

**Project Title:**

Analysis of mobile element insertion in massive short-read datasets

**Name:**

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

The purpose was to perform preliminary analysis of mobile element insertions into eukaryotic genomes, at the population scale, in order to determine whether these genetic elements are associated with phenotypic differences in different members of the same species.

2. Specific usage status of the system and calculation method

235 hours on bwmpc have been used as of February 6th. This project was started very late in FY2019 (January 2020), and thus far only pilot-scale analyses have been performed.

3. Result

The result in this FY has been to demonstrate that Hokusai is able to perform the computational pipelines designed for the task, and thus will be a valuable resource to address the scientific question intend to address on much larger scale in FY2020.

4. Conclusion

Hokusai is a valuable computational resource for my research, and while no publications were produced in this short time frame of the current project, they can be anticipated based on extension and expansion of this project's concept.

5. Schedule and prospect for the future

In addition to this quick use application, a general use application is being prepared to allow increased use of shared use computational resources in RIKEN by my team in FY2020.

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