

Nutrition Winter School 2020 – Seminar report

The Nutrition Winter School 2020 in Levi (Lapland, Finland) offered an inspiring program into microbes, diet, and brain health. The wide range of topics and lectures provided both a good introduction for the newbies to the gut-brain interaction as well as more in-depth talks for the scientists with more expertise in the field. Next to the scientific program, there was plenty of opportunity to explore the Laplandic outdoors, with temperatures down to -30 degrees!

On the first day, we received an introduction to the current landscape of gut health research by Prof. Karl-Heinz Herzig, followed by an update of our knowledge to date by Prof. Willem de Vos. Both talks showed the complexity of the field and touched upon some topics to be discussed during the following days. The first day ended with snap presentations of all seminar attendees to get to know each other and all backgrounds. Tuesday morning was focused on gastrointestinal diseases and gut health with an excellent lecture by Prof. Robert-Jan Brummer and several others. In the afternoon, neurological diseases were discussed, including discussions regarding the role of the gut microbiota in mental health. Fecal Microbiota Transplantations (FMTs) have caught the attention of several researchers presenting their work - an observation that would hold up during the following days.

Gut-host interactions and related metabolites were discussed on Wednesday with interesting lectures by Prof. Michael Schemann, Dr. David Houghton, Dr. Teemu Aitta-aho, and a mini-session regarding new commercial solutions for current research. The talks ended on Thursday diving a bit more into the role of the diet, starting with a talk by Prof Magnus Simrén and Prof Stefan Kiechl. Prof Eero Mervaala highlighted the important of gut health in several metabolic diseases. In the afternoon, next steps in gut health research were explored, with an interesting talk delivered by Dr. Justus Reunanen on microbial vesicles and health-related questions. Last, but not least, Prof Seppo Salminen guided the audience through the current path for gut microbes approval for commercialization. The Winter School ended with an amazing dinner at a typical Lappish Restaurant.

All days, several attendees gave short presentations about their research and various posters were introduced and discussed in a poster session. On Friday, several workshops,

including a bioinformatics and graphics workshop, were offered. The whole week was an inspirational experience, with a lot of opportunities to network and meet fellow researchers.

Karolin Weitkunat: *"For me as a nutritionist it was a new inspiration to attend the 6th Nutrition Winter School Diet and Microbes: Gut health for the brain and body. As I'm not an expert in the field of microbiology, I learned a lot about host-microbe interactions and their effects on disease development. I had the pleasure to present my work in a short presentation and thereby was fortunate to discuss my own results with a number of high ranking researchers both during the session as well as during the well organized activities. Due to the large number of presentations, I got a many new ideas which I want to include and discuss in my next publication. "*

CAMILLA DIOTALLEVI: *"My research topic is focused on how a healthy diet, enriched in polyphenols, can help metabolic syndrome patients and this seminar was helpful to broaden and update my knowledge. Thanks to this seminar I learnt that IBS (Irritable Bowel Syndrome), is the main gastrointestinal disease that show how gut and brain are strongly correlated. Beside the scientific program I really enjoyed all the outdoor activities provided by the winter school organizers. All of them were lovely. They gave us the possibility to explore the wonderful and magic world of Lapland. The conference dinner was amazing, and the Lappish cuisine delicious. It was also a nice experience to meet new colleagues and have fun together. The only one thing I am sorry about is we did not see the Northern lights"*

CHIARA SALVESI: *"I also had the opportunity to present my PhD research activity, a project on probiotics and elderly people. The title of my oral presentation was "Probiotics-based diet for healthy ageing" and I'm very grateful for this chance.*

On Friday, we had the possibility to attend one of the available workshops: bioinformatics, graphics and writing workshops. A good chance to discover or improve our skills.

The NWS Organizers provided also a very detailed social program with outdoor experiences and other activities to enjoy the week all together. It was amazing and funny! We discovered the typical Lappish cuisine, and I loved it!"

VERONICA ARREAZA: *“My research topic is focused on the impact of the gut microbiota dysbiosis on the functionality of polyphenols under different photoperiods, in a metabolic syndrome context. Therefore, this seminar has given me the opportunity to learn and widen my knowledge about the role of diet in gastrointestinal diseases and in the gut-host interactions, as well as to share ideas and different views with other seminar attendees about my project in the poster session. Beside the scientific program, I really enjoyed with all the outdoor activities provided by the winter school organizers. They gave us the opportunity for a better interaction with other researchers and to explore Lapland and its wonderful snowy landscape. The whole week was a nice experience where to learn, to share ideas, to network and to enjoy the environment. The only one thing I am sorry about is we could not to see the Northern lights”*

ANNE GEIJSEN: *“I am currently finishing my PhD in nutrition in relation to colorectal cancer using metabolomics. As a next challenge, I would like to transition into the fields of gut and brain health. The Nutrition Winter School was a great opportunity to learn about groups working on these topics and to meet fellow early-career scientists. The focus of the talks were very diverse, which gave me a lot of ideas for the future. The Winter School had a very informal atmosphere and I loved the outdoor activities organised by the committee. The whole week was an inspirational experience, with a lot of opportunities to network and meet fellow researcher”*

Erika Coletto: *“The Nutrition Winter School was a really exciting scientific meeting, for the high quality of the science and for the outdoor activities we had chance to do in this very intense week, where I have enjoyed every single bit of it. I was glad to share with a short oral talk my project with the audience and happy for the feedback. Other than that, Lapland was a dream came true!”*

