

**[P01.012] Using Neuromuscular Disease Cases To Bridge the Intellectual Cultures of Graduate and Medical Students: Experience with LISTER**

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**OBJECTIVE:** To examine the effect of joint analysis of clinical cases and basic research papers on graduate and medical students perceptions of their abilities to operate in each others intellectual environments. **BACKGROUND:** It is recognized that graduate and medical students have differing skills when approaching issues in basic, translational and clinical investigation. For successful translation of basic discoveries to clinical application, it is essential that individuals with these differing skills work together. In 2007, we piloted a new course, LISTER (Linking Interest of Students to Translational Education and Research), to give graduate and medical students the experience of learning and working together. **DESIGN/METHODS:** Eleven first year graduate and eight medical students worked together on cases of Duchenne dystrophy and myotonic dystrophy followed by analysis of papers describing basic and translational investigations. The students were divided into three multidisciplinary teams who proposed a translational project related to the cases studied. Students responded to a self-assessment of knowledge and abilities before and after LISTER on a 7-point scale from 1=Poor to 7=Excellent. **RESULTS:** Improvements occurred in the following domains: knowledge of basic science principles and disease processes, identify the central hypothesis in translational research, determine if proper controls were employed, evaluate experimental design in translational research, identify steps to address a clinical case problem and translational research problem, develop hypotheses to explain clinical cases, analyze experimental results to support or refute a hypothesis, provide alternative explanations of experimental results, propose additional experiments to strengthen the conclusions of published literature or clinical evaluation, and participate effectively in a multidisciplinary team to solve translational research issues. **CONCLUSIONS/RELEVANCE:** There was significant enhancement in a broad range of skills and knowledge required for successful translational research. Graduate and medical students are able to appreciate and leverage their complementary skills and knowledge. The LISTER model appears to be useful for bridging the intellectual cultural differences between these two groups of students.