

Bring hospital into home toward controlling inflammation at home





What is your research about?

We will establish technologies analyzing gases emitted from human skin to monitor health condition and then research and develop technologies (exercise-substituting therapy and exercise-mimicking drug) to reproduce "good-for-health inflammation" induced by exercise, etc. By building a medical network that connects wearable sensors and hospitals to enable home diagnosis, we aim to realize a healthy longevity society.

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What are the goals aimed by 2030?

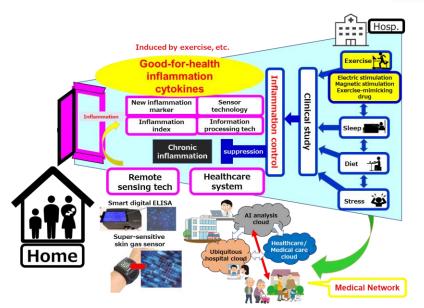
- We will build a system that can monitor inflammation biomarkers and conduct clinical research in combination with solutions related to exercise, sleep, and diet.
- We will create an "on-site digital bioanalyzer" that can measure factors related to lifestylerelated diseases, such as inflammation markers, in the comfort of the home.
- We will formulate a clinical trial strategy using controlled inflammation medical technology to induce "controlled inflammation," and build a medical network integrating the solutions
 obtained.





How will your research change the medical care in 2040?

We will characterize the state of inflammation for each individual with an "inflammation index" using digital bioassay technology for remote, low-cost, non-invasive assessment, ultra-sensitive body gas sensing, and other technologies. Through control methods of inflammation using electrical and magnetic stimulation devices and exercise-mimetic drugs, we will achieve a society where innovative telemedicine for chronic diseases is "accessible to anyone, anywhere".



< Main Research Institutes >

The University of Tokyo, Nippon Medical School, Kanagawa University of Human Service, etc. 6 institutes in total