Could you use $1500 in core bucks for use with any of the services provided by the LBRN Molecular and Cellular Biology Core?

Core Services include both one-on-one training for faculty and students as well as workshops on topics like bioinformatics and protein purification.

Sample services:

1. Molecular Biology Reagent Equipment and Services
   a. Genelab provides conventional and next generation nucleic acid sequencing (NGS), and recombinant DNA Service. NGS equipment includes Torrent PGM, Ion Proton etc
   b. NGS Services provides a reliable connection between NGS experiments and the analysis of NGS data

2. Protein Production, Purification and Characterization Laboratory
   a. Protein Purification and Characterization includes semi automated Bio-rad profinia affinity chromatography system, AKTA Explorer FPLC system, and HPLC and ultracentrifugation equipment
   b. Peptide Synthesis and purification
   c. Protein-protein interactions are investigated using primarily Surface Plasmon Resonance (SPR) implemented on Biacore and ForteBio SPR equipment. Additional physicochemical characterization of protein-protein interactions is available through collaborations with the LSU Department of Chemistry.
   d. Gene-to-Protein-to-Antibody Services – you provide the gene, we return an antibody

3. Molecular Immunopathology Laboratory Services
   a. Pathology Services including necropsy procedures, gross and histopathological examinations and interpretation of immunohistochemistry and special stains performed by veterinarians and histology specialists
   b. Flow Cytometry and immunophenotyping Services
   c. Multiplex/Luminex complements immunophenotyping services for rapid and standardized analysis of soluble factors e.g., lymphokines, using bead based array technology.
   d. Microscopy – contains transmission and scanning electron microscopes, a laser dissection microscope, a Leica TCS SP2 for 3D fluorescence microscope, and a high-throughput digital slide-scanner.
   e. Metabolic analysis using Agilent Seahorse XF Pro Analyzer (96 well format): one can measure the oxygen consumption (OCR) and extracellular acidification rate (ECAR/PER) of live cells. OCR and ECAR or PER are key indicators of mitochondrial respiration and glycolysis as well as ATP production rate.

- To apply for core bucks, contact Core Liaison
- For technical questions regarding core services, contact Dr. Yong-Hwan Lee at yhlee@lsu.edu or 225-578-0522