Dear Editorial Board,

On behalf of all co-authors, please find enclosed the manuscript titled “A ligated intestinal loop model in anesthetized specific pathogen free chickens to study *Clostridium perfringens* virulence”. The content is original and has not been submitted to another journal. We believe that the manuscript meets all guidelines described in the “Manuscript Instruction for Authors (rev. October 2013)” as found on your website.

This work describes in detail the protocol, list of materials and representative results of an *in vivo* infection model called “intestinal ligated loop model” to study necrotic enteritis, caused by the bacterium *Clostridium perfringens*, in chickens. This technique has the advantage of using a small number of animals compared to other *in vivo* infection models commonly used to study necrotic enteritis in chickens. Moreover, chickens used in our experiments are anesthetized during the infection, in contrast with other infection models where pain is poorly managed and mortality can be high. We consider that this model reduces animal use and pain to a maximum when studying necrotic enteritis. The procedures involve high precision and technical skills and the sole description of the methods in a text format would most likely result in a poor reproducibility of the method by other researchers interested in replicating the intestinal ligated loop model. It is our wish to share this method and allow researchers from around the globe to have a unique and precious visual access to this animal model. This is what motivated us to submit this manuscript to the Journal of Visualized Experiments. We strongly believe that the uniqueness of JoVE format using both video and text descriptions is a must in order to detail the methodology used and avoid future potential problems in live animals caused by a poor execution.

Drs. Boulianne and Parent developed the model. Drs. Boulianne and Parent performed the surgeries. Dr. Burns assisted in developing the anesthesia protocol. Dr. Parent edited the video and wrote the manuscript. Drs Burns, Desrochers and Boulianne edited the manuscript.

We would like to thank Ms. Nandita Singh from the JoVE editorial team for providing assistance in the submission process.

List of proposed peer reviewers:

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Thank you for your consideration of our manuscript. We look forward to hearing from you.

Best regards,

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