■ Job Information

Subject No.	2027R-8
Job Title	Fixed Term Researcher
Department	Advanced ICT Research Institute / Bio-ICT Collaboration Center, Bio-ICT Laboratory
Work Contents （Research theme）	Large-scale analysis of cellular mechanical information and development of a mechanoinformatics
Detail of Work Contents	At the Bio ICT Laboratory, we regard mechanical information exchanged within living systems as a new mode of information representation that connects biological systems with existing artificial ICT. We are conducting research and development on technologies for measuring and analyzing cellular mechanical information using ultra-sensitive mechanical sensors. In this research theme, we will establish a mechanical omics analysis platform that enables large-scale and quantitative acquisition of the mechanical signals generated and sensed by cells by combining fluorescence imaging with mechanical sensors, automated observation, and AI-based image analysis systems. The successful candidate will mainly be responsible for establishing experimental systems using cell biological and biophysical approaches, setting up automated observation systems based on fluorescence microscopy, integrating these systems with AI image analysis, and performing large-scale data analysis. The Article 15(2) of the Act on the activation of Science, Technology and Innovation will be applied to this work content.
	Employees to be hired through this recruitment may apply for external competitive research fundings such as Grant-in-Aid for Scientific Research (KAKENHI) and NICT’s internal research fundings.
Application requirement	・Applicants should hold a doctoral degree and have a strong interest in research and development in the field of Bio ICT, which aims to seamlessly connect mechanical information and other forms of information exchanged within living systems with existing artificial ICT. ・Applicants should have research experience in cell biology, biophysics, molecular biology, or a related field, and should be proficient in cell functional analysis using cell culture and fluorescence microscopy. ・Applicants should have knowledge and experience in quantitative analysis of microscopy images, image processing, or large-scale data analysis. ・Experience in automated microscopy systems, high-content imaging, AI-based image analysis, or bio-data analysis using machine learning is desirable.
Recruiting (Number of people)	1
Contract period	hiring date ～ March 31,2028 N.B. Contract could be renewed.
The employment period in case of fully renewing	Up to 5years if certain conditions are fulfilled
Salary (basic salary)	¥541,000 ～ ¥558,000/month Basic salary shall be determined by taking into account each employee’s experience and task to be engaged in. However, as a basic salary is compliant with government employees' wages, it shall be changed when a basic salary is changed after labor union and the like of NICT agreed under a revision to the government employees' wages.
Work Place	Advanced ICT Research Institute (Iwaoka, Nishi-ku, Kobe-shi, Hyogo)
Working frequency	5days/week （7.5hours/day）

* Scope of change in work and workplace：No changes are expected in general
* The expressions used in "Work Contents (Research theme)" and "Detail of Work Contents" and the names of "Department" and "Work Place" may be subject to change due to organizational restructuring or other reasons.

NICT Fixed Term Positions Job Announcement: https://www.nict.go.jp/en/employment/index-e-top.koubo.html