Dear Editorial Board:

Thank you for the opportunity to submit our work to the Journal of Visual Experimentology (JoVE). Our laboratory has learned a great deal about experimental design and methodology from JoVE, and we are excited to present our study design to you. Our manuscript provides methodology details on a murine model of Necrotizing Enterocolitis (NEC). This disease is one of the most devastating diseases that occurs among premature infants. Unfortunately, the pathophysiology of the disease is complex and not well understood. Animal models are needed to improve our collective fund of knowledge.

Our journal submission describes our mouse and rat model of NEC. We have used this model for several years, and have produced several publications and funding opportunities with it. This model is unique in that it used the same risk factors to induce the disease that premature infants face—hypercaloric formula, systemic hypoxia, and endotoxin. The techniques we use are detailed, and would take a new researcher an extended period of time to master. We feel that by publishing our methodology in your journal, we will be able to provide a wealth of knowledge to many laboratories, and hopefully advance the care of premature newborns at risk of this disease.

Author Contributions:

Scott Welak: Corresponding author; wrote and edited manuscript; assisted with design and implementation of described protocol.

Rebecca Rentea: Wrote and edited manuscript; assisted with design and implementation of described protocol.

Shannon Koehler: Edited manuscript; has participated in use of described protocol.

David Gourlay: Edited manuscript; assisted with design and implementation of described protocol; mentor for the other authors

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