

Seeking qualified applicants for a Postdoctoral Researcher in Developing High-throughput Metabolomics Methods for Populations-based Phenotyping

at the Gunma University Initiative for Advanced Research (GIAR)

in collaboration with the Karolinska Institute (KI)

1. Positions Offered	<p>Postdoctoral Researcher Fellowship</p> <p>Affiliation: Gunma University Initiative for Advanced Research</p> <p>Work location: 3-39-22 Showa-Machi, Maebashi, Gunma 371-8511 JAPAN</p>
2. Research	<p>What is health? Despite our best efforts, biomedical science has failed to provide a concrete definition. It is clear that health is more than simply “free from disease”. However, traditional biomedicine focuses on identifying pathways and mechanisms associated with disease symptoms, not on understanding the processes that keep us healthy. It is not possible to understand deviations from health, whether disease-, environment-, or therapeutic-induced, without first establishing a definition of health. This project will develop and employ large-scale metabolomics-based molecular phenotyping at the population level to profile health. The successful applicant will be part of a team applying high-resolution mass spectrometry (HRMS)-based metabolomics to perform deep molecular phenotyping. The acquired phenotype profiles will be integrated with patient meta-data to identify relationships between metabolic trajectories and health, with a focus on respiratory disease. These efforts will require significant experience in mass spectrometry as well as sample preparation. Project tasks include the development of high-throughput methods for rapid molecular phenotyping. The project involves working with collaborators in the National Institute for Environmental Studies who are conducting the Japan Environment and Children’s Study (JECS). This longitudinal birth-cohort study includes 100,000 mother-child pairs and extensive environmental monitoring data. The access to large well characterized cohorts, an extended timeframe of financing, and cutting-edge equipment available represent an unprecedented opportunity to explore the nature of health as well as investigate the relationship between environmental exposure and disease. Our vision is to provide a quantitative definition of health and the associated deviations due to disease or environmental stress.</p>
3. Environment	<p>The Karolinska Institute (KI) has recently launched a new Molecular Phenotyping group at Gunma University (GU). The current post-doctoral</p>

position is being recruited to work in this new facility under the supervision of Associate Prof. Craig Wheelock from KI and Prof. Takashi Izumi from GU. For the purposes of this project, the laboratory has purchased an Agilent RapidFire system. The successful candidate will have access to dedicated state-of-the-art instrumentation including 3 QToF, 1 triple quadrupole, and 1 GC-MS, as well as extensive newly renovated laboratory facilities. The official language of the lab is English, and all affiliated researchers and administrative support staff speak English. Additional information on the group is available at: <http://www.metabolomics.se/>.

- | | |
|----------------------------|--|
| 4. Qualifications | We are looking for highly motivated candidates with a Ph.D. in mass spectrometry or bioanalytical chemistry and experience in small molecule mass spectrometry as well as biological sample preparation techniques. Candidates should have demonstrated experience in LC-MS based metabolomics. We are especially interested in candidates with prior experience working with method development and sample preparation. It is expected that a significant portion of time will be spent on developing novel sample preparation procedures for high-throughput metabolomics. Excellent communication skills and an ability to interact with other staff in the lab and with collaborators in various networks are essential. |
| 5. Duties | (1) Perform research in the field of metabolomics and analytical chemistry
(2) Promote formation of a research base for domestic and overseas researchers. |
| 6. Term of Employment | Type of contract: Fixed-term employee
Contract Period: The start date is November 1 st , or as soon as possible after that date. The contract period can be renewed until March 31, 2020. |
| 7. Salary and Benefits | According to Gunma University Employment Regulations for Part-time Employees
Salary: determined based on the successful applicant's experience.
The position includes health insurance, pension, and labor insurance. |
| 8. Selection of Candidates | (1) Initial screening will be performed by the examination of application materials.
(2) Selected applicants will be interviewed via Skype and may be requested to interview in person at GU with a formal research seminar. |
-

-
9. Starting Date The initial start date is flexible, but the position is available immediately.
-
10. Deadline October 31, 2017
-
11. Application (1) A Curriculum Vitae (Form 1)
Materials (2) A List of Publications and Activities (Form 2)
 (3) A list of persons to whom the applicant's research and educational
 achievement can be referred (including name and contact information)
The necessary forms are available on the following website:
<http://www.giar.gunma-u.ac.jp/en/2015/07/10/application-forms/>
-
12. Send To Craig Wheelock, Karolinska Institutet
application by craig.wheelock#@#metabolomics.se
e-mail to AND
 To Advanced Research Support Office
 Research Promotion Division, Gunma University
 miraisentan#@#jimu.gunma-u.ac.jp
 (Please note that “#@#” should be replaced with “@”.)
-
13. For further More information can be found at:
information, <http://www.metabolomics.se/>
contact <http://ki.se/en/startpage>
 <http://www.gunma-u.ac.jp/>
 <http://www.giar.gunma-u.ac.jp/english/>
- Questions regarding the position can be directed to Craig Wheelock
(craig.wheelock#@#metabolomics.se)
-
14. Other Gunma University promotes a society based on equal opportunity by actively
 hiring women when applicants are equally qualified in performance
 evaluation (research and educational achievement, social contributions and
 personality).
-