



UNIVERSITY
OF MANITOBA

Graduate Program in Biomedical Engineering

E2-390 Eng. Bldg.
University of Manitoba
Winnipeg, Manitoba
Canada, R3T 5V6
Telephone (204) 474-9755
biomedic@umanitoba.ca

Data Sharing Agreement

The data provided through this agreement are tracheal breathing sounds data recorded at Misericordia Hospital from patients a few hours (around 8-9 PM) prior to proceeding to the full PSG overnight sleep study. The data recording procedure and equipment as well as the methodology for analyzing the breathing sounds to predict obstructive sleep apnea during wakefulness are fully explained in the reference below.

By signing this consent, if eligible, you will have access to three files: the raw data in MAT format (for MATLAB), an excel file containing anonymized anthropometric information of the subjects in MAT file and a README file that describes what each row and columns of data are plus an example to read the data correctly. There are other papers of our team on this topic as well that you can see their list on the next page of this document.

If interested to receive the data, please provide the following information:

First name, Last name:

Position:

University/Research Institution:

Department:

Purpose of using this data:

Statement of Consent

By signing this consent form, on behalf of my team I declare all the provided information above is true, I will use this data only for research purpose, will not share the data with another research group, and also acknowledge the source of data by referring to the following publications in any of our future publications.

Reference

1. <https://link.springer.com/article/10.1007/s11517-014-1151-0>
2. <https://link.springer.com/article/10.1007/s11517-012-0958-9>

Name:

Signature:

Date:

In case the applicant is a student:

Supervisor's name:

Supervisor's Signature:

Date:

Please save the signed copy of this page and send it to Dr. Zahra.Moussavi@Umanitoba.ca for consideration.

List of relevant papers on this topic

1. Sarraf S., Birjandi A., Moussavi Z., "Non-invasive and Automatic Diagnosis of Patients at High Risk of Swallowing Aspiration," J Med Biol Eng Comp (MBEC), 52(5):459-65 May 2014. DOI: 10.1007/s11517-014-1151-0
2. Sarraf-Shirazi S., Caitlin Buchel, Reesa Daun, Laura Lenton, and Moussavi Z. "Acoustic Detection of Silent Aspiration using swallowing and breath sound analysis," J Med Biol Eng Comp, DOI: 10.1007/s11517-012-0958-9, 50(12):1261-1268, 2012.
3. Sarraf-Shirazi S., Baril J. and Moussavi Z. "Characteristics of the Swallowing Sounds Recorded in the Ear, Nose and on Trachea," J Med Biol Eng Comp, 50(8):885-90, Aug. 2012
4. Sarraf-Shirazi S. and Moussavi Z., "Acoustical Modeling of Swallowing Mechanism," IEEE Trans. Biomed. Eng., Vol 58, No 1, pp: 81-87, Jan. 2011
5. Aboofazli M., Moussavi Z., Swallowing Sound Detection using Hidden Markov Modeling of Recurrence Plot Features, Journal of Chaos, Solitons and Fractals, Vol. 39, No. 2, PP. 778-783, 2009
6. Aboofazli M., Moussavi Z., Comparison of Recurrence Plot features of Swallowing and Breath Sounds, Journal of Chaos, Solitons and Fractals, Vol. 37, No. 2, pp. 454-464, July 2008.
7. Aboofazli M., Moussavi Z., Analysis of Swallowing Sounds using Hidden Markov Models, J. Med. Biol. Eng. Comput., Vol. 46, No. 4, pp. 307-314, Nov. 2007
8. Rempel G and Moussavi Z, The effect of altering the consistency of food on the breath and swallow pattern of young people with cerebral palsy, J Dysphagia, Vol. 20, No. 2. pp. 108-112, 2005
9. Lazareck L, and Moussavi Z., Classification of Normal and Dysphagic Swallowing Sounds by Acoustical Means, J IEEE, Trans. Biomed. Eng., 51(12): 2103-2112, 2004
10. Sarraf S. and Moussavi Z., "Silent Aspiration Detection by Breath and Swallowing Sound Analysis," Proc IEEE EMBS, Aug. 2012
11. Sarraf S. and Moussavi Z., "Investigating the statistical properties of the swallowing sounds", Proc IEEE EMBS conf., Sept. 2011
12. Sarraf S. and Moussavi Z., "Acoustical Analysis of Swallowing Mechanism", Proc Comput & Math Biomed Eng (CMBE), pp. 339-342, March 2011
13. Yadollahi A. and Moussavi Z., A Model for Normal Swallowing Sounds Generation Based on Wavelet Analysis, Proc. IEEE CCECE, pp. 827-830, May 2008
14. Yadollahi A. and Moussavi Z., Feature selection for swallowing sounds classification, Proc. 29th IEEE EMBS, pp. 3172-3175, Aug. 2007
15. Yadollahi A. and Moussavi Z., Adaptive Compression of Respiratory and Swallowing Sounds, Proc. 28th IEEE EMBS, pp. 517-520, Sept. 2006
16. Aboofazeli M. and Moussavi Z., Automated Extraction of Swallowing Sounds Using a Wavelet-Based Filter, Proc. 28th IEEE EMBS, pp. 5607-5610, Sept. 2006.
17. Aboofazeli M. and Moussavi Z., Analysis of Temporal Pattern of Swallowing Mechanism, Proc. 28th IEEE EMBS, pp. 5592-5595, Sept. 2006
18. Moussavi Z., Assessment of Swallowing Sounds' Stages with Hidden Markov Model, 27th IEEE EMBS conference, Sept. 2005
19. Aboofazeli M. and Moussavi Z., Analysis of Normal Swallowing Sounds using Nonlinear Dynamics Metric Tools, Proc. 26th IEEE EMBS, pp. 3812-15, Sept. 2004.
20. Aboofazeli M. and Moussavi Z., Automated Classification of Swallowing and Breath Sounds, Proc. IEEE EMBS, pp. 3816-19, Sept. 2004.
21. Lazareck L. and Moussavi Z., Swallowing Sound Characteristics in Healthy and Dysphagic Individuals, Proc. 26th IEEE EMBS, pp. 3820-23, Sept. 2004