



Machteld Hylkema (1965) is an immunologist with a broad interest in the pathogenesis of asthma and COPD. She obtained a master in Biology at the University of Leiden in 1991 and completed her PhD at the University of Amsterdam in 1995. In the same year she moved to Groningen for a post-doc position at the department of Cell Biology and Histology, University of Groningen. In 1998 she continued to work as a post-doc at the Stanford University, Palo Alto, USA. After her return to Groningen she started as a post-doc at the department of Pathology from the UMCG and was appointed as assistant professor in 2001. In 2011 she was appointed as associate professor.

Her work focuses on the early origins of asthma and COPD which is studied in different experimental models in the mouse. In particular, the effects of maternal smoking during pregnancy on lung development and epigenetic changes in gene expression are investigated. Her research is conducted within the Groningen Research Institute for Asthma and COPD (GRIAC) and she has been and is participating as scientific leader in several projects funded by the European Commission (GABRIEL, COSTBM1201) and the Netherlands Lung Foundation. She co-authored over 70 peer reviewed publications and is member of the editorial board of *The American Journal of Physiology-Lung Cellular and Molecular Physiology*.

Related publications include:

- Krauss-Etschmann S, Meyer KF, Dehmel S, Hylkema MN. Inter- and transgenerational epigenetic inheritance; evidence in asthma and COPD? *Clin Epigenetics*. 2015 May 1;7(1):53. Review.
- Meyer KF, Zwier M, Reinders-Luinge M, Kooistra W, Timens W, Plösch T, Kobzik L and Hylkema MN. Lifestylefactor smoking: Effects on Prenatal Programming? *Abstract Journal of Nutrigenetics and Nutrigenomics*, 2014.
- Krauss-Etschmann S, Bush A, Bellusci S, Brusselle GG, Dahlén SE, Dehmel S, Eickelberg O, Gibson G, Hylkema MN, Knaus P, Königshoff M, Lloyd CM, Macciarini P, Mailleux A, Marsland BJ, Postma DS, Roberts G, Samakovlis C, Stocks J, Vandesompele J, Wjst M, Holloway J. Of flies, mice and men: a systematic approach to understanding the early life origins of chronic lung disease. *Thorax* 2013 68(4):380-4. Review.
- Prins JR, Hylkema MN, Erwich JJ, Huitema S, Dekkema GJ, Dijkstra FE, Faas MM, Melgert BN. Smoking during pregnancy influences the maternal immune response in mice and humans. *Am J Obstet Gynecol*. 2012 Jul;207(1):76
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