

## ABSTRACT

Accurate scientific communication is of chief importance. The ability to understand complex biomedical content and describe it in accurate simplistic terms is a skill that needs practice and refinement. The Kindergarten Challenge began as a virtual learning activity in March 2020 designed out of necessity due to the global pandemic and has evolved into a unique assessment tool for our Medical Physiology and Pharmacology course in our Biomedical Master's of Science Program. Our graduate students are tasked with describing technical physiological processes and pharmacological interventions learned in our course to 5 year olds at a local grade school. This "challenge" allows our graduate students to practice accurate scientific communication to an inquisitive young audience, mimicking the skillset they will need as future leaders in the biomedical sciences and healthcare.

## ACTIVITY GUIDELINES

- Over the course of our MPP PBLs there has been an emphasis on how to effectively and accurately convey medical information to patients that might not have a medical background. For our PBL #3 we are going to put these skills to practice with....Kindergartners!
- Wednesday morning at 9:00am Kindergartners (5 and 6yr olds) will be posting questions related to our material so far in this block (Lectures 15-17; 19-21).
- Your challenge is to select one question from each of the categories of lectures below to answer via FlipGrid (i.e. 5 short videos will be uploaded in total).
- The Kindergartners will then be able to go back into FlipGrid with their caregivers and review your responses. Everyone is welcome to participate in the "liking" of videos they find particularly excellent; we might even crown a winner per question.
- You will have 24hrs to complete this assignment – due at 9:00am (EST) Thursday, March 26th.
- An example video will be posted to our Canvas site prior to the activity.
- Please consult the rubric on Canvas to understand the expectations for completion credit of each video.



# Kindergarten Challenge:

## Developing Scientific Communication Skills in a Biomedical Sciences Graduate Program

**Scan the codes to watch submissions:**

What is CKD?



What is a nephron?



What is Addison's Disease?



What are the adrenal glands?



**Julia Hum, Ph.D.**

*College of Osteopathic Medicine*

## GRADING RUBRIC

### MPP PBL #3: Kindergarten Challenge!

Scoring: Pick 5 Videos to Answer			
Areas of Evaluation	Completion 10pts	Incomplete 0 pts	Score
Video #:	Student addresses the main phys/pharm question accurately to the level of a Kindergartener. Students should also take the time to thoroughly explain any underlying topics in their answer to the Kindergartener.	Student does not complete a video response.	
Video #:	Student addresses the main phys/pharm question accurately to the level of a Kindergartener. Students should also take the time to thoroughly explain any underlying topics in their answer to the Kindergartener.	Student does not complete a video response.	
Video #:	Student addresses the main phys/pharm question accurately to the level of a Kindergartener. Students should also take the time to thoroughly explain any underlying topics in their answer to the Kindergartener.	Student does not complete a video response.	
Video #:	Student addresses the main phys/pharm question accurately to the level of a Kindergartener. Students should also take the time to thoroughly explain any underlying topics in their answer to the Kindergartener.	Student does not complete a video response.	
Video #:	Student addresses the main phys/pharm question accurately to the level of a Kindergartener. Students should also take the time to thoroughly explain any underlying topics in their answer to the Kindergartener.	Student does not complete a video response.	
Additional Feedback:			Total Score: /50



## FUTURE PLANS

- Continue to develop the learning activity for use across our BMS curriculum.
- Partner with our local public school, Cold Spring Elementary, to promote a community of learners.
- A writing component could be developed into a pen pal type exercise.
- Develop the activity to be more dynamic between the elementary students and our graduate students.