Here begins our new MIRAI



R&D Theme

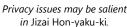
# Ethical, legal, and social issues (ELSI) involved in Jizai Hon-yaku-ki

## **Progress until FY2022**

### 1. Outline of the project

In R&D Theme 6, we analyze the ethical, legal, and social issues (ELSI) involved in this R&D project to make Jizai Hon-yaku-ki socially acceptable.







Protecting participants is our utmost priority.

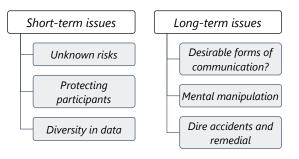
Since Jizai Hon-yaku-ki builds on emerging biology and neuroscience, it may cause various ethical concerns regarding privacy and unfamiliar forms of communication. Also, our highest priority is to protect the rights of participants in our R&D. Jizai Hon-yaku-ki should reduce — rather than worsen — discrimination against people with developmental conditions.

The primary task of our R&D Theme 6 is to investigate these potential issues from theoretical and practical standpoints. This sub-project also aims to provide future-oriented insights into neurodiversity and (supported) communication.

#### 2. Outcome so far

- 1. Compiled a list of potential issues relevant to our R&D of Jizai Hon-yaku-ki;
- 2. Started the data management working-group in our R&D project;
- 3. Analyzed ethical issues concerning mental manipulation.

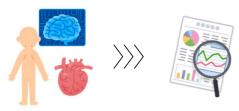
Outcome 1: We compiled a list of ethical, legal, and social issues relevant to this R&D project. The list is twofold to reflect the distinction between (1) issues that can be salient shortly and (2) issues of longer-term relevance.



Two lists of ELSI relevant to Jizai R&D project (abr.)

Outcome 2: We established a working group to address data-related issues in every phase of this R&D project from data generation to data collection, storage, analysis, archiving, and destruction.

We are trying in this project to "integrate" ethical perspectives into the R&D project at its earliest stage through the active collaboration between scientists, engineers, and ethicists.



Data-related issues are worth serious attention, because our R&D deals with sensitive neurological and physiological data.

Outcome 3: We analyzed the ethical issues concerning "mental manipulation" — one of the prominent issues in our R&D project. Mental manipulation as such is everywhere, but it has been unclear what makes manipulation ethically problematic. The insight from this ethical inquiry will tell us what kind of supportive intervention is (im)permissible in Jizai Hon-yaku-ki.

#### 3. Future plans

We go on with the ongoing collaboration between scholars from various academic disciplines to achieve consensus on important ELSI on our R&D project.

Our R&D Theme 6 is broadening further the scope of issues addressed. We also have a plan to compile a recommendation/opinion document, or a "guidebook," to address various ELSI-related problems attributed to Jizai Hon-yakuki and communication aids in general.

(Tohoku U: N. Osumi)

