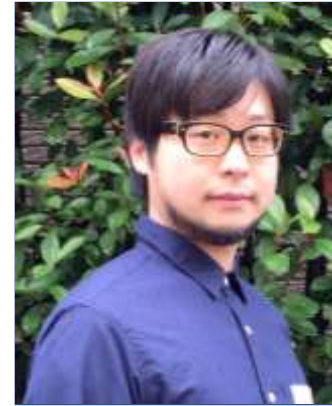


# Realization of common platform technology, facilities, and equipment that creates innovative knowledge and products

## Development of mathematical sciences framework for "morph" and social implementation of their logic toward real-world issues

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### Summary :

Although morphological quantification and analysis are required in a wide range of fields, the processes are still labor-intensive, based on tacit knowledge, and heavily reliant on experts, which makes it difficult to automate and scale out of the quantification processes. We attempt to solve the problem with a computer-aided morphometric ecosystem based on mathematical models. In particular, we develop theories and techniques on quantification of morphological characteristics, and implement them into a measurement system. Using the morphometric framework, it will be possible to quantify morphological characteristics neglected before, to improve the throughput, and to contribute to solve real-world issues.

### Model-based morphometrics and implementation of their logic and techniques into advanced phenotyping systems

