## **Theme: Health Technology**

## - Sub Theme: Next Generation Wearable Devices for Human Musculoskeletal Healthcare

As the number of elderly people is expected to be skyrocketing in the near future, the issues regarding the quality of life for the elderly are getting much attention. In this situation, the solutions to keep or enhance their mobility are believed to be closely related to managing human musculoskeletal health. Therefore, such solutions have a high level of potential as an upcoming business.

We are aiming to find a brand new and innovative technology which could be implemented into wearable-typed devices and generate a plenty of data for users' physical conditions, and bind with the AI-based technology to analyze and diagnose musculoskeletal health. Those could be unprecedented sensing or fusion methodologies, and also could be more practical and affordable solutions to replace all the conventional approaches. Besides just gathering data from users, it could be also differentiated to make any desirable effects on users' motion actively by interacting with them in a physical way, especially to delay muscle weakening or to prevent falling.

- Human Sensory Assistance or Augmentation
- Transparent Power Assistance for Preventing Falling or Muscle Degradation
- Learning-Based Diagnosis for Neuro-Musculoskeletal Health Condition or Rehabilitation Progress
- Smart Suit for Health Monitoring

<sup>\*</sup> The topics are not limited to the above examples and the participants are encouraged to propose original idea.

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