Posting Date: May 7, 2021

Closing Date: May 17, 2020 11:30 a.m. ET

Reference Number: 21-031593

To: NCI Bid Board

From: Tanika Crossen
NCI P-ARC Program Analyst
crossent@nih.gov

Subject: NCI Bid Board Posting – Large scale metabolome analysis of human pancreatic cancer cells

The Laboratory of Human Carcinogenesis (LHC) has a multifaceted research program integrating basic, translational, clinical, and population research, with a major focus on common and lethal human cancers that include tumors of the breast, colon, esophagus, liver, lung, pancreas and prostate. LHC studies utilize a Precision Medicine Strategy. It's main objectives are to conduct investigations that assess: (1) Mechanisms of carcinogenesis including the cellular functions of cancer driving genes; (2) experimental approaches in biological systems for the extrapolation of carcinogenesis data and mechanisms from in vitro models and experimental animals to humans; (3) molecular integrative epidemiology of human cancer risk; and (4) cancer biomarkers of diagnosis, prognosis, and therapeutic outcome.

The Pancreatic Cancer Section is requesting services for qualitative and quantitative metabolome analysis of 54 tumor samples including sample preparation, technical replicates, application of Liquid chromatography/Mass spectrometry (LC/MS) and Gas chromatography/Mass spectrometry (GC/MS) for metabolite discovery, data extraction and quality assurance, data normalization, bioinformatics and metabolite identification. Also required is a report which goes back to the customer and contains QC measurements and the standardized relative abundance values of all measured metabolites for each individual tumor.

Sole Source Justification:

Metabolon's services, which include running of the samples through HPLC columns, for large-scale quantitative measurements of known and unknown metabolites, are not provided through any other company. The measurements by Metabolon for LHC's proposed project will allow to compare and integrate findings from this study with previous measurements from Metabolon in another panel of human pancreatic cancers. In summary, Metabolon is the only company that provides the services we need to accomplish this study.

Attached Documents:
SF18
Statement of Work
FAR Clause 52.204-24 Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment.
FAR Clause 52.213-4 Simplified Acquisitions Terms and Conditions (AUG 2020) is applicable and available in full text upon request.

REQUEST FOR QUOTATION
(THIS IS NOT AN ORDER)

THIS RFQ ☐ IS ☒ IS NOT A SMALL BUSINESS SET-ASIDE

PAGE 1 OF PAGES 1

1. REQUEST NO.	2. DATE ISSUED	3. REQUISITION/PURCHASE REQUEST NO.	4. CERT. FOR NAT. DEF. UNDER BDSA REG. 2 AND/OR DMS REG. 1	RATING
21-031593	5/7/2021			

5a. ISSUED BY
NCI CCR Purchasing Administrative Resource Center

6. DELIVER BY *(Date)*

5b. FOR INFORMATION CALL *(NO COLLECT CALLS)*

NAME	TELEPHONE NUMBER	
	AREA CODE	NUMBER
Tanika Crossen, Program Analyst	301	480-0602

7. DELIVERY ☒ FOB DESTINATION ☐ OTHER *(See Schedule)*

9. DESTINATION

a. NAME OF CONSIGNEE
NIH, NCI

8. TO:

a. NAME	b. COMPANY	b. STREET ADDRESS
	Metabolon	

c. STREET ADDRESS	c. CITY
	Bethesda

d.. CITY	e.. STATE	f.. ZIP CODE	d.. STATE	e. ZIP CODE
			MD	20892

10. PLEASE FURNISH QUOTATIONS TO THE ISSUING OFFICE IN BLOCK 5a ON OR BEFORE CLOSE OF BUSINESS *(Date)*

5/17/2021 11:30 EST

IMPORTANT: This is a request for information, and quotations furnished are not offers. If you are unable to quote, please indicate on this form and return it to the address in Block 5a. This request does not commit the Government to pay any costs incurred in the preparation of the submission of this quotation or to contract for supplies or services. Supplies are of domestic origin unless otherwise indicated by quoter. Any representations and/or certifications attached to this Request for Quotations must be completed by the quoter.

11. SCHEDULE *(Include applicable Federal, State and local taxes)*

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)
	Large scale metabolome analysis of human pancreatic cancer cells Notice of Intent: If submitting a capability statement, please e-mail only 1 copy of the technical capability statement to Tanika Crossen- crossent@nih.gov See attached statement of work This will be awarded as a Firm-Fixed Price Contract.				

12. DISCOUNT FOR PROMPT PAYMENT	a. 10 CALENDAR DAYS (%)	b. 20 CALENDAR DAYS (%)	c. 30 CALENDAR DAYS (%)	d.. CALENDAR DAYS NUMBER	d.. CALENDAR DAYS PERCENTAGE

NOTE: Additional provisions and representations ☐ are ☐ are not attached.

13. NAME AND ADDRESS OF QUOTER	14. SIGNATURE OF PERSON AUTHORIZED TO SIGN QUOTATION	15. DATE OF QUOTATION
a. NAME OF QUOTER		
b. STREET ADDRESS	16. SIGNER	
	a. NAME *(Type or print)*	b. TELEPHONE AREA CODE
c. COUNTY		
d. CITY / **e. STATE** / **f. ZIP CODE**	c. TITLE *(Type or print)*	NUMBER

STATEMENT OF WORK:

A. Background:

Recently, two molecular subtypes have been characterized based on gene-expression analysis in pancreatic ductal adenocarcinoma (PDAC): one is classical/progenitor, and the other is basal-like/squamous subtype. Patients with the latter subtype have the worst prognosis and carry distinct features, including metabolic reprogramming and MYC activation. The key genes conferring the disease aggressiveness in this subtype are not clearly defined. The goal of this study is to identify genes suppressing the basal-like/squamous subtype by mediating metabolic reprogramming, which may be potential targets of diagnostic and therapeutic significance. Our group recently identified that the genes ADRA2A, GAS2, KIAA1324, and LMO3 are downregulated in the basal-like/squamous subtype and the downregulation correlates with worst prognosis of PDAC patients. In this project, we are assessing the metabolic reprogramming regulated by these genes. For the characterization of the effects on metabolism, we will assess 1000 metabolites in PDAC cells (conducted by Metabolon).

B. Purpose and Objectives:

The purpose of this purchase order is to perform metabolomic assays on 54 samples to investigate the role of ADRA2A, GAS2, KIAA1324, and LMO3 in regulating metabolic reprogramming in pancreatic cancer.

C. Contractor Requirements:

The contractor shall perform the following tasks:

1. Conduct liquid chromatography-tandem mass spectrometry (LC-MS/MS, or GC/MS) assays on the samples provided.
2. Provide appropriate data to identify and quantitate the small molecules (~ 1000, based on their comprehensive spectra dataset) identified in the 54 samples.
3. Provide other data as appropriate to aid in the interpretation of the findings

Period of Performance: Eight (8) weeks from the date of award.

D. Government Responsibilities

NCI's role is to: 1) secure the funding necessary for the metabolomics assay; 2) provide pancreatic cancer samples; 3) receive assay results; 4) link data to available data, analyze and publish the data.

E. Reporting Requirements and Deliverables

The contractor shall perform metabolomics assay and send back the assay results (along with quantitation and characterization to support interpretation) no later than the last day of this contract to the NCI.

F. Inspection and Acceptance Criteria

The NCI Project Officer will have one month to review the assay results and analyze the data. If no comments or request for revisions are provided within one month, the deliverables shall be considered acceptable.

G. Clearances

Not applicable