

Connecting the animal genome, gastrointestinal microbiomes and nutrition to improve digestion efficiency and the environmental impacts of ruminant livestock

## RuminOmics e-Newsletter

November 2015

### Final Conference - Registration still open!

The final conference of the RuminOmics project will be held on 7th December 2015 at FIAP Jean Monnet in Paris, France. Registration is still open and you can do so from <a href="here">here</a>. As there will be a international Climate Change conference held in the same week, we feel that the RuminOmics conference fits very well within this theme.

The programme and speakers can be viewed at the project <u>conference page</u>. We hope that you will join us!

### \*\*Click on the titles or images to read the full story.\*\*



### **RuminOmics reaches out to industry**

Efficiency of production provides the answer, not only to greater profitability, but also to reducing carbon footprint and greenhouse gas (GHG) emissions, according to the expert speakers at a RuminOmics workshop organised by Quality Meat Scotland (QMS) in Edinburgh. The meeting attracted around 70 delegates from 12 countries representing a wide interest in the subject of solving the challenge of emissions from livestock systems.



# Implementation of project outputs at the regional level

With the aim to update stakeholders on progress in the project and to discuss future research needs and proposals for implementing project outputs, the project has held a series of workshops across Europe in Warsaw, Budapest, Lodi (Italy) and Edinburgh in the past three months. A standard programme was adopted for all the workshops which included a discussion on implementation of project outputs in the region and future research priorities.



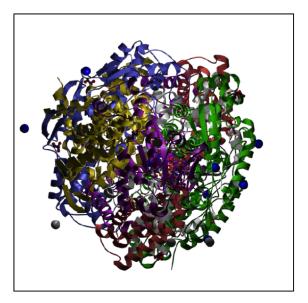
# Joint RuminOmics session enjoys high attendance at EAAP Warsaw

On August 31st 2015 a full-day seminar was organised on Climate Smart Cattle Farming and Breeding at the Annual Meeting of the European Association of Animal Production (EAAP). METHAGENE and RuminOmics were responsible for organising this day, together with the Cattle Commission of EAAP. Martin Scholten led off the morning session and Jan Lassen in the afternoon session. The seminar had an attendance of more than 200+ delegates and was the most attended session at EAAP Warsaw apart from the Plenary.



#### **RuminOmics inspires the arts!**

Our climate is changing and solutions to keep our climate healthy is not something only scientists and large companies are working on, it is something that interests children as well. And what better way to raise the issue than through a family art performance? RuminOmics was one of the inspiration sources for Moxie Brawl, an all-female dance theatre company, to bring dance and science together. The result is 'Windibops', a fun and inclusive dance theatre piece for children and their families.



### <u>Metaproteomics technologies and</u> <u>Methane</u>

Proteins can be found in the rumen in a number of different forms such as enzymes that catalyse the biochemical reactions of the metabolic pathways in bacteria and archaea. Some of these enzymes in the archaea are involved in the conversion of carbon dioxide and hydrogen to produce methane. Investigating the function of the rumen microbial community and the importance of methane production requires a novel tool that can characterise the whole protein content of a sample, taken at a particular point in time. This technique is known as 'Metaproteomics'.