

**JUSTIFICATION FOR SINGLE SOURCE AWARDS IAW FAR 13.106-1**  
(OVER MICRO-PURCHASE THRESHOLD(\$3K) BUT NOT EXCEEDING THE SAT (\$150K))

IAW [FAR13.104](#), COs must promote competition to the maximum extent practicable to obtain supplies and services from the source whose offer is the most advantageous to the Government, considering the administrative cost of the purchase. When competition is not practicable, IAW [FAR13.106-1\(b\)](#), COs solicit from a single source for purchases not exceeding the simplified acquisition threshold. COs may solicit from one source if the CO determines that the circumstances of the contract action deem only one source reasonably available (e.g., urgency, exclusive licensing agreements, brand-name or industrial mobilization). IAW [FAR13.106-3\(b\)\(3\)](#), COs are required to include additional statements **explaining the absence of competition** (see [13.106-1](#) for brand name purchases) if only one source is solicited and the acquisition does not exceed the simplified acquisition threshold (does not apply to an acquisition of utility services available from only one source) or supporting the award decision if other than price-related factors were considered in selecting the supplier. This template when completed can be used to document single source awards IAW [FAR13.106-3\(b\)\(3\)](#). Note: Statements such as "only known source" or "only source which can meet the required delivery date" are inadequate to support a sole source purchase.

**1. PURCHASE REQUEST OR REQUISITION NUMBER:**

663-18-1-8163-0203

**1A. PROJECT/TASK  
NUMBER**

**1B. ESTIMATED AMOUNT:**

\$13,548.00 x 5 =  
\$67,740.00

**2. BRIEF DESCRIPTION OF SUPPLIES OR SERVICES REQUIRED AND THE INTENDED USE:**

This is a sole source justification for technical research services provided by the University of Missouri-Columbia Electron Microscopy Core Facility in collaboration with Dr. Melvin Hayden to the VA Puget Sound Health Care System - Seattle Division (VAPSHCS - Seattle Division) Drs. Therese Salameh and William Banks for lipidomic and metabolomic services. The work accomplished by the contractor will provide technical support not available at VA to Dr. Bank's lab for merit review projects.

**3. UNIQUE CHARACTERISTICS THAT LIMIT AVAILABILITY TO ONLY ONE SOURCE, WITH THE REASON NO OTHER SUPPLIES OR SERVICES CAN BE USED:** Drs. Salameh and Banks already have a working relationship with this facility and Dr. Hayden; this familiarity with Banks Lab projects will provide continuity for their studies. Previous studies completed by the Banks lab with the University of Missouri-Columbia Electron Microscopy Core Facility in collaboration with Dr. Hayden has resulted in the following publication: **Therese S. Salameh**, Gul N. Shah, Tulin O. Price, Melvin R. Hayden, and William A. Banks. Blood-brain Barrier Disruption and Neurovascular Unit Dysfunction in Diabetic Mice: Protection with the Mitochondrial Carbonic Anhydrase Inhibitor Topiramate. *Journal of Pharmacology and Experimental Therapeutics*. 2016; 359(3):452-459. The working relationship is essential for the development of these studies.

**4. REASON THAT SUGGESTED SOURCE IS THE ONLY SOURCE, WHICH CAN PROVIDE THE SUPPLIES OR SERVICES:**

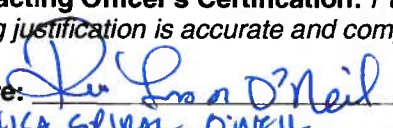
The University of Missouri-Columbia Electron Microscopy Core Facility has already developed the optimal sample preparation methods for these studies during the above project. In addition, Dr. Hayden expert analysis of the results are essential to the project. He defined the changes documented in the study published above and has an extensive knowledge related to the diabetic/obese animal models used in this study as demonstrated by the following publications:

- Lastra et al., Xanthine oxidase inhibition protects against Western diet-induced aortic stiffness and impaired vasorelaxation in female mice. Am J Physiol Regul Integr Comp Physiol. 2017 Aug 1;313(2):R67-R77
- Habibi et al., Sodium glucose transporter 2 (SGLT2) inhibition with empagliflozin improves cardiac diastolic function in a female rodent model of diabetes. Cardiovasc Diabetol. 2017 Jan 13; 16(1):9
- Jia et al., [Endothelial Mineralocorticoid Receptor Mediates Diet-Induced Aortic Stiffness in Females](#). Circ Res. 2016 Mar 18;118(6):935-943.
- Nistala et al., [DPP4 inhibition attenuates filtration barrier injury and oxidant stress in the Zucker obese rat](#). Obesity (Silver Spring). 2014 Oct;22(10):2172-9
- Bostick et al., [Dipeptidyl peptidase inhibition prevents diastolic dysfunction and reduces myocardial fibrosis in a mouse model of Western diet induced obesity](#). Metabolism. 2014 Aug;63(8):1000-11.
- Manrique et al., [Obesity and insulin resistance induce early development of diastolic dysfunction in young female mice fed a Western diet](#). Endocrinology. 2013 Oct;154(10):3632-42.
- Yang et al., [Retinal redox stress and remodeling in cardiometabolic syndrome and diabetes](#). Oxid Med Cell Longev. 2010 Nov-Dec;3(6):392-403.
- Hayden et al., [Pericytopathy: oxidative stress and impaired cellular longevity in the pancreas and skeletal muscle in metabolic syndrome and type 2 diabetes](#). Oxid Med Cell Longev. 2010 Sep-Oct;3(5):290-303
- Lastra et al., [Direct renin inhibition improves systemic insulin resistance and skeletal muscle glucose transport in a transgenic rodent model of tissue renin overexpression](#). Endocrinology. 2009 Jun;150(6):2561-8

**5. DESCRIPTION OF MARKET RESEARCH CONDUCTED AND RESULTS OR STATEMENT WHY IT WAS NOT CONDUCTED:**

Market Research was conducted by Dr. Therese Salameh and Dr. Banks. Some other Universities and research facilities offer comparable services (see quotes). The cost for the services are considerably greater. The University of Colorado charges \$126.00 to \$175 per hour for scope time. This would increase the cost by ~\$10,000-\$15,000. The Fred Hutch Cancer Research Center (Seattle, WA) quoted a cost of \$33,260 for this project. Neither of these facilities offers any image analysis or pathology results. We were unable to find a facility that could provide a comparable level of data analysis.

**6. Contracting Officer's Certification:** *Purchase is approved in accordance with FAR13.106-1(b). I certify that the foregoing justification is accurate and complete to the best of my knowledge and belief.*

Signature:   
Name: LISA SPINN O'NEIL  
Title: Contracting Officer  
Facility: NCO 20

Date: 8/8/2018