

Postdoctoral Fellow (full-time)
(Umeda Lab, Nano Life Science Institute, Kanazawa University)

We are currently recruiting a postdoctoral fellow in the fields of Ultrafast AFM and Nanomechanical Measurements (Umeda Laboratory) as follows.

1. **Number of Position** One
2. **Period of Employment** Starting from August 1st, 2026, or as early as possible if later.
3. **Duration of Employment** One year (The contract could be renewed every year until a maximum of three years

has elapsed from the date of hire)

4. **Job Description**

Umeda Lab is a new laboratory starting from August 2026. The lab focuses on the further development of high-speed atomic force microscopy (HS-AFM), including ultrafast imaging and nanomechanical measurements of biological samples. Our goal is to develop advanced AFM technologies and use them to uncover previously unresolved biological phenomena.

Conventional HS-AFM has typically been limited to frame rates of approximately 5–20 fps. Through recent technological developments, however, we are now achieving ultrafast imaging at frame rates exceeding 100 fps. We are also developing three-dimensional force-mapping techniques to measure the nanomechanical properties of biomolecules at the submolecular level.

Recent publications:

<https://researchmap.jp/UM8456?lang=en>

We are seeking a highly motivated, independent, and ambitious individual who is interested in working in a diverse and collaborative research environment. We will consider candidates from a broad range of backgrounds, including molecular and cellular biology, biochemistry, biophysics, and related fields. Experience with AFM is not required, but candidates should be willing to learn and actively engage in AFM measurements. We particularly welcome applicants who can prepare novel biological samples that have not previously been studied using HS-AFM.

The successful candidate will conduct ultrafast AFM imaging, nanomechanical measurements, and biological sample preparation. The position will also involve developing and conducting an independent research project, writing scientific manuscripts, and presenting research findings at seminars and conferences. Umeda Lab provides an open, collaborative research environment, working with laboratories within the NanoLSI, as well as researchers in Japan and abroad.

5. **Requirements**

- The applicant must satisfy all the following requirements:

- 1) Doctoral degree (including equivalent degrees such as a PhD from overseas universities) has been conferred or will be conferred when he/she arrives at the post.
- 2) Research experience with any one of the followings: AFM, life science, or structural biology

- The applicant should be able to communicate and collaborate with other researchers in English.

- International researchers or Japanese female researchers* are welcome to apply.

*Article 8 of the Equal Employment Opportunity Law (Special Provisions of Measures Pertaining to Female Workers): Actions to actively improve the situation of a considerably low percentage of female researchers.

6. **Institution** Nano Life Science Institute (WPI-NanoLSI)

7. **Working Hours** 8:30 – 17:00 (recess 45 minutes) 38 hours and 45 minutes a week
Holidays: Saturdays, Sundays, national holidays, and
year-end and new year holidays (Dec. 29-Jan.3)

8. **Compensation**
- Employment status: Adjunct employee of Kanazawa University (full-time worker)
 - Salary: Approximately 4.2 to 4.5 million yen per year
 - Leave, allowances, etc. shall be as prescribed in the Rules of Employment and Salaries for Part-time Employees
 - Eligibility to Social insurance: Yes (Health insurance and welfare pension)
 - Eligibility to Unemployment insurance: Yes

9. **Application** Please send the following application documents below 1) to 4) by e-mail.

Email : nanolsi-jobs@adm.kanazawa-u.ac.jp

*Please title the e-mail "Application for Postdoctoral Fellow (Umeda Lab)."

【Application Documents】

- 1) Curriculum vitae with a recent photograph of the face, describing present address, phone number, e-mail address, academic career, research career, professional career, and other relevant information.
- 2) List of research activities, including original scientific papers, book chapters, other publications, presentations in scientific meetings, awards, and other relevant activities.
- 3) PDF files of up to five key papers
- 4) A description of the applicant's research interests, achievements, and future research plan (~2 pages; the use of figures is recommended)
- 5) Contact information for two references

10. **Application period** This position is open until filled.

Note; We will review submitted documents as soon as we receive them.

11. **Selection** Document screening and interviews

12. **Contact** Nano Life Science Institute, Kanazawa University

Tel: +81-76-234-4550

Email: nanolsi-jobs@adm.kanazawa-u.ac.jp