

## Efforts toward 'Music and Health'

At Sumitomolife Izumi Hall, we are promoting the "Music and Health" project as a proposal for new values of well-being through music. The project is based on the hypothesis that music has benefits for (mental) health, and it aims to measure these benefits using new technologies and propose new values of music based on the measurement results. The project members are researchers leading their respective fields, who gather at Sumitomo Life Izumi Hall and have been building discussions since last July.

### **Project Overview**

Using the latest technology to measure the movements of the mind that have been difficult to quantify until now, we aim to establish a new understanding of the mind through collaboration with research in the fields of neuroscience and information engineering, verify the effects of music on mental health, and propose initiatives that contribute to mental well-being (activating the mind) through music.

In the future, we aim not only to focus on music but also to broadly connect health with culture and the arts, creating new value and encouraging behavioral changes that lead people to engage with culture for the sake of their health.

### **Project member**

Music : Kazuki Sawa, Former President of Tokyo University of the Arts

Medical : Sonu Bhaskar, Director of the Global Health Neurology Research Institute

Medical : Kenji Ohata, Professor Emeritus, Osaka Metropolitan University

Engineering : Koichi Kise, Professor, Osaka Metropolitan University,  
Director of DFKI Lab Japan

Technology : Hitoshi Imaoka, NEC Fellow

International Affairs: Hirofumi Ichisaka

Planning : Yoh Matsuda, Managing Director of Sumitomolife Izumi Hall

## 1. Measurement Methods

- Objective measurement using the latest technologies such as wearable devices and AI technology (\*).
- Subjective measurement using an emotion questionnaire supervised by Dr. Bhascar (\*).

## 2. Measurement Targets

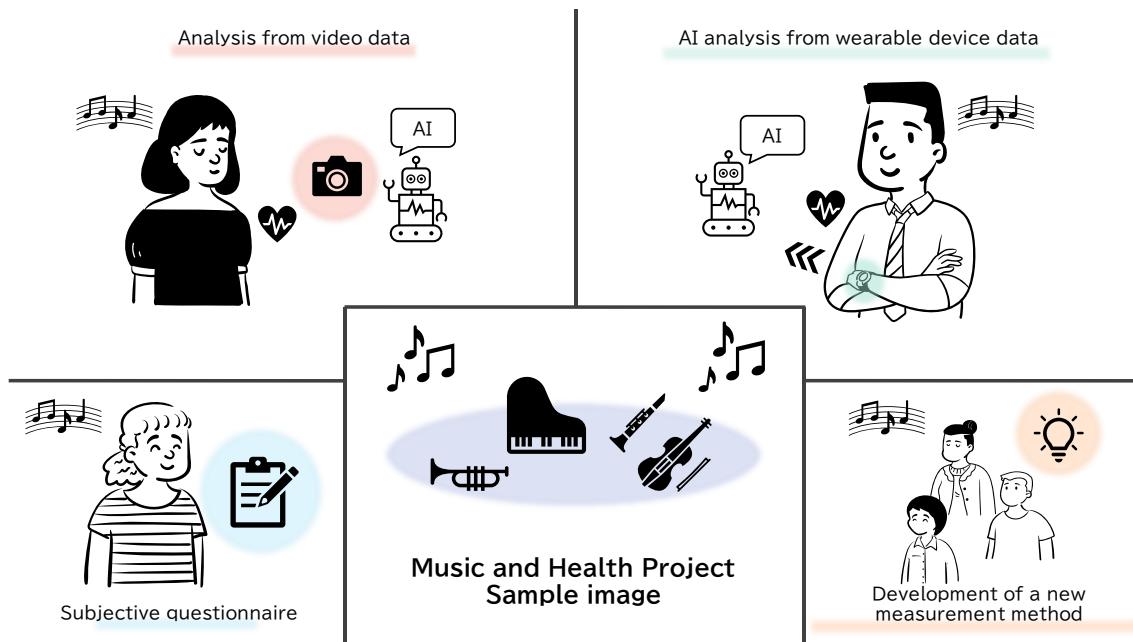
- Mainly focusing on Osaka Prefecture: young people and seniors  
Young people: junior high, high school, and university students  
Seniors: residents of elderly care facilities

## 3. Intended Effects

- The Sumitomo Life Welfare and Culture Foundation, a general incorporated foundation, contributes to society by supporting both physical and mental health, promoting overall well-being of the body and mind.
- As a legacy of EXPO 2025, we aim to establish an institution based in Osaka that conducts research on the theme of '○○ and Health.' Taking EXPO 2025 as an opportunity, we will create new innovations in Osaka by combining the concentration of life sciences and biomedicine with culture science, while promoting Osaka's image as a city committed to a 'healthy society' to the world.
- Aiming to become a model case of a mechanism where local communities and companies work together to create and nurture new action values, we will contribute to developing schemes that deepen collaboration between local communities and companies, leading to the revitalization of regions across Japan, starting from Osaka.
- By measuring the effects of music on mental health, for example, it can change the awareness of teachers and parents conducting music classes in elementary schools, contributing to a shift in the significance and meaning of children becoming familiar with music.
- By dealing with the universal theme of music and health, which is Not limited to region, age, or gender, it has developed into collaborative research not only within the country but also with the world.
- In light of the future decline in population and aging society, utilize research findings in preventive healthcare for the elderly in Japan, taking reference from 'social prescribing' in the UK.

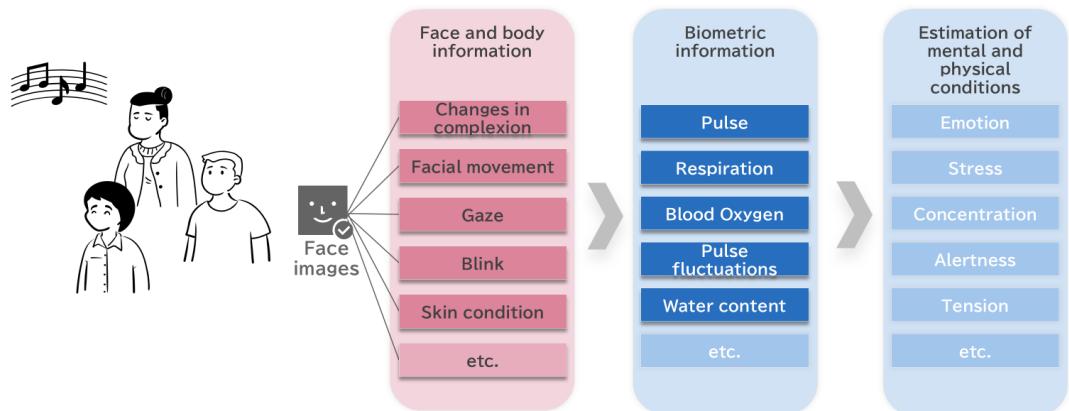
### ◆ For inquiries, please contact the following:

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## New applications of face recognition technology

Technology for assessing mental and physical conditions using facial and body information  
 Estimating well-being through music using non-contact sensing



**Bhaskar Music and Emotion Questionnaire (BMEQ)**  
**Developed by Sonu Bhaskar, MD PhD FANA**

**Background:** BMEQ is designed for use before and after listening to or watching music. The questionnaire is structured to capture the participant's emotional and mental health state, with sections focusing on their mood, mental state, and specific emotional responses related to the music.

Pre-Music Session Questionnaire

1. Demographic Information (Optional)			
Age:			
Gender:			
Date:			
2. General Mood Assessment			
<b>On a scale of 1 to 10, how would you rate your current mood?</b> (1 = Very Low, 10 = Very High)			
Grading	General Mood	Short Description	Response
1	Very Low	Feeling extremely down or hopeless.	
2	Low	Experiencing significant sadness or negativity.	
3	Somewhat Low	Mildly negative mood; feeling off.	
4	Below Average	Below normal mood; some dissatisfaction.	
5	Average	Neutral mood; neither good nor bad.	
6	Above Average	Slightly positive mood; feeling decent.	
7	Somewhat High	Generally good mood; feeling uplifted.	
8	High	Positive mood; feeling happy and engaged.	
9	Very High	Very positive mood; feeling great.	
10	Extremely High	Peak mood; feeling ecstatic and full of energy.	

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Post-Music Session Questionnaire

1. Immediate Emotional Response			
<ul style="list-style-type: none"><li>How did the music make you feel? (Select all that apply)</li></ul>			
Emotion	Short Description	Response	
Happy	Feeling joy and contentment.		
Sad	Experiencing disappointment or grief.		
Angry	Feeling frustrated or annoyed.		
Anxious	Experiencing worry or unease.		
Excited	Feeling enthusiastic and eager.		
Calm	Experiencing tranquility and peace.		
Frustrated	Feeling upset due to obstacles.		
Hopeful	Believing in positive outcomes.		
Indifferent	Lacking interest or concern.		
Other	Specify any other emotion you feel.		