



an Open Access Journal by MDPI

# Priming the Dairy Cow for Lactation: Insights into Metabolism, Immunity, and Performances Related to Strategies for the Optimization of the Transition Period

Guest Editors:

### Dr. Vincenzo Lopreiato

Department of Animal Sciences, Food and Nutrition (DIANA), Faculty of Agriculture, Food and Environmental Science, Università Cattolica del Sacro Cuore, Via Emilia Parmense 84, 29122 Piacenza, Italy

#### Dr. Andrea Minuti

Department of Animal Sciences, Food and Nutrition (DIANA), Faculty of Agriculture, Food and Environmental Science, Università Cattolica del Sacro Cuore, Via Emilia Parmense 84, 29122 Piacenza, Italy

Deadline for manuscript submissions: closed (31 July 2020)



Message from the Guest Editors

Dear Colleagues,

Around parturition, dairy cows face metabolic and physiologic challenges, which require both homeostatic and homeorhetic mechanisms to accommodate the sudden demands of the mammary gland. Cows are also faced with a dysfunctional immune system and an increased inflammatory state, as a consequence of adaptation from a non-productive period (dry) to the onset of a new lactation for multiparous cows and the first lactation for heifers. The cows' ability to react to these factors often determines their profitability. Therefore, characterizing and attempting to better address the underlying physiological mechanisms behind their responses will give us the ability to reduce unnecessary losses within a given production system, while maximizing performance and efficiency.

We invite researchers to share their recent findings on the development of specific nutritional, pharmacological, and management strategies to support metabolic adaptations during the transition period.

Original and review papers are welcome.

Dr. Vincenzo Lopreiato Dr. Andrea Minuti *Guest Editors* 







an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Clive J. C. Phillips

1. Institute of Veterinary Medicine and Animal Sciences, Estonian University of Life Sciences, Kreutzwaldi 1, 51014 Tartu, Estonia 2. Curtin University Sustainability Policy (CUSP) Institute, Kent St., Bentley 6102, Australia Animals is an on-line open access journal that was first published in 2011. Animals adheres to rigorous peerreview and editorial processes and publishes only high quality manuscripts that address important issues in the many varied disciplines that involve animals, with a focus on animal science, animal welfare and animal ethics. Animals is covered in the Science Citation Index Expanded (SCIE) in Web of Science, with the latest Impact Factor: 2.7 (2023, ranks 10/80 (Q1) in 'Agriculture, Dairy & Animal Science'; 16/167 (Q1) in 'Veterinary Sciences'), 5-Year Impact Factor: 3.0.

**Message from the Editor-in-Chief** 

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, PubAg, AGRIS, Animal Science Database, CAB Abstracts, and other databases. **Journal Rank:** JCR - Q1 (Veterinary Sciences) / CiteScore - Q1 (General Veterinary )

### **Contact Us**

*Animals* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/animals animals@mdpi.com X@Animals\_MDPI