

Sustainable Productivity and Health Advisor (SUPHRA)

Motivation and Background

In today's workspace, it is hard to keep pace and individuals constantly ask:

- How to be more productive and improve health simultaneously?
- How to reach peak productivity and fitness while staying relaxed?
- How to maximize one's healthy lifespan (longevity)?
- How to utilize cognitive enhancers like caffeine sustainably?

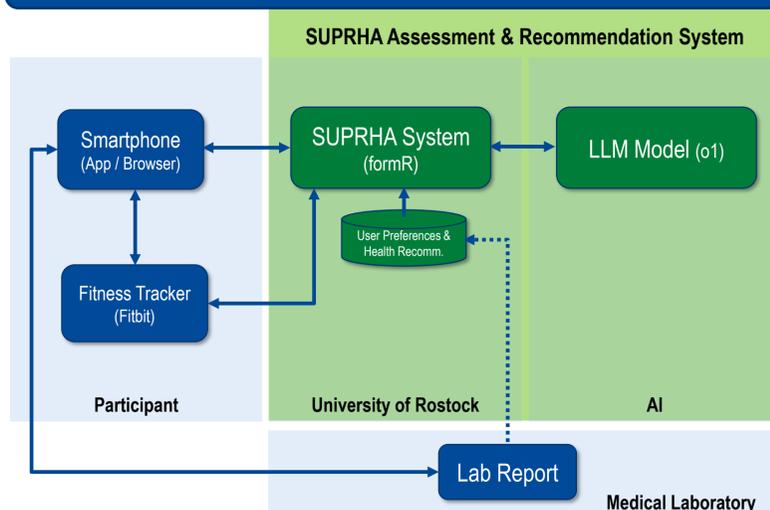
A synergistic approach for sustainable self- and health management is urgently needed!



Key Idea

Science-driven and AI-enabled toolbox for individualized recommendations

System Architecture



Highlights:

- **4D+ multi-modal dataset** (work, behavior, mindset, fitness, +biomarkers)
- **Validated scales** for all self-assessments
- **Hybrid processing:** correlation matrix & LLM
- **Personalization:** health literacy and interests

Evaluation

Evaluation is planned using Kirkpatrick's model (reactivity, knowledge, behavior, outcome).

We invite you to participate in our study!

(We have a **limited capacity** of 20 Fitbits)

Sample Recommendations (Improvement & Praise)

Increase micro-breaks: You indicated that you hardly took any micro-breaks today. Try to take short breaks regularly throughout the day. These few minutes can help to restore concentration and reduce mental fatigue.

Social interaction: You didn't spend much time with other people during your breaks today. Even brief social interactions can help lift your mood and reduce stress.

Manage your workload: Since you have a very high workload and often have more tasks than time, it would be helpful to prioritize and clearly structure tasks. If possible, delegate tasks or seek support from colleagues.

Make progress visible: Despite your high level of commitment, you feel that you have not made good progress. It might be helpful to reflect on your progress at the end of the day and celebrate small successes to keep you motivated.

Relaxation exercises: Your feelings of restlessness and tension could be alleviated by regular relaxation exercises. Short breathing exercises or gentle stretching exercises during your breaks can help to relieve tension.

Maintain your diet: It is positive that you pay attention to food intake. A balanced diet is important to keep energy levels stable. Try to stay hydrated throughout the day.

Integrate exercise: You have already incorporated relaxation or exercise activities into your breaks today. Try to incorporate this regularly as a great way to de-stress.

Future Research

- Combining **LLM-generated improvement tips with scientific knowledge** from our catalogue.
- Integration of lab-based biomarker analysis
- Evaluation with a larger sample size