

Posting Date: August 25, 2022

Closing Date: September 4, 2022 11:30 a.m. ET

Reference Number: 22-049258

To: NCI Bid Board

From: Morgan Oliver
NCI CCR P-ARC
morgan.oliver@nih.gov

Subject: NCI Bid Board Posting – Whole Genome Sequencing (WGS) with genomic DNA from GATA2 deficiency patients and families exhibiting genetic anticipation

The Immune Deficiency Cellular Therapy Program (ID-CTP) seeks to accelerate progress in the treatment of children, adolescents and young adults with genetic diseases of the blood and immune system, collaborating across multiple specialties to synergize disease-specific and gene mutation-specific approaches.

The primary objective is to examine the gDNA sequence to identify variations in the tandem repeat motifs across the GATA2 locus region of chromosome 3 (~150kb) and correlation these variations with the clinical features of each tested family member. If necessary, these data will also enable examination of other loci throughout the genome for DNA sequence variations that correlate with the clinical course of the patients and the medical history of their respective families.

The National Cancer Institute Plans to purchase whole genome sequencing (WGS) with genomic DNA from GATA2 deficiency patients and families exhibiting potential genetic anticipation from Psomagen, Inc, Rockville, MD. This is not a request for competitive quotation. However, if any interested party believes it can meet the attached requirements, it may submit a statement of capabilities. The capability statement must be in writing and must contain information and material in sufficient detail to allow NCI to determine is the party can fully meet this requirement. The capability statement must be received in the contracting office by 11:30 AM on August 21, 2022. ET. A determination by the Government not to compete this requirement based upon responses to this notice is solely within the discretion of the Government. Information received will be considered solely for the purpose of determining whether to conduct a competitive procurement.

Sole Source Justification:

The internet was used to investigate other vendors for similar service requirements and deliverable product. Common commercial genomic DNA sequencing companies, such as 23andMe, Inc, AncestryDNA, MyHeritage, FamilyTreeDNA, etc., are not appropriate for this project for several reasons. These types of companies do not sequence or analyze the entire genome, they do not provide the raw DNA sequencing files (.fasta or .fastq), they only investigate a biased pre-determined set of genetic loci, and they retain certain proprietary rights to sequence and analysis findings. Companies like BGI offer the raw data, but they do not provide DNA variant calling (.vcf), the ultimate product in the processing pipeline. This would require contracting a second vendor to produce the .vcf files. Organizations like the New York Genome Center and the Broad Institute require an application and review for services and the sequencing is done as a collaboration, which would require an MTA and CREDA, and may conflict with proprietary rights and patient privacy. Companies such as Illumina, Agilent and ThermoFisher sell the equipment and training to do the sequencing inhouse, but the startup cost and setup time would be far beyond the scope of our laboratory. I could not find any small businesses to do this service, and given the high startup and setup costs for such an operation, it seems unlikely a small company could provide this service. Psomagen is not a small company, but they are a local company (Rockville, MD)

Attached Documents:

SF18

Statement of Work

52.204-24 Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment.

REQUEST FOR QUOTATION (THIS IS NOT AN ORDER)		THIS RFQ <input type="checkbox"/> IS <input checked="" type="checkbox"/> IS NOT A SMALL BUSINESS SET-ASIDE	PAGE OF PAGES 1 1
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1. REQUEST NO. POTS 22-049258	2. DATE ISSUED 8/25/2022	3. REQUISITION/PURCHASE REQUEST NO. 22-049258	4. CERT. FOR NAT. DEF. UNDER BDSA REG. 2 AND/OR DMS REG. 1	RATING
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5a. ISSUED BY		6. DELIVER BY (Date) 10/06/2022		
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5b. FOR INFORMATION CALL (NO COLLECT CALLS)				
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NAME Morgan Oliver	TELEPHONE NUMBER		7. DELIVERY <input type="checkbox"/> FOB DESTINATION <input checked="" type="checkbox"/> OTHER (See Schedule)	
	AREA CODE 240	NUMBER 760-6147	9. DESTINATION	

8. TO:			a. NAME OF CONSIGNEE Robert West 240-858-3692	
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a. NAME	b. COMPANY Psomagen, Inc		b. STREET ADDRESS 10 Center Dr, Rm 3-3264	
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c. STREET ADDRESS 1330 Piccard Drive, Ste 103			c. CITY Bethesda	
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d. CITY Rockville,	e. STATE MD	f. ZIP CODE 20850	d. STATE MD	e. ZIP CODE 20892
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10. PLEASE FURNISH QUOTATIONS TO THE ISSUING OFFICE IN BLOCK 5a ON OR BEFORE CLOSE OF BUSINESS (Date) 09/04/2022	IMPORTANT: This is a request for information and quotations furnished are not offers. If you are unable to quote, please so 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 service. Supplies are of domestic origin unless otherwise indicated by quoter. Any representations and/or certifications attached to this Request for Quotation must be completed by the quoter.
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11. SCHEDULE (Include applicable Federal, State and local taxes)

ITEM NO. (a)	SUPPLIES/ SERVICES (b)	QUANTITY (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)
1	Whole Genome Sequencing	23	EA		0.00
2	Basic Analysis	23	EA		0.00
3	External hardieve (2TB)	1	EA		0.00
<p>Notice of Intent: If submitting a capability statement, please e-mail only 1 copy of the technical capability statement to: Morgan Oliver @ morgan.oliver@nih.gov.</p> <p>See attached statement of work.</p> <p>This will be a Firm-Fixed Price Contract.</p>					

12. DISCOUNT FOR PROMPT PAYMENT	a. 10 CALENDAR DAYS (%)	b. 20 CALENDAR DAYS (%)	c. 30 CALENDAR DAYS (%)	d. CALENDAR DAYS	
			0.00	NUMBER	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			16. SIGNER		b. TELEPHONE
b. STREET ADDRESS					
c. COUNTY			a. NAME (Type or print)		AREA CODE
d. CITY	e. STATE	f. ZIP CODE	c. TITLE (Type or print)		NUMBER

STATEMENT OF WORK (SOW)

1.0 TITLE

WHOLE GENOME SEQUENCING (WGS) WITH GENOMIC DNA FROM GATA2 DEFICIENCY PATIENTS & FAMILIES EXHIBITING POTENTIAL GENETIC ANTICIPATION.

2.0 BACKGROUND

Dr. Dennis D. Hickstein, M.D., conducts research and clinical care for patients with a bone marrow failure and immunodeficiency diseases in the Immune Deficiency – Cellular Therapy Program (ID-CTP). The primary focus is called MonoMAC Syndrome or GATA2 Deficiency. The disease is characterized by a constellation of clinical manifestations, including immunodeficiency with frequent infections, including refractory human papillomavirus (HPV) warts, non-tuberculous mycobacterial infections, and other life-threatening opportunistic infections. Severe pancytopenias, particularly in monocytes, B and NK lymphocytes and dendritic cells present in this first stage of the disease. In the second stage of the disease, patients develop a hypocellular bone marrow and myelodysplastic syndrome (MDS) with abnormal cytogenetics. The third stage of the disease can show a transition from hypocellular to hypercellular bone marrow as an indication of progression to acute myeloid leukemia (AML) or a proliferative chronic myelomonocytic leukemia (CMML). There is considerable variability in other features of the disease, including peripheral lymphedema (Emberger Syndrome), deafness, pulmonary alveolar proteinosis, lupus-like autoimmunity and others. The basis for this variable expressivity remains unknown. GATA2 Deficiency is usually initiated by germline (hereditary) mutations in the protein coding region of the *GATA2* gene. These are most often missense mutations in the second zinc-finger domain or frameshift and nonsense mutations throughout the protein.

The age of onset of symptoms ranges considerably from pediatric to midlife, even within the same family bearing the same germline *GATA2* mutation. Other individuals can remain asymptomatic throughout life. The rate of disease progression also varies significantly among and within affected families, from a few years to decades. Despite the considerable degree of variability among, and particularly within affected families, several families display a pattern of disease onset and progression that suggests Genetic Anticipation (GA). Examination of GATA2 Deficiency/MonoMAC Syndrome families pedigrees enrolled at the NIH Clinical Center identified the best candidates to investigate any molecular basis for GA in GATA2 Deficiency.

GA is a process by which the clinical symptoms of a disease appear at an earlier age and/or become more severe more quickly in each successive generation of an affected family. This phenomenon was first described for spinal bulbar muscular dystrophy (SBMD) and myotonic dystrophy in the 1990's. It has now been described for over 50 diseases. The molecular basis for GA is DNA sequence tandem repeat (TR) expansion (or contraction) across generations and represents one of the most abundant classes of variations in the human genome. The first TR class discovered were triple nucleotide repeats in the coding sequences of proteins. More recently, repeats motifs as large as 12 nucleotides have been described and the repeats may be present in any element of the gene, including introns and regulatory elements. Despite advances in DNA sequencing technology, their identification requires overcoming methodological difficulties.

The *GATA2* gene does not have any TR elements in its coding sequence or introns. However, we have identified several tandem repeat elements across the super enhancer regulatory region of the gene, including several which contain a (W)GATA(R) GATA-binding motif. WGS will be applied to several members of each candidate family to identify variant patterns in TRs of the

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GATA2 gene that correlate with the clinical course of the patients and pedigrees of the corresponding family. If *GATA2* locus repeat variation does not correlation with GA, the WGS6 data will be used to look for genetic variation in other genetic loci that may contribute to GA in *GATA2* Deficiency.

2.1 OBJECTIVE

Whole Genome Sequencing (WGS) provides the whole genome DNA sequence that is unbiased by *a priori* selection or targeting criteria. WGS will provide the primary nucleotide sequence necessary for variant identification and comparisons with family medical history. The work described in Quote #ANQ00001526 from *Psomagen* will provide WGS data on patient genomic DNA (gDNA) samples isolated from peripheral blood and/or bone marrow samples. The samples are from patients and family members with clinical and pedigree characteristics that make them candidates for Genetic Anticipation. All patients have been consented for WGS. The objective is to examine the gDNA sequence to identify variations in the tandem repeat motifs across the *GATA2* locus region of chromosome 3 (~150kb) and correlation these variations with the clinical features of each tested family member. If necessary, these data will also enable examination of other loci throughout the genome for DNA sequence variations that correlate with the clinical course of the patients and the medical history of their respective families.

3.0 SCOPE

Whole Genome Sequencing (WGS) will be done with genomic DNA (gDNA) on 23 samples isolated from peripheral blood samples and or bone marrow aspirates collected from patients and family member. Samples of $\geq 0.1\mu\text{g}$ gDNA stock solutions already prepared at the NIH will be provided to *Psomagen* for sequencing and analysis. A library will be constructed using the TruSeq Nano Library Prep Kit (350bp insert size). The sequencing platform will be the NovaSeq6000 S4 (150bp PE) with a mean depth coverage of 30X per sample. Standard analysis for mapping, alignment and variant calling (bam & vcf) will be done and be provided along with the raw data (fastq) as an FTP download link and external hard drive (2TB, 3 units).

3.1 CONTRACT REQUIREMENTS/ AND PERSONNEL QUALIFICATIONS

PERSONNEL QUALIFICATIONS: *Psomagen* is ISO 9001 and ISO 3485 certified for sample preparation. *Psomagen* can generate over 37,800 human whole genomes and over 48,000 exomes or equivalent per year. *Psomagen* generates sequencing data at clinical grade for discovery and validation of genetic variants. *Psomagen* Clinical Laboratory in the US practices under CLIA certified (Clinical Laboratory Improvement Amendments) and CAP accredited (College of American Pathologists) environment which assures higher standard of accuracy and reliability. *Psomagen* (formally *MacroGen*) has been used successfully by the Hickstein laboratory for several other WGS genomics sequencing projects for several years, and their employment for this project also provides experimental continuity for our MonoMAC/*GATA2* Deficiency research.

4.0 TYPE OF ORDER

Whole Genome Sequencing.

5.0 PERIOD OF PERFORMANCE

4-6 weeks after samples pass their initial Quality Control.

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6.0 PLACE OF PERFORMANCE.

Psomagen, Inc. 1330 Piccard Drive, Ste 103, Rockville, MD 20850

8.0 REPORT(S)/DELIVERABLES AND DELIVERY SCHEDULE

Psomagen will provide raw (fastq) and standard analysis (mapping, expression profiling) data as a FTP downloadable link.

9.0 PAYMENT

Payment shall be made upon receipt.

Payment authorization requires submission and approval of invoices to the COR and NIH OFM, in accordance with the attached payment provisions listed below:

The following clause is applicable to all Purchase Orders, Task or Delivery Orders, and Blanket Purchase Agreement (BPA) Calls: PROMPT PAYMENT (JUL 2013) FAR 52.232-25. Highlights of this clause and NIH implementation requirements follow:

I INVOICE REQUIREMENTS

- A. An invoice is the Contractor's bill or written request for payment under the contract for supplies delivered or services performed. A proper invoice is an "Original" which must include the items listed in subdivisions 1 through 12, below, in addition to the requirements of FAR 32.9. If the invoice does not comply with these requirements, the Contractor will be notified of the defect within 7 days after the date the designated billing office received the invoice (3 days for meat, meat food products, or fish, and 5 days for perishable agricultural commodities, dairy products, edible fats or oils) with a statement of the reasons why it is not a proper invoice. (See exceptions under II., below.) Untimely notification will be taken into account in the computation of any interest penalty owed the Contractor.
1. Vendor/Contractor: Name, Address, Point of Contact for the invoice (Name, title, telephone number, e-mail and mailing address of point of contact).
 2. Remit-to address (Name and complete mailing address to send payment).
 3. Remittance name must match exactly with name on original order/contract. If the Remittance name differs from the Legal Business Name, then both names must appear on the invoice.
 4. Invoice date.
 5. Unique invoice #s for all invoices per vendor regardless of site.
 6. NBS document number formats must be included for awards created in the NBS: Contract Number; Purchase Order Number; Task or Delivery Order Number and Source Award Number (e.g., Indefinite Delivery Contract number; General Services Administration number); or, BPA Call Number and BPA Parent Award Number.
 7. Data Universal Numbering System (DUNS) or DUNS + 4 as registered in the Central Contractor Registration (CCR).
 8. Federal Taxpayer Identification Number (TIN). In those exceptional cases where a contractor does not have a DUNS number or TIN, a Vendor Identification Number (VIN) must be referenced on the invoice. The VIN is the number that appears after the contractor's name on the face page of the award document.

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9. Identify that payment is to be made using a three-way match.
10. Description of supplies/services that match the description on the award, by line billed.*
11. Freight or delivery charge must be billed as shown on the award. If it is included in the item price do not bill it separately. If identified in the award as a separate line item, it must be billed separately.
12. Quantity, Unit of Measure, Unit Price, Extended Price of supplies delivered or services performed, as applicable, and that match the line items specified in the award.*

* NOTE: If your invoice must differ from the line items on the award, please contact the Contracting Officer before submitting the invoice. A modification to the order or contract may be needed before the invoice can be submitted and paid.

B. Shipping costs will be reimbursed only if authorized by the Contract/Purchase Order. If authorized, shipping costs must be itemized. Where shipping costs exceed \$100, the invoice must be supported by a bill of lading or a paid carrier's receipt.

C. Mail an original and 1 copy of the itemized invoice to:

National Institutes of Health
Office of Financial Management, Commercial Accounts
2115 East Jefferson Street, Room 4B-432, MSC 8500
Bethesda, MD 20892-8500

For inquiries regarding payment call: (301) 496-6088

In order to facilitate the prompt payment of invoices, it is recommended that the vendor submit a photocopy of the invoice to the "Consignee" designated for the acquisition in blocks 6A – 6E of the face page of the Order/Award document.

II. INVOICE PAYMENT

A. Except as indicated in paragraph B., below, the due date for making invoice payments by the designated payment office shall be the later of the following two events:

1. The 30th day after the designated billing office has received a proper invoice.
2. The 30th day after Government acceptance of supplies delivered or services performed.

B. The due date for making invoice payments for meat and meat food products, perishable agricultural commodities, dairy products, and edible fats or oils, shall be in accordance with the Prompt Payment Act, as amended.

III. INTEREST PENALTIES

A. An interest penalty shall be paid automatically, if payment is not made by the due date and the conditions listed below are met, if applicable.

1. A proper invoice was received by the designated billing office.
2. A receiving report or other Government documentation authorizing payment was

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processed and there was no disagreement over quantity, quality, or contractor compliance with a term or condition.

3. In the case of a final invoice for any balance of funds due the contractor for supplies delivered or services performed, the amount was not subject to further settlement actions between the Government and the Contractor.

- B. Determination of interest and penalties due will be made in accordance with the provisions of the Prompt Payment Act, as amended, the Contract Disputes Act, and regulations issued by the Office of Management and Budget.

IV. PROVIDING ACCELERATED PAYMENT TO SMALL BUSINESS SUBCONTRACTORS, FAR 52.232-40 (DEC 2013)

- a) Upon receipt of accelerated payments from the Government, the Contractor shall make accelerated payments to its small business subcontractors under this contract, to the maximum extent practicable and prior to when such payment is otherwise required under the applicable contract or subcontract, after receipt of a proper invoice and all other required documentation from the small business subcontractor.
- b) The acceleration of payments under this clause does not provide any new rights under the prompt Payment Act.

Include the substance of this clause, include this paragraph c, in all subcontracts with small business concerns, including subcontracts with small business concerns for the acquisition of commercial items.

52.213-4 Terms and Conditions-Simplified Acquisitions (Other Than Commercial Items).

As prescribed in [13.302-5\(d\)](#), insert the following clause:

TERMS AND CONDITIONS-SIMPLIFIED ACQUISITIONS (OTHER THAN COMMERCIAL ITEMS) (AUG 2020)

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses that are incorporated by reference:

(1) The clauses listed below implement provisions of law or Executive order:

(i) [52.203-19](#), Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (JAN 2017) (section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235) and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions)).

(ii) [52.204-23](#), Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities (JUL 2018) (Section 1634 of Pub. L. 115-91).

(iii) [52.204-25](#), Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment. (AUG 2020) (Section 889(a)(1)(A) of Pub. L. 115-232).

(iv) [52.222-3](#), Convict Labor (JUN 2003) (E.O.11755).

(v) [52.222-21](#), Prohibition of Segregated Facilities (APR 2015).

(vi) [52.222-26](#), Equal Opportunity (*Sept* 2016) (E.O.11246).

(vii) [52.225-13](#), Restrictions on Certain Foreign Purchases (Jun 2008) (E.O.s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).

(viii) [52.233-3](#), Protest After Award (AUG 1996) ([31 U.S.C.3553](#)).

(ix) [52.233-4](#), Applicable Law for Breach of Contract Claim (OCT 2004) (Pub.L.108-77, 108-78 ([19 U.S.C. 3805 note](#))).

(2) Listed below are additional clauses that apply:

(i) [52.232-1](#), Payments (APR 1984).

(ii) [52.232-8](#), Discounts for Prompt Payment (FEB 2002).

(iii) [52.232-11](#), Extras (APR 1984).

(iv) [52.232-25](#), Prompt Payment (JAN 2017) .

(v) [52.232-39](#), Unenforceability of Unauthorized Obligations (JUN 2013).

(vi) [52.232-40](#), Providing Accelerated Payments to Small Business Subcontractors (DEC 2013).

(vii) [52.233-1](#), Disputes (MAY 2014).

(viii) [52.244-6](#), Subcontracts for Commercial Items (AUG 2020).

(ix) [52.253-1](#), Computer Generated Forms (JAN 1991).

(b) The Contractor shall comply with the following FAR clauses, incorporated by reference, unless the circumstances do not apply:

(1) The clauses listed below implement provisions of law or Executive order:

(i) [52.204-10](#), Reporting Executive Compensation and First-Tier Subcontract Awards (JUN 2020)(Pub. L. 109-282) ([31 U.S.C. 6101 note](#)) (Applies to contracts valued at or above the threshold specified in FAR [4.1403](#)(a) on the date of award of this contract).

(ii) [52.222-19](#), Child Labor-Cooperation with Authorities and Remedies (JAN 2020) (E.O.13126) (Applies to contracts for supplies exceeding the micro-purchase threshold, as defined in FAR [2.101](#) on the date of award of this contract).

(iii) [for Materials, Supplies, Articles, and Equipment.](#), Contracts for Materials, Supplies, Articles, and Equipment (JUN 2020) ([41 U.S.C.chapter 65](#)) (Applies to supply contracts over the threshold specified in FAR [22.602](#) on the date of award of this contract, in the United States, Puerto Rico, or the U.S. Virgin Islands).

(iv) [52.222-35](#), Equal Opportunity for Veterans (JUN 2020) ([38 U.S.C.4212](#)) (Applies to contracts valued at or above the threshold specified in FAR [22.1303](#)(a) on the date of award of this contract).

(v) [52.222-36](#), Equal Employment for Workers with Disabilities (JUN 2020) ([29 U.S.C.793](#)) (Applies to contracts over the threshold specified in FAR [22.1408](#)(a) on the date of award of this contract, unless the work is to be performed outside the United States by employees recruited outside the United States). (For purposes of this clause, "United States" includes the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.)

(vi) [52.222-37](#), Employment Reports on Veterans (JUN 2020) ([38 U.S.C.4212](#)) (Applies to contracts valued at or above the threshold specified in FAR [22.1303](#)(a) on the date of award of this contract).

(vii) [52.222-41](#), Service Contract Labor Standards (AUG 2018) ([41 U.S.C.chapter 67](#)) (Applies to service contracts over \$2,500 that are subject to the Service Contract Labor Standards statute and will be performed in the United States, District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, Johnston Island, Wake Island, or the outer Continental Shelf).

(viii)

(A) [52.222-50](#), Combating Trafficking in Persons (JAN 2019) ([22 U.S.C. chapter78](#) and E.O 13627) (Applies to all solicitations and contracts).

(B) Alternate I (MAR 2015) (Applies if the Contracting Officer has filled in the following information with regard to applicable directives or notices: Document title(s), source for obtaining document(s), and contract performance location outside the United States to which the document applies).

(ix) [52.222-55](#), Minimum Wages Under Executive Order 13658 (DEC 2015) (Applies when [52.222-6](#) or [52.222-41](#) are in the contract and performance in whole or in part is in the United States (the 50 States and the District of Columbia)).

(x) [52.222-62](#), Paid Sick Leave Under Executive Order 13706 (Jan 2017) (E.O. 13706) (Applies when [52.222-6](#) or [52.222-41](#) are in the contract and performance in whole or in part is in the United States (the 50 States and the District of Columbia).)

(xi) [52.223-5](#), Pollution Prevention and Right-to-Know Information (MAY 2011) (E.O. 13423) (Applies to services performed on Federal facilities).

(xii) [52.223-11](#), Ozone-Depleting Substances and High Global Warming Potential Hydrofluorocarbons (JUN 2016) (E.O. 13693)(applies to contracts for products as prescribed at FAR [23.804](#)(a)(1)).

(xiii) [52.223-12](#), Maintenance, Service, Repair, or Disposal of Refrigeration Equipment and Air Conditioners (JUN 2016) (E.O. 13693) (Applies to maintenance, service, repair, or disposal of refrigeration equipment and air conditioners).

(xiv) [52.223-15](#), Energy Efficiency in Energy-Consuming Products (DEC 2007) ([42 U.S.C. 8259b](#)) (Unless exempt pursuant to [23.204](#), applies to contracts when energy-consuming products listed in the ENERGY STAR® Program or Federal Energy Management Program (FEMP)) will be-

(A) Delivered;

(B) Acquired by the Contractor for use in performing services at a Federally-controlled facility;

(C) Furnished by the Contractor for use by the Government; or

(D) Specified in the design of a building or work, or incorporated during its construction, renovation, or maintenance).

(xv) [52.223-20](#), Aerosols (JUN 2016) (E.O. 13693) (Applies to contracts for products that may contain high global warming potential hydrofluorocarbons as a propellant or as a solvent; or contracts for maintenance or repair of electronic or mechanical devices).

(xvi) [52.223-21](#), Foams (JUN 2016) (E.O. 13693) (Applies to contracts for products that may contain high global warming potential hydrofluorocarbons or refrigerant blends containing hydrofluorocarbons as a foam blowing agent; or contracts for construction of buildings or facilities).

(xvii) [52.225-1](#), Buy American-Supplies (MAY 2014) ([41 U.S.C. chapter 67](#)) (Applies to contracts for supplies, and to contracts for services involving the furnishing of supplies, for use in the United States or its outlying areas, if the value of the supply contract or supply portion of a service contract exceeds the micro-purchase threshold, as defined in FAR [2.101](#) on the date of award of this contract, and the acquisition-

(A) Is set aside for small business concerns; or

(B) Cannot be set aside for small business concerns (see [19.502-2](#)), and does not exceed \$25,000).

(xviii) [Excess Food Donation to Nonprofit Organizations](#), Promoting Excess Food Donation to Nonprofit Organizations (JUN 2020) ([42 U.S.C. 1792](#)) (Applies to contracts greater than the threshold specified in FAR [26.404](#) on the date of award of this contract, that provide for the provision, the service, or the sale of food in the United States).

(xix) [52.232-33](#), Payment by Electronic Funds Transfer-System for Award Management (OCT 2013) (Applies when the payment will be made by electronic funds transfer (EFT) and the payment office uses the System for Award Management (SAM) as its source of EFT information).

(xx) [52.232-34](#), Payment by Electronic Funds Transfer-Other than System for Award Management (JUL 2013) (Applies when the payment will be made by EFT and the payment office does not use the SAM database as its source of EFT information).

(xxi) [52.247-64](#), Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) ([46 U.S.C.App.1241](#)) (Applies to supplies transported by ocean vessels (except for the types of subcontracts listed at [47.504\(d\)](#))).

(2) Listed below are additional clauses that may apply:

(i) [52.204-21](#), Basic Safeguarding of Covered Contractor Information Systems (JUN 2016) (Applies to contracts when the contractor or a subcontractor at any tier may have Federal contract information residing in or transiting through its information system.

(ii) [52.209-6](#), Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment (JUN 2020) (Applies to contracts over the threshold specified in FAR [9.405-2\(b\)](#) on the date of award of this contract).

(iii) [52.211-17](#), Delivery of Excess Quantities (*Sept* 1989) (Applies to fixed-price supplies).

(iv) [52.247-29](#), F.o.b. Origin (FEB 2006) (Applies to supplies if delivery is f.o.b. origin).

(v) [52.247-34](#), F.o.b. Destination (NOV 1991) (Applies to supplies if delivery is f.o.b. destination).

(c) FAR [52.252-2](#), *Clauses Incorporated by Reference (Feb 1998)*. This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

[Insert one or more Internet addresses]

(d) *Inspection/Acceptance.* The Contractor shall tender for acceptance only those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any supplies or services that have been tendered for acceptance. The Government may require repair or replacement of nonconforming supplies or reperformance of nonconforming services at no increase in contract price. The Government must exercise its postacceptance rights-

(1) Within a reasonable period of time after the defect was discovered or should have been discovered; and

(2) Before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

(e) *Excusable delays.* The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence, such as acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

(f) *Termination for the Government's convenience.* The Government reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such termination, the Contractor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid a percentage of the contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges that the Contractor can demonstrate to the satisfaction of the Government, using its standard record keeping system, have resulted from the termination. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give the Government any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred that reasonably could have been avoided.

(g) *Termination for cause.* The Government may terminate this contract, or any part hereof, for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any contract terms and conditions, or fails to provide the Government, upon request, with adequate assurances of future performance. In the event of termination for cause, the Government shall not be liable to the Contractor for any amount for supplies or services not accepted, and the Contractor shall be liable to the Government for any and all rights and remedies provided by law. If it is determined that the Government improperly terminated this contract for default, such termination shall be deemed a termination for convenience.

(h) *Warranty.* The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

(End of clause)

52.244-6 Subcontracts for Commercial Items.

As prescribed in [44.403](#), insert the following clause:

SUBCONTRACTS FOR COMMERCIAL ITEMS (AUG 2020)

(a) *Definitions.* As used in this clause—

Commercial item and *commercially available off-the-shelf item* have the meanings contained in Federal Acquisition Regulation (FAR) [2.101](#).

Subcontract includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or non-developmental items as components of items to be supplied under this contract.

(c)

(1) The Contractor shall insert the following clauses in subcontracts for commercial items:

(i) [52.203-13](#), Contractor Code of Business Ethics and Conduct (JUN 2020) ([41 U.S.C. 3509](#)), if the subcontract exceeds the threshold specified in FAR [3.1004](#)(a) on the date of subcontract award, and has a performance period of more than 120 days. In altering this clause to identify the appropriate parties, all disclosures of violation of the civil False Claims Act or of Federal criminal law shall be directed to the agency Office of the Inspector General, with a copy to the Contracting Officer.

(ii) [52.203-15](#), Whistleblower Protections Under the American Recovery and Reinvestment Act of 2009 (JUN 2010) (Section 1553 of Pub. L. 111-5), if the subcontract is funded under the Recovery Act.

(iii) [52.203-19](#), Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (JAN 2017).

(iv) [52.204-21](#), Basic Safeguarding of Covered Contractor Information Systems (JUN 2016), other than subcontracts for commercially available off-the-shelf items, if flow down is required in accordance with paragraph (c) of FAR clause [52.204-21](#).

(v) [52.204-23](#), Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities (JUL 2018) (Section 1634 of Pub. L. 115-91).

(vi) [52.204-25](#), Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment. (AUG 2020) (Section 889(a)(1)(A) of Pub. L. 115-232).

(vii) [52.219-8](#), Utilization of Small Business Concerns (OCT 2018) ([15 U.S.C.637](#)(d)(2) and (3)), if the subcontract offers further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds the applicable threshold specified in FAR [19.702](#)(a) on the date of subcontract award, the subcontractor must include [52.219-8](#) in lower tier subcontracts that offer subcontracting opportunities.

(viii) [52.222-21](#), *Prohibition of Segregated Facilities* (APR 2015).

(ix) [52.222-26](#), *Equal Opportunity* (Sept 2015) (E.O.11246).

(x) [52.222-35](#), *Equal Opportunity for Veterans* (JUN 2020) ([38 U.S.C.4212\(a\)](#));

(xi) [52.222-36](#), *Equal Opportunity for Workers with Disabilities* (JUN 2020) ([29 U.S.C.793](#)).

(xii) [52.222-37](#), *Employment Reports on Veterans* (JUN 2020) ([38 U.S.C.4212](#)).

(xiii) [52.222-40](#), *Notification of Employee Rights Under the National Labor Relations Act* (DEC 2010) (E.O. 13496), if flow down is required in accordance with paragraph (f) of FAR clause [52.222-40](#).

(xiv)

(A) [52.222-50](#), *Combating Trafficking in Persons* (JAN 2019) ([22 U.S.C. chapter 78](#) and E.O. 13627).

(B) Alternate I (MAR 2015) of [52.222-50](#) ([22 U.S.C. chapter 78](#) and E.O. 13627).

(xv) [52.222-55](#), *Minimum Wages under Executive Order 13658* (DEC 2015), if flow down is required in accordance with paragraph (k) of FAR clause [52.222-55](#).

(xvi) [52.222-62](#), *Paid Sick Leave Under Executive Order 13706* (JAN 2017) (E.O. 13706), if flow down is required in accordance with paragraph (m) of FAR clause [52.222-62](#).

(xvii)

(A) [52.224-3](#), *Privacy Training* (JAN 2017) ([5 U.S.C. 552a](#)) if flow down is required in accordance with [52.224-3](#)(f).

(B) Alternate I (JAN 2017) of [52.224-3](#), if flow down is required in accordance with [52.224-3](#)(f) and the agency specifies that only its agency-provided training is acceptable).

(xviii) [52.225-26](#), *Contractors Performing Private Security Functions Outside the United States* (OCT 2016) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; [10 U.S.C. 2302 Note](#)).

(xix) [52.232-40](#), *Providing Accelerated Payments to Small Business Subcontractors* (DEC 2013), if flow down is required in accordance with paragraph (c) of FAR clause [52.232-40](#).

(xx) [52.247-64](#), *Preference for Privately Owned U.S.-Flag Commercial Vessels* (FEB 2006) ([46 U.S.C. App.1241](#) and [10 U.S.C.2631](#)), if flow down is required in accordance with paragraph (d) of FAR clause [52.247-64](#).

(2) While not required, the Contractor may flow down to subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

(End of clause)

Invoice and Payment Provisions (2/2014)

The following clause is applicable to all Purchase Orders, Task or Delivery Orders, and Blanket Purchase Agreement (BPA) Calls: **Prompt Payment (Jul 2013) FAR 52.232-25**. Highlights of this clause and NIH implementation requirements follow:

I Invoice Requirements

- A. An invoice is the Contractor's bill or written request for payment under the contract for supplies delivered or services performed. A proper invoice is an "Original" which must include the items listed in subdivisions 1 through 12, below, in addition to the requirements of FAR 32.9. If the invoice does not comply with these requirements, the Contractor will be notified of the defect within 7 days after the date the designated billing office received the invoice (3 days for meat, meat food products, or fish, and 5 days for perishable agricultural commodities, dairy products, edible fats or oils) with a statement of the reasons why it is not a proper invoice. (See exceptions under II., below.) Untimely notification will be taken into account in the computation of any interest penalty owed the Contractor.
1. Vendor/Contractor: Name, Address, Point of Contact for the invoice (Name, title, telephone number, e-mail and mailing address of point of contact).
 2. Remit-to address (Name and complete mailing address to send payment).
 3. Remittance name must match exactly with name on original order/contract. If the Remittance name differs from the Legal Business Name, then both names must appear on the invoice.
 4. Invoice date.
 5. Unique invoice #s for all invoices per vendor regardless of site.
 6. NBS document number formats must be included for awards created in the NBS: Contract Number; Purchase Order Number; Task or Delivery Order Number and Source Award Number (e.g., Indefinite Delivery Contract number; General Services Administration number); or, BPA Call Number and BPA Parent Award Number.
 7. Data Universal Numbering System (DUNS) or DUNS + 4 as registered in the Central Contractor Registration (CCR).
 8. Federal Taxpayer Identification Number (TIN). In those exceptional cases where a contractor does not have a DUNS number or TIN, a Vendor Identification Number (VIN) must be referenced on the invoice. The VIN is the number that appears after the contractor's name on the face page of the award document.
 9. Identify that payment is to be made using a three-way match.
 10. Description of supplies/services **that match** the description on the award, by line billed.*
 11. Freight or delivery charge must be billed as shown on the award. If it is included in the item price do not bill it separately. If identified in the award as a separate line item, it must be billed separately.
 12. Quantity, Unit of Measure, Unit Price, Extended Price of supplies delivered or services performed, as applicable, and that **match** the line items specified in the award.*
- * NOTE: If your invoice must differ from the line items on the award, please contact the Contracting Officer before submitting the invoice. A modification to the order or contract may be needed before the invoice can be submitted and paid.
- B. Shipping costs will be reimbursed only if authorized by the Contract/Purchase Order. If authorized, shipping costs must be itemized. Where shipping costs exceed \$100, the invoice must be supported by a bill of lading or a paid carrier's receipt.

C. Mail an original and 1 copy of the itemized invoice to:

National Institutes of Health
Office of Financial Management,
Commercial Accounts
2115 East Jefferson Street, Room 4B-432,
MSC 8500
Bethesda, MD 20892-8500

For inquiries regarding payment call: (301) 496-6088

In order to facilitate the prompt payment of invoices, it is recommended that the vendor submit a photocopy of the invoice to the "Consignee" designated for the acquisition in blocks 6A – 6E of the face page of the Order/Award document.

II. Invoice Payment

- A. Except as indicated in paragraph B., below, the due date for making invoice payments by the designated payment office shall be the later of the following two events:
1. The 30th day after the designated billing office has received a proper invoice.
 2. The 30th day after Government acceptance of supplies delivered or services performed.
- B. The due date for making invoice payments for meat and meat food products, perishable agricultural commodities, dairy products, and edible fats or oils, shall be in accordance with the Prompt Payment Act, as amended.

III. Interest Penalties

- A. An interest penalty shall be paid automatically, if payment is not made by the due date and the conditions listed below are met, if applicable.
1. A proper invoice was received by the designated billing office.
 2. A receiving report or other Government documentation authorizing payment was processed and there was no disagreement over quantity, quality, or contractor compliance with an term or condition.
 3. In the case of a final invoice for any balance of funds due the contractor for supplies delivered or services performed, the amount was not subject to further settlement actions between the Government and the Contractor.
- B. Determination of interest and penalties due will be made in accordance with the provisions of the Prompt Payment Act, as amended, the Contract Disputes Act, and regulations issued by the Office of Management and Budget.

IV. PROVIDING ACCELERATED PAYMENT TO SMALL BUSINESS SUBCONTRACTORS, FAR 52.232-40 (December 2013)

- a. Upon receipt of accelerated payments from the Government, the Contractor shall make accelerated payments to its small business subcontractors under this contract, to the maximum extent practicable and prior to when such payment is otherwise required under the applicable contract or subcontract, after receipt of a proper invoice and all other required documentation from the small business subcontractor.

- b. The acceleration of payments under this clause does not provide any new rights under the prompt Payment Act.
- c. Include the substance of this clause, include this paragraph c, in all subcontracts with small business concerns, including subcontracts with small business concerns for the acquisition of commercial items.

(End of Clause)