SEMINARIO

Risk prediction models for personalised health and care
Niels Peek, University of Manchester, UK

Venerdì 25 Giugno 2021, 10.30-12.00

ONLINE: https://us02web.zoom.us/j/6807412420

Niels Peek is Professor of Health Informatics in the Division of Informatics, Imaging and Data Science (School of Health Sciences, FBMH), and lead for Digital Health and Care at the Christabel Pankhurst Institute for Health Technlogy Research and Innovation.

His research focuses on translational data science for risk prediction, personalised and precision medicine, patient safety, and multimorbidity. He has co-authored more than 200 peer-reviewed scientific publications. From 2013 to 2017 he was the President of the Society for Artificial Intelligence in Medicine. From 2016 to 2020, he led the Greater Manchester Connected Health City, which was part of a government investment to establish a learning health system in the North of England. In April 2017, he organised the Informatics for Health 2017 conference in Manchester which was attended by more than 800 people from 30 countries. In the same year, I also co-chaired the Scientific Programme Committee of MEDINFO-2017, the 16th World Congress on Health and Biomedical Informatics, which was held in Hangzhou, China.
He is an associate editor of BMJ Health and Care Informatics, and a member of the editorial boards of the Journal of the American Medical Informatics Association and the Artificial Intelligence in Medicine journal. I am a fellow of the Alan Turing Institute and a fellow of the American College of Medical Informatics.

Throughout his career he has conducted methodological work on clinical prediction models. In this work he has considered both the development of such models using statistical and/or machine learning methods; as well as methods for validating the clinical validity of such models. The goal of this research has always been to extend the methodological toolbox for researchers and engineers in this area, whilst being mindful of the clinical context in which these models are applied.

He will talk about several of the activities of the Health eResearch Centre (HeRC, https://www.herc.ac.uk/) where they bring together a multi-disciplinary team of researchers, developers and clinicians to understand more about how under-used health data can be re-purposed to improve health. Working on over forty research projects they are combining the latest technology with innovative, mathematical models to deliver better services.

References

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3. Verduijn M, Peek N, Rosseel PM, de Jonge E, de Mol BA. Prognostic Bayesian networks I: Rationale, learning procedure, and clinical use. J Biomed Inform 2007 Dec;40(6):609-18.
4. Peek N, Arts DG, Bosman RJ, van der Voort PH, de Keizer NF. External validation of prognostic models for critically ill patients required substantial sample sizes. J Clin Epidemiol 2007 May;60(5):491-501.
5. Sisk R, Lin L, Sperrin M, Barrett JK, Tom B, Diaz-Ordaz K, Peek N, Martin GP. Informative presence and observation in routine health data: A review of methodology for clinical risk prediction. J Am Med Inform Assoc. 2021 Jan 15;28(1):155-166.

Organizer

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