



METHAGENE

## Questionnaire researcher profile

- 1) Tell us about yourself (Who are you? Where are you from? What is your educational background?)

My name is Ilma Tapio. I am a molecular biologist-population geneticist at Natural Resources Institute Finland (Luke) former MTT Agrifood Research Finland. I am Lithuanian by origin and hold MSc in molecular biology and biotechnology from Vytautas Magnus University in Kaunas and PhD in biomedical sciences from the former Lithuanian Veterinary Academy.
- 2) What is your area of expertise?

My career in science started by screening heavily contaminated soil for bacteria capable to digest naphthalene and studying their genes involved in naphthalene biodegradation. After a period of exploring genetic diversity in Baltic and Nordic livestock populations, I joined a project in Kenya in which we set up next generation sequencing capacity to study diversity of known and identification of potentially new pathogens to livestock, wildlife and humans. In 2011 I returned to MTT (now Luke) where I am studying rumen microorganisms through application of advanced molecular and sequencing methods.
- 3) Where does your focus lie within your current project(s)? (related to GHG/methane)

My particular research interests at Luke are to study the link between the function of rumen microbial populations and the physiological traits of their host. Livestock methane emissions are part of it.
- 4) What would be the added value for you of joining an international project/network? (such as the METHAGENE network, or the RuminOmics project)

International projects and networks first of all give me an excellent opportunity to meet and communicate with other researchers of my field. It is like an engine that keeps you running. Science is so dynamic and quickly evolving, communication and interaction with other experts allows you to develop and share ideas, get inspired or get help and advice if needed.
- 5) What and/or who inspired you to make a career in science?

For my interest in molecular biology I am grateful to my first supervisor Prof. Rolandas Meskys from the Institute of Biochemistry at Vilnius University. Summers spent working in his laboratory was in many ways eyes opening experience.
- 6) What do you enjoy most about your work?

To me it is important to do research that can have practical applications. In addition, there is nothing simple in the nature. Understanding how biological processes work is a challenge and I enjoy it.

- 7) What is your most stand-out or surprising moment in science so far?  
The development of sequencing techniques over the last 10 years and the possibilities that these new techniques brought is completely breath taking.

