

Dear Network Members,

Happy New Year! 🌸 As we step into 2025, let's celebrate the achievements we've made together and embrace the opportunities ahead.

This year, let's make it our mission to strengthen collaboration and take our teamwork to the next level. Here are some New Year resolutions to guide us:



New Year's resolution n°1 : Take great care with the submission of metadata

- ⇒ *Ruminant microbiome data are skewed and unFAIR, undermining their usefulness for sustainable production improvement*

New Year's resolution n°2 : Develop and standardise database usage

- ⇒ *A community database for all microbial taxa*
- ⇒ *An updated version of the anaerobic fungi taxonomy databases*

New Year's resolution n°3 : Strengthening international collaboration

- ⇒ *Croatian Veterinary Institute's (CVI) Laboratory for Feed Microbiology*

New Year's resolution n°4 : Share my findings and perspectives

- ⇒ *Contribute to the RMG publication repository*

New Year's resolution n°5: Let's meet in person

- ⇒ *RMG Network in person meeting : June 2nd 2025, Clermont-Ferrand, France*
- ⇒ *International Gut Microbiota Symposium IGMS 2025 : Clermont-Ferrand, France*

New Year's resolution n°6: Giving young scientists a head start in an exciting career

- ⇒ *Two competitively funded PhD projects are available in the glycomycology team in Edinburgh*
- ⇒ *The Systems Microbiology & Natural Products Laboratory (www.HessLab.com) at UC Davis will be hiring several additional postdocs in the next 12 months.*
- ⇒ *8-10 Postdocs to develop Genetic Toolkits for Rumen Bacteria and Methanogenic Archaea*

New Year's resolution n°7: Stay connected

- ⇒ *WeChat account*

- ⇒ [X account](#)
- ⇒ [We are now on LinkedIn](#)
- ⇒ [Contacts: rmg_network@groupes.renater.fr](mailto:rmg_network@groupes.renater.fr)

New Year's resolution n°1 : Take great care with the submission of metadata

Ruminant microbiome data are skewed and unFAIR, undermining their usefulness for sustainable production improvement.

Ortiz-Chura et al. *Animal Microbiome* (2024) 6:61
<https://doi.org/10.1186/s42523-024-00348-x>

Animal Microbiome

RESEARCH

Open Access



Ruminant microbiome data are skewed and unFAIR, undermining their usefulness for sustainable production improvement

How representative is ruminant microbiome data in terms of species and geographic regions? How complete and standardised are the metadata associated with ruminant microbiome samples? To what extent do the existing data comply with FAIR (Findable, Accessible, Interoperable, Reusable) principles to allow re-use and further analysis?

DOI <https://doi.org/10.1186/s42523-024-00348-x>

This recent paper emphasises that global ruminant microbiome data is biased, with a focus on cattle and high-income regions, resulting in key species and areas being underrepresented. Studies conducted in high-income countries do not accurately reflect the environmental, genetic and management conditions of ruminants in low-income regions, thereby limiting the global applicability of microbiome-based strategies. Incomplete metadata and quality issues hinder data reuse and analysis. The adoption of FAIR principles is imperative for ensuring data accessibility and sustainability, and for addressing challenges posed by climate change adaptation, animal health, feed efficiency, and emissions reduction.

New Year's resolution n°2 : Develop and standardise database usage

A community database for all microbial taxa



Cultivarium is a non-profit research organization based out of Boston, Massachusetts, USA. Our mission is to develop and distribute tools for working with non-model microbes. The Cultivarium Portal is a digital resource that indexes strain banks and hosts both experimental and computational data for 150,000+ organisms, including 800+ rumen microbes. Featured data include growth media, antibiotic sensitivities, methylation patterns, and functional molecular tools such as origins of replication. To support experimentalists, the Portal also provides additional tools such as a catalog of reported genetic methods, discussion forum (lab lore), and a taxonomy-based literature search tool.

RMG members are invited to sign up for free access and provide feedback on what features they would like to see developed next!

An updated version of the anaerobic fungi taxonomy databases

An updated version of the anaerobic fungi taxonomy databases is now available on the AFN website : <https://anaerobicfungi.org/databases/> . These are 'gold standard' reference databases which contain representatives of all currently known anaerobic fungal taxa (for which there is sequence data publicly available). The databases are compatible with both Mothur & QIIME.

New Year's resolution n°3 : Strengthening international collaboration

Bringing scientists together is one of the aims of the network. We are proud to have over 200 members from 43 different institutions in our network. So, if you're looking to collaborate internationally, feel free to drop us a line, like Dr Manuela Zadavec from the Croatian Veterinary Institute has done.

Croatian Veterinary Institute's (CVI) Laboratory for Feed Microbiology

Dr Manuela Zadavec (ORCID: 0000-0003-4382-4424), is a veterinary professional at the Croatian Veterinary Institute's (CVI) Laboratory for Feed Microbiology. CVI is a scientifically and professionally accredited institute responsible for animal health and veterinary public health. Most of CVI's laboratories function as National Reference Laboratories (NRLs), including Dr

Zadravec's laboratory, which serves as the NRL for processed animal proteins in feed. In addition to veterinarians, CVI employs a multidisciplinary team comprising chemists and biologists. Dr Zadravec primary research interests revolve around the study of molds in feed and food. However, after attending the International Mycology Conference 12 in Maastricht this year, Dr Zadravec was captivated by the fascinating field of anaerobic fungi and rumen microflora. This emerging interest has inspired her to further explore the role of anaerobic fungi in the rumen ecosystem.

As a veterinarian and newcomer to this field, Dr Zadravec is excited to embark on this journey alongside her postgraduate professional assistant, who is also a veterinarian with aspirations for scientific advancement. Together, they are keen to build foundational knowledge and delve deeper into the world of anaerobic fungi. They are particularly interested in collaborating on projects that offer opportunities for theoretical learning and hands-on experience, helping them uncover the intricacies of this intriguing field.

Dr Zadravec laboratory's expertise includes the isolation and identification of molds in food and feed using classical techniques, molecular methods, and MALDI-TOF. Additionally, they have experience working with feed-related bacteria such as *Salmonella*, *Clostridium* spp., and *Lactobacillus*.

Dr Zadravec have contributed as a team member to a national research project and currently serve as the leader of the EU Next Generation project titled „Biological diversity of moulds species and occurrence of Fusarium mycotoxins in the most important cereals grown in the Republic of Croatia“.

Collaboration Opportunities : Dr Zadravec team are diligent, enthusiastic, and eager to expand their skillset while contributing meaningfully to collaborative projects. If you are looking for dedicated partners with complementary expertise, they would be delighted to connect and explore potential collaborations. **Please feel free to reach out if you would like to discuss project ideas or potential partnerships : zadravec@veinst.hr**



New Year's resolution n°4 : Share my findings and perspectives

Contribute to the RMG publication repository

In order to enhance RMG awareness of current research priorities and identified gaps in scientific knowledge, we are launching an RMG publication repository. This repository will be populated with literature identified through our research activities. However, if you wish to

ensure that your latest paper is included, please either complete the document yourself or send the Digital Object Identifier (DOI) information to rmg_network@groups.renater.fr.

The repository is accessible via a shared Google document :

<https://docs.google.com/spreadsheets/d/1ZAghbd2MP8wvovVhEDT7PIbXHfkqUhmoRBdQu56KQKc/edit?usp=sharing>

New Year's resolution n°5 : Let's meet in person

SAVE THE DATE : RMG Network in person meeting : June 2nd 2025, Clermont-Ferrand, France

We're so excited to announce our next in-person meeting will be held on 2 June afternoon in the Oceania Hotel, Clermont-Ferrand, France!



We're incredibly grateful to the **Nanjing Agricultural University** for their support in organising this event.

We're working on an exciting programme and can't wait to share it with you!

International Gut Microbiota Symposium IGMS 2025 : Clermont-Ferrand, France



The 14th edition of the symposium presents a unique opportunity to bring together scientists studying the vertebrate gut microbial community, fostering the exchanges and discussions of the latest advances and future perspectives in the field. The topics that will be discussed during the symposium will go far beyond the importance of the gut microbiota for digestion and energy production. Topics will delve into the impact of food, feed and nutrition on microbial community composition and function, the role of microbes in host homeostasis and their integration within the OneHealth paradigm will be discussed. Additionally, novel approaches towards understanding of the mechanisms of microbial action and the effective translation of this understanding into practical applications will also be a focal point of discussion.

New Year's resolution n°6 Giving young scientists a head start in an exciting career



Two competitively funded PhD projects are available in the glycomycology team in Edinburgh, led by Dr Jolanda van Munster.

The projects focus on elucidating interactions between rumen-derived fungi and bacteria, details can be found here: <https://sites.google.com/view/glycomycology/join-us>

Please feel free to get in contact for more information via Jolanda.van-munster@sruc.ac.uk



The Systems Microbiology & Natural Products Laboratory (www.HessLab.com) at UC Davis will be hiring several additional postdocs in the next 12 months.

The new hires will work on different aspects of rumen microbiology with emphasis on:

- isolation, cultivation and metabolic engineering of methanogens and acetogens
- hydrogen and carbon flow during anaerobic digestion/fermentation
- rumen fungi

Feel free to share this email with potential candidates. Start dates are negotiable - opening great opportunities for students who are graduating in the next 12 months.

Potential candidates can reach out directly to Dr. Matthias Hess (mhess@ucdavis.edu) or his lab manager Dr. Saumya Wickramasinghe (swickramasinghe@ucdavis.edu).

8-10 Postdocs to develop Genetic Toolkits for Rumen Bacteria and Methanogenic Archaea



The Global Methane Hub is hiring postdocs for a project in the Enteric Fermentation R&D Accelerator to tackle methane emissions in livestock using cutting-edge microbial genetics. A great opportunity for talented scientists wishing to be at the cutting edge of anaerobic microbiology. Help us push the boundaries of science and develop new tools to unlock mitigation of enteric methane emissions.

Please see the link and attachment for more information and expressions of interest.
<https://globalresearchalliance.org/n/opportunity-expressions-of-interest-postdoctoral-research-associate-positions/>

New Year's resolution n°7: Stay connected

WeChat



follow

@RMGNetwork for updates



We are now on **LinkedIn**

[linkedin.com/in/rmg-network-1b7061347](https://www.linkedin.com/in/rmg-network-1b7061347)

Get connected to the [Livestock Research Group](#) as well

Contact us:

You want to share any kind of information relevant to the community:

- ⇒ a new or on-going project
- ⇒ a recently published paper
- ⇒ an opinion
- ⇒ meeting and events
- ⇒ project call / partnership search
- ⇒ jobs
- ⇒ ...

Send us an email and we will circulate it far and wide:

rmg_network@groupes.renater.fr