interspecies interactions via metagenomics and other omics data. For informal enquiries please contact Professor Igor Goryanin goryanin@oist.jp

Working Location:

Onna-son, Okinawa, Japan. Travelling worldwide.

Qualifications:

Required)

- 1) Strong scientific programming skills (R, Unix)
- 2) Ph.D. in a relevant domain
- 3) 10+ years experience
- 4) Fluent in English.
- 5) Good writing skills. Publications track record in international journals

Preferred

- 1) Working knowledge of other programming languages (Java, C++, Python, Perl)
- 2) Working knowledge of bioinformatics databases, pipelines and tools.
- 3) Working knowledge of pipeline design software (KNIME, Nextflow)
- 4) Working knowledge of database design and development (SQL, column-based, graph-based)
- 5) Practical experience working with metagenomes and human genomes.

Report to:

Prof. Igor Goryanin

Starting Date:

April 1, 2022



Term & Working hours:

Term: Full-time, fixed-term appointment for 1 years. Contract initially with a 3-month probationary period (inclusive). This contract may be renewed up to total of three years.

Working hours: 9:00-17:30 (Discretionary)

Compensation & Benefits:

Compensation in accordance with the OIST Employee Compensation Regulations

Benefits:

- Relocation, housing and commuting allowances
- Annual paid leave and summer holidays
- Health insurance (Private School Mutual Aid <http://www.shigakukyosai.jp/>)
- Welfare pension insurance (kousei-nenkin)
- Worker's accident compensation insurance (roudousha-saigai-hoshou-hoken)

How to Apply:

Apply by emailing your Submission Documents to:

goryanin@oist.jp

Submission Documents:

1. CV in English
2. Two reference letters
3. Research plan for 3 Years

Application Due Date:

1 August 2021

* Prior to the start of employment all new hires are required to successfully complete a background check. Personal information including employment history and academic background should be submitted to third-party administrators after a conditional offer of employment.

Declaration:

- * OIST Graduate University is an equal opportunity, affirmative action educator and employer and is committed to increasing the diversity of its faculty, students and staff. The University strongly encourages women and minority candidates to apply.
- * Information provided by applicants or references will be kept confidential, documents will



not be returned. All applicants will be notified regarding the status of their applications.

* Please view our policy for rules on external professional activities

[\(https://groups.oist.jp/acd/information-disclosure/\)](https://groups.oist.jp/acd/information-disclosure/).

* Further details about the University can be viewed on our website (www.oist.jp).