

## Michael Biehl - Publications in reverse chronological order

- [1] Alessandro Prete, Katharina Lang, David Pavlov, Yara Rhayem, Alice J Sitch, Anna S Franke, Lorna C Gilligan, Cedric HL Shackleton, Stefanie Hahner, Marcus Quinkler, et al. Urine steroid metabolomics as a diagnostic tool in primary aldosteronism. *The Journal of Steroid Biochemistry and Molecular Biology*, pages Article No. 106445,10 pages, 2023.
- [2] Michael Biehl. *The Shallow and the Deep: A biased introduction to neural networks and old school machine learning*. University of Groningen Press, 2023. 292 pages.
- [3] Elina L. van den Brandhof, A.M. Madelein van der Stouwe, Jelle R Dalenberg, Inge Tuitert, Marina A.J. Tijssen, and Michael Biehl. Machine learning basic concepts for the movement disorders specialist. In *International Review of Movement Disorders*, volume 5, pages 21–47. Elsevier, <https://doi.org/10.1016/bs.irmvd.2023.04.004>, 2023.
- [4] Rein Smedinga and Michael Biehl. *20th SC@ RUG 2023, proceedings of the Computer Science Student Colloquium 2022-2023*. University of Groningen, 2023.
- [5] Thais P Rocha, Eka Melson, Roland J Veen, Lida Abdi, Tara McDonnell, Veronika Tandl, James Hawley, Laura Wittemans, Amarah Anthony, Lorna Gilligan, et al. Abstract or20-01 machine learning-based steroid metabolome analysis in women with polycystic ovary syndrome reveals three distinct androgen excess subtypes with different metabolic risk profiles. *Journal of the Endocrine Society*, 7(Supplement 1):bvad114–1653, 2023.
- [6] Sofie Lövdal and Michael Biehl. Improved interpretation of feature relevances: Iterated relevance matrix analysis (IRMA). In M. Verleysen, editor, *31st European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning, ESANN 2023*, pages 59–64. Ciaco - i6doc.com, 2023.
- [7] Frederieke Richert, Michiel Straat, Elisa Oostwal, and Michael Biehl. Layered neural networks with gelu activation, a statistical mechanics analysis. In M. Verleysen, editor, *31st European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning, ESANN 2023*, pages 435–440. <https://www.esann.org>, 2023.
- [8] Alessandro Prete, Lida Abdi, Onnicha Suntornlohanakul, Katharina Lang, Julien Riancho, Aida Lazkani, Casper K Larsen, Anne-Paule Gimenez-Roqueplo, Alessio Pecori, Martina Tetti, et al. Abstract: Urine steroid metabolomics as a diagnostic tool in endocrine hypertension. In *Endocrine Abstracts*, volume 94. 2023.
- [9] Eka Melson, Thais P Rocha, Roland J Veen, Lida Abdi, Tara McDonnell, Veronika Tandl, James M Hawley, Laura BL Wittemans, Amarah V Anthony, Lorna C Gilligan, et al. Abstract: Unsupervised steroid metabolome cluster analysis to dissect androgen excess and metabolic dysfunction in 488 women

with polycystic ovary syndrome-results from the prospective daisy-pcos study. In *Endocrine Abstracts*, volume 94. 2023.

- [10] Htet Htet Htun, Michael Biehl and Nicolai Petkov. Survey of feature selection and extraction techniques for stock market prediction. *Financial Innovation*, 9(1):1–25, 2023.
- [11] A. Prete, L. Abdi, M. Canducci, A.E. Taylor, I. Bancos, L.C. Gilligan, C. Jenkinson, A. Albors-Zumel, Y. Zhang, V. Chortis, S. Tsagarakis, K. Lang, M. Macech, D.A. Delivanis, I.D. Pupovac, G. Reimondo, L.V. Marina, T. Deutschbein, M. Balomenaki, T. Bednarczuk, Tina Dusek C.D. Zhang, A. Diamantopoulos, M. Asia, A. Kondracka, D. Li, J.R. Masjkur, M. Quinkler, G.A.E. Ueland, D.M. Conall, F. Beuschlein, A. Tabarin, M. Fassnacht, M. Ivovic, M. Terzolo, D. Kastelan, W.F. Young, K.M. Manolopoulos, U. Ambroziak, D.A. Vassiliadi, A.J. Sitch, P. Tino, M. Biehl, W.B. Dunn, and W. Arlt. Steroid and global metabolome in benign adrenal tumours with mild autonomous cortisol excretion: analysis by mass spectrometry and machine learning to understand metabolomic risk. In *Endocrine Abstracts*, volume 86, page OC4.4. 2022. doi: 10.1530/endoabs.86.OC4.4.
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