

INSTITUTE FOR SYSTEMS BIOLOGY

Single Audit Reports

For the Year Ended December 31, 2019

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**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, 2019, 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 October 27, 2020.

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) as a basis for designing 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.



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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 financial statements. 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

October 27, 2020

**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, 2019. 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.



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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, 2019.

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, 2019, and have issued our report thereon dated October 27, 2020, 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
October 27, 2020

INSTITUTE FOR SYSTEMS BIOLOGY

**Schedule of Expenditures of Federal Awards
For the Year Ended December 31, 2019**

| <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: | | | | |
| 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 | \$ - | \$ 326,397 |
| Passed through The Brigham & Women's Hospital, Inc. | 93.HHSN261200800001E | 19X037Q | | 201,604 |
| Passed through Leidos Biomedical Research, Inc. | 93.HHSN261200800001E | 17X148 | <u>779,081</u> | <u>1,963,727</u> |
| Total for CFDA 93.HHSN261200800001E | | | 779,081 | 2,165,331 |
| Human Genome Research | 93.172 | | 60,071 | 790,916 |
| Drug Abuse and Addiction Research Programs- Passed through Ohio State University | 93.279 | 60061348 | | 60,371 |
| Trans-NIH Research Support- Passed through Pacific Northwest Research Institute | 93.310 | 126496-S01 | | 25,397 |
| Passed through Duke University | 93.310 | A03-2348 | | 21,541 |
| Passed through Ohio State University | 93.310 | 60072805 | | <u>7,385</u> |
| Total for CFDA 93.310 | | | | 54,323 |
| National Center for Advancing Translational Sciences- Direct | 93.350 | | 39,940 | 539,594 |
| Passed through Oregon Health and Service University | 93.350 | P0453A-A | | <u>255,070</u> |
| Total for CFDA 93.350 | | | 39,940 | 794,664 |
| 21st Century Cures Act - Beau Biden Cancer Moonshot- Passed through Dana Farber Cancer Institute | 93.353 | 1288401 | | 230,442 |
| Cancer Cause and Prevention Research- Passed through University of Washington | 93.393 | UWSC8481 | | 131,109 |
| Passed through Fred Hutchison Cancer Research Center | 93.393 | 1004577 | | 43,244 |
| Passed through Fred Hutchison Cancer Research Center | 93.393 | 918392 | | <u>127,344</u> |
| Total for CFDA 93.393 | | | | 301,697 |
| Cancer Detection and Diagnosis Research- Passed through British Columbia Cancer Agency | 93.394 | 2018-0238 | | 197,627 |
| Passed through Virginia Commonwealth University | 93.394 | FP00005690_SA001 | | <u>97,734</u> |
| Total for CFDA 93.394 | | | | 295,361 |
| Cancer Treatment Research | 93.395 | | 66,232 | 204,499 |
| Cancer Biology Research- Direct | 93.396 | | 120,334 | 781,031 |
| Passed through Fred Hutchison Cancer Research Center | 93.396 | 990885 | | 26,770 |
| Passed through University of California Riverside | 93.396 | S-001145 | | 32,873 |
| Passed through Johns Hopkins University | 93.396 | PO2002979490 | | 97,430 |
| Passed through University of Texas | 93.396 | UTA18-000299 | | 273,539 |
| Passed through University of Southern California | 93.396 | 63910573 | | <u>7,019</u> |
| Total for CFDA 93.396 | | | 120,334 | 1,218,662 |
| Cancer Center Support | 93.397 | | 2,065,841 | 3,241,501 |
| Cancer Research Manpower | 93.398 | | | 62,341 |
| Cardiovascular Diseases Research- Direct | 93.837 | | | 431,163 |
| Passed through University of Washington | 93.837 | BPO20259 | | <u>191,328</u> |
| Total for CFDA 93.837 | | | | 622,491 |

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

INSTITUTE FOR SYSTEMS BIOLOGY

**Schedule of Expenditures of Federal Awards (Continued)
For the Year Ended December 31, 2019**

| <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> |
|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------------------|-------------------------------------|
| Lung Diseases Research- Passed through The Brigham & Women's Hospital, Inc. | 93.838 | 117046 | | 293,551 |
| Diabetes, Digestive and Kidney Diseases Extramural Research | 93.847 | | | 47,338 |
| Extramural Research Programs in the Neurosciences and Neurological Disorders- Passed through Houston Methodist Research Institute | 93.853 | AGMT00000857/AM1 | | 12,487 |
| Allergy and Infectious Disease Research- Direct | 93.855 | | 72,096 | 2,043,588 |
| Passed through Seattle Children's Research Institute | 93.855 | ISB-12005 | | 6,648 |
| Passed through Seattle Children's Research Institute | 93.855 | ISB-10170 | | 110,610 |
| Passed through Seattle Children's Research Institute | 93.855 | 1204SUB | | 368,651 |
| Passed through University of Washington | 93.855 | UWSC10255 | | 42,552 |
| Total for CFDA 93.855 | | | 72,096 | 2,572,049 |
| Biomedical Research and Research Training- Direct | 93.859 | | 250,557 | 1,238,062 |
| Passed through University of Colorado, Boulder | 93.859 | 1554625 | | 284,562 |
| Passed through University of Colorado, Boulder | 93.859 | 1553848 | | 7,591 |
| Passed through University of California, Berkeley | 93.859 | 11722sc | | 9,149 |
| Passed through University of Washington | 93.859 | UWSC9891 | | 42,048 |
| Passed through University of Washington | 93.859 | UWSC10140 | | 13,571 |
| Total for CFDA 93.859 | | | 250,557 | 1,594,983 |
| Child Health and Human Development Extramural Research- Direct | 93.865 | | | 111,109 |
| Passed through Cincinnati Children's Hospital | 93.865 | 138656 | | 242,793 |
| Total for CFDA 93.865 | | | | 353,902 |
| Aging Research- Passed through Fred Hutchison Cancer Research Center | 93.866 | AMPT2017ISB | | 174,712 |
| Passed through Duke University | 93.866 | 2036651 | | 180,083 |
| Passed through Duke University | 93.866 | A030700 | | 93,091 |
| Passed through Oregon Health & Science University | 93.866 | 1013336_ISB | | 1,729,448 |
| Passed through California Pacific Medical Center | 93.866 | 280201018-S228 | | 667,653 |
| Passed through California Pacific Medical Center | 93.866 | 280101018-S242 | | 147,701 |
| Passed through university of Washington | 93.866 | UWSC11600 | | 6,972 |
| Passed through University of Florida | 93.866 | UF13201 | | 464,110 |
| Total for CFDA 93.866 | | | | 3,463,770 |
| Total U.S. Department of Health and Human Services | | | 3,454,152 | 18,707,076 |
| National Science Foundation: | | | | |
| Engineering Grants- Passed through University of Washington | 47.041 | UWSC8578 | | 49,895 |
| Geosciences- Passed through University of Washington | 47.050 | UWSC9760 | | 14,962 |
| Biological Sciences- Direct | 47.074 | | | 1,024,739 |
| Passed through Portland State University | 47.074 | 206THO552 | | 7,833 |
| Passed through Cornell University | 47.074 | 89335-11264 | | 74,900 |
| Passed through San Diego State University | 47.074 | SA0000545 | | 62,722 |
| Total for CFDA 47.074 | | | | 1,170,194 |
| Integrative Activities- Passed through University of California, Berkeley | 47.083 | 11653sc | | 30,232 |
| Total National Science Foundation | | | | 1,265,283 |

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

INSTITUTE FOR SYSTEMS BIOLOGY

**Schedule of Expenditures of Federal Awards (Continued)
For the Year Ended December 31, 2019**

| <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> |
|---------------------------------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------------------|-------------------------------------|
| U.S. Department of Defense: | | | | |
| Inflammatory Mediators Testing- Direct | 12.W81XWH-17-C-0220 | | | 4,149 |
| Direct | 12.W81XWH18C0158 | | | 502,680 |
| Total for Inflammatory Mediators Testing | | | | 506,829 |
| High Throughput Platform- Pass through California Institute of Technology | 12.W911NF-09-D-0001 | 5385787 | | 465,081 |
| Military Medical Research and Development- Direct | 12.420 | | 80,903 | 303,904 |
| Basic Scientific Research- Passed through Harvard College | 12.431 | 124045-5104226 | | 338,196 |
| Total U.S. Department of Defense | | | 80,903 | 1,614,010 |
| U.S. Department of Energy: | | | | |
| Center for Advanced Bioenergy- Passed through University of Illinois Chicago | 81.049 | 090634-16919 | | 133,738 |
| Experimental Design, Implementation- Passed through Lawrence Berkeley National Lab | 81.DE-AC02-05CH11231 | 6953601 | | 680,781 |
| Total U.S. Department of Energy | | | | 814,519 |
| Total Research and Development Cluster/ Expenditures of Federal Awards | | | \$ 3,535,055 | \$ 22,400,888 |

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, 2019

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, 2019. 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 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, 2019**

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 47.083 | |
| 81.049 81.DE-AC02-05CH11231 | |
| 93.172 93.279 93.310 93.350 | |
| 93.353 93.393 93.394 93.395 | |
| 93.396 93.397 93.398 93.837 | |
| 93.838 93.847 93.853 93.855 | |
| 93.859 93.865 93.866 | |
| 93.HHSN272201500015I 93.HHSN261200800001E | |

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 (Continued)
For the Year Ended December 31, 2019**

Section II - Financial Statement Findings

No matters reported.

Section III - Findings and Questioned Costs for Federal Awards

No matters reported.