



[Vacancy for Research and Teaching Assistant \(PhD candidate in Mathematical Biology\) – Ghent University Global Campus, Korea](#)

Ghent University Global Campus

Ghent University Global Campus (GUGC) is an integrated campus of Ghent University, Belgium, and the first European university to be part of the Incheon Global Campus (IGC) in Incheon, South Korea. Ghent University Global Campus currently offers Bachelor of Science programs in Molecular Biotechnology, Environmental Technology, and Food Technology. Ghent University is one of the top 100 universities in the world (ARWU 62nd), and in the Life Sciences subjects taught at GUGC, Ghent University ranks even higher. Please visit the Ghent University Global Campus homepages to learn more about our organization: <http://www.ghent.ac.kr>.

Center for Biosystems and Biotech Data Science

The Centre for Biosystems and Biotech Data Science is one of the five research centers at GUGC. It pursues the development of new mathematical and computational approaches for analyzing biosystems and for extracting knowledge from huge sets of biotech data. The biosystems that are studied in this center include biochemical reaction networks and ecological systems. Some of the key projects that are actively pursued include modelling, model reduction, parameter estimation and stability analysis of biochemical reaction networks and modelling and analysis of metapopulation and ecological competition networks. The research center is also involved in teaching undergraduate courses of mathematics, (bio)informatics, probability & statistics and process modelling and control.

Job Summary

Full-Time Research and Teaching Assistant (PhD candidate in Mathematical Biology) – Ghent University Global Campus

Department: Center for Biosystems & Biotech Data Science

Degree: Master degree in one of the following: mathematics, systems and control, electrical/electronics/mechanical/chemical engineering.

Contract: 1-year contract, renewable (max. 6 years)

Occupancy rate: 100%

Vacancy Type: Assistant Academic Staff



Last application date: 31 May, 2024 (Applicants are encouraged to apply immediately as the position will be filled upon finding the right candidate)

Starting date: 26 August 2024 (negotiable)

Job Position

Ghent University Global Campus, South Korea, has a vacancy for a Research and Teaching Assistant (PhD candidates) in the area of mathematical biology, starting from 26 August, 2024 (open to negotiation). It concerns a 1-year full-time position that is renewable three times based on favourable evaluation, for a maximum period of 6 years. The candidate will work under the supervision of Prof. Shodhan Rao at the Center for Biosystems and Biotech Data Science of the Ghent University Global campus in Korea. In addition, he/she will also be assigned a co-promoter. The candidate will be able to visit the home campus in Ghent once in every two years during his/her PhD studies. In addition to the regular monthly salary, free housing within the campus and a yearly travel budget will be provided to the successful candidate in case he/she does not have Korean nationality. Ghent University Global Campus is an equal opportunities employer.

As a teaching assistant, the PhD candidate is expected to spend 50% of his/her time in teaching activities pertaining to undergraduate mathematics courses that include the topics calculus, analytical geometry and linear algebra. These activities include supervision of exercise/tutorial sessions, preparing and grading tests/exams and the supervision of bachelor projects.

Apart from teaching activities, the PhD candidate is expected to perform research in the area of mathematical biology, specifically in the area of stability analysis of epidemiological models. In this regard, the candidate is expected to complete a doctoral research proposal containing a literature review, a set of research objectives and research plan within the first six months of joining. This research proposal will need to be approved by the GUGC Campus Council in order to ensure renewal of the candidate's first contract with GUGC.

Job Description

- ♦ Assist his/her supervisors in teaching undergraduate courses at Ghent University Global Campus, Korea (Mathematics 1, 2).
- ♦ Conduct research in the interdisciplinary field of mathematical biology with particular focus on stability analysis of epidemiological models.



- ♦ Assist his/her supervisors with tasks in ongoing and future R&D projects.
- ♦ Present research results at conferences and publish in peer reviewed international journals.

Profile of the Candidate

- ♦ Hold by June 2024, a master degree in one of the following disciplines: (applied) mathematics, systems & control, mechanical/ electrical /electronics /chemical engineering. Exceptional candidates from other engineering/science backgrounds will also be considered.
- ♦ Should have had a rigorous undergraduate training and in general a strong background in mathematics.
- ♦ Be highly motivated to conduct research in the area of applied mathematics, specifically in the area of mathematical biology.
- ♦ Have an excellent academic track record, an excellent command of English and good academic writing and presentation skills.
- ♦ Knowledge of biology or chemistry at undergraduate level is preferable although not mandatory.

Application Documents

- ❖ Motivation letter
- ❖ Full resume(CV), including at least 2 references
- ❖ Copy of the Bachelors and Master degree certificates
- ❖ Transcripts (overview of study results)

All required documents must be submitted in English. The documents must be merged in to a single PDF file and sent to shodhan.rao@ghent.ac.kr (subject line: Full-time PhD Position in Mathematical Biology).

Application Process and Interview

- ♦ Interviews will take place in stages from the first available time, possibly via Microsoft Teams.
- ♦ Applicants are encouraged to apply immediately as the position will be filled upon finding the right candidate

We reserve the right to hold applications on file for potential future job openings.



Selection Process

- ♦ CV Screening -> Interview -> Internal committee -> Approval -> Acceptance notice to the selected candidate.

Compensation & Benefits for the Selected Candidate

- ♦ Basic terms of the contract
 - 1-year contract (renewable three times, after positive evaluation, for a total period of maximum 6 years)
- ♦ Salary
 - Starts from an Annual Base Salary of 27,375,000 KRW (Monthly Salary of 2,281,250 KRW, Gross)
- ♦ Bonuses
 - Two additional bonuses in June (92% of monthly salary) and December (100% of monthly salary)
- ♦ Housing Unit or Housing Allowance
 - A single dormitory unit operated by Incheon Global Campus (IGC) will be provided for non-Koreans.
- ♦ Two Roundtrip Tickets to Hometown (for non-Koreans only)
 - The selected candidate of non-Korean nationality will be provided, on a yearly basis, with two roundtrip tickets to their hometown (up to 4,000,000 KRW)
- ♦ Severance
 - Severance shall be paid when the contract ends and if the candidate worked for more than one year
- ♦ Private Health Insurance
 - Marsh private health insurance is provided, including basic medical reimbursements
- ♦ Extensive Annual Paid Leave and Holidays
 - The selected candidate shall have 35 days of paid annual leave per year
 - Additional holidays: from Christmas (Dec 25) to New Year (Jan 1)