

efile GRAPHIC print - DO NOT PROCESS

As Filed Data -

DLN: 93493319202529

Form 990

Return of Organization Exempt From Income Tax

OMB No 1545-0047

2018

Open to Public Inspection

Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Code (except private foundations)

Do not enter social security numbers on this form as it may be made public

Go to [www.irs.gov/Form990](http://www.irs.gov/Form990) for instructions and the latest information.

A For the 2019 calendar year, or tax year beginning 01-01-2018 , and ending 12-31-2018

B Check if applicable

☐ Address change

☐ Name change

☐ Initial return

☐ Final return/terminated

☐ Amended return

☐ Application pending

C Name of organization

J CRAIG VENTER INSTITUTE

Doing business as

Number and street (or P O box if mail is not delivered to street address)

Room/suite

4120 CAPRICORN LANE

City or town, state or province, country, and ZIP or foreign postal code

LA JOLLA, CA 92037

D Employer identification number

52-1842938

E Telephone number

(858) 200-1800

G Gross receipts \$ 110,673,474

F Name and address of principal officer

JOHN CRAIG VENTER

4120 CAPRICORN LANE

LA JOLLA, CA 92037

H(a) Is this a group return for subordinates?

☐ Yes ☒ No

H(b) Are all subordinates included?

☐ Yes ☐ No

If "No," attach a list (see instructions)

H(c) Group exemption number ▶

I Tax-exempt status

☒ 501(c)(3) ☐ 501(c) ( ) ◀(insert no ) ☐ 4947(a)(1) or ☐ 527

J Website: ▶ WWW JCVI ORG

K Form of organization

☒ Corporation ☐ Trust ☐ Association ☐ Other ▶

L Year of formation 1993

M State of legal domicile MD

Part I

Summary

Activities & Governance

1 Briefly describe the organization's mission or most significant activities

A NON-PROFIT RESEARCH INSTITUTE DEDICATED TO THE ADVANCEMENT OF THE SCIENCE OF GENOMICS, UNDERSTANDING THE IMPLICATIONS FOR SOCIETY, AND COMMUNICATION OF RESULTS TO SCIENTIFIC COMMUNITIES, THE PUBLIC, AND POLICYMAKERS

2 Check this box ☐ if the organization discontinued its operations or disposed of more than 25% of its net assets

3 Number of voting members of the governing body (Part VI, line 1a)

10

4 Number of independent voting members of the governing body (Part VI, line 1b)

7

5 Total number of individuals employed in calendar year 2018 (Part V, line 2a)

225

6 Total number of volunteers (estimate if necessary)

7

7a Total unrelated business revenue from Part VIII, column (C), line 12

33,254

7b Net unrelated business taxable income from Form 990-T, line 34

2,306

Revenue

8 Contributions and grants (Part VIII, line 1h)

20,421,917

9 Program service revenue (Part VIII, line 2g)

16,234

10 Investment income (Part VIII, column (A), lines 3, 4, and 7d )

2,830,998

11 Other revenue (Part VIII, column (A), lines 5, 6d, 8c, 9c, 10c, and 11e)

23,724

12 Total revenue—add lines 8 through 11 (must equal Part VIII, column (A), line 12)

23,292,873

Expenses

13 Grants and similar amounts paid (Part IX, column (A), lines 1–3 )

1,492,998

14 Benefits paid to or for members (Part IX, column (A), line 4)

0

15 Salaries, other compensation, employee benefits (Part IX, column (A), lines 5–10)

18,904,834

16a Professional fundraising fees (Part IX, column (A), line 11e)

0

b Total fundraising expenses (Part IX, column (D), line 25) ▶304,484

17 Other expenses (Part IX, column (A), lines 11a–11d, 11f–24e)

11,880,775

18 Total expenses Add lines 13–17 (must equal Part IX, column (A), line 25)

32,278,607

19 Revenue less expenses Subtract line 18 from line 12

-8,985,734

Net Assets or Fund Balances

20 Total assets (Part X, line 16)

131,946,762

21 Total liabilities (Part X, line 26)

34,866,745

22 Net assets or fund balances Subtract line 21 from line 20

97,080,017

Prior Year

Current Year

Beginning of Current Year

End of Year

Part II

Signature Block

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete Declaration of preparer (other than officer) is based on all information of which preparer has any knowledge

\*\*\*\*\*

Signature of officer

JOHN CRAIG VENTER CHAIRMAN AND CEO

Type or print name and title

2019-11-15

Date

Paid Preparer Use Only

Print/Type preparer's name

Preparer's signature

Date

Check ☐ if self-employed

PTIN P00188643

Firm's name ▶ MOSS ADAMS LLP

Firm's EIN ▶ 91-0189318

Firm's address ▶ 4747 EXECUTIVE DR SUITE 1300

Phone no (858) 627-1400

SAN DIEGO, CA 92121

May the IRS discuss this return with the preparer shown above? (see instructions)

☒ Yes ☐ No

For Paperwork Reduction Act Notice, see the separate instructions.

Cat No 11282Y

Form 990 (2018)

**Part III Statement of Program Service Accomplishments**Check if Schedule O contains a response or note to any line in this Part III ☒**1** Briefly describe the organization's mission

A NON-PROFIT RESEARCH INSTITUTE DEDICATED TO THE ADVANCEMENT OF THE SCIENCE OF GENOMICS, UNDERSTANDING THE IMPLICATIONS FOR SOCIETY, AND COMMUNICATION OF RESULTS TO SCIENTIFIC COMMUNITIES, THE PUBLIC, AND POLICYMAKERS

**2** Did the organization undertake any significant program services during the year which were not listed on the prior Form 990 or 990-EZ? ☐ Yes ☒ No

If "Yes," describe these new services on Schedule O

**3** Did the organization cease conducting, or make significant changes in how it conducts, any program services? ☐ Yes ☒ No

If "Yes," describe these changes on Schedule O

**4** Describe the organization's program service accomplishments for each of its three largest program services, as measured by expenses. Section 501(c)(3) and 501(c)(4) organizations are required to report the amount of grants and allocations to others, the total expenses, and revenue, if any, for each program service reported

<b>4a</b>	(Code ) (Expenses \$ 10,615,497 including grants of \$ 855,577 ) (Revenue \$ 0 )
	See Additional Data
<b>4b</b>	(Code ) (Expenses \$ 2,581,475 including grants of \$ 620,354 ) (Revenue \$ )
	See Additional Data
<b>4c</b>	(Code ) (Expenses \$ 3,891,488 including grants of \$ 379,629 ) (Revenue \$ 0 )
	See Additional Data
	(Code ) (Expenses \$ 6,410,381 including grants of \$ 309,310 ) (Revenue \$ 1,188,068 )
<p>OTHER PROGRAM SERVICES: OTHER PROGRAM SERVICES THE JCVI GRANT PORTFOLIO ALSO INCLUDED SUPPORT FROM SEVERAL OTHER FEDERAL AGENCIES AND FOUNDATIONS INCLUDING U.S. DEPARTMENT OF JUSTICE (DOJ) JCVI IS DEVELOPING A FORENSIC MICROBIOME DATABASE (FMD) THAT WILL ALLOW FOR DEVELOPING MICROBIOME TOOLS FOR POTENTIAL IN MONITORING HUMAN TRAFFICKING AS PART OF THIS AWARD JCVI WORKED WITH 5 INTERNATIONAL COHORTS AT DIVERSE GLOBAL LOCATIONS CENTERS FOR DISEASE CONTROL (CDC) - JCVI IS DEVELOPING A COMPREHENSIVE GENE AND PROTEIN DATABASE AND WEB RESOURCE THAT PUBLIC HEALTH EXPERTS CAN USE TO QUICKLY DETECT AND IDENTIFY ANTIBIOTIC RESISTANCE GENES AS THEY EMERGE JCVI IS COMBINING MULTIPLE AMR GENES (ARGS) INTO A NON-REDUNDANT "LIVING" RELATIONAL DATABASE AND PUBLIC ONLINE RESOURCE THAT ALSO SERVES AS A CENTRALIZED REPOSITORY FOR IMPORTANT METADATA (E.G., BACTERIAL TAXONOMIC, GENOMIC CONTEXT, YEAR OF ISOLATE, GEOGRAPHICAL ISOLATION, ACCESSION NUMBERS, THREAT LEVEL, GENOTYPE/PHENOTYPE, ETC.) AND A TOOL FOR IN SILICO TESTING OF PCR AND RT-PCR PRIMER SETS THE RICHARD LOUNSBERRY FOUNDATION - THE JCVI TEAM IS WORKING IN COLLABORATION WITH A GROUP IN EUROPE TO DECIPHER THE GENOME OF LEONARDO DA VINCI AND HIS RELATIVES, AND ALSO USING THE MICROBIOME AS AN APPROACH TO IMPROVE ART CONSERVATION HUMAN VACCINES PROJECT (HVP) - JCVI, IN COLLABORATION WITH THE SAN DIEGO SUPERCOMPUTER CENTER, SERVES AS THE MAIN DEVELOPER OF THE CENTRAL DATA MANAGEMENT AND BIOINFORMATICS HUB FOR THE HVP, WITH DIRECT SUPPORT FROM THE HVP GENERAL FUND THE MISSION OF THE HVP IS TO ACCELERATE THE DEVELOPMENT OF VACCINES AND IMMUNOTHERAPIES AGAINST MAJOR GLOBAL INFECTIOUS DISEASES AND CANCERS BY DECODING THE HUMAN IMMUNE SYSTEM THE GOAL OF THE HVP BIOINFORMATICS HUB IS TO PROVIDE HIGH-AVAILABILITY, STANDARDIZED DATA AND ADVANCED ANALYTICAL CAPABILITIES TO THE HVP JCVI IS ALSO CONTRIBUTING SINGLE CELL GENOMICS ASSAYS AND ANALYSIS EXAMINING CELLULAR RESPONSES TO HEPATITIS B VACCINATION CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE (CIRM) - JCVI, IN COLLABORATION WITH THE UNIVERSITY OF CALIFORNIA, SANTA CRUZ, THE UNIVERSITY OF CALIFORNIA, SAN DIEGO, AND STANFORD UNIVERSITY, IS INVOLVED IN THE DEVELOPMENT OF THE MAIN DATA MANAGEMENT PORTAL FOR THE CIRM CENTER OF EXCELLENCE IN STEM CELL GENOMICS (CESCG) JCVI'S ROLE HAS BEEN TO DEVELOP A SERIES OF DATA STANDARDS TO SUPPORT THE INTEGRATION AND DISSEMINATION OF CESCG EXPERIMENTAL GENOMICS DATA, AND TO DEVELOP NOVEL STATISTICAL METHODS FOR SINGLE CELL GENOMICS DATA ANALYSIS NASA - JCVI HAS RECEIVED FUNDING FROM NASA FOR UNDERSTANDING THE IMPACT OF SPACE TRAVEL ON THE HUMAN MICROBIOME NATIONAL SCIENCE FOUNDATION (NSF) - DURING 2018 JCVI PORTFOLIO INCLUDED MULTIPLE AWARDS FROM THE NSF THAT ENCOMPASSED DIVERSE AREAS OF RESEARCH IN ENVIRONMENTAL MICROBIOLOGY, BIOREMEDIATION, COMPUTATIONAL BIOLOGY, AND EDUCATION ONE LARGE PROGRAM IS DEVOTED TO DEVELOPMENT OF A VACCINE TO PREVENT BOVINE PLEUROPNEUMONIA, AN INFECTIOUS DISEASE OF CATTLE IN SUB-SAHARAN AFRICA SEVERAL GRANTS PERTAIN TO ENVIRONMENTAL MICROBIOLOGY, ANALYZING THE ROLES OF MICROBES IN IMPORTANT ECOSYSTEMS THROUGHOUT THE WORLD COLLABORATIVE RESEARCH IRON BIOAVAILABILITY IN HIGH-CO<sub>2</sub> OCEANS NEW PERSPECTIVES ON IRON ACQUISITION MECHANISMS IN DIATOMS WITH THIS PROJECT THE JCVI SEEKS TO UNDERSTAND THE DIFFERENTIAL SENSITIVITY OF DIATOM IRON ACQUISITION STRATEGIES TO CHANGES IN SEAWATER PH AND CARBONATE CHEMISTRY ULTIMATELY A MORE THOROUGH AND DETAILED MECHANISTIC UNDERSTANDING OF DIATOM IRON UPTAKE PATHWAYS WILL FACILITATE A MUCH-IMPROVED ABILITY TO FORECAST THE IMPACT OF ANTICIPATED CHANGES IN OCEAN PH AND INORGANIC CARBON CHEMISTRY ON RATES OF IRON UPTAKE BY DIATOMS THIS CRITICAL BIOGEOCHEMICAL ISSUE IS ADDRESSED THROUGH TRACE METAL CLEAN MANIPULATION EXPERIMENTS INCORPORATING STATE-OF-THE-ART ANALYTICAL METHODOLOGY TO PROBE PHYTOPLANKTON CELLULAR PHYSIOLOGY AND BIOGEOCHEMISTRY IN LABORATORY CULTURES AND NATURAL COMMUNITIES IN THE FIRST YEAR, LABORATORY EXPERIMENTS WITH A MODEL PENNATE DIATOM LEVERAGE A COLLECTION OF TARGETED KNOCKOUT TRANSGENIC LINES TO EVALUATE THE SUBSTRATE SPECIFICITY AND RELATIVE IMPORTANCE OF DISTINCT IRON ASSIMILATION PATHWAYS UNDER A RANGE OF PCO<sub>2</sub> AND IRON AVAILABILITY CONDITIONS ADDITIONALLY, QUANTITATION OF MRNA AND PROTEINS FOR KEY DIATOM IRON ASSIMILATION PATHWAYS IN NATURAL COMMUNITIES IN THE SOUTHERN CALIFORNIA CURRENT FURTHER CLARIFY THE RELATIVE IMPORTANCE AND SENSITIVITY OF DISTINCT IRON ASSIMILATION PATHWAYS IN RELATION TO PCO<sub>2</sub> AND IRON AVAILABILITY IN YEAR TWO A LAGRANGIAN STUDY OF IRON UPTAKE RATES AND ASSOCIATED MRNA AND PROTEIN ABUNDANCE IS PERFORMED ON UPWELLED HIGH PCO<sub>2</sub> WATER OVER THE COURSE OF OFFSHORE ADVECTION ADDITIONALLY, WE CONDUCT MESOCOSM EXPERIMENTS USING NATURALLY ELEVATED HIGH PCO<sub>2</sub> SEAWATER AS WELL AS LABORATORY EXPERIMENTS ON MULTIPLEX KNOCKOUT LINES YEAR THREE IS DEDICATED TO DATA ANALYSES AND OVERALL PROJECT SYNTHESIS OVERALL AIMS OF THE RESEARCH ACTIVITIES INCLUDE, 1) DEVELOPMENT AND VALIDATION OF A REFINED CONCEPTUAL MODEL OF IRON UPTAKE IN KEY MARINE PHYTOPLANKTON AND SUBSEQUENT UTILIZATION OF THE MODEL TO CHARACTERIZE THE SENSITIVITY OF DISTINCT IRON UPTAKE PATHWAYS TO THE EFFECTS OF OCEAN ACIDIFICATION, AND 2) DETERMINATION OF THE EFFECTS OF ACIDIFICATION ON IRON UPTAKE, AND QUANTIFICATION OF THE RELATIVE CONTRIBUTION OF DISTINCT IRON ACQUISITION PATHWAYS IN HIGH PCO<sub>2</sub> PHYTOPLANKTON COMMUNITIES</p>	

**4d** Other program services (Describe in Schedule O )

(Expenses \$ 6,410,381 including grants of \$ 309,310 ) (Revenue \$ 1,188,068 )

**4e** Total program service expenses 23,498,841

**Part IV Checklist of Required Schedules**

	Yes	No
<b>1</b> Is the organization described in section 501(c)(3) or 4947(a)(1) (other than a private foundation)? If "Yes," complete Schedule A	<b>1</b> Yes	
<b>2</b> Is the organization required to complete Schedule B, Schedule of Contributors (see instructions)?	<b>2</b> Yes	
<b>3</b> Did the organization engage in direct or indirect political campaign activities on behalf of or in opposition to candidates for public office? If "Yes," complete Schedule C, Part I	<b>3</b>	No
<b>4 Section 501(c)(3) organizations.</b> Did the organization engage in lobbying activities, or have a section 501(h) election in effect during the tax year? If "Yes," complete Schedule C, Part II	<b>4</b>	No
<b>5</b> Is the organization a section 501(c)(4), 501(c)(5), or 501(c)(6) organization that receives membership dues, assessments, or similar amounts as defined in Revenue Procedure 98-19? If "Yes," complete Schedule C, Part III	<b>5</b>	No
<b>6</b> Did the organization maintain any donor advised funds or any similar funds or accounts for which donors have the right to provide advice on the distribution or investment of amounts in such funds or accounts? If "Yes," complete Schedule D, Part I	<b>6</b>	No
<b>7</b> Did the organization receive or hold a conservation easement, including easements to preserve open space, the environment, historic land areas, or historic structures? If "Yes," complete Schedule D, Part II	<b>7</b>	No
<b>8</b> Did the organization maintain collections of works of art, historical treasures, or other similar assets? If "Yes," complete Schedule D, Part III	<b>8</b> Yes	
<b>9</b> Did the organization report an amount in Part X, line 21 for escrow or custodial account liability, serve as a custodian for amounts not listed in Part X, or provide credit counseling, debt management, credit repair, or debt negotiation services? If "Yes," complete Schedule D, Part IV	<b>9</b>	No
<b>10</b> Did the organization, directly or through a related organization, hold assets in temporarily restricted endowments, permanent endowments, or quasi-endowments? If "Yes," complete Schedule D, Part V	<b>10</b>	No
<b>11</b> If the organization's answer to any of the following questions is "Yes," then complete Schedule D, Parts VI, VII, VIII, IX, or X as applicable		
<b>a</b> Did the organization report an amount for land, buildings, and equipment in Part X, line 10? If "Yes," complete Schedule D, Part VI	<b>11a</b> Yes	
<b>b</b> Did the organization report an amount for investments—other securities in Part X, line 12 that is 5% or more of its total assets reported in Part X, line 16? If "Yes," complete Schedule D, Part VII	<b>11b</b>	No
<b>c</b> Did the organization report an amount for investments—program related in Part X, line 13 that is 5% or more of its total assets reported in Part X, line 16? If "Yes," complete Schedule D, Part VIII	<b>11c</b>	No
<b>d</b> Did the organization report an amount for other assets in Part X, line 15 that is 5% or more of its total assets reported in Part X, line 16? If "Yes," complete Schedule D, Part IX	<b>11d</b>	No
<b>e</b> Did the organization report an amount for other liabilities in Part X, line 25? If "Yes," complete Schedule D, Part X	<b>11e</b> Yes	
<b>f</b> Did the organization's separate or consolidated financial statements for the tax year include a footnote that addresses the organization's liability for uncertain tax positions under FIN 48 (ASC 740)? If "Yes," complete Schedule D, Part X	<b>11f</b> Yes	
<b>12a</b> Did the organization obtain separate, independent audited financial statements for the tax year? If "Yes," complete Schedule D, Parts XI and XII	<b>12a</b> Yes	
<b>b</b> Was the organization included in consolidated, independent audited financial statements for the tax year? If "Yes," and if the organization answered "No" to line 12a, then completing Schedule D, Parts XI and XII is optional	<b>12b</b>	No
<b>13</b> Is the organization a school described in section 170(b)(1)(A)(ii)? If "Yes," complete Schedule E	<b>13</b>	No
<b>14a</b> Did the organization maintain an office, employees, or agents outside of the United States?	<b>14a</b>	No
<b>b</b> Did the organization have aggregate revenues or expenses of more than \$10,000 from grantmaking, fundraising, business, investment, and program service activities outside the United States, or aggregate foreign investments valued at \$100,000 or more? If "Yes," complete Schedule F, Parts I and IV	<b>14b</b> Yes	
<b>15</b> Did the organization report on Part IX, column (A), line 3, more than \$5,000 of grants or other assistance to or for any foreign organization? If "Yes," complete Schedule F, Parts II and IV	<b>15</b> Yes	
<b>16</b> Did the organization report on Part IX, column (A), line 3, more than \$5,000 of aggregate grants or other assistance to or for foreign individuals? If "Yes," complete Schedule F, Parts III and IV	<b>16</b>	No
<b>17</b> Did the organization report a total of more than \$15,000 of expenses for professional fundraising services on Part IX, column (A), lines 6 and 11e? If "Yes," complete Schedule G, Part I (see instructions)	<b>17</b>	No
<b>18</b> Did the organization report more than \$15,000 total of fundraising event gross income and contributions on Part VIII, lines 1c and 8a? If "Yes," complete Schedule G, Part II	<b>18</b>	No
<b>19</b> Did the organization report more than \$15,000 of gross income from gaming activities on Part VIII, line 9a? If "Yes," complete Schedule G, Part III	<b>19</b>	No
<b>20a</b> Did the organization operate one or more hospital facilities? If "Yes," complete Schedule H	<b>20a</b>	No
<b>b</b> If "Yes" to line 20a, did the organization attach a copy of its audited financial statements to this return?	<b>20b</b>	
<b>21</b> Did the organization report more than \$5,000 of grants or other assistance to any domestic organization or domestic government on Part IX, column (A), line 1? If "Yes," complete Schedule I, Parts I and II	<b>21</b> Yes	
<b>22</b> Did the organization report more than \$5,000 of grants or other assistance to or for domestic individuals on Part IX, column (A), line 2? If "Yes," complete Schedule I, Parts I and III	<b>22</b>	No

**Part IV Checklist of Required Schedules (continued)**

	Yes	No
<b>23</b> Did the organization answer "Yes" to Part VII, Section A, line 3, 4, or 5 about compensation of the organization's current and former officers, directors, trustees, key employees, and highest compensated employees? <i>If "Yes," complete Schedule J</i> . . . . .	<b>23</b> Yes	
<b>24a</b> Did the organization have a tax-exempt bond issue with an outstanding principal amount of more than \$100,000 as of the last day of the year, that was issued after December 31, 2002? <i>If "Yes," answer lines 24b through 24d and complete Schedule K. If "No," go to line 25a</i> . . . . .	<b>24a</b> Yes	
<b>b</b> Did the organization invest any proceeds of tax-exempt bonds beyond a temporary period exception? . . . . .	<b>24b</b>	No
<b>c</b> Did the organization maintain an escrow account other than a refunding escrow at any time during the year to defease any tax-exempt bonds? . . . . .	<b>24c</b>	No
<b>d</b> Did the organization act as an "on behalf of" issuer for bonds outstanding at any time during the year? . . . . .	<b>24d</b>	No
<b>25a Section 501(c)(3), 501(c)(4), and 501(c)(29) organizations.</b> Did the organization engage in an excess benefit transaction with a disqualified person during the year? <i>If "Yes," complete Schedule L, Part I</i> . . . . .	<b>25a</b>	No
<b>b</b> Is the organization aware that it engaged in an excess benefit transaction with a disqualified person in a prior year, and that the transaction has not been reported on any of the organization's prior Forms 990 or 990-EZ? <i>If "Yes," complete Schedule L, Part I</i> . . . . .	<b>25b</b>	No
<b>26</b> Did the organization report any amount on Part X, line 5, 6, or 22 for receivables from or payables to any current or former officers, directors, trustees, key employees, highest compensated employees, or disqualified persons? <i>If "Yes," complete Schedule L, Part II</i> . . . . .	<b>26</b>	No
<b>27</b> Did the organization provide a grant or other assistance to an officer, director, trustee, key employee, substantial contributor or employee thereof, a grant selection committee member, or to a 35% controlled entity or family member of any of these persons? <i>If "Yes," complete Schedule L, Part III</i> . . . . .	<b>27</b>	No
<b>28</b> Was the organization a party to a business transaction with one of the following parties (see Schedule L, Part IV instructions for applicable filing thresholds, conditions, and exceptions) <b>a</b> A current or former officer, director, trustee, or key employee? <i>If "Yes," complete Schedule L, Part IV</i> . . . . .	<b>28a</b>	No
<b>b</b> A family member of a current or former officer, director, trustee, or key employee? <i>If "Yes," complete Schedule L, Part IV</i> . . . . .	<b>28b</b>	No
<b>c</b> An entity of which a current or former officer, director, trustee, or key employee (or a family member thereof) was an officer, director, trustee, or direct or indirect owner? <i>If "Yes," complete Schedule L, Part IV</i> . . . . .	<b>28c</b> Yes	
<b>29</b> Did the organization receive more than \$25,000 in non-cash contributions? <i>If "Yes," complete Schedule M</i> . . . . .	<b>29</b> Yes	
<b>30</b> Did the organization receive contributions of art, historical treasures, or other similar assets, or qualified conservation contributions? <i>If "Yes," complete Schedule M</i> . . . . .	<b>30</b>	No
<b>31</b> Did the organization liquidate, terminate, or dissolve and cease operations? <i>If "Yes," complete Schedule N, Part I</i> . . . . .	<b>31</b>	No
<b>32</b> Did the organization sell, exchange, dispose of, or transfer more than 25% of its net assets? <i>If "Yes," complete Schedule N, Part II</i> . . . . .	<b>32</b>	No
<b>33</b> Did the organization own 100% of an entity disregarded as separate from the organization under Regulations sections 301.7701-2 and 301.7701-3? <i>If "Yes," complete Schedule R, Part I</i> . . . . .	<b>33</b> Yes	
<b>34</b> Was the organization related to any tax-exempt or taxable entity? <i>If "Yes," complete Schedule R, Part II, III, or IV, and Part V, line 1</i> . . . . .	<b>34</b>	No
<b>35a</b> Did the organization have a controlled entity within the meaning of section 512(b)(13)?	<b>35a</b>	No
<b>b</b> If "Yes" to line 35a, did the organization receive any payment from or engage in any transaction with a controlled entity within the meaning of section 512(b)(13)? <i>If "Yes," complete Schedule R, Part V, line 2</i> . . . . .	<b>35b</b>	
<b>36 Section 501(c)(3) organizations.</b> Did the organization make any transfers to an exempt non-charitable related organization? <i>If "Yes," complete Schedule R, Part V, line 2</i> . . . . .	<b>36</b>	No
<b>37</b> Did the organization conduct more than 5% of its activities through an entity that is not a related organization and that is treated as a partnership for federal income tax purposes? <i>If "Yes," complete Schedule R, Part VI</i> . . . . .	<b>37</b>	No
<b>38</b> Did the organization complete Schedule O and provide explanations in Schedule O for Part VI, lines 11b and 19? <b>Note.</b> All Form 990 filers are required to complete Schedule O . . . . .	<b>38</b> Yes	

**Part V Statements Regarding Other IRS Filings and Tax Compliance**Check if Schedule O contains a response or note to any line in this Part V . . . . . ☐

	Yes	No
<b>1a</b> Enter the number reported in Box 3 of Form 1096. Enter -0- if not applicable . . . . .	<b>1a</b> 36	
<b>b</b> Enter the number of Forms W-2G included in line 1a. Enter -0- if not applicable . . . . .	<b>1b</b> 0	
<b>c</b> Did the organization comply with backup withholding rules for reportable payments to vendors and reportable gaming (gambling) winnings to prize winners? . . . . .	<b>1c</b> Yes	

<b>2a</b> Enter the number of employees reported on Form W-3, Transmittal of Wage and Tax Statements, filed for the calendar year ending with or within the year covered by this return . . . . .		<b>2a</b>	225			
<b>b</b> If at least one is reported on line 2a, did the organization file all required federal employment tax returns? <b>Note.</b> If the sum of lines 1a and 2a is greater than 250, you may be required to e-file (see instructions)				<b>2b</b>	Yes	
<b>3a</b> Did the organization have unrelated business gross income of \$1,000 or more during the year? . . . . .				<b>3a</b>	Yes	
<b>b</b> If "Yes," has it filed a Form 990-T for this year? If "No" to line 3b, provide an explanation in Schedule O . . . . .				<b>3b</b>	Yes	
<b>4a</b> At any time during the calendar year, did the organization have an interest in, or a signature or other authority over, a financial account in a foreign country (such as a bank account, securities account, or other financial account)? . . . . .				<b>4a</b>		No
<b>b</b> If "Yes," enter the name of the foreign country <span style="border-bottom: 1px solid black; display: inline-block; width: 200px;"></span> See instructions for filing requirements for FinCEN Form 114, Report of Foreign Bank and Financial Accounts (FBAR)						
<b>5a</b> Was the organization a party to a prohibited tax shelter transaction at any time during the tax year? . . . . .				<b>5a</b>		No
<b>b</b> Did any taxable party notify the organization that it was or is a party to a prohibited tax shelter transaction?				<b>5b</b>		No
<b>c</b> If "Yes," to line 5a or 5b, did the organization file Form 8886-T? . . . . .				<b>5c</b>		
<b>6a</b> Does the organization have annual gross receipts that are normally greater than \$100,000, and did the organization solicit any contributions that were not tax deductible as charitable contributions? . . . . .				<b>6a</b>		No
<b>b</b> If "Yes," did the organization include with every solicitation an express statement that such contributions or gifts were not tax deductible? . . . . .				<b>6b</b>		
<b>7 Organizations that may receive deductible contributions under section 170(c).</b>						
<b>a</b> Did the organization receive a payment in excess of \$75 made partly as a contribution and partly for goods and services provided to the payor? . . . . .				<b>7a</b>		No
<b>b</b> If "Yes," did the organization notify the donor of the value of the goods or services provided? . . . . .				<b>7b</b>		
<b>c</b> Did the organization sell, exchange, or otherwise dispose of tangible personal property for which it was required to file Form 8282? . . . . .				<b>7c</b>		No
<b>d</b> If "Yes," indicate the number of Forms 8282 filed during the year . . . . .				<b>7d</b>		
<b>e</b> Did the organization receive any funds, directly or indirectly, to pay premiums on a personal benefit contract?				<b>7e</b>		No
<b>f</b> Did the organization, during the year, pay premiums, directly or indirectly, on a personal benefit contract? . . . . .				<b>7f</b>		No
<b>g</b> If the organization received a contribution of qualified intellectual property, did the organization file Form 8899 as required? . . . . .				<b>7g</b>		
<b>h</b> If the organization received a contribution of cars, boats, airplanes, or other vehicles, did the organization file a Form 1098-C? . . . . .				<b>7h</b>		
<b>8 Sponsoring organizations maintaining donor advised funds.</b> Did a donor advised fund maintained by the sponsoring organization have excess business holdings at any time during the year? . . . . .						
				<b>8</b>		
<b>9a</b> Did the sponsoring organization make any taxable distributions under section 4966? . . . . .				<b>9a</b>		
<b>b</b> Did the sponsoring organization make a distribution to a donor, donor advisor, or related person? . . . . .				<b>9b</b>		
<b>10 Section 501(c)(7) organizations.</b> Enter						
<b>a</b> Initiation fees and capital contributions included on Part VIII, line 12 . . . . .				<b>10a</b>		
<b>b</b> Gross receipts, included on Form 990, Part VIII, line 12, for public use of club facilities				<b>10b</b>		
<b>11 Section 501(c)(12) organizations.</b> Enter						
<b>a</b> Gross income from members or shareholders . . . . .				<b>11a</b>		
<b>b</b> Gross income from other sources (Do not net amounts due or paid to other sources against amounts due or received from them ) . . . . .				<b>11b</b>		
<b>12a Section 4947(a)(1) non-exempt charitable trusts.</b> Is the organization filing Form 990 in lieu of Form 1041?						
<b>b</b> If "Yes," enter the amount of tax-exempt interest received or accrued during the year				<b>12b</b>		
<b>13 Section 501(c)(29) qualified nonprofit health insurance issuers.</b>						
<b>a</b> Is the organization licensed to issue qualified health plans in more than one state? <b>Note.</b> See the instructions for additional information the organization must report on Schedule O				<b>13a</b>		
<b>b</b> Enter the amount of reserves the organization is required to maintain by the states in which the organization is licensed to issue qualified health plans . . . . .				<b>13b</b>		
<b>c</b> Enter the amount of reserves on hand . . . . .				<b>13c</b>		
<b>14a</b> Did the organization receive any payments for indoor tanning services during the tax year? . . . . .				<b>14a</b>		No
<b>b</b> If "Yes," has it filed a Form 720 to report these payments? If "No," provide an explanation in Schedule O . . . . .				<b>14b</b>		
<b>15</b> Is the organization subject to the section 4960 tax on payment(s) of more than \$1,000,000 in remuneration or excess parachute payment(s) during the year? If "Yes," see instructions and file Form 4720, Schedule N . . . . .				<b>15</b>	Yes	
<b>16</b> Is the organization an educational institution subject to the section 4968 excise tax on net investment income? If "Yes," complete Form 4720, Schedule O . . . . .				<b>16</b>		No

**Part VI Governance, Management, and Disclosure** For each "Yes" response to lines 2 through 7b below, and for a "No" response to lines 8a, 8b, or 10b below, describe the circumstances, processes, or changes in Schedule O. See instructions.  
Check if Schedule O contains a response or note to any line in this Part VI ☒

### Section A. Governing Body and Management

		Yes	No
<b>1a</b> Enter the number of voting members of the governing body at the end of the tax year	<b>1a</b> 10		
If there are material differences in voting rights among members of the governing body, or if the governing body delegated broad authority to an executive committee or similar committee, explain in Schedule O			
<b>b</b> Enter the number of voting members included in line 1a, above, who are independent	<b>1b</b> 7		
<b>2</b> Did any officer, director, trustee, or key employee have a family relationship or a business relationship with any other officer, director, trustee, or key employee?	<b>2</b>	Yes	
<b>3</b> Did the organization delegate control over management duties customarily performed by or under the direct supervision of officers, directors or trustees, or key employees to a management company or other person?	<b>3</b>		No
<b>4</b> Did the organization make any significant changes to its governing documents since the prior Form 990 was filed?	<b>4</b>		No
<b>5</b> Did the organization become aware during the year of a significant diversion of the organization's assets?	<b>5</b>		No
<b>6</b> Did the organization have members or stockholders?	<b>6</b>		No
<b>7a</b> Did the organization have members, stockholders, or other persons who had the power to elect or appoint one or more members of the governing body?	<b>7a</b>		No
<b>b</b> Are any governance decisions of the organization reserved to (or subject to approval by) members, stockholders, or persons other than the governing body?	<b>7b</b>		No
<b>8</b> Did the organization contemporaneously document the meetings held or written actions undertaken during the year by the following:			
<b>a</b> The governing body?	<b>8a</b>	Yes	
<b>b</b> Each committee with authority to act on behalf of the governing body?	<b>8b</b>	Yes	
<b>9</b> Is there any officer, director, trustee, or key employee listed in Part VII, Section A, who cannot be reached at the organization's mailing address? If "Yes," provide the names and addresses in Schedule O	<b>9</b>		No

### Section B. Policies (This Section B requests information about policies not required by the Internal Revenue Code.)

	Yes	No
<b>10a</b> Did the organization have local chapters, branches, or affiliates?	<b>10a</b>	No
<b>b</b> If "Yes," did the organization have written policies and procedures governing the activities of such chapters, affiliates, and branches to ensure their operations are consistent with the organization's exempt purposes?	<b>10b</b>	
<b>11a</b> Has the organization provided a complete copy of this Form 990 to all members of its governing body before filing the form?	<b>11a</b> Yes	
<b>b</b> Describe in Schedule O the process, if any, used by the organization to review this Form 990		
<b>12a</b> Did the organization have a written conflict of interest policy? If "No," go to line 13	<b>12a</b> Yes	
<b>b</b> Were officers, directors, or trustees, and key employees required to disclose annually interests that could give rise to conflicts?	<b>12b</b> Yes	
<b>c</b> Did the organization regularly and consistently monitor and enforce compliance with the policy? If "Yes," describe in Schedule O how this was done	<b>12c</b> Yes	
<b>13</b> Did the organization have a written whistleblower policy?	<b>13</b> Yes	
<b>14</b> Did the organization have a written document retention and destruction policy?	<b>14</b> Yes	
<b>15</b> Did the process for determining compensation of the following persons include a review and approval by independent persons, comparability data, and contemporaneous substantiation of the deliberation and decision?		
<b>a</b> The organization's CEO, Executive Director, or top management official	<b>15a</b> Yes	
<b>b</b> Other officers or key employees of the organization	<b>15b</b> Yes	
If "Yes" to line 15a or 15b, describe the process in Schedule O (see instructions)		
<b>16a</b> Did the organization invest in, contribute assets to, or participate in a joint venture or similar arrangement with a taxable entity during the year?	<b>16a</b>	No
<b>b</b> If "Yes," did the organization follow a written policy or procedure requiring the organization to evaluate its participation in joint venture arrangements under applicable federal tax law, and take steps to safeguard the organization's exempt status with respect to such arrangements?	<b>16b</b>	

### Section C. Disclosure

**17** List the States with which a copy of this Form 990 is required to be filed: CA, MD

**18** Section 6104 requires an organization to make its Form 1023 (or 1024-A if applicable), 990, and 990-T (501(c)(3)s only) available for public inspection. Indicate how you made these available. Check all that apply.  
☐ Own website ☐ Another's website ☒ Upon request ☐ Other (explain in Schedule O)

**19** Describe in Schedule O whether (and if so, how) the organization made its governing documents, conflict of interest policy, and financial statements available to the public during the tax year

**20** State the name, address, and telephone number of the person who possesses the organization's books and records  
 DR JOHN CRAIG VENTER AND MEGAN WU 4120 CAPRICORN LANE LA JOLLA, CA 92037 (858) 200-1800

**Part VII****Compensation of Officers, Directors, Trustees, Key Employees, Highest Compensated Employees, and Independent Contractors**Check if Schedule O contains a response or note to any line in this Part VII ☐**Section A. Officers, Directors, Trustees, Key Employees, and Highest Compensated Employees****1a** Complete this table for all persons required to be listed. Report compensation for the calendar year ending with or within the organization's tax year.

- List all of the organization's **current** officers, directors, trustees (whether individuals or organizations), regardless of amount of compensation. Enter -0- in columns (D), (E), and (F) if no compensation was paid.

- List all of the organization's **current** key employees, if any. See instructions for definition of "key employee."

- List the organization's five **current** highest compensated employees (other than an officer, director, trustee or key employee) who received reportable compensation (Box 5 of Form W-2 and/or Box 7 of Form 1099-MISC) of more than \$100,000 from the organization and any related organizations.

- List all of the organization's **former** officers, key employees, or highest compensated employees who received more than \$100,000 of reportable compensation from the organization and any related organizations.

- List all of the organization's **former directors or trustees** that received, in the capacity as a former director or trustee of the organization, more than \$10,000 of reportable compensation from the organization and any related organizations.

List persons in the following order: individual trustees or directors; institutional trustees; officers; key employees; highest compensated employees; and former such persons.

☐ Check this box if neither the organization nor any related organization compensated any current officer, director, or trustee

(A) Name and Title	(B) Average hours per week (list any hours for related organizations below dotted line)	(C) Position (do not check more than one box, unless person is both an officer and a director/trustee)						(D) Reportable compensation from the organization (W-2/1099-MISC)	(E) Reportable compensation from related organizations (W-2/1099-MISC)	(F) Estimated amount of other compensation from the organization and related organizations
		Individual trustee or director	Institutional Trustee	Officer	Key employee	Highest compensated employee	Former			
(1) BADR-EL-DIN AMIN PHD ..... TRUSTEE (AS OF 9/18)	4 00 .....	X						0	0	0
(2) HOROWITZREENA ..... TRUSTEE	4 00 .....	X						0	0	0
(3) KNIGHT JESSIE ..... TRUSTEE	4 00 .....	X						0	0	0
(4) KOWALSKI HEATHER ..... CHIEF OPERATING OFFICER	40 00 .....	X		X				94,382	0	0
(5) MCGRORY JACK ..... TRUSTEE	4 00 .....	X						0	0	0
(6) NELSON KAREN ..... PRESIDENT	40 00 .....	X		X				709,371	0	66,166
(7) NORRBY ERLING ..... TRUSTEE	4 00 .....	X						0	0	0
(8) ROMO ALFONSO ..... TRUSTEE	4 00 .....	X						0	0	0
(9) RUGGLES RUDY ..... TRUSTEE	4 00 .....	X						0	0	0
(10) VENTER JOHN CRAIG ..... CHAIRMAN & CHIEF EXEC OFFICER	40 00 .....	X		X				1,193,311	0	46,674
(11) NGUYEN TAI THRU 519 ..... VP OF FINANCE/CFO	40 00 .....			X				176,659	0	24,482
(12) ADELSON JULIE ..... VP, LEG AFFRS/GENERAL COUNSEL	40 00 .....			X				370,815	0	33,575
(13) FRIEDMAN ROBERT M ..... VP FOR POLICY & UNIV RELATION	40 00 .....				X			287,686	0	57,805
(14) PEAKE ANTONY G ..... VP FOR RESEARCH ADMINISTRATION	40 00 .....				X			255,567	0	26,330
(15) PIEPER REMBERT ..... DIRECTOR, ROCKVILLE CAMPUS	40 00 .....				X			273,450	0	31,664
(16) SCHEUERMANN RICHARD H ..... DIRECTOR, LA JOLLA CAMPUS	40 00 .....				X			343,006	0	42,192
(17) STOUT MARTIN ..... CHIEF TECHNOLOGY OFFICER	40 00 .....				X			310,690	0	66,104

**Part VII Section A. Officers, Directors, Trustees, Key Employees, and Highest Compensated Employees** (continued)

(A) Name and Title	(B) Average hours per week (list any hours for related organizations below dotted line)	(C) Position (do not check more than one box, unless person is both an officer and a director/trustee)						(D) Reportable compensation from the organization (W-2/1099-MISC)	(E) Reportable compensation from related organizations (W-2/1099-MISC)	(F) Estimated amount of other compensation from the organization and related organizations
		Individual trustee or director	Institutional Trustee	Officer	Key employee	Highest compensated employee	Former			
(18) GLASS JOHN ..... PROFESSOR	40 00 .....					X		211,261	0	59,179
(19) SMITH HAMILTON O ..... SCIENTIFIC DIRECTOR	40 00 .....					X		332,510	0	23,475
(20) STAYEAS TIMOTHY V ..... DIRECTOR, IT NETWORK/SECURITY	40 00 .....					X		206,364	0	66,897
(21) SUTTON GRANGER G ..... PROFESSOR	40 00 .....					X		217,881	0	69,029
(22) YUMUL MARY ..... VP OF HUMAN RESOURCES	40 00 .....					X		215,193	0	48,380
<b>1b Sub-Total</b> . . . . .										
<b>c Total from continuation sheets to Part VII, Section A</b> . . . . .										
<b>d Total (add lines 1b and 1c)</b> . . . . .								5,198,146	0	661,952

**2** Total number of individuals (including but not limited to those listed above) who received more than \$100,000 of reportable compensation from the organization ► 57

	Yes	No
<b>3</b> Did the organization list any <b>former</b> officer, director or trustee, key employee, or highest compensated employee on line 1a? If "Yes," complete Schedule J for such individual . . . . .		No
<b>4</b> For any individual listed on line 1a, is the sum of reportable compensation and other compensation from the organization and related organizations greater than \$150,000? If "Yes," complete Schedule J for such individual . . . . .	Yes	
<b>5</b> Did any person listed on line 1a receive or accrue compensation from any unrelated organization or individual for services rendered to the organization? If "Yes," complete Schedule J for such person . . . . .		No

**Section B. Independent Contractors**

**1** Complete this table for your five highest compensated independent contractors that received more than \$100,000 of compensation from the organization. Report compensation for the calendar year ending with or within the organization's tax year.

(A) Name and business address	(B) Description of services	(C) Compensation
COOLEY LLP 101 CALIFORNIA STREET SAN FRANCISCO, CA 94111	LEGAL CONSULTING SERVICES	404,918
US SECURITY ASSOCIATES PO BOX 931703 ATLANTA, GA 31193	SECURITY SERVICES	196,141
MOSS ADAMS LLP 4747 EXECUTIVE DRIVE SUITE 1300 SAN DIEGO, CA 92121	ACCOUNTING AND AUDIT SERVICES	108,608

**2** Total number of independent contractors (including but not limited to those listed above) who received more than \$100,000 of compensation from the organization ► 3



Part VIII		Statement of Revenue					
Check if Schedule O contains a response or note to any line in this Part VIII . . . . . <input type="checkbox"/>							
		(A)	(B)	(C)	(D)		
		Total revenue	Related or exempt function revenue	Unrelated business revenue	Revenue excluded from tax under sections 512 - 514		
Contributions, Gifts, Grants and Other Similar Amounts	1a Federated campaigns . . . . .	1a					
	b Membership dues . . . . .	1b					
	c Fundraising events . . . . .	1c					
	d Related organizations . . . . .	1d					
	e Government grants (contributions) . . . . .	1e	21,070,282				
	f All other contributions, gifts, grants, and similar amounts not included above . . . . .	1f	8,941,745				
	g Noncash contributions included in lines 1a - 1f \$ . . . . .		5,923,000				
	h Total. Add lines 1a-1f . . . . . ▶		30,012,027				
Program Service Revenue			Business Code				
	2a SEQUENCING SERVICES REVENUE . . . . .		900099	1,185,959	1,185,959		
	b CLONE REVENUE . . . . .		900099	2,109	2,109		
	c . . . . .						
	d . . . . .						
	e . . . . .						
	f All other program service revenue . . . . .						
	9 Total. Add lines 2a-2f . . . . . ▶		1,188,068				
Other Revenue	3 Investment income (including dividends, interest, and other similar amounts) . . . . . ▶		1,387,304				1,387,304
	4 Income from investment of tax-exempt bond proceeds . . . . . ▶						
	5 Royalties . . . . . ▶						
			(i) Real	(ii) Personal			
	6a Gross rents . . . . .						
	b Less rental expenses . . . . .						
	c Rental income or (loss) . . . . .						
	d Net rental income or (loss) . . . . . ▶						
			(i) Securities	(ii) Other			
	7a Gross amount from sales of assets other than inventory . . . . .		78,050,131 2,690				
	b Less cost or other basis and sales expenses . . . . .		65,466,740 3,644				
	c Gain or (loss) . . . . .		12,583,391 -954				
	d Net gain or (loss) . . . . . ▶		12,582,437				12,582,437
	8a Gross income from fundraising events (not including \$ of contributions reported on line 1c) See Part IV, line 18 . . . . . a						
	b Less direct expenses . . . . . b						
	c Net income or (loss) from fundraising events . . . . . ▶						
	9a Gross income from gaming activities See Part IV, line 19 . . . . . a						
	b Less direct expenses . . . . . b						
	c Net income or (loss) from gaming activities . . . . . ▶						
	10a Gross sales of inventory, less returns and allowances . . . . . a						
b Less cost of goods sold . . . . . b							
c Net income or (loss) from sales of inventory . . . . . ▶							
Miscellaneous Revenue		Business Code					
11a TRANSPORTATION BENEFITS UBI . . . . .		900099		33,991		33,991	
b K-1 PASSTHROUGH . . . . .		900099		-737		-737	
c . . . . .							
d All other revenue . . . . .							
e Total. Add lines 11a-11d . . . . . ▶				33,254			
12 Total revenue. See Instructions . . . . . ▶				45,203,090	1,188,068	33,254	13,969,741

**Part IX Statement of Functional Expenses**

Section 501(c)(3) and 501(c)(4) organizations must complete all columns. All other organizations must complete column (A).

Check if Schedule O contains a response or note to any line in this Part IX ☐

	(A) Total expenses	(B) Program service expenses	(C) Management and general expenses	(D) Fundraising expenses
<b>Do not include amounts reported on lines 6b, 7b, 8b, 9b, and 10b of Part VIII.</b>				
<b>1</b> Grants and other assistance to domestic organizations and domestic governments. See Part IV, line 21.	2,102,860	2,102,860		
<b>2</b> Grants and other assistance to domestic individuals. See Part IV, line 22.				
<b>3</b> Grants and other assistance to foreign organizations, foreign governments, and foreign individuals. See Part IV, line 15 and 16.	62,010	62,010		
<b>4</b> Benefits paid to or for members.				
<b>5</b> Compensation of current officers, directors, trustees, and key employees.	4,409,930	3,051,325	1,358,605	
<b>6</b> Compensation not included above, to disqualified persons (as defined under section 4958(f)(1)) and persons described in section 4958(c)(3)(B).				
<b>7</b> Other salaries and wages.	14,355,221	7,973,339	6,178,464	203,418
<b>8</b> Pension plan accruals and contributions (include section 401 (k) and 403(b) employer contributions).	467,279	274,530	187,684	5,065
<b>9</b> Other employee benefits.	1,605,786	943,411	644,968	17,407
<b>10</b> Payroll taxes.	1,197,615	703,608	481,025	12,982
<b>11</b> Fees for services (non-employees):				
<b>a</b> Management.				
<b>b</b> Legal.	622,996	450	622,546	
<b>c</b> Accounting.	118,068		118,068	
<b>d</b> Lobbying.				
<b>e</b> Professional fundraising services. See Part IV, line 17.				
<b>f</b> Investment management fees.	201,000		201,000	
<b>g</b> Other (If line 11g amount exceeds 10% of line 25, column (A) amount, list line 11g expenses on Schedule O).	741,800	259,716	481,784	300
<b>12</b> Advertising and promotion.	58,734		58,734	
<b>13</b> Office expenses.	545,113	263,664	278,519	2,930
<b>14</b> Information technology.	1,274,930	91,813	1,183,045	72
<b>15</b> Royalties.				
<b>16</b> Occupancy.	1,563,644	1,215,351	328,376	19,917
<b>17</b> Travel.	524,537	263,119	251,703	9,715
<b>18</b> Payments of travel or entertainment expenses for any federal, state, or local public officials.				
<b>19</b> Conferences, conventions, and meetings.	137,671	94,532	42,238	901
<b>20</b> Interest.	1,006,715	650,357	348,616	7,742
<b>21</b> Payments to affiliates.				
<b>22</b> Depreciation, depletion, and amortization.	2,899,077	1,671,867	1,212,611	14,599
<b>23</b> Insurance.	527,443	227,714	298,174	1,555
<b>24</b> Other expenses. Itemize expenses not covered above (List miscellaneous expenses in line 24e. If line 24e amount exceeds 10% of line 25, column (A) amount, list line 24e expenses on Schedule O):				
<b>a</b> LAB EQUIPMENT/SUPPLIES	4,001,322	3,611,192	390,097	33
<b>b</b> BAD DEBT EXPENSE	117,406		117,406	
<b>c</b> BOOKS AND SUBSCRIPTIONS	110,377	1,754	108,473	150
<b>d</b>				
<b>e</b> All other expenses	159,969	36,229	116,042	7,698
<b>25</b> Total functional expenses. Add lines 1 through 24e.	38,811,503	23,498,841	15,008,178	304,484
<b>26</b> Joint costs. Complete this line only if the organization reported in column (B) joint costs from a combined educational campaign and fundraising solicitation. Check here <input type="checkbox"/> if following SOP 98-2 (ASC 958-720).				

**Part X Balance Sheet**Check if Schedule O contains a response or note to any line in this Part IX ☐

				(A) Beginning of year		(B) End of year
<b>Assets</b>	<b>1</b>	Cash—non-interest-bearing . . . . .		2,455,323	<b>1</b>	4,253,735
	<b>2</b>	Savings and temporary cash investments . . . . .		4,384,121	<b>2</b>	2,624,266
	<b>3</b>	Pledges and grants receivable, net . . . . .		3,833,858	<b>3</b>	4,241,716
	<b>4</b>	Accounts receivable, net . . . . .		140,284	<b>4</b>	375,164
	<b>5</b>	Loans and other receivables from current and former officers, directors, trustees, key employees, and highest compensated employees. Complete Part II of Schedule L . . . . .			<b>5</b>	
	<b>6</b>	Loans and other receivables from other disqualified persons (as defined under section 4958(f)(1)), persons described in section 4958(c)(3)(B), and contributing employers and sponsoring organizations of section 501(c)(9) voluntary employees' beneficiary organizations (see instructions). Complete Part II of Schedule L . . . . .			<b>6</b>	
	<b>7</b>	Notes and loans receivable, net . . . . .			<b>7</b>	
	<b>8</b>	Inventories for sale or use . . . . .			<b>8</b>	
	<b>9</b>	Prepaid expenses and deferred charges . . . . .		738,159	<b>9</b>	866,516
	<b>10a</b>	Land, buildings, and equipment—cost or other basis. Complete Part VI of Schedule D . . . . .	<b>10a</b>	76,176,984		
	<b>b</b>	Less: accumulated depreciation . . . . .	<b>10b</b>	25,436,535		
				51,576,780	<b>10c</b>	50,740,449
	<b>11</b>	Investments—publicly traded securities . . . . .		63,599,654	<b>11</b>	50,308,884
	<b>12</b>	Investments—other securities. See Part IV, line 11 . . . . .		1,854,163	<b>12</b>	1,553,980
	<b>13</b>	Investments—program-related. See Part IV, line 11 . . . . .		583,978	<b>13</b>	0
	<b>14</b>	Intangible assets . . . . .			<b>14</b>	
<b>15</b>	Other assets. See Part IV, line 11 . . . . .		2,780,442	<b>15</b>	2,841,834	
<b>16</b>	<b>Total assets.</b> Add lines 1 through 15 (must equal line 34) . . . . .		131,946,762	<b>16</b>	117,806,544	
<b>Liabilities</b>	<b>17</b>	Accounts payable and accrued expenses . . . . .		4,246,249	<b>17</b>	5,772,850
	<b>18</b>	Grants payable . . . . .			<b>18</b>	
	<b>19</b>	Deferred revenue . . . . .		2,532,435	<b>19</b>	2,556,527
	<b>20</b>	Tax-exempt bond liabilities . . . . .		26,360,042	<b>20</b>	25,089,970
	<b>21</b>	Escrow or custodial account liability. Complete Part IV of Schedule D . . . . .			<b>21</b>	
	<b>22</b>	Loans and other payables to current and former officers, directors, trustees, key employees, highest compensated employees, and disqualified persons. Complete Part II of Schedule L . . . . .			<b>22</b>	
	<b>23</b>	Secured mortgages and notes payable to unrelated third parties . . . . .		1,608,716	<b>23</b>	1,608,716
	<b>24</b>	Unsecured notes and loans payable to unrelated third parties . . . . .			<b>24</b>	
	<b>25</b>	Other liabilities (including federal income tax, payables to related third parties, and other liabilities not included on lines 17 - 24). Complete Part X of Schedule D . . . . .		119,303	<b>25</b>	55,910
	<b>26</b>	<b>Total liabilities.</b> Add lines 17 through 25 . . . . .		34,866,745	<b>26</b>	35,083,973
<b>Net Assets or Fund Balances</b>	<b>Organizations that follow SFAS 117 (ASC 958), check here <input checked="" type="checkbox"/> and complete lines 27 through 29, and lines 33 and 34.</b>					
	<b>27</b>	Unrestricted net assets . . . . .		96,648,699	<b>27</b>	82,229,932
	<b>28</b>	Temporarily restricted net assets . . . . .		431,318	<b>28</b>	492,639
	<b>29</b>	Permanently restricted net assets . . . . .			<b>29</b>	
	<b>Organizations that do not follow SFAS 117 (ASC 958), check here <input type="checkbox"/> and complete lines 30 through 34.</b>					
	<b>30</b>	Capital stock or trust principal, or current funds . . . . .			<b>30</b>	
	<b>31</b>	Paid-in or capital surplus, or land, building or equipment fund . . . . .			<b>31</b>	
	<b>32</b>	Retained earnings, endowment, accumulated income, or other funds . . . . .			<b>32</b>	
	<b>33</b>	<b>Total net assets or fund balances</b> . . . . .		97,080,017	<b>33</b>	82,722,571
	<b>34</b>	<b>Total liabilities and net assets/fund balances</b> . . . . .		131,946,762	<b>34</b>	117,806,544

**Part XI Reconciliation of Net Assets**Check if Schedule O contains a response or note to any line in this Part XI ☒

<b>1</b>	Total revenue (must equal Part VIII, column (A), line 12)	<b>1</b>	45,203,090
<b>2</b>	Total expenses (must equal Part IX, column (A), line 25)	<b>2</b>	38,811,503
<b>3</b>	Revenue less expenses Subtract line 2 from line 1	<b>3</b>	6,391,587
<b>4</b>	Net assets or fund balances at beginning of year (must equal Part X, line 33, column (A))	<b>4</b>	97,080,017
<b>5</b>	Net unrealized gains (losses) on investments	<b>5</b>	-20,749,770
<b>6</b>	Donated services and use of facilities	<b>6</b>	
<b>7</b>	Investment expenses	<b>7</b>	
<b>8</b>	Prior period adjustments	<b>8</b>	
<b>9</b>	Other changes in net assets or fund balances (explain in Schedule O)	<b>9</b>	737
<b>10</b>	Net assets or fund balances at end of year Combine lines 3 through 9 (must equal Part X, line 33, column (B))	<b>10</b>	82,722,571

**Part XII Financial Statements and Reporting**Check if Schedule O contains a response or note to any line in this Part XII ☐

	Yes	No
<b>1</b> Accounting method used to prepare the Form 990 <input type="checkbox"/> Cash <input checked="" type="checkbox"/> Accrual <input type="checkbox"/> Other _____ If the organization changed its method of accounting from a prior year or checked "Other," explain in Schedule O		
<b>2a</b> Were the organization's financial statements compiled or reviewed by an independent accountant? If 'Yes,' check a box below to indicate whether the financial statements for the year were compiled or reviewed on a separate basis, consolidated basis, or both <input type="checkbox"/> Separate basis <input type="checkbox"/> Consolidated basis <input type="checkbox"/> Both consolidated and separate basis		No
<b>b</b> Were the organization's financial statements audited by an independent accountant? If 'Yes,' check a box below to indicate whether the financial statements for the year were audited on a separate basis, consolidated basis, or both <input checked="" type="checkbox"/> Separate basis <input type="checkbox"/> Consolidated basis <input type="checkbox"/> Both consolidated and separate basis	Yes	
<b>c</b> If "Yes," to line 2a or 2b, does the organization have a committee that assumes responsibility for oversight of the audit, review, or compilation of its financial statements and selection of an independent accountant? If the organization changed either its oversight process or selection process during the tax year, explain in Schedule O	Yes	
<b>3a</b> As a result of a federal award, was the organization required to undergo an audit or audits as set forth in the Single Audit Act and OMB Circular A-133?	Yes	
<b>b</b> If "Yes," did the organization undergo the required audit or audits? If the organization did not undergo the required audit or audits, explain why in Schedule O and describe any steps taken to undergo such audits	Yes	

**Software ID:**  
**Software Version:**  
**EIN:** 52-1842938  
**Name:** J CRAIG VENTER INSTITUTE

Form 990 (2018)

**Form 990, Part III, Line 4a:**

DEPARTMENT OF HEALTH AND HUMAN SERVICES DURING 2018, JCVI HAD MULTIPLE ACTIVE RESEARCH GRANTS AND CONTRACTS FROM AGENCIES WITHIN THE DHHS AMONG THESE WAS JCVI'S LARGEST FUNDED RESEARCH PROGRAM, A GRANT FROM THE NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES (NIAID/NIH) TO SERVE AS A DESIGNATED GENOME CENTER FOR INFECTIOUS DISEASES (GCID). THE GCID PROGRAM SCOPE INCLUDES ANALYSIS OF VIRAL, BACTERIAL, AND PARASITE PATHOGENS. THE BACTERIAL AND PARASITE PROGRAMS HAVE A PARTICULAR EMPHASIS ON ANTIMICROBIAL RESISTANCE. THE BACTERIAL PROGRAM IS FOCUSED ON THE EVOLUTION AND TRANSMISSION OF CARBAPENEM-RESISTANT ENTEROBACTERIACEAE AND OTHER GRAM-NEGATIVE BACTERIA. ALL GENOME SEQUENCE DATA PRODUCED WITH GCID FUNDING IS RAPIDLY DEPOSITED IN PUBLIC REPOSITORIES TO PROMOTE THE WIDEST POSSIBLE USE AMONG RESEARCH SCIENTISTS. JCVI IS THE PRIMARY LEAD OF A LARGE COLLABORATIVE NATIONAL CENTER FOR ADVANCING TRANSLATIONAL SCIENCES (NCATS/NIH) U01 AWARD WITH THE GOAL TO DEVELOP, VALIDATE AND DISSEMINATE A COMPUTATIONAL INFRASTRUCTURE FOR UNBIASED ANALYSIS OF CYTOMETRY DATA FOR BOTH DIAGNOSTIC AND DISCOVERY APPLICATIONS THAT COULD HELP OVERCOME THE CURRENT LIMITATIONS OF MANUAL ANALYSIS AND PROVIDE FOR MORE EFFICIENT, OBJECTIVE, ACCURATE, AND REPRODUCIBLE ANALYSIS OF CYTOMETRY DATA. FLOW CYTOMETRY ANALYSIS IS WIDELY USED IN TRANSLATIONAL RESEARCH LAB TO EXPLORE THE MECHANISMS OF NORMAL AND ABNORMAL BIOLOGICAL PROCESSES AND IN THE CLINICAL DIAGNOSTIC LAB FOR THE IDENTIFICATION AND CLASSIFICATION OF BLOOD-BORNE MALIGNANCIES. HOWEVER, THE CURRENT PRACTICE FOR CYTOMETRY DATA ANALYSIS RELIES ON SUBJECTIVE AND AD HOC "MANUAL GATING" DURING THE YEAR OF 2018, THE PROJECT TEAM OF JCVI, THE UNIVERSITY OF CALIFORNIA, SAN DIEGO (UCSD), THE UNIVERSITY OF CALIFORNIA, IRVINE (UCI), AND STANFORD UNIVERSITY COLLABORATED TO CONTINUE IMPROVING THE ACCESSIBILITY, FUNCTIONALITY, AND USABILITY OF THE PROPOSED INFRASTRUCTURE. THE PROJECT TEAMS ASSEMBLED MULTIPLE FLOW CYTOMETRY DATASETS FROM IMPORTANT BIOMEDICAL PROJECTS CONDUCTED BY TRANSLATIONAL RESEARCHERS AT UC IRVINE AND FROM THE CLINICAL DIAGNOSTICS LAB AT UCSD. THE JCVI TEAM PROCESSED AND ANALYZED THE DATASETS USING THE COMPUTATIONAL INFRASTRUCTURE AND VALIDATED THE ANALYSIS RESULTS USING FOLLOW-UP STUDIES. THE COMPUTATIONAL ANALYSES OF THESE DATASETS HAVE IDENTIFIED NOVEL CELL SUBSETS FROM HUMAN LEUKOCYTES FOR INDEPENDENT ASTHMA RESEARCH PROJECTS BEING CONDUCTED AT PEDIATRICS OF UC IRVINE. THE ANALYSES HAVE ALSO IDENTIFIED A NOVEL COMBINATION OF CELL SURFACE MARKERS FOR PRECISION DIAGNOSIS OF THE CHRONIC LYMPHOCYTIC LEUKEMIA BASED ON THE CLINICAL FLOW CYTOMETRY DATA PROVIDED BY UCSD. THE RESULTS AND FINDINGS HAVE BEEN PUBLISHED ON PEER-REVIEWED JOURNALS OR REPORTED AT SCIENTIFIC CONFERENCES. THE PROJECT TEAM HAVE ALSO BEEN TRAINING THE TRANSLATIONAL RESEARCHERS OF UCI PEDIATRICS AND HEMATOPATHOLOGISTS OF UCSD PATHOLOGY FOR USING THE ADVANCED DATA ANALYTICS TOOLS ON THE COMPUTATIONAL INFRASTRUCTURE THROUGH IN-PERSON SITE VISITS AND WEBEX MEETINGS. ANTIBIOTIC RESISTANCE IS ONE OF THE BIGGEST PUBLIC HEALTH PROBLEMS OF OUR TIME. JCVI IN COLLABORATION WITH NORTHEASTERN UNIVERSITY HAVE DEVELOPED NEW METHODS TO GROW AND EXPLOIT PREVIOUSLY UNCHARACTERIZED MICROBES. JCVI HAS DEVELOPED A TRANSCRIPTION-BASED PLATFORM THAT BIOINFORMATICALLY PREDICTS WHETHER NEW POTENTIAL COMPOUNDS ARE EXPRESSING ANTIBIOTIC PROPERTIES WITH NOVEL MECHANISMS OF ACTION. PROMISING COMPOUNDS ARE VALIDATED AND BECOME LEAD ANTIMICROBIAL COMPOUNDS FOR FURTHER STUDY. JCVI, IN COLLABORATION WITH NORTHRUP GRUMMAN, SERVES AS THE MAIN DEVELOPER OF THE VIRAL PATHOGEN RESOURCE (WWW.VIPRBRC.ORG) AND THE INFLUENZA RESEARCH DATABASE (WWW.FLUDB.ORG). THESE RESOURCES SERVE AS FREE PUBLIC PORTALS TO A WIDE RANGE OF INFORMATION, DATA, AND ANALYTICAL TOOLS FOR INTERPRETING VIRAL GENOMES IN THE CONTEXT OF DISEASE. OVER 3000 RESEARCHERS THROUGHOUT THE WORLD USE THESE RESOURCES EVERY WEEK. SEVERAL ADDITIONAL DHHS GRANTS AT JCVI ARE RELATED TO HUMAN MICROBIOME STUDIES. THE MICROBIOME IS THE COLLECTION OF MICROBES THAT LIVE IN AND ON THE HUMAN BODY, THESE SPECIES HAVE RECEIVED CONSIDERABLE ATTENTION IN RECENT YEARS BECAUSE A NEW APPRECIATION OF THE COMPLEX ROLES THAT THEY PLAY IN HEALTH AND DISEASE. SOME OF THESE STUDIES ARE AIMED AT BASIC CHARACTERIZATION OF THE COMPOSITION AND ACTIVITY OF THE MICROBIOME, WHILE OTHERS SEEK TO UNDERSTAND THE CONTRIBUTION OF THE MICROBIOME TO THE DEVELOPMENT OF VARIOUS DISEASES INCLUDING ALCOHOLIC HEPATITIS, TYPE 1 DIABETES, DENTAL CARIES, DIARRHEA, AND ESOPHAGEAL CANCER, AMONG OTHERS. IN COLLABORATION WITH THE SANFORD BURNHAM PREBYNS INSTITUTE, THE JCVI IS DEVELOPING METHODS TO IDENTIFY NEW DRUGS THAT SPECIFICALLY TARGET AN ENZYME IN THE MALARIA PARASITE THAT WE KNOW IS ESSENTIAL FOR THE GROWTH OF THE PARASITE. MALARIA, A PARASITIC DISEASE TRANSMITTED BY MOSQUITOES, IS STILL A MAJOR THREAT TO PUBLIC HEALTH AND ECONOMIC DEVELOPMENT IN THE TROPICAL AND SUB-TROPICAL REGIONS OF THE GLOBE, AS WELL AS TO TRAVELERS TO THESE AREAS FROM THE DEVELOPED WORLD. CONTINUAL DEVELOPMENT OF NEW DRUGS AND VACCINES IS ESSENTIAL TO ENSURE THAT MALARIA CONTROL IS MAINTAINED TO PREVENT UNNECESSARY ILLNESS AND LOSS OF LIFE. THIS PROJECT HAS SHOWN THAT ONE PARTICULAR CHEMICAL THAT BLOCKS THIS ENZYME CAN KILL MALARIA PARASITES IN THE LABORATORY. THIS COLLABORATION IS NOW DEVELOPING A LABORATORY TEST THAT WE CAN USE TO SCREEN THOUSANDS OF CHEMICALS TO FIND THOSE THAT ARE MORE EFFECTIVE AT KILLING MALARIA PARASITES THAN THE FIRST CHEMICAL. THE INSTITUTE ALSO PARTICIPATES IN THE H3AFRICA PROGRAM VIA A COLLABORATION THE UNIVERSITY OF CAPE TOWN, SOUTH AFRICA, TO TRAIN COLLABORATORS IN HUMAN MICROBIOME ANALYSIS. THE PROGRAM IS SPONSORED BY THE NIH COMMON FUND TO BRING TECHNOLOGICAL RESOURCES AND TRAINING IN A CAPITAL INVESTMENT-INTENSIVE FIELD (GENOMICS) TO THE AFRICAN CONTINENT VIA COLLABORATIONS WITH US SCIENTISTS WITH EXPERTISE IN THIS FIELD.

**Form 990, Part III, Line 4b:**

DEPARTMENT OF ENERGY JCVI IS THE RECIPIENT OF A LARGE COLLABORATIVE ASSISTANCE AWARD FROM THE DOE AWARDED TO THE VALUE OF \$10.7M, THE JCVI AND ITS COLLABORATORS, COLORADO STATE UNIVERSITY, VANDERBILT UNIVERSITY AND THE UNIVERSITY OF CALIFORNIA, SAN DIEGO, SEEK TO LEVERAGE SIGNIFICANT RECENT ADVANCES IN DIATOM GENOME ENGINEERING AND METABOLIC MODELING, INCLUDING THE ABILITY TO INTRODUCE CHROMOSOME-LIKE EXPRESSION PLATFORMS, WHICH SUBSTANTIALLY ADVANCE POSSIBILITIES FOR HIGH-THROUGHPUT GENERATION AND SCREENING OF GENETICALLY ENGINEERED DIATOMS. RESEARCH PROPOSED HERE WILL RESULT IN DRAMATIC IMPROVEMENTS IN THE PREDICTIVE CAPACITY OF EXISTING GENOME SCALE METABOLIC MODELS OF DIATOM METABOLISM. FOR THE FIRST TIME ON A LARGE SCALE, FLUXOMICS, WHICH IS COMPOUND SPECIFIC INCORPORATION OF AN ISOTOPICALLY-LABELED FEEDSTOCK, WILL BE USED TO PROVIDE BETTER FIRST STEP CONSTRAINTS ON CO<sub>2</sub> ASSIMILATION OF IN DIATOMS. STATE-OF-THE-ART HIGH THROUGHPUT IN VITRO EXAMINATIONS OF NEARLY ALL 200 DIATOM TRANSCRIPTION FACTORS WILL BE CONDUCTED TO BETTER UNDERSTAND REGULATORY ARCHITECTURE UNDERLYING DIATOM METABOLISM AS WELL AS SERVE AS A SOURCE FOR NEW TOOLS FOR GENOME ENGINEERING. TAKEN TOGETHER, RESEARCH PROPOSED HERE WILL ADDRESS CURRENTLY LIMITING BOTTLENECKS THROUGH FOSTERING STATE-OF-THE-ART INTEGRATION OF GENOME-SCALE MODELING WITH GENOME ENGINEERING TO OPTIMIZE ENERGY AND METABOLITE FLUX THROUGH SUBCELLULAR COMPARTMENTS TO PROMOTE EFFICIENT PRODUCTION OF HIGH VALUE AND FUEL-RELATED METABOLITES.

---

## Form 990, Part III, Line 4c:

DEPARTMENT OF DEFENSE DURING 2018, JCVI HAD MULTIPLE ACTIVE RESEARCH AWARDS FROM THE DOD. THESE AWARDS FOCUS ON THE UNDERSTANDING OF POLYMICROBIAL INFECTIONS IN WOUNDS, THE DEVELOPMENT OF SYNTHETIC GENOMIC TECHNOLOGIES FOR MANIPULATION OF CHROMOSOMES AND GENOMES AND FOR THE DEVELOPMENT OF SAFE METHODS FOR DNA ISOLATION AND ANALYSIS FROM BIOTHRREAT AGENTS. FUNDED BY THE DEFENSE ADVANCED RESEARCH PROJECTS AGENCY (DARPA) BIOLOGICAL ROBUSTNESS IN COMPLEX SETTINGS (BRICS) PHASE II PROGRAM, THE JCVI IS USING INNOVATIVE RESEARCH APPROACHES TO DEVELOP A MICROBIOME FORENSIC MICROBIAL SYSTEM (FMS) THAT WILL DETECT WHETHER AND WHEN AN OBJECT ENCOUNTERED A PARTICULAR ENVIRONMENT. IN ADDITION, THE FMS SHOULD CONTAIN A SAFETY MECHANISM THAT WILL ENSURE ITS REMOVAL FROM THE ENVIRONMENT FOR CONTAINMENT. THIS FMS WILL ULTIMATELY ALLOW FOR BROAD RANGE FORENSIC APPLICATIONS OF SYNTHETIC MICROBIOMES THAT INCLUDE, BUT ARE NOT LIMITED TO, GEOSOURCING, TRACKING, AND CRIME SCENE INVESTIGATIONS. WOUND MICROBIOME PROJECT - CHRONIC WOUNDS ARE WOUNDS THAT FAIL TO HEAL AFTER 3 MONTHS UNDER STANDARD OF CARE WOUND MANAGEMENT. THE GOAL OF THIS DOD STUDY IS TO GAIN A BETTER UNDERSTANDING OF THE DIFFERENT CLASSES OF MICROBES THAT COULD BE PRESENT IN HUMAN CHRONIC WOUNDS (I.E. THE WOUND MICROBIOME), AND ASK WHETHER SPECIFIC MICROBES OR MICROBIAL COMMUNITIES ARE ASSOCIATED WITH NON-HEALING WOUNDS. NEXT GENERATION SEQUENCING WILL BE USED TO IDENTIFY AND CATALOG THE MICROBIAL SPECIES OF BACTERIA, FUNGI, AND VIRUSES THAT ARE PRESENT IN CHRONIC WOUND SPECIMENS. COMPUTATIONAL AND BIOINFORMATICS ANALYSES OF THE MICROBIAL COMMUNITY DNA SEQUENCES WILL BE CARRIED OUT TO CHARACTERIZE THE PRESENCE ANY PATHOGENIC, VIRULENCE, AND ANTIMICROBIAL RESISTANCE-RELATED GENES AND PATHWAYS. THE EVENTUAL GOAL IS TO IDENTIFY ANY PATHOGENIC SPECIES OR FEATURES THAT ARE ASSOCIATED WITH NON-HEALING WOUNDS, AND COULD BE USED AS DIAGNOSTIC AND TREATMENT TARGETS OF CHRONIC WOUNDS. SYNTHETIC ENGINEERING OF BACTERIOPHAGE FOR TREATMENT OF WOUND INFECTIONS ANTIMICROBIAL RESISTANCE IN BACTERIAL PATHOGENS IS STEADILY INCREASING AND RECOGNIZED AS ONE OF THE GREATEST THREATS TO GLOBAL PUBLIC HEALTH. SHORTLY AFTER THE BEGINNING OF THE WARS IN AFGHANISTAN AND IRAQ, THE MILITARY HEALTH SYSTEM EXPERIENCED A MAJOR INCREASE IN WOUND AND HEALTHCARE-ASSOCIATED INFECTIONS CAUSED BY MULTIDRUG RESISTANT ORGANISMS (MDROs) WITH EXTREMELY LIMITED TREATMENT OPTIONS. FUNDED THROUGH THE US MEDICAL RESEARCH ACQUISITION ACTIVITY, THE JCVI IN COLLABORATION WITH THE MILITARY AND THE WALTER REED ARMY INSTITUTE OF RESEARCH, IS COLLABORATING WITH THE GOAL TO DESIGN, BUILD, TEST AND CHARACTERIZE NOVEL ENGINEERED BACTERIOPHAGE BIOLOGICS SPECIFICALLY TARGETING MDROs FOR USE AS NOVEL THERAPEUTICS FOR TREATING AND PREVENTING COMBAT WOUND INFECTIONS USING PIONEERING TECHNOLOGY DEVELOPED AT JCVI. THIS OBJECTIVE WILL BE ACCOMPLISHED THROUGH EXPERIMENTS FOCUSED ON PRODUCING SYNTHETICALLY ENGINEERED PHAGE WITH AN ENHANCED HOST RANGE SUFFICIENT TO COVER CURRENT AND FUTURE CIRCULATING MDR STRAINS OF *S. AUREUS* AND *K. PNEUMONIAE* COMMONLY FOUND IN THE MILITARY HEALTH SYSTEM, INCLUDING METHICILLIN-RESISTANT *S. AUREUS* AND CARBAPENEM-RESISTANT *K. PNEUMONIAE* STRAINS. CANDIDATE ENGINEERED THERAPEUTIC PHAGE CHASSIS WILL BE PRODUCED, CHARACTERIZED AND TESTED IN MOUSE WOUND INFECTION MODELS BY RESEARCHERS AT WRHAIR AS A PRELUDE TO FUTURE HUMAN USE. IT IS ANTICIPATED THAT WE WILL DEVELOP ONE OR MORE PHAGE CHASSIS CAPABLE OF SPECIFICALLY TARGETING AND KILLING EACH PATHOGEN BOTH IN VITRO AND IN VIVO. FUNDED BY THE DEFENSE THREAT REDUCTION AGENCY (DTRA), THE JCVI IS INVESTIGATING AN ASPECT OF THE WELL-RECOGNIZED PUBLIC HEALTH THREAT OF ANTIBIOTIC DRUG RESISTANCE IN PATHOGENIC BACTERIA. IN ADDITION TO STANDARD BACTERIAL RESISTANCE TO ANTIBIOTICS, INFECTION CAUSING BACTERIA ARE ABLE TO ASSUME A METABOLIC STATE THAT MAKES THE BACTERIA HIGHLY TOLERANT OF MASSIVE DOSES OF ANTIBIOTICS. THIS STATE IS TERMED THE PERSISTENT STATE AND ACCOUNTS FOR ANTIBIOTIC FAILURE IN PATIENTS BEING TREATED FOR INFECTIONS AND FOR THE REEMERGENCE OF AN INFECTION AFTER AN APPARENT CLEARING OF THE DISEASE BY ANTIBIOTIC TREATMENT. JCVI IS INVESTIGATING THE GENETIC/GENOMIC INFRASTRUCTURE OF THE PERSISTENT STATE IN THE PUBLIC HEALTH AND BIOTHRREAT BACTERIAL PATHOGEN *BURKHOLDERIA PSEUDOMALLEI* USING BOTH GENOME BASED TECHNOLOGIES AND TRADITIONAL MICROBIOLOGY APPROACHES WITH THE ULTIMATE GOAL OF FINDING WAYS TO ELIMINATE EVEN BACTERIA IN THE PERSISTENT STATE FROM PATIENTS WITH BACTERIAL INFECTIONS. JCVI, FUNDED THROUGH THE DARPA BIOLOGICAL CONTROL PROGRAM IS APPLYING THE LESSONS LEARNED FROM MINIMIZING AND REORGANIZING A BACTERIAL GENOME TO REMODEL THE GENOME OF AN INDUSTRIALLY USEFUL, VASTLY MORE COMPLICATED EUKARYOTIC YEAST, CALLED *KLUYVEROMYCES MARXIANUS*. IN USING A SINGLE *K. MARXIANUS* CHROMOSOME AS A PLATFORM, JCVI IS DEVELOPING A GENERALIZED SET OF ALGORITHMS FOR MINIMIZATION AND DEFRAGMENTING THE GENES INTO FUNCTIONAL MODULES THAT COULD BE APPLIED TO ALL SMALL GENOME EUKARYOTES, SUCH AS YEASTS, EUKARYOTIC ALGAE, AND PARASITES.

---

<b>SCHEDULE A</b> (Form 990 or 990-EZ)	<b>Public Charity Status and Public Support</b> Complete if the organization is a section 501(c)(3) organization or a section 4947(a)(1) nonexempt charitable trust. ▶ Attach to Form 990 or Form 990-EZ. ▶ Go to <a href="http://www.irs.gov/Form990">www.irs.gov/Form990</a> for the latest information.	OMB No 1545-0047
		<b>2018</b>
		<b>Open to Public Inspection</b>
Department of the Treasury Internal Revenue Service	<b>Name of the organization</b> J CRAIG VENTER INSTITUTE	<b>Employer identification number</b> 52-1842938

**Part I Reason for Public Charity Status** (All organizations must complete this part.) See instructions.

The organization is not a private foundation because it is (For lines 1 through 12, check only one box )

- ☐ **1** A church, convention of churches, or association of churches described in **section 170(b)(1)(A)(i)**.
- ☐ **2** A school described in **section 170(b)(1)(A)(ii)**. (Attach Schedule E (Form 990 or 990-EZ) )
- ☐ **3** A hospital or a cooperative hospital service organization described in **section 170(b)(1)(A)(iii)**.
- ☐ **4** A medical research organization operated in conjunction with a hospital described in **section 170(b)(1)(A)(iii)**. Enter the hospital's name, city, and state
- ☐ **5** An organization operated for the benefit of a college or university owned or operated by a governmental unit described in **section 170(b)(1)(A)(iv)**. (Complete Part II )
- ☐ **6** A federal, state, or local government or governmental unit described in **section 170(b)(1)(A)(v)**.
- ☒ **7** An organization that normally receives a substantial part of its support from a governmental unit or from the general public described in **section 170(b)(1)(A)(vi)**. (Complete Part II )
- ☐ **8** A community trust described in **section 170(b)(1)(A)(vi)** (Complete Part II )
- ☐ **9** An agricultural research organization described in **170(b)(1)(A)(ix)** operated in conjunction with a land-grant college or university or a non-land grant college of agriculture See instructions Enter the name, city, and state of the college or university
- ☐ **10** An organization that normally receives (1) more than 33 1/3% of its support from contributions, membership fees, and gross receipts from activities related to its exempt functions—subject to certain exceptions, and (2) no more than 33 1/3% of its support from gross investment income and unrelated business taxable income (less section 511 tax) from businesses acquired by the organization after June 30, 1975 See **section 509(a)(2)**. (Complete Part III )
- ☐ **11** An organization organized and operated exclusively to test for public safety See **section 509(a)(4)**.
- ☐ **12** An organization organized and operated exclusively for the benefit of, to perform the functions of, or to carry out the purposes of one or more publicly supported organizations described in **section 509(a)(1)** or **section 509(a)(2)**. See **section 509(a)(3)**. Check the box in lines 12a through 12d that describes the type of supporting organization and complete lines 12e, 12f, and 12g
  - ☐ **a Type I.** A supporting organization operated, supervised, or controlled by its supported organization(s), typically by giving the supported organization(s) the power to regularly appoint or elect a majority of the directors or trustees of the supporting organization **You must complete Part IV, Sections A and B.**
  - ☐ **b Type II.** A supporting organization supervised or controlled in connection with its supported organization(s), by having control or management of the supporting organization vested in the same persons that control or manage the supported organization(s) **You must complete Part IV, Sections A and C.**
  - ☐ **c Type III functionally integrated.** A supporting organization operated in connection with, and functionally integrated with, its supported organization(s) (see instructions) **You must complete Part IV, Sections A, D, and E.**
  - ☐ **d Type III non-functionally integrated.** A supporting organization operated in connection with its supported organization(s) that is not functionally integrated The organization generally must satisfy a distribution requirement and an attentiveness requirement (see instructions) **You must complete Part IV, Sections A and D, and Part V.**
  - ☐ **e** Check this box if the organization received a written determination from the IRS that it is a Type I, Type II, Type III functionally integrated, or Type III non-functionally integrated supporting organization
  - f** Enter the number of supported organizations
- g** Provide the following information about the supported organization(s)

(i) Name of supported organization	(ii) EIN	(iii) Type of organization (described on lines 1- 10 above (see instructions))	(iv) Is the organization listed in your governing document?		(v) Amount of monetary support (see instructions)	(vi) Amount of other support (see instructions)
			Yes	No		
<b>Total</b>						



**Part II**

**Support Schedule for Organizations Described in Sections 170(b)(1)(A)(iv), 170(b)(1)(A)(vi), and 170(b)(1)(A)(ix)**  
(Complete only if you checked the box on line 5, 7, 8, or 9 of Part I or if the organization failed to qualify under Part III. If the organization fails to qualify under the tests listed below, please complete Part III.)

Section A. Public Support							
	Calendar year (or fiscal year beginning in) ►	(a) 2014	(b) 2015	(c) 2016	(d) 2017	(e) 2018	(f) Total
1	Gifts, grants, contributions, and membership fees received (Do not include any "unusual grant ")	35,600,497	31,545,719	26,768,604	20,421,917	30,012,027	144,348,764
2	Tax revenues levied for the organization's benefit and either paid to or expended on its behalf						
3	The value of services or facilities furnished by a governmental unit to the organization without charge						
4	<b>Total.</b> Add lines 1 through 3	35,600,497	31,545,719	26,768,604	20,421,917	30,012,027	144,348,764
5	The portion of total contributions by each person (other than a governmental unit or publicly supported organization) included on line 1 that exceeds 2% of the amount shown on line 11, column (f)						3,980,079
6	<b>Public support.</b> Subtract line 5 from line 4						140,368,685

Section B. Total Support							
Calendar year (or fiscal year beginning in) ►		(a)2014	(b)2015	(c)2016	(d)2017	(e)2018	(f)Total
7	Amounts from line 4	35,600,497	31,545,719	26,768,604	20,421,917	30,012,027	144,348,764
8	Gross income from interest, dividends, payments received on securities loans, rents, royalties and income from similar sources	2,950,770	31,325,751	1,482,196	1,373,809	1,387,304	38,519,830
9	Net income from unrelated business activities, whether or not the business is regularly carried on						
10	Other income. Do not include gain or loss from the sale of capital assets (Explain in Part VI.)	208,097					208,097
11	<b>Total support.</b> Add lines 7 through 10						183,076,691
12	Gross receipts from related activities, etc. (see instructions)					12	2,982,454
13	<b>First five years.</b> If the Form 990 is for the organization's first, second, third, fourth, or fifth tax year as a section 501(c)(3) organization, check this box and <b>stop here</b> . . . . .						<input type="checkbox"/>

Section C. Computation of Public Support Percentage		
<b>14</b>	Public support percentage for 2018 (line 6, column (f) divided by line 11, column (f))	<b>14</b> 76.670 %
<b>15</b>	Public support percentage for 2017 Schedule A, Part II, line 14	<b>15</b> 78.710 %
<b>16a</b>	<b>33 1/3% support test—2018.</b> If the organization did not check the box on line 13, and line 14 is 33 1/3% or more, check this box and <b>stop here.</b> The organization qualifies as a publicly supported organization. ► <input checked="" type="checkbox"/>	
<b>b</b>	<b>33 1/3% support test—2017.</b> If the organization did not check a box on line 13 or 16a, and line 15 is 33 1/3% or more, check this box and <b>stop here.</b> The organization qualifies as a publicly supported organization. ► <input type="checkbox"/>	
<b>17a</b>	<b>10%-facts-and-circumstances test—2018.</b> If the organization did not check a box on line 13, 16a, or 16b, and line 14 is 10% or more, and if the organization meets the "facts-and-circumstances" test, check this box and <b>stop here.</b> Explain in Part VI how the organization meets the "facts-and-circumstances" test. The organization qualifies as a publicly supported organization. ► <input type="checkbox"/>	
<b>b</b>	<b>10%-facts-and-circumstances test—2017.</b> If the organization did not check a box on line 13, 16a, 16b, or 17a, and line 15 is 10% or more, and if the organization meets the "facts-and-circumstances" test, check this box and <b>stop here.</b> Explain in Part VI how the organization meets the "facts-and-circumstances" test. The organization qualifies as a publicly supported organization. ► <input type="checkbox"/>	
<b>18</b>	<b>Private foundation.</b> If the organization did not check a box on line 13, 16a, 16b, 17a, or 17b, check this box and see instructions. ► <input type="checkbox"/>	

**Part III Support Schedule for Organizations Described in Section 509(a)(2)**

(Complete only if you checked the box on line 10 of Part I or if the organization failed to qualify under Part II. If the organization fails to qualify under the tests listed below, please complete Part II.)

**Section A. Public Support**

Calendar year (or fiscal year beginning in) ►	(a) 2014	(b) 2015	(c) 2016	(d) 2017	(e) 2018	(f) Total
<b>1</b> Gifts, grants, contributions, and membership fees received (Do not include any "unusual grants.")						
<b>2</b> Gross receipts from admissions, merchandise sold or services performed, or facilities furnished in any activity that is related to the organization's tax-exempt purpose						
<b>3</b> Gross receipts from activities that are not an unrelated trade or business under section 513						
<b>4</b> Tax revenues levied for the organization's benefit and either paid to or expended on its behalf						
<b>5</b> The value of services or facilities furnished by a governmental unit to the organization without charge						
<b>6 Total.</b> Add lines 1 through 5						
<b>7a</b> Amounts included on lines 1, 2, and 3 received from disqualified persons						
<b>b</b> Amounts included on lines 2 and 3 received from other than disqualified persons that exceed the greater of \$5,000 or 1% of the amount on line 13 for the year						
<b>c</b> Add lines 7a and 7b						
<b>8 Public support.</b> (Subtract line 7c from line 6.)						

**Section B. Total Support**

Calendar year (or fiscal year beginning in) ►	(a) 2014	(b) 2015	(c) 2016	(d) 2017	(e) 2018	(f) Total
<b>9</b> Amounts from line 6						
<b>10a</b> Gross income from interest, dividends, payments received on securities loans, rents, royalties and income from similar sources						
<b>b</b> Unrelated business taxable income (less section 511 taxes) from businesses acquired after June 30, 1975						
<b>c</b> Add lines 10a and 10b						
<b>11</b> Net income from unrelated business activities not included in line 10b, whether or not the business is regularly carried on						
<b>12</b> Other income. Do not include gain or loss from the sale of capital assets (Explain in Part VI.)						
<b>13 Total support.</b> (Add lines 9, 10c, 11, and 12.)						

**14 First five years.** If the Form 990 is for the organization's first, second, third, fourth, or fifth tax year as a section 501(c)(3) organization, check this box and **stop here** ► ☐

**Section C. Computation of Public Support Percentage**

<b>15</b> Public support percentage for 2018 (line 8, column (f) divided by line 13, column (f))	<b>15</b>	
<b>16</b> Public support percentage from 2017 Schedule A, Part III, line 15	<b>16</b>	

**Section D. Computation of Investment Income Percentage**

<b>17</b> Investment income percentage for <b>2018</b> (line 10c, column (f) divided by line 13, column (f))	<b>17</b>	
<b>18</b> Investment income percentage from <b>2017</b> Schedule A, Part III, line 17	<b>18</b>	

**19a 33 1/3% support tests—2018.** If the organization did not check the box on line 14, and line 15 is more than 33 1/3%, and line 17 is not more than 33 1/3%, check this box and **stop here**. The organization qualifies as a publicly supported organization ► ☐

**b 33 1/3% support tests—2017.** If the organization did not check a box on line 14 or line 19a, and line 16 is more than 33 1/3% and line 18 is not more than 33 1/3%, check this box and **stop here**. The organization qualifies as a publicly supported organization ► ☐

**20 Private foundation.** If the organization did not check a box on line 14, 19a, or 19b, check this box and see instructions ► ☐

**Part IV Supporting Organizations**

(Complete only if you checked a box on line 12 of Part I. If you checked 12a of Part I, complete Sections A and B. If you checked 12b of Part I, complete Sections A and C. If you checked 12c of Part I, complete Sections A, D, and E. If you checked 12d of Part I, complete Sections A and D, and complete Part V.)

**Section A. All Supporting Organizations**

	Yes	No
<b>1</b> Are all of the organization's supported organizations listed by name in the organization's governing documents? <i>If "No," describe in <b>Part VI</b> how the supported organizations are designated. If designated by class or purpose, describe the designation. If historic and continuing relationship, explain.</i>	<b>1</b>	
<b>2</b> Did the organization have any supported organization that does not have an IRS determination of status under section 509(a)(1) or (2)? <i>If "Yes," explain in <b>Part VI</b> how the organization determined that the supported organization was described in section 509(a)(1) or (2).</i>	<b>2</b>	
<b>3a</b> Did the organization have a supported organization described in section 501(c)(4), (5), or (6)? <i>If "Yes," answer (b) and (c) below.</i>	<b>3a</b>	
<b>b</b> Did the organization confirm that each supported organization qualified under section 501(c)(4), (5), or (6) and satisfied the public support tests under section 509(a)(2)? <i>If "Yes," describe in <b>Part VI</b> when and how the organization made the determination.</i>	<b>3b</b>	
<b>c</b> Did the organization ensure that all support to such organizations was used exclusively for section 170(c)(2)(B) purposes? <i>If "Yes," explain in <b>Part VI</b> what controls the organization put in place to ensure such use.</i>	<b>3c</b>	
<b>4a</b> Was any supported organization not organized in the United States ("foreign supported organization")? <i>If "Yes" and if you checked 12a or 12b in Part I, answer (b) and (c) below.</i>	<b>4a</b>	
<b>b</b> Did the organization have ultimate control and discretion in deciding whether to make grants to the foreign supported organization? <i>If "Yes," describe in <b>Part VI</b> how the organization had such control and discretion despite being controlled or supervised by or in connection with its supported organizations.</i>	<b>4b</b>	
<b>c</b> Did the organization support any foreign supported organization that does not have an IRS determination under sections 501(c)(3) and 509(a)(1) or (2)? <i>If "Yes," explain in <b>Part VI</b> what controls the organization used to ensure that all support to the foreign supported organization was used exclusively for section 170(c)(2)(B) purposes.</i>	<b>4c</b>	
<b>5a</b> Did the organization add, substitute, or remove any supported organizations during the tax year? <i>If "Yes," answer (b) and (c) below (if applicable). Also, provide detail in <b>Part VI</b>, including (i) the names and EIN numbers of the supported organizations added, substituted, or removed, (ii) the reasons for each such action, (iii) the authority under the organization's organizing document authorizing such action, and (iv) how the action was accomplished (such as by amendment to the organizing document).</i>	<b>5a</b>	
<b>b</b> <b>Type I or Type II only.</b> Was any added or substituted supported organization part of a class already designated in the organization's organizing document?	<b>5b</b>	
<b>c</b> <b>Substitutions only.</b> Was the substitution the result of an event beyond the organization's control?	<b>5c</b>	
<b>6</b> Did the organization provide support (whether in the form of grants or the provision of services or facilities) to anyone other than (i) its supported organizations, (ii) individuals that are part of the charitable class benefited by one or more of its supported organizations, or (iii) other supporting organizations that also support or benefit one or more of the filing organization's supported organizations? <i>If "Yes," provide detail in <b>Part VI</b>.</i>	<b>6</b>	
<b>7</b> Did the organization provide a grant, loan, compensation, or other similar payment to a substantial contributor (defined in section 4958(c)(3)(C)), a family member of a substantial contributor, or a 35% controlled entity with regard to a substantial contributor? <i>If "Yes," complete Part I of Schedule L (Form 990 or 990-EZ).</i>	<b>7</b>	
<b>8</b> Did the organization make a loan to a disqualified person (as defined in section 4958) not described in line 7? <i>If "Yes," complete Part I of Schedule L (Form 990 or 990-EZ).</i>	<b>8</b>	
<b>9a</b> Was the organization controlled directly or indirectly at any time during the tax year by one or more disqualified persons as defined in section 4946 (other than foundation managers and organizations described in section 509(a)(1) or (2))? <i>If "Yes," provide detail in <b>Part VI</b>.</i>	<b>9a</b>	
<b>b</b> Did one or more disqualified persons (as defined in line 9a) hold a controlling interest in any entity in which the supporting organization had an interest? <i>If "Yes," provide detail in <b>Part VI</b>.</i>	<b>9b</b>	
<b>c</b> Did a disqualified person (as defined in line 9a) have an ownership interest in, or derive any personal benefit from, assets in which the supporting organization also had an interest? <i>If "Yes," provide detail in <b>Part VI</b>.</i>	<b>9c</b>	
<b>10a</b> Was the organization subject to the excess business holdings rules of section 4943 because of section 4943(f) (regarding certain Type II supporting organizations, and all Type III non-functionally integrated supporting organizations)? <i>If "Yes," answer line 10b below.</i>	<b>10a</b>	
<b>b</b> Did the organization have any excess business holdings in the tax year? <i>(Use Schedule C, Form 4720, to determine whether the organization had excess business holdings.)</i>	<b>10b</b>	

**Part IV Supporting Organizations** (continued)

	Yes	No
<b>11</b> Has the organization accepted a gift or contribution from any of the following persons?		
<b>a</b> A person who directly or indirectly controls, either alone or together with persons described in (b) and (c) below, the governing body of a supported organization?		
<b>b</b> A family member of a person described in (a) above?		
<b>c</b> A 35% controlled entity of a person described in (a) or (b) above? <i>If "Yes" to a, b, or c, provide detail in Part VI</i>		
	<b>11a</b>	
	<b>11b</b>	
	<b>11c</b>	

**Section B. Type I Supporting Organizations**

	Yes	No
<b>1</b> Did the directors, trustees, or membership of one or more supported organizations have the power to regularly appoint or elect at least a majority of the organization's directors or trustees at all times during the tax year? <i>If "No," describe in Part VI how the supported organization(s) effectively operated, supervised, or controlled the organization's activities. If the organization had more than one supported organization, describe how the powers to appoint and/or remove directors or trustees were allocated among the supported organizations and what conditions or restrictions, if any, applied to such powers during the tax year.</i>		
	<b>1</b>	
<b>2</b> Did the organization operate for the benefit of any supported organization other than the supported organization(s) that operated, supervised, or controlled the supporting organization? <i>If "Yes," explain in Part VI how providing such benefit carried out the purposes of the supported organization(s) that operated, supervised or controlled the supporting organization.</i>		
	<b>2</b>	

**Section C. Type II Supporting Organizations**

	Yes	No
<b>1</b> Were a majority of the organization's directors or trustees during the tax year also a majority of the directors or trustees of each of the organization's supported organization(s)? <i>If "No," describe in Part VI how control or management of the supporting organization was vested in the same persons that controlled or managed the supported organization(s).</i>		
	<b>1</b>	

**Section D. All Type III Supporting Organizations**

	Yes	No
<b>1</b> Did the organization provide to each of its supported organizations, by the last day of the fifth month of the organization's tax year, (i) a written notice describing the type and amount of support provided during the prior tax year, (ii) a copy of the Form 990 that was most recently filed as of the date of notification, and (iii) copies of the organization's governing documents in effect on the date of notification, to the extent not previously provided?		
	<b>1</b>	
<b>2</b> Were any of the organization's officers, directors, or trustees either (i) appointed or elected by the supported organization (s) or (ii) serving on the governing body of a supported organization? <i>If "No," explain in Part VI how the organization maintained a close and continuous working relationship with the supported organization(s).</i>		
	<b>2</b>	
<b>3</b> By reason of the relationship described in (2), did the organization's supported organizations have a significant voice in the organization's investment policies and in directing the use of the organization's income or assets at all times during the tax year? <i>If "Yes," describe in Part VI the role the organization's supported organizations played in this regard.</i>		
	<b>3</b>	

**Section E. Type III Functionally-Integrated Supporting Organizations**

<b>1</b> Check the box next to the method that the organization used to satisfy the Integral Part Test during the year ( <b>see instructions</b> )		
<b>a</b> <input type="checkbox"/> The organization satisfied the Activities Test. Complete <b>line 2</b> below.		
<b>b</b> <input type="checkbox"/> The organization is the parent of each of its supported organizations. Complete <b>line 3</b> below.		
<b>c</b> <input type="checkbox"/> The organization supported a governmental entity. Describe in <b>Part VI</b> how you supported a government entity (see instructions).		
<b>2</b> Activities Test. <b>Answer (a) and (b) below.</b>		
<b>a</b> Did substantially all of the organization's activities during the tax year directly further the exempt purposes of the supported organization(s) to which the organization was responsive? <i>If "Yes," then in Part VI identify those supported organizations and explain how these activities directly furthered their exempt purposes, how the organization was responsive to those supported organizations, and how the organization determined that these activities constituted substantially all of its activities.</i>		
	<b>2a</b>	
<b>b</b> Did the activities described in (a) constitute activities that, but for the organization's involvement, one or more of the organization's supported organization(s) would have been engaged in? <i>If "Yes," explain in Part VI the reasons for the organization's position that its supported organization(s) would have engaged in these activities but for the organization's involvement.</i>		
	<b>2b</b>	
<b>3</b> Parent of Supported Organizations. <b>Answer (a) and (b) below.</b>		
<b>a</b> Did the organization have the power to regularly appoint or elect a majority of the officers, directors, or trustees of each of the supported organizations? <i>Provide details in Part VI.</i>		
	<b>3a</b>	
<b>b</b> Did the organization exercise a substantial degree of direction over the policies, programs and activities of each of its supported organizations? <i>If "Yes," describe in Part VI the role played by the organization in this regard.</i>		
	<b>3b</b>	

<b>Part V</b> <b>Type III Non-Functionally Integrated 509(a)(3) Supporting Organizations</b>			
<div>1</div> <div><input type="checkbox"/></div> <div>Check here if the organization satisfied the Integral Part Test as a qualifying trust on Nov. 20, 1970 (explain in Part VI). <b>See instructions.</b> All other Type III non-functionally integrated supporting organizations must complete Sections A through E.</div>			
<b>Section A - Adjusted Net Income</b>		(A) Prior Year	(B) Current Year (optional)
1	Net short-term capital gain	1	
2	Recoveries of prior-year distributions	2	
3	Other gross income (see instructions)	3	
4	Add lines 1 through 3	4	
5	Depreciation and depletion	5	
6	Portion of operating expenses paid or incurred for production or collection of gross income or for management, conservation, or maintenance of property held for production of income (see instructions)	6	
7	Other expenses (see instructions)	7	
8	<b>Adjusted Net Income</b> (subtract lines 5, 6 and 7 from line 4)	8	
<b>Section B - Minimum Asset Amount</b>		(A) Prior Year	(B) Current Year (optional)
1	Aggregate fair market value of all non-exempt-use assets (see instructions for short tax year or assets held for part of year)	1	
a	Average monthly value of securities	1a	
b	Average monthly cash balances	1b	
c	Fair market value of other non-exempt-use assets	1c	
d	<b>Total</b> (add lines 1a, 1b, and 1c)	1d	
e	<b>Discount</b> claimed for blockage or other factors (explain in detail in Part VI)		
2	Acquisition indebtedness applicable to non-exempt use assets	2	
3	Subtract line 2 from line 1d	3	
4	Cash deemed held for exempt use. Enter 1-1/2% of line 3 (for greater amount, see instructions)	4	
5	Net value of non-exempt-use assets (subtract line 4 from line 3)	5	
6	Multiply line 5 by .035	6	
7	Recoveries of prior-year distributions	7	
8	<b>Minimum Asset Amount</b> (add line 7 to line 6)	8	
<b>Section C - Distributable Amount</b>			Current Year
1	Adjusted net income for prior year (from Section A, line 8, Column A)	1	
2	Enter 85% of line 1	2	
3	Minimum asset amount for prior year (from Section B, line 8, Column A)	3	
4	Enter greater of line 2 or line 3	4	
5	Income tax imposed in prior year	5	
6	<b>Distributable Amount.</b> Subtract line 5 from line 4, unless subject to emergency temporary reduction (see instructions)	6	
7	<div><input type="checkbox"/></div> Check here if the current year is the organization's first as a non-functionally-integrated Type III supporting organization (see instructions)		

Part V

Type III Non-Functionally Integrated 509(a)(3) Supporting Organizations (continued)

Section D - Distributions	Current Year
1 Amounts paid to supported organizations to accomplish exempt purposes	
2 Amounts paid to perform activity that directly furthers exempt purposes of supported organizations, in excess of income from activity	
3 Administrative expenses paid to accomplish exempt purposes of supported organizations	
4 Amounts paid to acquire exempt-use assets	
5 Qualified set-aside amounts (prior IRS approval required)	
6 Other distributions (describe in Part VI) See instructions	
7 Total annual distributions. Add lines 1 through 6	
8 Distributions to attentive supported organizations to which the organization is responsive (provide details in Part VI) See instructions	
9 Distributable amount for 2018 from Section C, line 6	
10 Line 8 amount divided by Line 9 amount	

Section E - Distribution Allocations (see instructions)	(i) Excess Distributions	(ii) Underdistributions Pre-2018	(iii) Distributable Amount for 2018
1 Distributable amount for 2018 from Section C, line 6			
2 Underdistributions, if any, for years prior to 2018 (reasonable cause required-- explain in Part VI) See instructions			
3 Excess distributions carryover, if any, to 2018			
a From 2013. . . . .			
b From 2014. . . . .			
c From 2015. . . . .			
d From 2016. . . . .			
e From 2017. . . . .			
f Total of lines 3a through e			
g Applied to underdistributions of prior years			
h Applied to 2018 distributable amount			
i Carryover from 2013 not applied (see instructions)			
j Remainder Subtract lines 3g, 3h, and 3i from 3f			
4 Distributions for 2018 from Section D, line 7 \$			
a Applied to underdistributions of prior years			
b Applied to 2018 distributable amount			
c Remainder Subtract lines 4a and 4b from 4			
5 Remaining underdistributions for years prior to 2018, if any Subtract lines 3g and 4a from line 2 If the amount is greater than zero, explain in Part VI See instructions			
6 Remaining underdistributions for 2018 Subtract lines 3h and 4b from line 1 If the amount is greater than zero, explain in Part VI See instructions			
7 Excess distributions carryover to 2019. Add lines 3j and 4c			
8 Breakdown of line 7			
a Excess from 2014. . . . .			
b Excess from 2015. . . . .			
c Excess from 2016. . . . .			
d Excess from 2017. . . . .			
e Excess from 2018. . . . .			

**Part VI** **Supplemental Information.** Provide the explanations required by Part II, line 10, Part II, line 17a or 17b, Part III, line 12, Part IV, Section A, lines 1, 2, 3b, 3c, 4b, 4c, 5a, 6, 9a, 9b, 9c, 11a, 11b, and 11c, Part IV, Section B, lines 1 and 2, Part IV, Section C, line 1, Part IV, Section D, lines 2 and 3, Part IV, Section E, lines 1c, 2a, 2b, 3a and 3b, Part V, line 1, Part V, Section B, line 1e, Part V Section D, lines 5, 6, and 8, and Part V, Section E, lines 2, 5, and 6. Also complete this part for any additional information. (See instructions)

Facts And Circumstances Test

**990 Schedule A, Supplemental Information**

Return Reference	Explanation
SCHEDULE A, PART II, LINE 10, EXPLANATION OF OTHER INCOME	MISC REVENUE - 2014 AMOUNT \$ 208,097

efile GRAPHIC print - DO NOT PROCESS

As Filed Data -

DLN: 93493319202529

SCHEDULE D

(Form 990)

Department of the Treasury

Internal Revenue Service

Supplemental Financial Statements

► Complete if the organization answered "Yes," on Form 990, Part IV, line 6, 7, 8, 9, 10, 11a, 11b, 11c, 11d, 11e, 11f, 12a, or 12b.

► Attach to Form 990.

► Go to [www.irs.gov/Form990](http://www.irs.gov/Form990) for the latest information.

OMB No 1545-0047

2018

Open to Public Inspection

Name of the organization

J CRAIG VENTER INSTITUTE

Employer identification number

52-1842938

Part I

Organizations Maintaining Donor Advised Funds or Other Similar Funds or Accounts.

Complete if the organization answered "Yes" on Form 990, Part IV, line 6.

1

Total number at end of year

2

Aggregate value of contributions to (during year)

3

Aggregate value of grants from (during year)

4

Aggregate value at end of year

(a) Donor advised funds

(b) Funds and other accounts

5

Did the organization inform all donors and donor advisors in writing that the assets held in donor advised funds are the organization's property, subject to the organization's exclusive legal control?

Yes

No

6

Did the organization inform all grantees, donors, and donor advisors in writing that grant funds can be used only for charitable purposes and not for the benefit of the donor or donor advisor, or for any other purpose conferring impermissible private benefit?

Yes

No

Part II

Conservation Easements.

Complete if the organization answered "Yes" on Form 990, Part IV, line 7.

1

Purpose(s) of conservation easements held by the organization (check all that apply)

☐ Preservation of land for public use (e g , recreation or education)

☐ Preservation of an historically important land area

☐ Protection of natural habitat

☐ Preservation of a certified historic structure

☐ Preservation of open space

2

Complete lines 2a through 2d if the organization held a qualified conservation contribution in the form of a conservation easement on the last day of the tax year

2a

Total number of conservation easements

2b

Total acreage restricted by conservation easements

2c

Number of conservation easements on a certified historic structure included in (a)

2d

Number of conservation easements included in (c) acquired after 7/25/06, and not on a historic structure listed in the National Register

3

Number of conservation easements modified, transferred, released, extinguished, or terminated by the organization during the tax year ►

4

Number of states where property subject to conservation easement is located ►

5

Does the organization have a written policy regarding the periodic monitoring, inspection, handling of violations, and enforcement of the conservation easements it holds?

Yes

No

6

Staff and volunteer hours devoted to monitoring, inspecting, handling of violations, and enforcing conservation easements during the year ►

7

Amount of expenses incurred in monitoring, inspecting, handling of violations, and enforcing conservation easements during the year ► \$

8

Does each conservation easement reported on line 2(d) above satisfy the requirements of section 170(h)(4)(B)(i) and section 170(h)(4)(B)(ii)?

Yes

No

9

In Part XIII, describe how the organization reports conservation easements in its revenue and expense statement, and balance sheet, and include, if applicable, the text of the footnote to the organization's financial statements that describes the organization's accounting for conservation easements

Part III

Organizations Maintaining Collections of Art, Historical Treasures, or Other Similar Assets.

Complete if the organization answered "Yes" on Form 990, Part IV, line 8.

1a

If the organization elected, as permitted under SFAS 116 (ASC 958), not to report in its revenue statement and balance sheet works of art, historical treasures, or other similar assets held for public exhibition, education, or research in furtherance of public service, provide, in Part XIII, the text of the footnote to its financial statements that describes these items

1b

If the organization elected, as permitted under SFAS 116 (ASC 958), to report in its revenue statement and balance sheet works of art, historical treasures, or other similar assets held for public exhibition, education, or research in furtherance of public service, provide the following amounts relating to these items

(i) Revenue included on Form 990, Part VIII, line 1

► \$ 0

(ii) Assets included in Form 990, Part X

► \$ 2,545,000

2

If the organization received or held works of art, historical treasures, or other similar assets for financial gain, provide the following amounts required to be reported under SFAS 116 (ASC 958) relating to these items

a

Revenue included on Form 990, Part VIII, line 1

► \$

b

Assets included in Form 990, Part X

► \$

For Paperwork Reduction Act Notice, see the Instructions for Form 990.

Cat No 52283D

Schedule D (Form 990) 2018



Part III

Organizations Maintaining Collections of Art, Historical Treasures, or Other Similar Assets (continued)

3

Using the organization's acquisition, accession, and other records, check any of the following that are a significant use of its collection items (check all that apply)

a

☒ Public exhibition

b

☒ Scholarly research

c

☒ Preservation for future generations

d

☐ Loan or exchange programs

e

☐ Other

4

Provide a description of the organization's collections and explain how they further the organization's exempt purpose in Part XIII

5

During the year, did the organization solicit or receive donations of art, historical treasures or other similar assets to be sold to raise funds rather than to be maintained as part of the organization's collection?

☐ Yes☒ No

Part IV

Escrow and Custodial Arrangements.

Complete if the organization answered "Yes" on Form 990, Part IV, line 9, or reported an amount on Form 990, Part X, line 21.

1a

Is the organization an agent, trustee, custodian or other intermediary for contributions or other assets not included on Form 990, Part X?

☐ Yes☐ No

b

If "Yes," explain the arrangement in Part XIII and complete the following table

c

Beginning balance

d

Additions during the year

e

Distributions during the year

f

Ending balance

	Amount
1c	
1d	
1e	
1f	

2a

Did the organization include an amount on Form 990, Part X, line 21, for escrow or custodial account liability?

☐ Yes☐ No

b

If "Yes," explain the arrangement in Part XIII Check here if the explanation has been provided in Part XIII

☐

Part V

Endowment Funds. Complete if the organization answered "Yes" on Form 990, Part IV, line 10.

	(a)Current year	(b)Prior year	(c)Two years back	(d)Three years back	(e)Four years back
1a Beginning of year balance . . . . .					
b Contributions . . . . .					
c Net investment earnings, gains, and losses					
d Grants or scholarships . . . . .					
e Other expenditures for facilities and programs . . . . .					
f Administrative expenses . . . . .					
g End of year balance . . . . .					

2

Provide the estimated percentage of the current year end balance (line 1g, column (a)) held as

a

Board designated or quasi-endowment ▶

b

Permanent endowment ▶

c

Temporarily restricted endowment ▶

The percentages on lines 2a, 2b, and 2c should equal 100%

3a

Are there endowment funds not in the possession of the organization that are held and administered for the organization by

(i)

unrelated organizations . . . . .

(ii)

related organizations . . . . .

b

If "Yes" on 3a(ii), are the related organizations listed as required on Schedule R?

☐

4

Describe in Part XIII the intended uses of the organization's endowment funds

Part VI

Land, Buildings, and Equipment.

Complete if the organization answered "Yes" on Form 990, Part IV, line 11a. See Form 990, Part X, line 10.

Description of property	(a) Cost or other basis (investment)	(b) Cost or other basis (other)	(c) Accumulated depreciation	(d) Book value
1a Land . . . . .				
b Buildings . . . . .		53,816,936	7,079,984	46,736,952
c Leasehold improvements				
d Equipment . . . . .		15,757,659	14,271,451	1,486,208
e Other . . . . .		6,602,389	4,085,100	2,517,289
Total. Add lines 1a through 1e (Column (d) must equal Form 990, Part X, column (B), line 10(c)) . . . ▶				50,740,449

Part VII

Investments—Other Securities. Complete if the organization answered "Yes" on Form 990, Part IV, line 11b.  
See Form 990, Part X, line 12.

(a) Description of security or category (including name of security)	(b) Book value	(c) Method of valuation Cost or end-of-year market value
(1) Financial derivatives . . . . .		
(2) Closely-held equity interests . . . . .		
(3) Other _____		
(A)		
(B)		
(C)		
(D)		
(E)		
(F)		
(G)		
(H)		
Total. (Column (b) must equal Form 990, Part X, col (B) line 12 ) ▶		

Part VIII

Investments—Program Related.  
Complete if the organization answered 'Yes' on Form 990, Part IV, line 11c. See Form 990, Part X, line 13.

(a) Description of investment	(b) Book value	(c) Method of valuation Cost or end-of-year market value
(1)		
(2)		
(3)		
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
Total. (Column (b) must equal Form 990, Part X, col (B) line 13 ) ▶		

Part IX

Other Assets. Complete if the organization answered 'Yes' on Form 990, Part IV, line 11d See Form 990, Part X, line 15

(a) Description	(b) Book value
(1)	
(2)	
(3)	
(4)	
(5)	
(6)	
(7)	
(8)	
(9)	
Total. (Column (b) must equal Form 990, Part X, col (B) line 15 ) . . . . . ▶	

Part X

Other Liabilities. Complete if the organization answered 'Yes' on Form 990, Part IV, line 11e or 11f.  
See Form 990, Part X, line 25.

1. (a) Description of liability	(b) Book value	
(1) Federal income taxes		
LEASES PAYABLE	55,910	
(2)		
(3)		
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
Total. (Column (b) must equal Form 990, Part X, col (B) line 25 ) ▶	55,910	

2. Liability for uncertain tax positions In Part XIII, provide the text of the footnote to the organization's financial statements that reports the organization's liability for uncertain tax positions under FIN 48 (ASC 740) Check here if the text of the footnote has been provided in Part XIII

☒

**Part XI Reconciliation of Revenue per Audited Financial Statements With Revenue per Return**

Complete if the organization answered 'Yes' on Form 990, Part IV, line 12a.

<b>1</b>	Total revenue, gains, and other support per audited financial statements . . . . .	<b>1</b>	24,613,057
<b>2</b>	Amounts included on line 1 but not on Form 990, Part VIII, line 12		
<b>a</b>	Net unrealized gains (losses) on investments . . . . .	<b>2a</b>	-20,749,770
<b>b</b>	Donated services and use of facilities . . . . .	<b>2b</b>	360,000
<b>c</b>	Recoveries of prior year grants . . . . .	<b>2c</b>	
<b>d</b>	Other (Describe in Part XIII ) . . . . .	<b>2d</b>	
<b>e</b>	Add lines <b>2a</b> through <b>2d</b> . . . . .	<b>2e</b>	-20,389,770
<b>3</b>	Subtract line <b>2e</b> from line <b>1</b> . . . . .	<b>3</b>	45,002,827
<b>4</b>	Amounts included on Form 990, Part VIII, line 12, but not on line <b>1</b>		
<b>a</b>	Investment expenses not included on Form 990, Part VIII, line 7b . . . . .	<b>4a</b>	201,000
<b>b</b>	Other (Describe in Part XIII ) . . . . .	<b>4b</b>	-737
<b>c</b>	Add lines <b>4a</b> and <b>4b</b> . . . . .	<b>4c</b>	200,263
<b>5</b>	Total revenue. Add lines <b>3</b> and <b>4c</b> . (This must equal Form 990, Part I, line 12 ) . . . . .	<b>5</b>	45,203,090

**Part XII Reconciliation of Expenses per Audited Financial Statements With Expenses per Return.**

Complete if the organization answered 'Yes' on Form 990, Part IV, line 12a.

<b>1</b>	Total expenses and losses per audited financial statements . . . . .	<b>1</b>	38,970,503
<b>2</b>	Amounts included on line 1 but not on Form 990, Part IX, line 25		
<b>a</b>	Donated services and use of facilities . . . . .	<b>2a</b>	360,000
<b>b</b>	Prior year adjustments . . . . .	<b>2b</b>	
<b>c</b>	Other losses . . . . .	<b>2c</b>	
<b>d</b>	Other (Describe in Part XIII ) . . . . .	<b>2d</b>	
<b>e</b>	Add lines <b>2a</b> through <b>2d</b> . . . . .	<b>2e</b>	360,000
<b>3</b>	Subtract line <b>2e</b> from line <b>1</b> . . . . .	<b>3</b>	38,610,503
<b>4</b>	Amounts included on Form 990, Part IX, line 25, but not on line <b>1</b> :		
<b>a</b>	Investment expenses not included on Form 990, Part VIII, line 7b . . . . .	<b>4a</b>	201,000
<b>b</b>	Other (Describe in Part XIII ) . . . . .	<b>4b</b>	
<b>c</b>	Add lines <b>4a</b> and <b>4b</b> . . . . .	<b>4c</b>	201,000
<b>5</b>	Total expenses. Add lines <b>3</b> and <b>4c</b> . (This must equal Form 990, Part I, line 18 ) . . . . .	<b>5</b>	38,811,503

**Part XIII Supplemental Information**

Provide the descriptions required for Part II, lines 3, 5, and 9, Part III, lines 1a and 4, Part IV, lines 1b and 2b, Part V, line 4, Part X, line 2, Part XI, lines 2d and 4b, and Part XII, lines 2d and 4b. Also complete this part to provide any additional information.

Return Reference	Explanation
See Additional Data Table	

**Part XIII**   **Supplemental Information** *(continued)*

Return Reference	Explanation

**Additional Data**

**Software ID:**  
**Software Version:**  
**EIN:** 52-1842938  
**Name:** J CRAIG VENTER INSTITUTE

**Supplemental Information**

Return Reference	Explanation
PART III, LINE 4	COLLECTION OF SCIENTIFIC WRITINGS RELEVANT TO GENOMIC RESEARCH

## Supplemental Information

Return Reference	Explanation
PART X, LINE 2	THE INSTITUTE IS A NOT-FOR-PROFIT ORGANIZATION EXEMPT FROM FEDERAL INCOME TAXES UNDER SECTION 501(C)(3) OF THE INTERNAL REVENUE CODE THE INSTITUTE DOES NOT BELIEVE THERE ARE ANY MATERIAL UNCERTAIN TAX POSITIONS AND ACCORDINGLY, NO PROVISION FOR INCOME TAXES HAS BEEN MADE IN THE ACCOMPANYING FINANCIAL STATEMENTS THE INSTITUTE IS SUBJECT TO ROUTINE AUDITS BY TAXING JURISDICTIONS, HOWEVER, THERE ARE CURRENTLY NO AUDITS FOR ANY TAX PERIOD IN PROGRESS

Supplemental Information	
Return Reference	Explanation
PART XI, LINE 4B - OTHER ADJUSTMENTS	K-1 PASSTROUGH -737

**SCHEDULE F  
(Form 990)**

Department of the Treasury  
Internal Revenue Service

Name of the organization  
J CRAIG VENTER INSTITUTE

**Statement of Activities Outside the United States**

- Complete if the organization answered "Yes" to Form 990, Part IV, line 14b, 15, or 16.  
► Attach to Form 990.  
► Go to [www.irs.gov/Form990](http://www.irs.gov/Form990) for instructions and the latest information.

OMB No 1545-0047

**2018**

**Open to Public  
Inspection**

**Employer identification number**

52-1842938

**Part I** **General Information on Activities Outside the United States.** Complete if the organization answered "Yes" to Form 990, Part IV, line 14b.

**1 For grantmakers.** Does the organization maintain records to substantiate the amount of its grants and other assistance, the grantees' eligibility for the grants or assistance, and the selection criteria used to award the grants or assistance? ☒ **Yes** ☐ **No**

**2 For grantmakers.** Describe in Part V the organization's procedures for monitoring the use of its grants and other assistance outside the United States

**3** Activities per Region (The following Part I, line 3 table can be duplicated if additional space is needed )

(a) Region	(b) Number of offices in the region	(c) Number of employees, agents, and independent contractors in region	(d) Activities conducted in region (by type) (e g , fundraising, program services, investments, grants to recipients located in the region)	(e) If activity listed in (d) is a program service, describe specific type of service(s) in region	(f) Total expenditures for and investments in region
See Add'l Data					
<b>3a</b> Sub-total	0	0			100,258
<b>b</b> Total from continuation sheets to Part I					0
<b>c Totals</b> (add lines 3a and 3b)	0	0			100,258



**Part II Grants and Other Assistance to Organizations or Entities Outside the United States.** Complete if the organization answered "Yes" to Form 990, Part IV, line 15, for any recipient who received more than \$5,000. Part II can be duplicated if additional space is needed.

<b>1</b>	<b>(a)</b> Name of organization	<b>(b)</b> IRS code section and EIN (if applicable)	<b>(c)</b> Region	<b>(d)</b> Purpose of grant	<b>(e)</b> Amount of cash grant	<b>(f)</b> Manner of cash disbursement	<b>(g)</b> Amount of non-cash assistance	<b>(h)</b> Description of non-cash assistance	<b>(i)</b> Method of valuation (book, FMV, appraisal, other)
			EUROPE (INCLUDING ICELAND & GREENLAND)	PROGRAM SERVICES	62,010	WIRE			

- 2 Enter total number of recipient organizations listed above that are recognized as charities by the foreign country, recognized as tax-exempt by the IRS, or for which the grantee or counsel has provided a section 501(c)(3) equivalency letter . . . . . **2**
- 3 Enter total number of other organizations or entities . . . . .

<b>Part III</b>	<b>Grants and Other Assistance to Individuals Outside the United States.</b> Complete if the organization answered "Yes" to Form 990, Part IV, line 16.
-----------------	---

Part III can be duplicated if additional space is needed.

[illegible]

**Part IV Foreign Forms**

- 1 Was the organization a U S transferor of property to a foreign corporation during the tax year? *If "Yes," the organization may be required to file Form 926, Return by a U S Transferor of Property to a Foreign Corporation (see Instructions for Form 926)* ☒ Yes ☐ No
- 2 Did the organization have an interest in a foreign trust during the tax year? *If "Yes," the organization may be required to separately file Form 3520, Annual Return to Report Transactions with Foreign Trusts and Receipt of Certain Foreign Gifts, and/or Form 3520-A, Annual Information Return of Foreign Trust With a U S Owner (see Instructions for Forms 3520 and 3520-A, don't file with Form 990)* ☐ Yes ☒ No
- 3 Did the organization have an ownership interest in a foreign corporation during the tax year? *If "Yes," the organization may be required to file Form 5471, Information Return of U S Persons with Respect to Certain Foreign Corporations (see Instructions for Form 5471)* ☐ Yes ☒ No
- 4 Was the organization a direct or indirect shareholder of a passive foreign investment company or a qualified electing fund during the tax year? *If "Yes," the organization may be required to file Form 8621, Information Return by a Shareholder of a Passive Foreign Investment Company or Qualified Electing Fund (see Instructions for Form 8621)* ☒ Yes ☐ No
- 5 Did the organization have an ownership interest in a foreign partnership during the tax year? *If "Yes," the organization may be required to file Form 8865, Return of U S Persons with Respect to Certain Foreign Partnerships (see Instructions for Form 8865)* ☒ Yes ☐ No
- 6 Did the organization have any operations in or related to any boycotting countries during the tax year? *If "Yes," the organization may be required to separately file Form 5713, International Boycott Report (see Instructions for Form 5713, don't file with Form 990)* ☐ Yes ☒ No

**Part V Supplemental Information**

Provide the information required by Part I, line 2 (monitoring of funds); Part I, line 3, column (f) (accounting method; amounts of investments vs. expenditures per region); Part II, line 1 (accounting method); Part III (accounting method); and Part III, column (c) (estimated number of recipients), as applicable. Also complete this part to provide any additional information (see instructions).

**990 Schedule F, Supplemental Information**

Return Reference	Explanation
PART I, LINE 2	EACH SUBGRANT IS A PASS THROUGH GRANT FROM A FEDERAL OR NON-FEDERAL GRANT OR CONTRACT AWARDED TO J CRAIG VENTER INSTITUTE ALL EXPENSES ARE MONITORED AS INVOICED AT LEAST QUARTERLY, BUT IN MOST CASES MONTHLY THE INVOICES ARE REVIEWED AND APPROVED BASED ON RECEIPT OF GOODS OR SERVICES AND AGAINST AN APPROVED BUDGET

**990 Schedule F, Supplemental Information**

Return Reference	Explanation
PART I, LINE 3	ACCRUAL BASIS

**990 Schedule F, Supplemental Information**

Return Reference	Explanation
PART II, LINE 1	ACCRUAL BASIS

Additional Data

Software ID:  
Software Version:  
EIN: 52-1842938  
Name: J CRAIG VENTER INSTITUTE

Form 990 Schedule F Part I - Activities Outside The United States

(a) Region	(b) Number of offices in the region	(c) Number of employees or agents in region	(d) Activities conducted in region (by type) (i.e., fundraising, program services, grants to recipients located in the region)	(e) If activity listed in (d) is a program service, describe specific type of service(s) in region	(f) Total expenditures for region
EUROPE (INCLUDING ICELAND & GREENLAND)	0	0	PROGRAM SERVICES	RESEARCH SUBGRANTS	62,010
CAYMAN ISLANDS			INVESTMENTS		38,248

Note: To capture the full content of this document, please select landscape mode (11" x 8.5") when printing.

Schedule I  
(Form 990)

Department of the  
Treasury  
Internal Revenue Service

Name of the organization  
J CRAIG VENTER INSTITUTE

Grants and Other Assistance to Organizations,  
Governments and Individuals in the United States

Complete if the organization answered "Yes," on Form 990, Part IV, line 21 or 22.  
▶ Attach to Form 990.  
▶ Go to [www.irs.gov/Form990](http://www.irs.gov/Form990) for the latest information.

OMB No 1545-0047

2018

Open to Public  
Inspection

Employer identification number  
52-1842938

Part I

General Information on Grants and Assistance

- 1 Does the organization maintain records to substantiate the amount of the grants or assistance, the grantees' eligibility for the grants or assistance, and the selection criteria used to award the grants or assistance? . . . . . ☒ Yes ☐ No
- 2 Describe in Part IV the organization's procedures for monitoring the use of grant funds in the United States

Part II

Grants and Other Assistance to Domestic Organizations and Domestic Governments. Complete if the organization answered "Yes" on Form 990, Part IV, line 21, for any recipient that received more than \$5,000. Part II can be duplicated if additional space is needed

(a) Name and address of organization or government	(b) EIN	(c) IRC section (if applicable)	(d) Amount of cash grant	(e) Amount of non-cash assistance	(f) Method of valuation (book, FMV, appraisal, other)	(g) Description of noncash assistance	(h) Purpose of grant or assistance
(1) See Additional Data							
(2)							
(3)							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							
(11)							
(12)							

2 Enter total number of section 501(c)(3) and government organizations listed in the line 1 table . . . . . 15

3 Enter total number of other organizations listed in the line 1 table . . . . . 1



**Part III Grants and Other Assistance to Domestic Individuals.** Complete if the organization answered "Yes" on Form 990, Part IV, line 22.  
Part III can be duplicated if additional space is needed

(a) Type of grant or assistance	(b) Number of recipients	(c) Amount of cash grant	(d) Amount of noncash assistance	(e) Method of valuation (book, FMV, appraisal, other)	(f) Description of noncash assistance
(1)					
(2)					
(3)					
(4)					
(5)					
(6)					
(7)					

**Part IV Supplemental Information.** Provide the information required in Part I, line 2; Part III, column (b); and any other additional information.

Return Reference	Explanation
PART I, LINE 2	EACH SUBGRANT IS A PASS THROUGH GRANT FROM A FEDERAL OR NON-FEDERAL GRANT OR CONTRACT AWARDED TO J CRAIG VENTER INSTITUTE ALL EXPENSES ARE MONITORED AS INVOICED AT LEAST QUARTERLY, BUT IN MOST CASES MONTHLY THE INVOICES ARE REVIEWED AND APPROVED BASED ON RECEIPT OF GOODS OR SERVICES AND AGAINST AN APPROVED BUDGET

Additional Data

Software ID:  
Software Version:  
EIN: 52-1842938  
Name: J CRAIG VENTER INSTITUTE

Form 990, Schedule I, Part II, Grants and Other Assistance to Domestic Organizations and Domestic Governments.

(a) Name and address of organization or government	(b) EIN	(c) IRC section if applicable	(d) Amount of cash grant	(e) Amount of non-cash assistance	(f) Method of valuation (book, FMV, appraisal, other)	(g) Description of non-cash assistance	(h) Purpose of grant or assistance
CARLETON COLLEGE 1 NORTH COLLEGE STREET NORTHFIELD, MN 55057	41-0694747	501(C)(3)	7,279				RESEARCH SUBGRANT
SANFORD BURNHAM PRESBYS 10901 NORTH TORREY PINES ROAD LA JOLLA, CA 92037	51-0197108	501(C)(3)	236,007				RESEARCH SUBGRANT

Form 990, Schedule I, Part II, Grants and Other Assistance to Domestic Organizations and Domestic Governments.							
(a) Name and address of organization or government	(b) EIN	(c) IRC section if applicable	(d) Amount of cash grant	(e) Amount of non-cash assistance	(f) Method of valuation (book, FMV, appraisal, other)	(g) Description of non-cash assistance	(h) Purpose of grant or assistance
SYNTHETIC GENOMICS INC 11149 N TORREY PINES RD LA JOLLA, CA 92037	27-3001571		83,378				RESEARCH SUBGRANT
UNIVERSITY OF CALIFORNIA IRVINE 120 THEORY SUITE 200 IRVINE, CA 92697	95-2226406	501(C)(3)	218,834				RESEARCH SUBGRANT

Form 990, Schedule I, Part II, Grants and Other Assistance to Domestic Organizations and Domestic Governments.							
(a) Name and address of organization or government	(b) EIN	(c) IRC section if applicable	(d) Amount of cash grant	(e) Amount of non-cash assistance	(f) Method of valuation (book, FMV, appraisal, other)	(g) Description of non-cash assistance	(h) Purpose of grant or assistance
UNITED STATES TREASURY- MD 1425 PORTER ST FORT DETRICK, MD 21702		GOVT	379,629				RESEARCH SUBGRANT
VANDERBILT UNIVERSITY 2201 WEST END AVE NASHVILLE, TN 37235	62-0476822	501(C)(3)	50,423				RESEARCH SUBGRANT

Form 990, Schedule I, Part II, Grants and Other Assistance to Domestic Organizations and Domestic Governments.							
(a) Name and address of organization or government	(b) EIN	(c) IRC section if applicable	(d) Amount of cash grant	(e) Amount of non-cash assistance	(f) Method of valuation (book, FMV, appraisal, other)	(g) Description of non-cash assistance	(h) Purpose of grant or assistance
PURDUE UNIVERSITY 23510 NETWORK PLACE CHICAGO, IL 60673	35-6002041	501(C)(3)	17,913				RESEARCH SUBGRANT
LELAND STANFORD JR UNIVERSITY 3145 PORTER DRIVE PALO ALTO, CA 94304	94-1156365	501(C)(3)	197,729				RESEARCH SUBGRANT

Form 990, Schedule I, Part II, Grants and Other Assistance to Domestic Organizations and Domestic Governments.							
(a) Name and address of organization or government	(b) EIN	(c) IRC section if applicable	(d) Amount of cash grant	(e) Amount of non-cash assistance	(f) Method of valuation (book, FMV, appraisal, other)	(g) Description of non-cash assistance	(h) Purpose of grant or assistance
WOODS HOLE OCEANOGRAPHIC INSTITUTE 569 WOODS HOLE ROAD WOODS HOLE, MA 02543	04-2105850	501(C)(3)	4,424				RESEARCH SUBGRANT
COLORADO STATE UNIVERSITY 6015 CAMPUS DELIVERY FORT COLLINS, CO 80523	84-6000545	501(C)(3)	250,267				RESEARCH SUBGRANT

Form 990, Schedule I, Part II, Grants and Other Assistance to Domestic Organizations and Domestic Governments.							
(a) Name and address of organization or government	(b) EIN	(c) IRC section if applicable	(d) Amount of cash grant	(e) Amount of non-cash assistance	(f) Method of valuation (book, FMV, appraisal, other)	(g) Description of non-cash assistance	(h) Purpose of grant or assistance
WASHINGTON UNIVERSITY 700 ROSEDALE AVE ST LOUIS, MO 63112	43-0653611	501(C)(3)	38,130				RESEARCH SUBGRANT
UNIVERSITY OF CALIFORNIA LOS ANGELES 924 WESTWOOD BLVD LOS ANGELES, CA 90095	95-6006143	501(C)(3)	9,370				RESEARCH SUBGRANT

Form 990, Schedule I, Part II, Grants and Other Assistance to Domestic Organizations and Domestic Governments.							
(a) Name and address of organization or government	(b) EIN	(c) IRC section if applicable	(d) Amount of cash grant	(e) Amount of non-cash assistance	(f) Method of valuation (book, FMV, appraisal, other)	(g) Description of non-cash assistance	(h) Purpose of grant or assistance
UNIVERSITY OF CALIFORNIA SAN DIEGO 9500 GILMAN DR LA JOLLA, CA 92037	56-6001393	501(C)(3)	569,770				RESEARCH SUBHRANT
HARVARD UNIVERSITY P O BOX 415649 BOSTON, MA 02241	04-2103580	501(C)(3)	20,735				RESEARCH SUBGRANT



Form 990, Schedule I, Part II, Grants and Other Assistance to Domestic Organizations and Domestic Governments.							
(a) Name and address of organization or government	(b) EIN	(c) IRC section if applicable	(d) Amount of cash grant	(e) Amount of non-cash assistance	(f) Method of valuation (book, FMV, appraisal, other)	(g) Description of non-cash assistance	(h) Purpose of grant or assistance
UNIVERSITY OF TEXAS PO BOX 660120 DALLAS, TX 75266	74-0000949	501(C)(3)	13,020				RESEARCH SUBGRANT
UT SOUTHWESTERN MEDICAL CENTER PO BOX 814765 DALLAS, TX 75284	75-6002868	501(C)(3)	6,940				RESEARCH SUBGRANT

<b>Schedule J</b> <b>(Form 990)</b>  <small>Department of the Treasury Internal Revenue Service</small>	<b>Compensation Information</b>  <b>For certain Officers, Directors, Trustees, Key Employees, and Highest Compensated Employees</b> <b>▶ Complete if the organization answered "Yes" on Form 990, Part IV, line 23.</b> <b>▶ Attach to Form 990.</b> <b>▶ Go to <u>www.irs.gov/Form990</u> for instructions and the latest information.</b>		OMB No 1545-0047
			2018
			Open to Public Inspection
Name of the organization J CRAIG VENTER INSTITUTE		Employer identification number 52-1842938	

Part I Questions Regarding Compensation			Yes	No
<b>1a</b> Check the appropriate box(es) if the organization provided any of the following to or for a person listed on Form 990, Part VII, Section A, line 1a Complete Part III to provide any relevant information regarding these items				
<input checked="" type="checkbox"/> First-class or charter travel	<input type="checkbox"/> Housing allowance or residence for personal use			
<input type="checkbox"/> Travel for companions	<input type="checkbox"/> Payments for business use of personal residence			
<input checked="" type="checkbox"/> Tax indemnification and gross-up payments	<input type="checkbox"/> Health or social club dues or initiation fees			
<input type="checkbox"/> Discretionary spending account	<input checked="" type="checkbox"/> Personal services (e g , maid, chauffeur, chef)			
<b>b</b> If any of the boxes in line 1a are checked, did the organization follow a written policy regarding payment or reimbursement or provision of all of the expenses described above? If "No," complete Part III to explain			<b>1b</b>	Yes
<b>2</b> Did the organization require substantiation prior to reimbursing or allowing expenses incurred by all directors, trustees, officers, including the CEO/Executive Director, regarding the items checked in line 1a?			<b>2</b>	Yes
<b>3</b> Indicate which, if any, of the following the filing organization used to establish the compensation of the organization's CEO/Executive Director Check all that apply Do not check any boxes for methods used by a related organization to establish compensation of the CEO/Executive Director, but explain in Part III				
<input checked="" type="checkbox"/> Compensation committee	<input type="checkbox"/> Written employment contract			
<input checked="" type="checkbox"/> Independent compensation consultant	<input checked="" type="checkbox"/> Compensation survey or study			
<input type="checkbox"/> Form 990 of other organizations	<input checked="" type="checkbox"/> Approval by the board or compensation committee			
<b>4</b> During the year, did any person listed on Form 990, Part VII, Section A, line 1a, with respect to the filing organization or a related organization				
<b>a</b> Receive a severance payment or change-of-control payment?			<b>4a</b>	No
<b>b</b> Participate in, or receive payment from, a supplemental nonqualified retirement plan?			<b>4b</b>	No
<b>c</b> Participate in, or receive payment from, an equity-based compensation arrangement?			<b>4c</b>	No
If "Yes" to any of lines 4a-c, list the persons and provide the applicable amounts for each item in Part III				
<b>Only 501(c)(3), 501(c)(4), and 501(c)(29) organizations must complete lines 5-9.</b>				
<b>5</b> For persons listed on Form 990, Part VII, Section A, line 1a, did the organization pay or accrue any compensation contingent on the revenues of				
<b>a</b> The organization?			<b>5a</b>	No
<b>b</b> Any related organization?			<b>5b</b>	No
If "Yes," on line 5a or 5b, describe in Part III				
<b>6</b> For persons listed on Form 990, Part VII, Section A, line 1a, did the organization pay or accrue any compensation contingent on the net earnings of				
<b>a</b> The organization?			<b>6a</b>	No
<b>b</b> Any related organization?			<b>6b</b>	No
If "Yes," on line 6a or 6b, describe in Part III				
<b>7</b> For persons listed on Form 990, Part VII, Section A, line 1a, did the organization provide any nonfixed payments not described in lines 5 and 6? If "Yes," describe in Part III			<b>7</b>	Yes
<b>8</b> Were any amounts reported on Form 990, Part VII, paid or accrued pursuant to a contract that was subject to the initial contract exception described in Regulations section 53.4958-4(a)(3)? If "Yes," describe in Part III			<b>8</b>	No
<b>9</b> If "Yes" on line 8, did the organization also follow the rebuttable presumption procedure described in Regulations section 53.4958-6(c)?			<b>9</b>	

For each individual whose compensation must be reported on Schedule J, report compensation from the organization on row (i) and from related organizations, described in the instructions, on row (ii). Do not list any individuals that are not listed on Form 990, Part VII.

**Note.** The sum of columns (B)(i)-(iii) for each listed individual must equal the total amount of Form 990, Part VII, Section A, line 1a, applicable column (D) and (E) amounts for that individual.

See Additional Data Table

**Schedule J (Form 990) 2018**

**Part III**   **Supplemental Information**

Provide the information, explanation, or descriptions required for Part I, lines 1a, 1b, 3, 4a, 4b, 4c, 5a, 5b, 6a, 6b, 7, and 8, and for Part II. Also complete this part for any additional information.

Return Reference	Explanation
PART I, LINE 1A	SCHEDULE J, PART I, LINE 1A TAX INDEMNIFICATION AND GROSS-UP PAYMENTS - CERTAIN AWARDS ARE GROSSED UP FOR INCOME TAX AND INCLUDED AS TAXABLE COMPENSATION. SCHEDULE J, PART I, LINE 1A, FIRST-CLASS OR CHARTER TRAVEL - THE ORGANIZATION PROVIDES THE CEO FIRST CLASS AND CHARTER TRAVEL FOR BUSINESS PURPOSES. NO PART OF THIS BENEFIT IS TREATED AS TAXABLE COMPENSATION. SCHEDULE J, PART I, LINE 1A, PERSONAL SERVICES - THE ORGANIZATION PROVIDES THE CEO SERVICES OF BODYGUARDS WHEN HE TRAVELS. NO PART OF THIS BENEFIT IS TREATED AS TAXABLE COMPENSATION.

Return Reference	Explanation
PART I, LINE 7	THE INSTITUTE PROVIDES SERVICE AWARDS FOR ITS EMPLOYEES FOR FIVE, TEN, FIFTEEN AND TWENTY YEARS OF SERVICE



# Additional Data

**Software ID:**  
**Software Version:**  
**EIN:** 52-1842938  
**Name:** J CRAIG VENTER INSTITUTE

## Form 990, Schedule J, Part II - Officers, Directors, Trustees, Key Employees, and Highest Compensated Employees

(A) Name and Title		(B) Breakdown of W-2 and/or 1099-MISC compensation			(C) Retirement and other deferred compensation	(D) Nontaxable benefits	(E) Total of columns (B)(i)-(D)	(F) Compensation in column (B) reported as deferred on prior Form 990
		(i) Base Compensation	(ii) Bonus & incentive compensation	(iii) Other reportable compensation				
NELSON KAREN PRESIDENT	(i)	705,297	0	4,074	11,000	55,166	775,537	0
	(ii)	0	0	0	0	0	0	0
VENTER JOHN CRAIG CHAIRMAN & CHIEF EXEC OFFICER	(i)	1,177,027	0	16,284	9,833	36,841	1,239,985	0
	(ii)	0	0	0	0	0	0	0
NGUYEN TAI THRU 519 VP OF FINANCE/CFO	(i)	174,580	0	2,079	5,562	18,920	201,141	0
	(ii)	0	0	0	0	0	0	0
ADELSON JULIE VP, LEG AFFRS/GENERAL COUNSEL	(i)	357,400	0	13,415	6,475	27,100	404,390	0
	(ii)	0	0	0	0	0	0	0
FRIEDMAN ROBERT M VP FOR POLICY & UNIV RELATION	(i)	271,857	0	15,829	9,270	48,535	345,491	0
	(ii)	0	0	0	0	0	0	0
PEAKE ANTONY G VP FOR RESEARCH ADMINISTRATION	(i)	252,794	0	2,773	10,000	16,330	281,897	0
	(ii)	0	0	0	0	0	0	0
PIEPER REMBERT DIRECTOR, ROCKVILLE CAMPUS	(i)	268,077	0	5,373	7,575	24,089	305,114	0
	(ii)	0	0	0	0	0	0	0
SCHEUERMANN RICHARD H DIRECTOR, LA JOLLA CAMPUS	(i)	336,652	0	6,354	5,500	36,692	385,198	0
	(ii)	0	0	0	0	0	0	0
STOUT MARTIN CHIEF TECHNOLOGY OFFICER	(i)	304,336	0	6,354	11,000	55,104	376,794	0
	(ii)	0	0	0	0	0	0	0
GLASS JOHN PROFESSOR	(i)	206,677	0	4,584	7,494	51,685	270,440	0
	(ii)	0	0	0	0	0	0	0
SMITH HAMILTON O SCIENTIFIC DIRECTOR	(i)	319,934	0	12,576	0	23,475	355,985	0
	(ii)	0	0	0	0	0	0	0
STAYEAS TIMOTHY V DIRECTOR, IT NETWORK/SECURITY	(i)	204,767	0	1,597	8,360	58,537	273,261	0
	(ii)	0	0	0	0	0	0	0
SUTTON GRANGER G PROFESSOR	(i)	214,501	0	3,380	7,492	61,537	286,910	0
	(ii)	0	0	0	0	0	0	0
YUMUL MARY VP OF HUMAN RESOURCES	(i)	212,858	0	2,335	7,800	40,580	263,573	0
	(ii)	0	0	0	0	0	0	0

Note: To capture the full content of this document, please select landscape mode (11" x 8.5") when printing.

Schedule K  
(Form 990)

Department of the Treasury  
Internal Revenue Service

Name of the organization  
J CRAIG VENTER INSTITUTE

Supplemental Information on Tax-Exempt Bonds

- Complete if the organization answered "Yes" to Form 990, Part VI, line 24a. Provide descriptions, explanations, and any additional information in Part VI.
- Attach to Form 990.
- Go to [www.irs.gov/Form990](http://www.irs.gov/Form990) for the latest information.

OMB No 1545-0047

2018

Open to Public  
Inspection

Employer identification number

52-1842938

Part I Bond Issues

(a) Issuer name	(b) Issuer EIN	(c) CUSIP #	(d) Date issued	(e) Issue price	(f) Description of purpose	(g) Defeased		(h) On behalf of issuer		(i) Pool financing	
						Yes	No	Yes	No	Yes	No
A CA MUNICIPAL FINANCE AUTHORTIY	20-1563466		03-22-2016	29,152,000	REFUND PRIOR ISSUE		X		X		X

Part II Proceeds

		A		B		C		D	
1	Amount of bonds retired . . . . .								
2	Amount of bonds legally defeased . . . . .								
3	Total proceeds of issue . . . . .	29,152,000							
4	Gross proceeds in reserve funds . . . . .								
5	Capitalized interest from proceeds . . . . .								
6	Proceeds in refunding escrows . . . . .								
7	Issuance costs from proceeds . . . . .	549,311							
8	Credit enhancement from proceeds . . . . .								
9	Working capital expenditures from proceeds . . . . .								
10	Capital expenditures from proceeds . . . . .								
11	Other spent proceeds . . . . .								
12	Other unspent proceeds . . . . .								
13	Year of substantial completion . . . . .								
		Yes	No	Yes	No	Yes	No	Yes	No
14	Were the bonds issued as part of a current refunding issue? . . . . .	X							
15	Were the bonds issued as part of an advance refunding issue? . . . . .		X						
16	Has the final allocation of proceeds been made? . . . . .	X							
17	Does the organization maintain adequate books and records to support the final allocation of proceeds? . . . . .	X							

Part III Private Business Use

					A		B		C		D	
					Yes	No	Yes	No	Yes	No	Yes	No
1	Was the organization a partner in a partnership, or a member of an LLC, which owned property financed by tax-exempt bonds? . . . . .					X						
2	Are there any lease arrangements that may result in private business use of bond-financed property? . . . . .					X						



**Part III Private Business Use** (Continued)

	<b>A</b>		<b>B</b>		<b>C</b>		<b>D</b>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
<b>3a</b> Are there any management or service contracts that may result in private business use of bond-financed property? . . . . .		X						
<b>b</b> If "Yes" to line 3a, does the organization routinely engage bond counsel or other outside counsel to review any management or service contracts relating to the financed property?								
<b>c</b> Are there any research agreements that may result in private business use of bond-financed property? . . . . .		X						
<b>d</b> If "Yes" to line 3c, does the organization routinely engage bond counsel or other outside counsel to review any research agreements relating to the financed property?								
<b>4</b> Enter the percentage of financed property used in a private business use by entities other than a section 501(c)(3) organization or a state or local government . . . . . ▶								
<b>5</b> Enter the percentage of financed property used in a private business use as a result of unrelated trade or business activity carried on by your organization, another section 501(c)(3) organization, or a state or local government . . . . . ▶								
<b>6</b> Total of lines 4 and 5 . . . . .								
<b>7</b> Does the bond issue meet the private security or payment test? . . .	X							
<b>8a</b> Has there been a sale or disposition of any of the bond-financed property to a nongovernmental person other than a 501(c)(3) organization since the bonds were issued? . . . . .		X						
<b>b</b> If "Yes" to line 8a, enter the percentage of bond-financed property sold or disposed of . .								
<b>c</b> If "Yes" to line 8a, was any remedial action taken pursuant to Regulations sections 1.141-12 and 1.145-2? . . . . .								
<b>9</b> Has the organization established written procedures to ensure that all nonqualified bonds of the issue are remediated in accordance with the requirements under Regulations sections 1.141-12 and 1.145-2? . . . . .	X							

**Part IV Arbitrage**

	<b>A</b>		<b>B</b>		<b>C</b>		<b>D</b>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
<b>1</b> Has the issuer filed Form 8038-T, Arbitrage Rebate, Yield Reduction and Penalty in Lieu of Arbitrage Rebate? . . .		X						
<b>2</b> If "No" to line 1, did the following apply? . . . .								
<b>a</b> Rebate not due yet? . . . . .	X							
<b>b</b> Exception to rebate? . . . . .		X						
<b>c</b> No rebate due? . . . . .		X						
If "Yes" to line 2c, provide in Part VI the date the rebate computation was performed . . . . .								
<b>3</b> Is the bond issue a variable rate issue? . . . . .		X						
<b>4a</b> Has the organization or the governmental issuer entered into a qualified hedge with respect to the bond issue?		X						
<b>b</b> Name of provider . . . . .								
<b>c</b> Term of hedge . . . . .								
<b>d</b> Was the hedge superintegrated? . . . . .								
<b>e</b> Was the hedge terminated? . . . . .								

**Part IV Arbitrage** (Continued)

	<b>A</b>		<b>B</b>		<b>C</b>		<b>D</b>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
<b>5a</b> Were gross proceeds invested in a guaranteed investment contract (GIC)?		X						
<b>b</b> Name of provider . . . . .								
<b>c</b> Term of GIC . . . . .								
<b>d</b> Was the regulatory safe harbor for establishing the fair market value of the GIC satisfied? . . . . .								
<b>6</b> Were any gross proceeds invested beyond an available temporary period?		X						
<b>7</b> Has the organization established written procedures to monitor the requirements of section 148? . . . .	X							

**Part V Procedures To Undertake Corrective Action**

	<b>A</b>		<b>B</b>		<b>C</b>		<b>D</b>	
	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
Has the organization established written procedures to ensure that violations of federal tax requirements are timely identified and corrected through the voluntary closing agreement program if self-remediation is not available under applicable regulations?	X							

**Part VI Supplemental Information.** Provide additional information for responses to questions on Schedule K (see instructions).

Return Reference	Explanation
SCHEDULE K - TAX EXEMPT BONDS	PROJECT COMPLETED IN NOVEMBER 2013 2011 BOND WAS REFINANCED IN 2016

**Additional Data**

**Software ID:**  
**Software Version:**  
**EIN:** 52-1842938  
**Name:** J CRAIG VENTER INSTITUTE

Return Reference	Explanation
SCHEDULE K - TAX EXEMPT BONDS	PROJECT COMPLETED IN NOVEMBER 2013 2011 BOND WAS REFINANCED IN 2016

Schedule L

(Form 990 or 990-EZ)

Transactions with Interested Persons

▶ Complete if the organization answered "Yes" on Form 990, Part IV, lines 25a, 25b, 26, 27, 28a, 28b, or 28c, or Form 990-EZ, Part V, line 38a or 40b.  
▶ Attach to Form 990 or Form 990-EZ.  
▶Go to [www.irs.gov/Form990](http://www.irs.gov/Form990) for the latest information.

OMB No 1545-0047

2018

Open to Public Inspection

Department of the Treasury  
Internal Revenue Service

Name of the organization  
J CRAIG VENTER INSTITUTE

Employer identification number  
52-1842938

Part I

Excess Benefit Transactions (section 501(c)(3), section 501(c)(4), and 501(c)(29) organizations only)  
Complete if the organization answered "Yes" on Form 990, Part IV, line 25a or 25b, or Form 990-EZ, Part V, line 40b

1	(a) Name of disqualified person	(b) Relationship between disqualified person and organization	(c) Description of transaction	(d) Corrected?	
				Yes	No

2

Enter the amount of tax incurred by organization managers or disqualified persons during the year under section 4958 . . . . . ▶ \$

3

Enter the amount of tax, if any, on line 2, above, reimbursed by the organization . . . . . ▶ \$

Part II

Loans to and/or From Interested Persons.  
Complete if the organization answered "Yes" on Form 990-EZ, Part V, line 38a, or Form 990, Part IV, line 26, or if the organization reported an amount on Form 990, Part X, line 5, 6, or 22

(a) Name of interested person	(b) Relationship with organization	(c) Purpose of loan	(d) Loan to or from the organization?		(e) Original principal amount	(f) Balance due	(g) In default?		(h) Approved by board or committee?		(i) Written agreement?	
			To	From			Yes	No	Yes	No	Yes	No
Total						▶ \$						

Part III

Grants or Assistance Benefiting Interested Persons.  
Complete if the organization answered "Yes" on Form 990, Part IV, line 27.

(a) Name of interested person	(b) Relationship between interested person and the organization	(c) Amount of assistance	(d) Type of assistance	(e) Purpose of assistance

**Part IV Business Transactions Involving Interested Persons.**

Complete if the organization answered "Yes" on Form 990, Part IV, line 28a, 28b, or 28c.

(a) Name of interested person	(b) Relationship between interested person and the organization	(c) Amount of transaction	(d) Description of transaction	(e) Sharing of organization's revenues?	
				Yes	No
(1) HEATHER KOWALSKI COMMUNICATIONS LLC	SEE PART V	80,000	PUBLIC RELATIONS SERVICES		No

**Part V Supplemental Information**

Provide additional information for responses to questions on Schedule L (see instructions)

Return Reference	Explanation
SCHEDULE L, PART IV	(A) NAME OF PERSON HEATHER KOWALSKI COMMUNICATIONS LLC(B) RELATIONSHIP BETWEEN INTERESTED PERSON AND ORGANIZATION ENTITY SET UP IN THE NAME OF HEATHER KOWALSKI, SPOUSE OF FOUNDER, BOARD MEMBER SINCE 2014 (C) AMOUNT OF TRANSACTION \$ 80,000(D) DESCRIPTION OF TRANSACTION PUBLIC RELATIONS SERVICES

SCHEDULE M  
(Form 990)

Department of the Treasury  
Internal Revenue Service

Noncash Contributions

►Complete if the organizations answered "Yes" on Form 990, Part IV, lines 29 or 30.  
► Attach to Form 990.  
►Go to [www.irs.gov/Form990](http://www.irs.gov/Form990) for the latest information.

OMB No 1545-0047

2018

Open to Public Inspection

Name of the organization  
J CRAIG VENTER INSTITUTE

Employer identification number  
52-1842938

Part I

Types of Property

	(a) Check if applicable	(b) Number of contributions or items contributed	(c) Noncash contribution amounts reported on Form 990, Part VIII, line 1g	(d) Method of determining noncash contribution amounts
1 Art—Works of art . . . .				
2 Art—Historical treasures . .				
3 Art—Fractional interests . .				
4 Books and publications . .				
5 Clothing and household goods . . . . .				
6 Cars and other vehicles . . .				
7 Boats and planes . . . . .				
8 Intellectual property . . . .				
9 Securities—Publicly traded .				
10 Securities—Closely held stock .	X	4	5,923,000	FMV
11 Securities—Partnership, LLC, or trust interests . . . . .				
12 Securities—Miscellaneous . .				
13 Qualified conservation contribution—Historic structures . . . . .				
14 Qualified conservation contribution—Other . . . .				
15 Real estate—Residential . .				
16 Real estate—Commercial . .				
17 Real estate—Other . . . .				
18 Collectibles . . . . .				
19 Food inventory . . . . .				
20 Drugs and medical supplies .				
21 Taxidermy . . . . .				
22 Historical artifacts . . . . .				
23 Scientific specimens . . . .				
24 Archeological artifacts . . . .				
25 Other ► ( )				
26 Other ► ( )				
27 Other ► ( )				
28 Other ► ( )				

29

Number of Forms 8283 received by the organization during the tax year for contributions for which the organization completed Form 8283, Part IV, Donee Acknowledgement

29

0

30a

During the year, did the organization receive by contribution any property reported in Part I, lines 1 through 28, that it must hold for at least three years from the date of the initial contribution, and which is not required to be used for exempt purposes for the entire holding period?

Yes

No

30a

No

b If "Yes," describe the arrangement in Part II

31

Does the organization have a gift acceptance policy that requires the review of any nonstandard contributions?

Yes

31

Does the organization hire or use third parties or related organizations to solicit, process, or sell noncash contributions?

No

32a

No

b If "Yes," describe in Part II

33

If the organization did not report an amount in column (c) for a type of property for which column (a) is checked, describe in Part II

**Part II** **Supplemental Information.**

Provide the information required by Part I, lines 30b, 32b, and 33, and whether the organization is reporting in Part I, column (b), the number of contributions, the number of items received, or a combination of both. Also complete this part for any additional information.

Return Reference	Explanation
PART I, COLUMN (B)	PART I, COLUMN B REPORTS THE NUMBER OF CONTRIBUTIONS

**SCHEDULE O**  
(Form 990 or 990-EZ)

Department of the Treasury

Name of the organization  
J CRAIG VENTER INSTITUTE

**Supplemental Information to Form 990 or 990-EZ**

Complete to provide information for responses to specific questions on Form 990 or 990-EZ or to provide any additional information.

▶ Attach to Form 990 or 990-EZ.

▶ Go to [www.irs.gov/Form990](http://www.irs.gov/Form990) for the latest information.

OMB No 1545-0047

**2018**

**Open to Public Inspection**

**Employer identification number**

52-1842938

**990 Schedule O, Supplemental Information**

Return Reference	Explanation
FORM 990, PART VI, SECTION A, LINE 2	BOARD MEMBERS HEATHER KOWALSKI AND J CRAIG VENTER HAVE A FAMILY RELATIONSHIP



# 990 Schedule O, Supplemental Information

Return Reference	Explanation
FORM 990, PART VI, SECTION B, LINE 11B	THE FORM 990 IS REVIEWED BY MANAGEMENT A COMPLETE COPY OF THE FORM 990 AND SUPPORTING SCHEDULES WAS PROVIDED TO THE FULL BOARD FOR REVIEW PRIOR TO BEING FILED

# 990 Schedule O, Supplemental Information

Return Reference	Explanation
FORM 990, PART VI, SECTION B, LINE 12C	JCVI MONITORS COMPLIANCE OF ITS CONFLICT OF INTEREST POLICY THROUGH AN ANNUAL SOLICITATION OF CONFLICT OF INTEREST STATEMENTS FROM TRUSTEES, OFFICERS, AND EMPLOYEES IF A PERSON HAS A CONFLICT WITH RESPECT TO A TRANSACTION, SUCH PERSON IS NOT ALLOWED TO VOTE

# 990 Schedule O, Supplemental Information

Return Reference	Explanation
FORM 990, PART VI, SECTION B, LINE 15	JCVI USES AN OUTSIDE COMPENSATION CONSULTANT, TO PROVIDE A LIST OF COMPARABLE SALARIES FOR THE CEO AND OFFICERS THESE ARE REVIEWED BY THE JCVI COMPENSATION COMMITTEE AND CEO BEFORE A FINAL DETERMINATION IS MADE THIS PROCESS WAS DOCUMENTED AND LAST DONE IN OCTOBER 2018

**990 Schedule O, Supplemental Information**

Return Reference	Explanation
FORM 990, PART VI, SECTION C, LINE 19	THE ORGANIZATION'S FINANCIAL STATEMENTS, GOVERNING DOCUMENTS, AND CONFLICT OF INTEREST POLICY ARE MADE AVAILABLE TO THE PUBLIC UPON REQUEST

**990 Schedule O, Supplemental Information**

Return Reference	Explanation
FORM 990, PART XI, LINE 9	K-1 PASSTHROUGH 737

SCHEDULE R  
(Form 990)

Department of the Treasury  
Internal Revenue Service

Related Organizations and Unrelated Partnerships

▶ Complete if the organization answered "Yes" on Form 990, Part IV, line 33, 34, 35b, 36, or 37.  
▶ Attach to Form 990.  
▶ Go to [www.irs.gov/Form990](http://www.irs.gov/Form990) for instructions and the latest information.

OMB No 1545-0047

2018

Open to Public Inspection

Name of the organization  
J CRAIG VENTER INSTITUTE

Employer identification number  
52-1842938

Part I Identification of Disregarded Entities Complete if the organization answered "Yes" on Form 990, Part IV, line 33.

(a) Name, address, and EIN (if applicable) of disregarded entity	(b) Primary activity	(c) Legal domicile (state or foreign country)	(d) Total income	(e) End-of-year assets	(f) Direct controlling entity
(1) OCEAN SOLUTION LLC 4120 CAPRICORN LANE LA JOLLA, CA 92037 26-0145075	DEVELOPMENT	DE	0	1,033,128	JCVI
(2) SORCERER II LLC 4120 CAPRICORN LANE LA JOLLA, CA 92037 56-2370157	RESEARCH	RI	0	1,484,161	JCVI

Part II Identification of Related Tax-Exempt Organizations Complete if the organization answered "Yes" on Form 990, Part IV, line 34 because it had one or more related tax-exempt organizations during the tax year.

(a) Name, address, and EIN of related organization	(b) Primary activity	(c) Legal domicile (state or foreign country)	(d) Exempt Code section	(e) Public charity status (if section 501(c)(3))	(f) Direct controlling entity	(g) Section 512(b)(13) controlled entity?	
						Yes	No

**Part III Identification of Related Organizations Taxable as a Partnership** Complete if the organization answered "Yes" on Form 990, Part IV, line 34 because it had one or more related organizations treated as a partnership during the tax year.

(a) Name, address, and EIN of related organization	(b) Primary activity	(c) Legal domicile (state or foreign country)	(d) Direct controlling entity	(e) Predominant income(related, unrelated, excluded from tax under sections 512- 514)	(f) Share of total income	(g) Share of end-of-year assets	(h) Disproportionate allocations?		(i) Code V-UBI amount in box 20 of Schedule K-1 (Form 1065)	(j) General or managing partner?		(k) Percentage ownership
							Yes	No		Yes	No	

**Part IV Identification of Related Organizations Taxable as a Corporation or Trust** Complete if the organization answered "Yes" on Form 990, Part IV, line 34 because it had one or more related organizations treated as a corporation or trust during the tax year.

(a) Name, address, and EIN of related organization	(b) Primary activity	(c) Legal domicile (state or foreign country)	(d) Direct controlling entity	(e) Type of entity (C corp, S corp, or trust)	(f) Share of total income	(g) Share of end-of- year assets	(h) Percentage ownership	(i) Section 512(b) (13) controlled entity?	
								Yes	No

**Part V Transactions With Related Organizations** Complete if the organization answered "Yes" on Form 990, Part IV, line 34, 35b, or 36.

**Note.** Complete line 1 if any entity is listed in Parts II, III, or IV of this schedule

**1** During the tax year, did the organization engage in any of the following transactions with one or more related organizations listed in Parts II-IV?

**a** Receipt of **(i)** interest, **(ii)** annuities, **(iii)** royalties, or **(iv)** rent from a controlled entity . . . . .

**b** Gift, grant, or capital contribution to related organization(s) . . . . .

**c** Gift, grant, or capital contribution from related organization(s) . . . . .

**d** Loans or loan guarantees to or for related organization(s) . . . . .

**e** Loans or loan guarantees by related organization(s) . . . . .

**f** Dividends from related organization(s) . . . . .

**g** Sale of assets to related organization(s) . . . . .

**h** Purchase of assets from related organization(s) . . . . .

**i** Exchange of assets with related organization(s) . . . . .

**j** Lease of facilities, equipment, or other assets to related organization(s) . . . . .

**k** Lease of facilities, equipment, or other assets from related organization(s) . . . . .

**l** Performance of services or membership or fundraising solicitations for related organization(s) . . . . .

**m** Performance of services or membership or fundraising solicitations by related organization(s) . . . . .

**n** Sharing of facilities, equipment, mailing lists, or other assets with related organization(s) . . . . .

**o** Sharing of paid employees with related organization(s) . . . . .

**p** Reimbursement paid to related organization(s) for expenses . . . . .

**q** Reimbursement paid by related organization(s) for expenses . . . . .

**r** Other transfer of cash or property to related organization(s) . . . . .

**s** Other transfer of cash or property from related organization(s) . . . . .

Yes

No

1a

1b

1c

1d

1e

1f

1g

1h

1i

1j

1k

1l

1m

1n

1o

1p

1q

1r

1s

**2** If the answer to any of the above is "Yes," see the instructions for information on who must complete this line, including covered relationships and transaction thresholds

(a) Name of related organization	(b) Transaction type (a-s)	(c) Amount involved	(d) Method of determining amount involved

Schedule R (Form 990) 2018



Provide the following information for each entity taxed as a partnership through which the organization conducted more than five percent of its activities (measured by total assets or gross revenue) that was not a related organization. See instructions regarding exclusion for certain investment partnerships.

[illegible]

**Part VII**   **Supplemental Information**

Provide additional information for responses to questions on Schedule R (see instructions)

Return Reference	Explanation