

INSTITUTE FOR SYSTEMS BIOLOGY

Single Audit Reports

For the Year Ended December 31, 2018

Table of Contents

	Page
Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With <i>Government Auditing Standards</i>	1 - 2
Report on Compliance for Each Major Federal Program; Report on Internal Control Over Compliance; and Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance	3 - 5
Schedule of Expenditures of Federal Awards	6 - 8
Notes to Schedule of Expenditures of Federal Awards	9
Schedule of Findings and Questioned Costs	10 - 11
Summary Schedule of Prior Audit Findings	12

**Report on Internal Control Over Financial Reporting
and on Compliance and Other Matters Based on an
Audit of Financial Statements Performed in
Accordance With *Government Auditing Standards***

Independent Auditor's Report

**To the Board of Directors
Institute for Systems Biology
Seattle, Washington**

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Institute for Systems Biology (the Institute), which comprise the statement of financial position as of December 31, 2018, and the related statements of activities, functional expenses, and cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated June 3, 2019.

INTERNAL CONTROL OVER FINANCIAL REPORTING

In planning and performing our audit of the financial statements, we considered the Institute's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Institute's internal control. Accordingly, we do not express an opinion on the effectiveness of the Institute's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.



T: 425-454-4919
T: 800-504-8747
F: 425-454-4620

10900 NE 4th St
Suite 1400
Bellevue WA
98004

clarknuber.com

COMPLIANCE AND OTHER MATTERS

As part of obtaining reasonable assurance about whether the Institute's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

PURPOSE OF THIS REPORT

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Institute's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Clark Nuber P.S.

Certified Public Accountants

June 3, 2019

**Report on Compliance for Each Major Federal Program;
Report on Internal Control Over Compliance; and
Report on Schedule of Expenditures of Federal Awards
Required by the Uniform Guidance**

Independent Auditor's Report

**To the Board of Directors
Institute for Systems Biology
Seattle, Washington**

REPORT ON COMPLIANCE FOR EACH MAJOR FEDERAL PROGRAM

We have audited the Institute for Systems Biology's (the Institute's) compliance with the types of compliance requirements described in the OMB Compliance Supplement that could have a direct and material effect on each of the Institute's major federal programs for the year ended December 31, 2018. The Institute's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of the Institute's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. Code of Federal Regulations (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the Institute's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of the Institute's compliance.



T: 425-454-4919
T: 800-504-8747
F: 425-454-4620

10900 NE 4th St
Suite 1400
Bellevue WA
98004

clarknuber.com

Opinion on Each Major Federal Program

In our opinion, the Institute complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended December 31, 2018.

REPORT ON INTERNAL CONTROL OVER COMPLIANCE

Management of the Institute is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Institute's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Institute's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

REPORT ON SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

We have audited the financial statements of the Institute as of and for the year ended December 31, 2018, and have issued our report thereon dated June 3, 2019, which contained an unmodified opinion on those financial statements. Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by the audit requirements of the Uniform Guidance and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated, in all material respects, in relation to the financial statements as a whole.

Clark Nuber P.S.

Certified Public Accountants
June 3, 2019

INSTITUTE FOR SYSTEMS BIOLOGY

**Schedule of Expenditures of Federal Awards
For the Year Ended December 31, 2018**

<u>Program Title/Federal Grantor/Pass-Through Grantor</u>	<u>Federal CFDA Number</u>	<u>Pass-Through Number</u>	<u>Passed Through to Subrecipients</u>	<u>Fiscal Year Expenditures</u>
Research and Development Cluster				
U.S. Department of Health and Human Services:				
National Institutes of Health- Cancer Genomics Cloud	93.HHSN261201400007C		\$ 31,183	\$ 94,471
Systems Approach to Immunity and Inflammation- Passed through OriGene Technologies, Inc.	93.HHSN261201500049C	ISB-1359		130,509
Systems Biology of Influenza Virus Infection and Vaccination- Passed through Medical Science and Computing Cancer Genomics Cloud Resource-	93.HHSN272201500015I	CSA-NIAID-ISB-17-2017-006		267,649
Passed through Leidos Biomedical Research, Inc.	93.HHSN261200800001E	17X148	729,474	2,094,736
Trans-NIH Research Support- Passed through Pacific Northwest Research Institute	93.310	126496-S01		184,616
National Center for Advancing Translational Sciences- Direct	93.350		521,115	1,114,320
Passed through Oregon Health and Service University	93.350	P0453A-A		263,357
Total for CFDA 93.350			521,115	1,377,677
21st Century Cures Act - Beau Biden Cancer Moonshot- Passed through Dana Farber Cancer Institute	93.353	1288401		41,541
Cancer Cause and Prevention Research- Passed through University of Washington	93.393	UWSC8481		174,292
Passed through Fred Hutchison Cancer Research Center	93.393	918392		136,169
Total for CFDA 93.393				310,461
Cancer Detection and Diagnosis Research- Passed through British Columbia Cancer Agency	93.394	2018-0238		204,064
Passed through Virginia Commonwealth University	93.394	FP00005690_SA001		113,343
Total for CFDA 93.394				317,407
Cancer Treatment Research	93.395		69,210	523,773
Cancer Biology Research- Direct	93.396		293,393	791,375
Passed through Johns Hopkins University	93.396	PO2002979490		108,312
Passed through University of Texas	93.396	UTA18-000299		140,799
Passed through University of Southern California	93.396	63910573		339,990
Total for CFDA 93.396			293,393	1,380,476
Human Genome Research	93.172		1,675	470,421
Cancer Center Support	93.397		1,393	725,022
Extramural Research Programs in the Neurosciences and Neurological Disorders- Passed through Houston Methodist Research Institute	93.853	AGMT00000857		24,054
Cancer Research Manpower	93.398			54,158
Drug Abuse and Addiction Research Programs- Passed through Ohio State University	93.279	60061348		37,716
Cardiovascular Diseases Research- Direct	93.837			523,388
Passed through University of Washington	93.837	BPO20259		194,389
Passed through Des Moines University	93.837	08-16-05 sub 3		146,506
Total for CFDA 93.837				864,283
Lung Diseases Research- Passed through The Brigham & Women's Hospital, Inc.	93.838	117046		685,144
Diabetes, Digestive and Kidney Diseases Extramural Research- Direct	93.847		117,450	234,921

See independent auditor's report and notes to schedule of expenditures of federal awards.

INSTITUTE FOR SYSTEMS BIOLOGY

**Schedule of Expenditures of Federal Awards
For the Year Ended December 31, 2018**

Program Title/Federal Grantor/Pass-Through Grantor	Federal CFDA Number	Pass-Through Number	Passed Through to Subrecipients	Fiscal Year Expenditures
Child Health and Human Development Extramural Research- Direct	93.865			39,934
Passed through Cincinnati Children's Hospital	93.865	138656		260,048
Total for CFDA 93.865				299,982
Aging Research- Passed through PreCyte	93.866	AG2015-01-ISB-001		1,269
Passed through Sage Bionetworks	93.866	AMPT2017ISB		140,545
Passed through Duke University	93.866	2036651		203,358
Passed through Longevity Consortium	93.866	1013336_ISB		46,014
Passed through California Pacific Medical Center	93.866	280201018-S228		82,389
Passed through University of Florida	93.866	UF13201		199,854
Total for CFDA 93.866				673,429
Biomedical Research and Research Training- Direct	93.859		183,967	1,291,669
Passed through University of Colorado, Boulder	93.859	1554625		320,405
Passed through University of Colorado, Boulder	93.859	1553848		48,054
Passed through University of Washington	93.859	UWSC9891		89,266
Passed through University of Washington	93.859	UWSC10140		32,933
Total for CFDA 93.859			183,967	1,782,327
Allergy and Infectious Disease Research- Direct	93.855		18,896	1,118,982
Passed through Center for Infectious Disease Research	93.855	ISB-10135		262,798
Passed through Center for Infectious Disease Research	93.855	ISB-10135DC		79,576
Passed through Center for Infectious Disease Research	93.855	ISB-12005		121,815
Passed through Center for Infectious Disease Research	93.855	ISB-13534		17,540
Passed through Center for Infectious Disease Research	93.855	ISB-10170		313,500
Passed through University of Washington	93.855	UWSC10255		45,120
Total for CFDA 93.855			18,896	1,959,331
Total U.S. Department of Health and Human Services			1,967,756	14,534,104
National Science Foundation:				
Engineering Grants- Passed through University of Washington	47.041	UWSC8578		117,170
Geosciences- Passed through University of Washington	47.050	UWSC9760		6,555
Biological Sciences- Direct	47.074			1,347,658
Passed through Portland State University	47.074	206THO552		35,129
Passed through San Diego State University	47.074	SA0000545		103,881
Total for CFDA 47.074				1,486,668
Total National Science Foundation				1,610,393
U.S. Department of Defense:				
U.S. Army Medical Command- Systems Approach to Immunity and Inflammation	12.HDTRA1-13-C-0055		8,095	252,934
Inflammatory Mediators Testing- Direct	12.W81XWH-17-C-0220		98,000	443,823
Direct	12.W81XWH18C0158			170,911
Total for Inflammatory Mediators Testing			98,000	614,734

See independent auditor's report and notes to schedule of expenditures of federal awards.

INSTITUTE FOR SYSTEMS BIOLOGY

**Schedule of Expenditures of Federal Awards
For the Year Ended December 31, 2018**

<u>Program Title/Federal Grantor/Pass-Through Grantor</u>	<u>Federal CFDA Number</u>	<u>Pass-Through Number</u>	<u>Passed Through to Subrecipients</u>	<u>Fiscal Year Expenditures</u>
High Throughput Platform- Pass through California Institute of Technology	12.W911NF-09-D-0001	S385787		40,100
Military Medical Research and Development- Direct	12.420		95,775	329,480
Basic Scientific Research- Passed through Harvard College	12.431	124045-5104226		81,105
Total U.S. Department of Defense			201,870	1,318,353
U.S. Department of Energy:				
Center for Advanced Bioenergy- Passed through University of Illinois Chicago	81.049	090634-16919		51,105
Experimental Design, Implementation- Passed through Lawrence Berkeley National Lab	81.DE-AC02-05CH11231	6953601		636,088
Total U.S. Department of Energy				687,193
Total Research and Development Cluster/Expenditures of Federal Awards			<u>\$ 2,169,626</u>	<u>\$ 18,150,043</u>

See independent auditor's report and notes to schedule of expenditures of federal awards.

INSTITUTE FOR SYSTEMS BIOLOGY

**Notes to Schedule of Expenditures of Federal Awards
For the Year Ended December 31, 2018**

Note 1 - Method of Accounting

The accompanying schedule of expenditures of federal awards (the "Schedule") includes the federal award activity of the Institute for Systems Biology (the Institute) under programs of the federal government for the year ended December 31, 2018. The information in this Schedule is presented in accordance with the requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (Uniform Guidance)*. Because the Schedule presents only a selected portion of the operations of the Institute, it is not intended to and does not present the financial position, changes in net assets or cash flows of the Institute.

Note 2 - Significant Accounting Policies

Expenditures reported on the Schedule are reported on the accrual basis of accounting. Such expenditures are recognized following, as applicable, either the cost principles in OMB Circular A-122, *Cost Principles for Non-Profit Organizations*, or the cost principles contained in the Uniform Guidance, wherein certain types of expenditures are not allowable or are limited as to reimbursement. The Institute has elected not to use the 10-percent de minimis indirect cost rate allowed under the Uniform Guidance. Negative amounts shown on the Schedule represent adjustments or credits made in the normal course of business to amounts reported as expenditures in prior years.

INSTITUTE FOR SYSTEMS BIOLOGY

**Schedule of Findings and Questioned Costs
For the Year Ended December 31, 2018**

Section I - Summary of Auditor's Results

Financial Statements

Type of auditor's report issued: Unmodified

Internal control over financial reporting:

- Material weaknesses identified? Yes No
- Significant deficiencies identified? Yes None reported.

Noncompliance material to financial statements noted? Yes No

Federal Awards

Internal control over major programs:

- Material weaknesses identified? Yes No
- Significant deficiencies identified? Yes None reported.

Type of auditor's report issued on compliance for major programs: Unmodified

Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)? Yes No

Identification of Major Programs

<u>CFDA Numbers</u>	<u>Name of Federal Program or Cluster</u>
12.420 12.431 12.W81XWH-17-C-0220	Research and Development Cluster
12.W81XWH18C0158 12.W911NF-09-D-0001	
47.041 47.050 47.074 81.049	
81.DE-AC02-05CH11231 93.172	
93.279 93.393 93.394 93.395	
93.396 93.310 93.350 93.353	
93.397 93.398 93.837 93.838	
93.847 93.853 93.855 93.859	
93.865 93.866 12.HDTRA1-13-C-0055	
93.HHSN261201400007C 93.HHSN272201500015I	
93.HHSN261200800001E 93.HHSN261201500049C	

Dollar threshold used to distinguish between Type A and Type B programs: \$ 750,000

Auditee qualified as low-risk auditee? Yes No

INSTITUTE FOR SYSTEMS BIOLOGY

**Schedule of Findings and Questioned Costs
For the Year Ended December 31, 2018**

Section II - Financial Statement Findings

No matters reported.

Section III - Findings and Questioned Costs for Federal Awards

No matters reported.

INSTITUTE FOR SYSTEMS BIOLOGY

**Summary Schedule of Prior Audit Findings
For the Year Ended December 31, 2018**

Financial Statement Findings

No matters were reported.

Findings and Questioned Costs for Federal Awards

Finding 2017-001

Significant deficiency in Internal controls over compliance related to specialized service facility costs.

Condition/Context for Evaluation

During the year ended December 31, 2017, from a sample of 60 internal control selections, we identified 14 instances which shared service invoice rates did not conform to the rates included in the most current internal rate sheet. In 13 of the 14 instances, rates used were lower than the rate in the most current internal rate sheet and in 1 of the of 14 instances, the rate used was higher than the rate in the most current internal rate sheet. The sample was not a statistical sample.

Recommendation

We recommend that management review all shared services invoices to ensure that rates are used in accordance with the current rate sheet.

Current Year Status

The Institute implemented new processes and procedures to address this area.