**Short but Detailed Summary**

**Sell Your Idea!**

1. Set the stage – Lay out the problem **(Why/Who Cares?)**
   * Get interest at the outset
   * Identify the importance – stress the need
   * Summarize the state of the art
   * Describe the technical challenges to solving the problem
2. State the theme – Your solution **(What and How?)**

* Describe the concept and establish credibility
* Describe your project’s fundamental purpose

1. Create a vision **(So What?/Benefits)**

* Show how your work will advance the field
* Discuss the potential benefits

**EXAMPLE: Intravenous Magnesium as a Treatment Modality for Recurrent Airway Obstruction” (Submitted to: U.S.D.A)**

Recurrent Airway Obstruction (RAO) is a progressive, debilitating respiratory disease, occurring in 50% of mature horses, with 5% affected severely enough to result in an end to their working careers or to euthanasia. It is a chronic, recurrent condition with clinical characteristics that are well recognized, although its pathogenesis is complex, multifactorial, and currently not well understood. As an indication of industry concern, in June of 2000, 30 of the world’s leading investigators were joined by pharmaceutical companies at a Michigan State University conference devoted entirely to improving RAO prevention and management. Further, current management and therapeutic regimens for horses with chronic or severe disease are either not efficacious or are not able to be implemented. For example, drugs commonly used to manage RAO, such as corticosteriods with anti-inflammatory properties and bronchodialators that open the passageways, also stress the heart, adding additional risk to an already debilitated animal. Strategies to remove environmental precipitators such as dust and mold often fail as many horse owners are unable or unwilling to comply with such husbandry recommendations.

With this study, we propose to administer intravenous magnesium to horses with acute and chronic RAO to determine if this treatment improves respiratory function and/or reduces arterial hypertension, without the deleterious side effects of other commonly administered drugs. Recent case reports show magnesium to be efficacious for acute human asthmatics who fail to respond to more conventional therapy. As RAO is increasingly seen as an equine analog to asthma in humans (replacing the previous use of the COPD model), and severely affected RAO horses demonstrate many of the same clinical signs as human asthmatics, RAO horses could be equally responsive to this treatment.

Should the research hypothesis be supported, clinicians will have another viable treatment modality at their disposal, one that is inexpensive, and effective in treating a resistant disease without the damaging side effects of other modalities. Additionally, horse owners and breeders could reduce the significant financial losses caused by the malady, currently estimated at more than $1.2 billion annually in the US alone.

Citation