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## Preface

I would like to present with great pleasure and proud, the inaugural volume of a new scholarly open-access journal Translational Research in Veterinary Science (TRVS). This journal is part of the Nicolaus Copernicus University (NCU) publishers' series devoted in the field of veterinary science issues. The aim of this issue is to introduce the various perspectives of basic researches in the field of veterinary science discipline. This new journal is envisioned to represent the growing needs of omics researches in veterinary science as an emerging and increasingly vital field of translational research. This journal mission is to become a voice of the veterinary science global community, addressing researchers and practitioners in areas ranging from veterinary anatomy, physiology, reproduction, nutrition, microbiology, immunology, parasitology, pathology, pharmacology, surgery, medicine and gynecology & obstetrics. In order to position TRVS as the most authoritative journal on omics studies in veterinary sciences, a group of highly valuable scholars have agreed to serve on the editorial board. I am honored to have six associate editors: Prof. Bhanu P. Chowdhary (UAE), Prof. Haja N. Kadarmideen (Denmark), Prof. Ming Zhang (China), Prof. Yang Qing Lu (China), Prof. Xiang Yang Miao (China), and Prof. Pramod K. Mathur (The Netherlands). I'm also delighted with our group of 15 review board members committee that will actively cooperate to evaluate and finalize the submitted manuscripts. With our editorial

board's cumulative experience, this journal brings a substantial representation of veterinary sciences omics studies in the disciplines noted.

This inaugural volume includes five manuscripts. Four original papers based clinical and nonclinical studies in small and large domesticated animals and an invited review article are presented to the readers of TRVS. In this issue, Szczepanek et al. have reviewed the role of microRNA in domestic animals. They summarized the existing knowledge about miR-NAs synthesis, mechanisms for regulation of the genome their functions in animals physiology; microRNAs as potential biomarkers for veterinary research; the implications associated with dysfunction and dysregulation. Review concludes that microRNA molecules are great targets for understanding biology, physiology and pathology in veterinary science. In the near future, these molecules may become very attractive features for their immediate implementation as biomarkers for many diseases and may contribute to enhancing global agricultural production as well. Brüssow et al. original paper analyzed the impact of unilateral ovarian removal (uni-OXV) on ovarian function, steroid hormone level, fetal distribution and development in gilts. Study concludes that by comparing to intact gilts, only long term uni-OVX could compensate ovarian development. However, short term uni-OVX affects the total number of CL and fetuses, distribution and weight of fetuses in uterine horns and steroid hormone levels. Gehrke et al. original paper reported the relations between fetopelvic proportion and fertility of black-and-white and red-and-white Polish Holstein-Friesian cows. Study concludes that process of "Holsteinization" of domestic headache of cattle requires selection of bull's semen not only for heifers but also older cows. Wysocka et al. original paper predicted the hepatic and pituitary gland expression of potential candidate genes in context to maintenance of oxidative balance, negative nitrogen balance, and ketosis in Polish HF and Polish Red cattle. Study conclude that understanding the genetic factors that predispose metabolic disorders in cattle would benefit the dairy industry as a whole by providing producers, breeding services, and veterinarians a tool to forecast a cow's susceptibility to metabolic disorders. Felsmann and Felsmann original paper examined the impact of changes in Polish law on the possibility of interrupting the spread toxoplasmosis and toxocarosis. Study updated the new changes in the Polish legal acts (acts and regulations) made in recent years in context to combat toxocarosis and toxoplasmosis by the legal authorities of Polish government administration. Study concluded that state

public health services do not currently possess the legal means necessary to take effective action leading to the blocking of pathways along which these zoonosis spread.

I would like to thank all the reviewers for their excellent work and the authors for their contribution. I am also very thankful to JM Rector, NCU Torun: Prof. dr hab. Andrzej Tretyn and director Veterinary Centre, NCU, Torun: Prof. dr hab. Jędrzej Jaskowski who supported the idea of creating this new TRVS journal under NCU publishers platform. I am confident and certain that this very first issue will be followed by many others, reporting new developments in the field of veterinary science researches. Moreover, this issue would not have been possible without the great support of the editorial board members, and we would like to express our sincere thanks to all of them. I would also like to express our gratitude to the TRVS editorial technical staff of NCU publisher, particularly Mirosława Buczyńska, Elżbieta Kossarzecka, who supported us at every stage of the project. Throughout preparation of this volume the editors were supported by NCU funds from JM Rector Prof. dr hab. Andrzej Tretyn. It is our hope that this fine collection of articles will be a valuable resource for TRVS readers and will stimulate further research into the vibrant area of veterinary science.

> Chandra S. Pareek Editor-in-Chief