



Leen Beller

Life Sciences

Trainee Patent Attorney

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After studying Biomedical Sciences at KU Leuven, Leen started her PhD at the REGA institute of the KU Leuven in 2015. During five years, she investigated how the gut flora (gut microbiome) of healthy infants develops in their first year of life.

She specialized in the many aspects of microbiology and genomics, but also in bioinformatics and biostatistics.

Working experience

- Trainee Patent Attorney, V.O. (2021-present)
- PhD student, Rega Institute KU Leuven (2015-2021)

Education

- PhD in Biomedical Sciences, KU Leuven (2020)
- MSc in Biomedical Sciences, KU Leuven (2015)
- BSc in Biomedical Sciences, KU Leuven (2013)

Publications

- Conceição-Neto, N., Zeller, M., Lefrère, H., De Bruyn, P., Beller, L., Deboutte, W., Yinda, C. K., Lavigne, R., Maes, P., Ranst, M. Van, Heylen, E. & Matthijnssens, J. Modular approach to customise sample preparation procedures for viral metagenomics: A reproducible protocol for virome analysis. *Sci. Rep.* 5, 16532 (2015).
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- Theuns, S., Vanmechelen, B., Bernaert, Q., Deboutte, W., Vandenhove, M., Beller, L., Matthijnssens, J., Maes, P. & Nauwynck, H. J. Nanopore sequencing as a revolutionary diagnostic tool for porcine viral enteric disease complexes identifies porcine kobuvirus as an important enteric virus. *Sci. Rep.* 8, 9830 (2018).
- Vanmechelen, B., Bletsa, M., Laenen, L., Lopes, A. R., Vergote, V., Beller, L., Deboutte, W., Korva, M., Avšič Županc, T., Goüy de Bellocq, J., Gryseels, S., Leirs, H., Lemey, P., Vrancken, B. & Maes, P. Discovery and genome characterization of three new Jeilongviruses, a lineage of paramyxoviruses characterized by their unique membrane proteins. *BMC Genomics* 19, 617 (2018).
- Yinda, C. K., Vanhulle, E., Conceição-Neto, N., Beller, L., Deboutte, W., Shi, C., Ghogomu, S. M., Maes, P., Van Ranst, M. & Matthijnssens, J. Gut Virome Analysis of Cameroonian Reveals High Diversity of Enteric Viruses, Including Potential Interspecies Transmitted Viruses. *mSphere* 4, (2019).

- Beller, L. & Matthijnssens, J. What is (not) known about the dynamics of the human gut virome in health and disease. *Curr. Opin. Virol.* 37, 52–57 (2019).
- Shi, C., Beller, L., Deboutte, W., Yinda, K. C., Delang, L., Vega-Rúa, A., Failloux, A.-B. & Matthijnssens, J. Stable distinct core eukaryotic viromes in different mosquito species from Guadeloupe, using single mosquito viral metagenomics. *Microbiome* 7, 121 (2019).
- Wollants, E., Beller, L., Beuselinck, K., Bloemen, M., Lagrou, K., Reynders, M. & Van Ranst, M. A decade of enterovirus genetic diversity in Belgium. *J. Clin. Virol.* 121, 104205 (2019).
- Deboutte, W., Beller, L., Yinda, C. K., Maes, P., de Graaf, D. C. & Matthijnssens, J. Honey-bee-associated prokaryotic viral communities reveal wide viral diversity and a profound metabolic coding potential. *Proc. Natl. Acad. Sci. U. S. A.* 117, 10511–10519 (2020).
- Thijssen, M., Tacke, F., Beller, L., Deboutte, W., Yinda, K. C., Nevens, F., Laleman, W., Van Ranst, M. & Pourkarim, M. R. Clinical relevance of plasma virome dynamics in liver transplant recipients. *EBioMedicine* 60, 103009 (2020).
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Languages

- Dutch (native)
- English (fluent)
- French (basic)