

**Project Title:**

Linking cellular morphology to single cell transcriptome

**Name:**

○FUMIKO KAWASAKI (1)

**Laboratory at RIKEN:**

(1) Center for Advanced Intelligence Project, Medical Image Analysis Team

---

1. Background and purpose of the project,  
relationship of the project with other projects

This project aims to clarify association between cell morphology and molecular biological state of cells by carrying out classification both by cellular images and transcriptome profiles.

2. Specific usage status of the system and  
calculation method

N/A (no analysis carried out)

3. Result

N/A (no analysis carried out)

4. Conclusion

N/A (no analysis carried out)

5. Schedule and prospect for the future

Once the experimental system improves, cell-type clustering and classification will be carried out.

6. If no job was executed, specify the reason.

Since the experiment unexpectedly required intensive optimization of cellular sample manipulation steps, the project tasks during FY2018 mostly focused on biochemical/cell biology method development (e.g. optimizing sequencing library preparation). All the sequencing/imaging data were produced in small scales for the purpose, therefore, no experiment required an access to the super computer.