

## MSD Animal Health Supports Young Bovine Scientist with Gustav Rosenberger Memorial Award

At the 2019 European Bovine Congress MSD Animal Health presented the Gustav Rosenberger Memorial Award to Delower Hossain, DVM, Lecturer, Department of Medicine and Public Health, Sher-e-Bangla Agricultural University, Dhaka, Bangladesh. The [Gustav Rosenberger Memorial Fund](#) is an annual grant of €10,000 awarded to a promising young veterinarian in a country with an unmet need in high quality bovine medicine.

Dr. Hossain was awarded the grant for his research on behalf of the Bangladesh-Sweden-Netherlands collaborative project, “Development of Udder Health Control Programme in Dairy Cows in Bangladesh” on the prevalence, risk factors and etiology of subclinical mastitis (SCM), an infection of the udder that is a major issue on Bangladeshi dairy farms.

“Chattogram (previously called Chittagong), the part of Bangladesh I grew up in, is well known for its dairy industry,” said Dr. Hossain. “With a first hand knowledge of dairy farmers’ struggle to control mastitis, my mission is to understand its epidemiology so that we can identify preventive measures and help farmers to improve the health and productivity of their cattle.”

Dr. Hossain found the prevalence of SCM was 78% at the herd level and 50% at cow level. The most commonly identified pathogens were *non-aureus staphylococci* (38.1%) and *Streptococci* (29.5%) followed by *Staphylococcus (S.) aureus* (4.4%) and *E. coli* (1.9%). Poor udder health related to mastitis, including SCM, impacts cow welfare and results in economic losses through the reduction of milk yields, milk discards due to bacterial contamination and veterinary intervention costs.

In future research, Dr. Hossain aims to understand the drivers of mastitis transmission in order to identify preventive measures. In collaboration with Utrecht University in The Netherlands, Dr. Hossain will investigate the molecular epidemiology of mastitis pathogens via whole genome sequencing, focusing primarily on *S.aureus* cultured from cows in the Chattogram area of Bangladesh.

Through our sponsorship of the Gustav Rosenberger Memorial Award, MSD Animal Health not only aims to advance ruminant veterinary science but also aims to advance the *Science of Prevention*. This is to address the disease across the entire lifecycle. It aims to help educate veterinarians and producers on how to implement prevention methods before the animal is born, when it is growing up, and during production in adulthood to effectively improve animal health, wellbeing and productivity.

The three pillars of The Science of Prevention are disease:

1. avoidance, achieved through good animal husbandry, stress-free housing, vaccination, hygiene and nutrition
2. prompt diagnosis and treatment, aimed at preventing the spread of disease
3. disease severity and complications; and the health restoration of affected animals.

For more information about the Gustav Rosenberger Memorial Fund, please go to <https://gustavrosenberger.com>.

For more information about EBC 2019, please go to [www.europeanbovinecongress2019.com/programme/](http://www.europeanbovinecongress2019.com/programme/).