Human-centric Digital Twins Services Utilizing AI, Big Data and IoT

Comprehensive and Cross-scale Physiological Signal Acquisition

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Summary:

The goal of this project is to develop comprehensive data acquisition methods in the field of biology. Although some fields advance from comprehensive data, such as genomic data, many other biological fields have neither the technology nor the practice of comprehensive data acquisition yet. We will develop methodologies to comprehensively collect data on physiological responses to drugs at the molecular, cellular, and tissue scales. We will then vertically integrate these data and attempt to digitally reconstruct physiological responses. The models thus constructed will be useful for applications such as drug development without side effects.

