

Thomas Svensson

2 Academic thesis

- 1) Staffini A, **Svensson T**, Chung UI, Svensson AK. (Peer reviewed)
A Disentangled VAE-BiLSTM Model for Heart Rate Anomaly Detection. *Bioengineering*. 2023;10(6),683. (Impact factor: 4.6)
Available from: <https://doi.org/10.3390/bioengineering10060683>
- 2) **Svensson T**, Madhawa K, Hoang NT, Chung UI, Svensson AK
Validity and reliability of the Oura Ring Generation 3 (Gen3) with Oura sleep staging algorithm 2.0 (OSSA 2.0) when compared to multi-night ambulatory polysomnography: A validation study of 96 participants and 421,045 epochs. *Sleep Medicine*. 2024;115:251-63. (Impact factor: 4.8)
Available from: <https://doi.org/10.1016/j.sleep.2024.01.020>
- 3) **Svensson T**, Madhawa K, Hoang NT, Chung UI, Svensson AK
Response to comment on "Validity and reliability of the Oura Ring Generation 3 (Gen3) with Oura Sleep Staging Algorithm 2.0 (OSSA 2.0) when compared to multi-night ambulatory polysomnography: A validation study of 96 participants and 421,045 epochs". *Sleep Med*. 2024.
Available from: <https://authors.elsevier.com/a/1ipiS4y2Nr8jjc>
- 4) **Svensson T**, Svensson AK, Kitlinski M, Engström G, Nilsson J, Orho-Melander M, Nilsson P, Melander O.
Very short sleep duration reveals a proteomic fingerprint that is selectively associated with incident diabetes mellitus but not with incident coronary heart disease: a cohort study. Under review in *BMC Medicine*
- 5) Yulong R, Kojima Y, Tsuji K, **Svensson T**, Suto A, Ochi E
Longitudinal changes in physical activity of early-stage breast cancer survivors in Japan during and after the COVID-19 lockdown. Under review in *Journal of Exercise Science & Fitness*
- 6) Ishikawa Y, **Svensson T**, Madhawa K, Hoang NT, Chung UI, Svensson AK
Association between sedentary behavior and sleep quality among urban white-collar workers: a multilevel analysis using ecological momentary assessment and wearable device data. In submission
- 7) Sjöland O, **Svensson T**, Madhawa K, Hoang NT, Chung UI, Svensson AK
Associations of subjective sleep quality with wearable device-derived resting heart rate during REM sleep and non-REM sleep in a cohort of Japanese office workers. In submission

3 Other Authorship

- 1) Svensson AK, **Svensson T**, Melander O.
Conference Report. *Journal of Internal Medicine Key 18 Symposium*: "Longevity and healthy ageing: What can we learn from Blue Zones?"

Available from Journal of Internal Medicine:

https://onlinelibrary.wiley.com/page/journal/13652796/homepage/key_symposia.htm

4 Membership of academic society, academies, and public institutions

- 1) Member of the Japan Epidemiological Association
- 2) Member of the Swedish Society of Medicine
- 3) Member of the Swedish Medical Association
- 4) Member of the Sleep Research Society
- 5) Member of the American Academy of Sleep Medicine

5 Regional contributions

- 1) I was a member of the organizing committee that in May 2023 arranged a symposium in Okinawa sponsored by the Royal Swedish Academy of Sciences and the Journal of Internal Medicine. The topic of the seminar was Longevity and Healthy Ageing. 20 world-renowned international researchers participated in the event which attracted significant media attention and participants ranging from graduate school students, medical professionals, media, and local residents (<https://www.okinawa-congre.co.jp/key-symposium2023/>).
- 2) Ongoing social implementation of the Lifestyle Evaluation Algorithm MIRAMED in Kanagawa Prefecture's アプリ「マイME・BYOカルテ」で未病を改善
<https://www.pref.kanagawa.jp/docs/fz7/ent/f532715/p991437.html>
- 3) Ongoing social implementation of MIRAMED in the following products for lifestyle improvement:
 - (ア) SoftBank affiliate, [Healthcare Technology Corporation](#), applied the MIRAMED technology to a remote specific health guidance service using the "HELPO" health app.
 - (イ) [Hitachi Systems](#) applied the MIRAMED technology to the "HISYS-MIRAMED" system, allowing the remote specific health guidance service provider companies to use the app.
 - (ウ) [MEDMIRAI Inc](#) is one of the above providers and in development of MEDMIRAI for regulatory approval as Software as a Medical Device (SaMD).

6 Lectures and Broadcastings

- 1) Speaker at the Drug Information Association (DIA) symposium in Tokyo on November 7th. Title of presentation: Sleep dBM – possibilities and challenges in research
- 2) News release of Key Symposium
QAB Ryukyu Asahi Broadcasting Corporation
<https://www.qab.co.jp/news/20230117159796.html>
- 3) News item related to Key Symposium
Ryukyu Shimpo

<https://ryukyushimpo.jp/news/entry-1657269.html>

8 Educational activities at KUHS/SHI

- 1) Course manager, “Introduction to Epidemiology”
- 2) Course manager, “Oral presentation”
- 3) Course manager, “Global Health Policy”
- 4) Main supervisor to one PhD Student
- 5) Main supervisor to two Masters’ Students
- 6) Assistant supervisor to one PhD student
- 7) Assistant supervisor to one Masters’ Student

9 Activities of various committees at KUHS/SHI

- 1) Serving on the International and Regional Collaboration Committee
- 2) Serving on the Entrance Examination Committee

10 Grants-in-Aid for Scientific Research (*KAKENHI*) or other grants

- 1) AMED Moonshot Research and Development Program (FY2022 – FY2025). Moonshot goal: The research and development on Target 2 (Realization of medical networks accessible for anyone from anywhere in the world). Project title: “Bring hospital into home toward controlling inflammation at home”
- 2) Sawai Pharmaceutical Co. "Development of Sleep application and Dashboard" (FY2022 - FY2024).
- 3) Oura Ring Oy. Preventive Healthcare and Bioengineering (FY2022-FY2024).

13 Patents and Copyrights

- 1) Precision sleep evaluation system
- 2) Healthy Ageing Index

14 Other works

- 1) Actively reviewing manuscripts for international journals. The following list shows my reviewer activity in chronological order between 2023.04.01 – 2024.03.31 (each entry represents a separate review):
 - (ア) Sleep Health (Impact Factor: 4.450)
 - (イ) Archives of Gerontology and Geriatrics (Impact Factor: 4.0)
 - (ウ) Sleep Epidemiology (Impact Factor: N/A)
 - (エ) Sleep Medicine (Impact Factor: 4.842)
 - (オ) Sleep Health (Impact Factor: 4.450)
 - (カ) JAMA Network Open (Impact Factor: 13.8)
 - (キ) Maturitas (Impact Factor: 4.9)
 - (ク) Sleep Medicine (Impact Factor: 4.842)
 - (ケ) Sleep Medicine (Impact Factor: 4.842)

(コ) Sleep Medicine (Impact Factor: 4.842)