Neuroscience Program Comprehensive Exam, 2018 NRSA Question

Hypertension (high blood pressure) is a common and difficult to treat disease. There are many causes of hypertension but it has become clear that immune system activation contributes to development and maintenance of some forms of hypertension. The inflammatory response can disrupt normal control of blood vessel diameter by altering sympathetic nervous system function.

Develop a research proposal that will test the hypothesis that immune system activation and subsequent disruption of nervous system control of blood vessel diameter contributes to the development and maintenance of high blood pressure in an animal model of hypertension.

*Make to support your positions and research approach with citations. Also make sure to clearly describe all control experiments.

*You can consult this website for details on the NRSA F31 Predoctoral Fellowship application format https://grants.nih.gov/grants/guide/pa-files/PA-18-671.html

*Your response should include a Project Summary (1 page), Specific Aims (1 page), Research Strategy (6 pages) and Literature Citations (with titles, not page limitation).