

**BOYCE THOMPSON INSTITUTE
FOR PLANT RESEARCH, INC.**

**Financial Statements as of
December 31, 2018
Together with
Independent Auditor's Report**

Bonadio & Co., LLP
Certified Public Accountants

BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC.

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INDEPENDENT AUDITOR'S REPORT

May 14, 2019

To the Board of Directors of
Boyce Thompson Institute for Plant Research, Inc.:

Report on the Financial Statements

We have audited the accompanying financial statements of Boyce Thompson Institute for Plant Research, Inc. (a New York not-for-profit organization), which comprise the statement of financial position as of December 31, 2018, and the related statements of activities and change in net assets, functional expenses, and cash flows for the year then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Boyce Thompson Institute for Plant Research, Inc. as of December 31, 2018, and the change in its net assets and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

(Continued)

INDEPENDENT AUDITOR'S REPORT

(Continued)

Change in Accounting Principles

As described in Note 2 to the financial statements, Boyce Thompson Institute for Plant Research, Inc. implemented Accounting Standards Update 2016-14 *Presentation of Financial Statements of Not-for-Profit Entities*, and the effects have been included in these financial statements. Our opinion is not modified with respect to this matter.

Report on Summarized Comparative Information

We have previously audited Boyce Thompson Institute for Plant Research, Inc.'s 2017 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated May 14, 2018. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2017, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Report on Supplemental Information

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 as required by Title 2 U.S. *Code of Federal Regulations (CFR) Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, is presented for purposes of additional analysis 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 financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated, in all material respects, in relation to the financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated May 14, 2019, on our consideration of Boyce Thompson Institute for Plant Research, Inc.'s internal control over financial reporting and on our tests of its compliance with certain provision of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of Boyce Thompson Institute for Plant Research, Inc.'s internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Boyce Thompson Institute for Plant Research, Inc.'s internal control over financial reporting and compliance.

BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC.

STATEMENT OF FINANCIAL POSITION

DECEMBER 31, 2018

(With Comparative Totals for 2017)

	<u>2018</u>	<u>2017</u>
ASSETS		
Cash and cash equivalents	\$ 711,461	\$ 640,493
Research grants and contracts receivable	1,694,352	2,326,405
Contributions receivable, net	1,737,717	363,282
Prepaid expenses and other assets	171,850	142,519
Investments	72,093,285	81,294,585
Property and equipment, net	<u>2,331,984</u>	<u>2,777,198</u>
Total assets	<u>\$ 78,740,649</u>	<u>\$ 87,544,482</u>
LIABILITIES AND NET ASSETS		
Accounts payable and accrued expenses	\$ 1,518,302	\$ 2,723,788
Research grant and contract advances	829,385	781,026
Deferred compensation and severance payable	216,936	212,230
Capital lease obligation	389,560	485,127
Accrued postretirement benefit obligation	<u>2,723,804</u>	<u>3,572,711</u>
Total liabilities	<u>5,677,987</u>	<u>7,774,882</u>
Net assets:		
Without donor restrictions	67,213,303	74,784,350
With donor restrictions	<u>5,849,359</u>	<u>4,985,250</u>
Total net assets	<u>73,062,662</u>	<u>79,769,600</u>
Total liabilities and net assets	<u>\$ 78,740,649</u>	<u>\$ 87,544,482</u>

The accompanying notes are an integral part of these statements.

BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC.

STATEMENT OF ACTIVITIES AND CHANGE IN NET ASSETS FOR THE YEAR ENDED DECEMBER 31, 2018

(With Comparative Totals for 2017)

	Without Donor Restrictions	With Donor Restrictions	Total	
			2018	2017
OPERATING REVENUES AND OTHER SUPPORT:				
Federal grants and contracts	\$ 10,941,878	\$ -	\$ 10,941,878	\$ 9,312,009
Foundation gifts and other grants	2,283,490	10,170	2,293,660	1,968,504
Investment income allocated to operations	4,335,000	-	4,335,000	4,121,000
Contributed facilities and services	1,708,391	-	1,708,391	1,613,434
Contributions, royalties and other revenues	395,793	1,434,176	1,829,969	688,092
Net assets released from restrictions	183,667	(183,667)	-	-
Total operating revenues and other support	19,848,219	1,260,679	21,108,898	17,703,039
OPERATING EXPENSES:				
Program services:				
Research	16,060,689	-	16,060,689	14,997,189
Greenhouse and other	1,441,077	-	1,441,077	1,261,181
Intellectual property and technology transfer	280,243	-	280,243	250,323
Total program services	17,782,009	-	17,782,009	16,508,693
Supporting services:				
Administration	2,025,621	-	2,025,621	2,173,603
Fundraising and public relations	576,861	-	576,861	604,405
Total operating expenses	20,384,491	-	20,384,491	19,286,701
CHANGE IN NET ASSETS FROM OPERATING ACTIVITIES:	(536,272)	1,260,679	724,407	(1,583,662)
NON-OPERATING REVENUE (EXPENSE):				
Investment gain (loss), net of amounts allocated to operations	(7,996,691)	(396,570)	(8,393,261)	4,180,895
Loss on disposal of property and equipment	-	-	-	(3,212)
Change in funded status of pension plan	-	-	-	(1,594,976)
Change in funded status of postretirement plan	961,916	-	961,916	122,108
Total non-operating revenue (expense)	(7,034,775)	(396,570)	(7,431,345)	2,704,815
CHANGE IN NET ASSETS	(7,571,047)	864,109	(6,706,938)	1,121,153
NET ASSETS - beginning of year	74,784,350	4,985,250	79,769,600	78,648,447
NET ASSETS - end of year	\$ 67,213,303	\$ 5,849,359	\$ 73,062,662	\$ 79,769,600

The accompanying notes are an integral part of these statements.

BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC.

**STATEMENT OF FUNCTIONAL EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2018**

	Program Services				Supporting Services			2018
	Research	Greenhouse and other	Intellectual property and technology transfer	Total	Administration	Fundraising and public relations	Total	
Salaries and benefits	\$ 7,283,079	\$ 1,009,405	\$ 173,740	\$ 8,466,224	\$ 1,367,282	\$ 442,795	\$ 1,810,077	\$ 10,276,301
Subcontracted services	3,396,224	-	-	3,396,224	-	-	-	3,396,224
Occupancy	1,463,844	224,748	5,692	1,694,284	169,834	52,574	222,408	1,916,692
Other labor costs	1,442,267	24,959	-	1,467,226	1,061	-	1,061	1,468,287
Travel and related supplies	862,376	210,904	24,620	1,097,900	147,434	39,514	186,948	1,284,848
Outside services and professional fees	623,291	67,073	76,191	766,555	272,105	41,978	314,083	1,080,638
Depreciation	582,464	60,547	-	643,011	38,092	-	38,092	681,103
Equipment and maintenance	61,790	188,795	-	250,585	29,813	-	29,813	280,398
Internal services	345,354	(345,354)	-	-	-	-	-	-
Total expenses	\$ 16,060,689	\$ 1,441,077	\$ 280,243	\$ 17,782,009	\$ 2,025,621	\$ 576,861	\$ 2,602,482	\$ 20,384,491

The accompanying notes are an integral part of these statements.

BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC.

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED DECEMBER 31, 2018 (With Comparative Totals for 2017)

	<u>2018</u>	<u>2017</u>
CASH FLOW FROM OPERATING ACTIVITIES:		
Change in net assets	\$ (6,706,938)	\$1,121,153
Adjustments to reconcile change in net assets to net cash flow from operating activities:		
Depreciation	681,103	662,038
Loss on disposal of property and equipment	-	3,212
Change in contribution discount	295,585	(45,821)
Loss (gain) on investments, net	5,501,763	(7,591,919)
Change in funded status of pension plan	-	1,594,976
Change in funded status of postretirement benefit plan	(961,916)	(122,108)
Changes in:		
Research grants and contracts receivable	632,053	(731,926)
Contribution receivable	(1,670,020)	350,150
Prepaid expenses and other assets	(29,331)	17,390
Accounts payable and accrued expenses	(1,205,486)	1,400,503
Research grant and contract advances	48,359	(100,613)
Deferred compensation and severance payable	4,706	(394,757)
Accrued postretirement benefit obligation	<u>113,009</u>	<u>(3,059,982)</u>
Net cash flow from operating activities	<u>(3,297,113)</u>	<u>(6,897,704)</u>
CASH FLOW FROM INVESTING ACTIVITIES:		
Purchases of investments	(16,975,447)	(150,349,157)
Proceeds from sales of investments	20,674,984	157,677,003
Purchase of property and equipment	<u>(235,889)</u>	<u>(197,123)</u>
Net cash flow from investing activities	<u>3,463,648</u>	<u>7,130,723</u>
CASH FLOW FROM FINANCING ACTIVITIES:		
Repayments on capital lease obligation	<u>(95,567)</u>	<u>(48,404)</u>
Net cash flow from financing activities	<u>(95,567)</u>	<u>(48,404)</u>
CHANGE IN CASH AND CASH EQUIVALENTS	70,968	184,615
CASH AND CASH EQUIVALENTS - beginning of year	<u>640,493</u>	<u>455,878</u>
CASH AND CASH EQUIVALENTS - end of year	<u>\$ 711,461</u>	<u>\$ 640,493</u>
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Capital lease acquisition	<u>\$ -</u>	<u>\$ 533,531</u>
Interest paid	<u>\$ 29,604</u>	<u>\$ 14,182</u>

The accompanying notes are an integral part of these statements.

BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC.

NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 2018

1. THE ORGANIZATION

Boyce Thompson Institute for Plant Research, Inc. (the Institute) was incorporated in 1924 to solve selected problems of agriculture and forestry through basic and applied research.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The financial statements of the Institute have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP).

Change in Accounting Principle

In August 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-14, *Presentation of Financial Statements of Not-for-Profit Entities*, with the purpose of improving financial reporting by not-for-profit (NFP) entities. ASU 2016-14 changes the presentation and accounting for non-for-profit organization's financial statements including:

- Reducing the number of classes of net assets from three to two (net assets with donor restrictions and net assets without donor restrictions);
- Requiring the presentation of expenses in both natural and functional classifications;
- Eliminating the requirement to disclose the components of investment return, as well as reporting investment return net of external and direct internal investment expenses; and
- Requiring qualitative and quantitative disclosure regarding the Institute's liquidity and availability of resources.

ASU 2016-14 is effective for the Institute's fiscal year ending December 31, 2018 and was applied retrospectively to all periods presented with the exception of the presentation of expenses in both natural and functional classifications and the disclosures regarding liquidity and availability of resources, which are presented for the current year only. The effects of this ASU have been included in these financial statements. There was no effect on total net assets or change in net assets.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Financial Reporting

The Institute's financial statements include the following classifications of net assets:

- **Net Assets Without Donor Restrictions**

Net assets without donor restrictions include operating resources that are available for use without any donor-imposed restrictions. Investment income, as well as gains and losses on investments, are reported as increases or decreases in net assets without restrictions unless use is restricted by explicit donor stipulations or by law. When such restrictions exist, investment income, gains or losses are reported as net assets with donor restrictions.

- **Net Assets With Donor Restrictions**

Net assets with donor restrictions are net assets whose use is limited by donor-imposed time or purpose stipulations, as well as resources that have donor-imposed restrictions that stipulate that resources be maintained in perpetuity. In cases where the donor-imposed stipulation does not expire, generally the donor of these net assets permits the Institute to use all or part of the investment return or related assets to support operational activities. Expirations of restrictions recognized on net assets (i.e. the donor-stipulated purpose has been fulfilled and/or the stipulated time period has elapsed) that do not occur within the same period as revenue recognition are reported as reclassifications from net assets with restrictions to net assets without donor restrictions and reported in the statement of activities and change in net assets as net assets released from donor restrictions.

Comparative Financial Information

The financial statements include certain prior year summarized comparative information in total, but not by net asset classification. Such information does not include sufficient detail to constitute a presentation in conformity with GAAP. Accordingly, such information should be read in conjunction with the Institute's financial statements as of and for the year ended December 31, 2017, from which summarized information was derived.

Cash and Cash Equivalents

Cash and cash equivalents consist of bank demand deposit accounts and savings accounts that may, at times, exceed federally insured limits. The Institute has not experienced any losses in these accounts and believes it is not exposed to any significant credit risk with respect to cash and cash equivalents.

Operations

The statement of activities and change in net assets present the changes in net assets of the Institute from operating activities and from non-operating activities. Operating expenses relate primarily to research activities conducted at the Institute. Utilization of the investment income and gains on long-term investments held for endowment and similar purposes under the Institute's total return spending policy is considered operating revenue.

Non-operating activities consists primarily of investment income and appreciation from long-term investments in excess of amounts utilized for operations, and postretirement benefit related changes other than net periodic benefit costs.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Contributions

Contributions, including unconditional promises to give, are recognized as revenue in the period received or pledged. Conditional promises to give are not recognized until they become unconditional, that is, when the conditions on which they depend are substantially met. Contributions of assets other than cash are recorded at their estimated fair value at the date of gift.

Contributions are reported as increases in the appropriate category of net assets, except that contributions which impose restrictions that are met in the same fiscal year they are received are included in revenues without donor restrictions. Contributions to be received in the future are discounted at a rate commensurate with risk involved. Amortization of the discount is recorded as additional contribution revenue. No allowance for uncollectible contributions receivable is provided based on a specific review of the contributions outstanding and management's judgement, including such factors as prior collection history, current economic conditions, and nature of activity.

Federal Grants and Contracts

Revenue from federal grants and contracts, primarily for research programs, is generally recognized as earned, that is as the related costs are incurred under the grant or contract agreements. Amounts received in advance are reported as research grant and contract advances.

Grants and contracts awarded to the Institute are subject to audit by various sponsoring agencies. Indirect costs recovered on grants and contracts are recorded at rates established by the Institute with the Federal Government, or predetermined by a nonfederal sponsor. Indirect cost rates for government grants and contracts are subject to audit, and subsequent final settlements are recorded as current period adjustments. Management believes the impact of any future settlements to be immaterial to the accompanying financial statements.

The Institute records receivables from grants and contracts for services provided. Bad debt expense is charged if the receivable is determined to be uncollectible based on periodic review by management. Factors used to determine whether an allowance should be recorded include the age of the receivable and a review of payments subsequent to year end. Interest is not charged on outstanding receivables. As of December 31, 2018 and 2017, no allowance for uncollectible accounts was deemed necessary.

Investments

The Institute invests in various types of investment securities, which are stated at fair value. Investment securities are exposed to various risks, such as interest rate, market and credit risk. Due to the level of risk associated with certain investment securities, it is possible that changes in their values could occur in the near term and such changes could materially affect the amounts reported in the accompanying financial statements.

Endowment

The Institute's endowment consists of one donor-restricted fund, the Boyce Schulze Downey Endowment Fund, to support unrestricted general operations of the Institute. As required by GAAP, net assets associated with this endowment fund are classified and reported based on existing donor-imposed restrictions.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Endowment (Continued)

The endowment consists of investments that are managed to achieve a maximum long-term total return. Investment earnings are appropriated for expenditure in support of operations based on a total return spending policy. The balance of net investment income or loss is reported as non-operating revenues. This policy is designed to preserve the value of the portfolio in real terms (after inflation) and provide a predictable flow of funds to support operations.

Fair Value Measurement - Definition and Hierarchy

The Institute uses various valuation techniques in determining fair value. Observable inputs are inputs that market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the Institute. Unobservable inputs are inputs that reflect the Institute's estimate about the assumptions market participants would use in pricing the asset or liability, developed based on the best information available in the circumstances.

The hierarchy is broken down into three levels based on the reliability of inputs as follows:

- Level 1 Inputs - Valuations are based on quoted prices in active markets for identical assets or liabilities that the Institute has the ability to access. Valuation adjustments are not applied to Level 1 instruments. Since valuations are based on quoted market prices that are readily and regularly available in an active market, valuation does not entail a significant degree of judgement.
- Level 2 Inputs - Valuations are based on quoted market prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.
- Level 3 Inputs - Valuations are based on inputs that are unobservable and significant to the overall fair value measurement.

The availability of observable inputs can vary and is affected by a wide variety of factors. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgement. Accordingly, the degree of judgement exercised in determining fair value is greatest for instruments categorized in Level 3. In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes the level in the fair value hierarchy within which the fair value measurement in its entirety falls is determined based on the lowest level input that is significant to the fair value measurement in its entirety.

Property and Equipment

Property and equipment is stated at cost, if purchased, or fair value at the date of donation. The Institute's policy is to capitalize all purchases greater than \$5,000 that have an estimated useful life in excess of one year. Depreciation is provided using the straight-line method over the assets' estimated useful lives ranging from five (5) to fifteen (15) years.

Contributed Facilities and Services

The Institute entered into an agreement of affiliation with Cornell University on May 28, 1974. The agreement provides the Institute with, among other things, exclusive use of its facilities, including utilities and maintenance, within New York State funding constraints, on such premises. The estimated fair value of contributed facilities and services is recognized in the accompanying statement of activities and change in net assets as revenue and expense in the period in which the facilities are utilized or the services are provided.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Income Taxes

The Institute is a New York not-for-profit corporation exempt from income taxes as an organization qualified under Section 501(c)(3) of the Internal Revenue Code. The Institute has also been classified by the Internal Revenue Service as an entity that is not a private foundation.

Allocation of Certain Expenses

The financial statements report certain categories of expenses that are attributable to one or more program or supporting functions. Those expenses include salaries and benefits, occupancy, depreciation, and equipment and maintenance. Salaries and benefits are directly charged whenever possible and practicable and otherwise are allocated based on time spent in various functions. Occupancy, depreciation and equipment and maintenance are allocated based on square footage used.

Certain expenses for the usage of equipment, lab and facilities relating the Greenhouse and Other program are allocated to the Research program based on actual usage. This allocation is included in Internal Services on the accompanying statement of functional expenses.

Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

3. LIQUIDITY

In managing its liquidity, the Institute structures its financial assets to be available as its general expenditures, liabilities and other obligations come due. The Institute invests cash in excess of periodic requirements in short-term investments.

The Institute maintains an endowment that consists of contributions with donor restrictions. The endowment consists of investments that are held within the Institute's general investment portfolio. On an annual basis, the Board of Directors has authorized an operational draw of 3.7% of the endowment, based on the Institute's approved spending policy calculation.

A portion of the Institute's investments are maintained in alternative investments which limit the Institute's ability to withdraw capital. Within these alternative investments are certain private equity funds that are available for redemption at the investment manager's discretion, and as such, are not available to meet general expenditures within one year of the balance sheet date. The remaining alternative investments are able to be redeemed at certain periods of time during the year. These constraints may limit the Institute's ability to respond quickly to changes in market conditions. Additionally, the Institute has a commitment to invest \$6,934,699 in its private capital investments as of December 31, 2018.

Although the Institute's liquid investments that are not designated for endowment are available to meet general expenditures, it is the Institute's intention to only allocate 5% of the average market value for the previous twelve quarters to support operations.

3. LIQUIDITY (Continued)

The Institute's financial assets available within one year of the statement of financial position date for general expenditure are as follows at December 31, 2018:

Cash and cash equivalents	\$ 711,461
Research grants and contracts receivable	1,694,352
Contributions receivable, net	1,737,717
Investments	<u>72,093,285</u>
Total financial assets	<u>76,236,815</u>

Less amounts unavailable for general expenditures within one year, due to:

Investment liquidity restrictions	(5,779,340)
Donor restricted endowment	(4,089,642)
Net of fiscal year 2019 spending policy appropriation	111,821
Donor restricted for use in future periods	<u>(1,759,717)</u>

Financial assets available to meet general expenditures within one year \$ 64,719,937

4. NET ASSETS WITH DONOR RESTRICTIONS

Net assets with donor restrictions are those whose use has been limited by donors to a specific time period or purpose. These assets are restricted for the following purposes at December 31:

	<u>2018</u>	<u>2017</u>
Research projects	\$ 1,737,717	\$ 363,282
Unexpended endowment earnings	1,067,442	1,577,768
Fellowships	22,000	22,000
Investments to be held in perpetuity, the income from which is expendable to support operations	<u>3,022,200</u>	<u>3,022,200</u>
	<u>\$ 5,849,359</u>	<u>\$ 4,985,250</u>

Net assets released from donor restrictions by incurring expenses satisfying the restricted purposes were as follows for the years ended December 31:

	<u>2018</u>	<u>2017</u>
Research projects	\$ 59,741	\$ 502,108
National Agricultural Biotechnology Council activities	-	148,954
Fellowships	10,170	5,000
Other support services	<u>113,756</u>	<u>73,824</u>
	<u>\$ 183,667</u>	<u>\$ 729,886</u>

5. CONTRIBUTIONS RECEIVABLE

Contributions receivable are expected to be collected for the years ending December 31 as follows:

2019	\$ 846,170
2020	400,000
2021	400,000
2022	<u>400,000</u>
	2,046,170
Less: Present value discount (5.50%)	<u>(308,453)</u>
	<u>\$ 1,737,717</u>

6. INVESTMENTS

Composition

Investments consisted of the following at December 31:

	<u>2018</u>	<u>2017</u>
Cash and cash equivalents	\$ 1,969,687	\$ 3,300,190
Mutual funds:		
Equities	41,506,212	49,104,975
Fixed income	9,637,420	12,299,897
Equity securities	-	41,763
Alternative investments:		
Hedge funds	13,200,626	10,342,274
Private capital	<u>5,779,340</u>	<u>6,205,486</u>
	<u>\$ 72,093,285</u>	<u>\$ 81,294,585</u>

Net Investment Income (Loss)

The Institute allocated net investment income to operating revenue and non-operating revenues as follows for the years ended December 31:

	<u>2018</u>	<u>2017</u>
Operating budget draw (4.3% in 2018 and 3.3% in 2017)	\$ 3,754,000	\$ 3,194,000
Start-up allocation	294,000	170,000
Investment management fee	144,000	539,000
Special allocation for employment agreements	<u>143,000</u>	<u>218,000</u>
	4,335,000	4,121,000
Investment gain (loss), net of amounts allocated to operations	<u>(8,393,261)</u>	<u>4,180,895</u>
	<u>\$ (4,058,261)</u>	<u>\$ 8,301,895</u>

7. FAIR VALUE OF FINANCIAL INSTRUMENTS

Fair value of the Institute's investment in cash and cash equivalents, mutual funds and equity securities are valued at the last reported sale price on the last business day of the fiscal year. Quoted market prices are obtained from the national securities exchanges or, in cases where securities are not listed on any exchanges, from brokerage firms.

The Institute utilized the net asset value (NAV) reported by each of the hedge funds and private capital (collectively alternative investments) as a practical expedient for determining the fair value of these investments. These investments are redeemable at NAV under the original terms of the subscription agreements and operations of the underlying funds. However, it is possible that these redemption rights may be restricted or eliminated by the funds in the future in accordance with the underlying fund agreements.

Due to the nature of the investments held by these funds, changes in market conditions and the economic environment may significantly impact the NAV of the funds and, consequently, the fair value of the Institute's interest in the funds. Furthermore, changes to the liquidity provisions of the funds may significantly impact the fair value of the Institute's interest in the

There have been no changes in valuation methodologies used at December 31, 2018 and 2017.

The Institute's investments are measured at fair value on a recurring basis using the following input levels at December 31, 2018:

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Cash and cash equivalents	\$ 1,969,687	\$ -	\$ -	\$ 1,969,687
Mutual funds:				
Equities	41,506,212	-	-	41,506,212
Fixed income	<u>9,637,420</u>	<u>-</u>	<u>-</u>	<u>9,637,420</u>
Total investments at fair value	<u>\$ 53,113,319</u>	<u>\$ -</u>	<u>\$ -</u>	53,113,319
Investments, measured using net asset value as practical expedient				<u>18,979,966</u>
Total investments				<u>\$ 72,093,285</u>

7. FAIR VALUE OF FINANCIAL INSTRUMENTS (Continued)

The Institute's investments are measured at fair value on a recurring basis using the following input levels at December 31, 2017:

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Cash and cash equivalents	\$ 3,300,190	\$ -	\$ -	\$ 3,300,190
Mutual funds:				
Equities	49,104,975	-	-	49,104,975
Fixed income	12,299,897	-	-	12,299,897
Equity securities	<u>41,763</u>	<u>-</u>	<u>-</u>	<u>41,763</u>
Total investments at fair value	<u>\$ 64,746,825</u>	<u>\$ -</u>	<u>\$ -</u>	64,746,825
Investments, measured using net asset value as practical expedient				<u>16,547,760</u>
Total investments				<u>\$ 81,294,585</u>

Alternative Investment Strategies

The Institute's alternative investment strategies are described as follows at December 31:

Redemption Period	Notice Period	<u>Description of Fund</u>	<u>2018</u>	<u>2017</u>
Hedge Funds				
<u>Hawk Ridge Partners Offshore LTD</u>				
Quarterly	60 days	The fund's investment objective is to invest in long and short-term equities with a small to midcap focus. Redemptions are allowed quarterly with a 60 day notice period.	\$ 5,270,934	\$ 5,080,784
<u>ACK Asset Partners (Cayman) LTD</u>				
Quarterly	45 days	The fund's investment objective is to invest in long and short-term equities with a small to midcap focus. Redemptions are allowed quarterly with a 45 day notice period.	4,417,138	5,261,490
<u>Steelhead Pathfinder Fund, LTD</u>				
Monthly	30 days	The Fund's portfolio centers on a core strategy of investing in convertible securities focused around either volatility-oriented convertible (convert arbitrage) or credit-oriented convertibles (busted convertibles). The fund has a 1-year soft lock up period through October 1, 2019, at which time redemptions will be allowed monthly with a 30 day notice period.	<u>3,512,554</u>	<u>-</u>
		Total hedge funds	<u>13,200,626</u>	<u>10,342,274</u>
Private Capital				
<u>StepStone Private Access Partnership, L.P</u>				
Liquidity is determined at the manager's discretion	n/a	The partnership's investment objective is to invest indirectly in a customized private equity portfolio comprising select underlying partnership interests. The focus of the partnership is to provide diversification across growth equity and small and middle market buyouts.	1,272,344	551,141

7. FAIR VALUE OF FINANCIAL INSTRUMENTS (Continued)

Alternative Investment Strategies (Continued)

Redemption Period	Notice Period	<u>Description of Fund</u>	<u>2018</u>	<u>2017</u>
Private Capital (Continued)				
<u>Metropolitan Real Estate Partners Global V-E, L.P.</u>				
Liquidity is determined at the manager's discretion	n/a	This partnership is a privately owned, registered investment advisor that focuses on private real estate funds in the domestic and international markets.	1,257,917	1,678,516
<u>Ares Capital Europe II (D), L.P.</u>				
Liquidity is determined at the manager's discretion	n/a	The partnership's investment objective is to achieve current income and long-term capital appreciation through mezzanine and junior debt as well as equity and equity-related investments principally in middle market-based companies.	1,234,425	1,921,828
<u>Silver Creek Special Opportunities Fund Cayman III, L.P. and Subsidiaries</u>				
Liquidity is determined at the manager's discretion	n/a	The partnership seeks to provide a limited number of qualified investors the opportunity to realize long-term appreciation through investment primarily in relatively illiquid opportunistic hedge fund investment strategies. The partnership is invested in pooled investment vehicles which may have illiquid or closed-ended structures and/or invest directly or indirectly in operating businesses. The partnership also invests in liquid strategies in anticipation of the investment or reinvestment of capital in special opportunities.	1,046,559	1,344,935
<u>StepStone Private Equity Partners Offshore L.P. and Subsidiaries</u>				
Liquidity is determined at the manager's discretion	n/a	The partnership's purpose is to invest and acquire interests from existing investors that have made investments in limited partnerships and other pooled investment vehicles that invest in private equity. The partnership's investment objective is to achieve diversification within the private equity asset class.	530,254	709,066
<u>Ares Capital Europe IV (D) Levered Feeder</u>				
Liquidity is determined at the manager's discretion	n/a	The partnership's investment objective is to achieve significant current income and long-term capital gains, primarily from investing in debt instruments in recapitalizations, refinancing of middle-market European companies, and leveraged buyouts.	343,839	-
<u>Metropolitan Real Estate Partners Secondaries Fund II-TE, L.P.</u>				
Liquidity is determined at the manager's discretion	n/a	This partnership is a privately owned, with an objective to seek quality assets in private real estate portfolios to acquire at a discount in the secondary market.	94,002	-
		Total private capital	<u>5,779,340</u>	<u>6,205,486</u>
		Total alternative investments	<u>\$ 18,979,966</u>	<u>\$ 16,547,760</u>

The Institute has a commitment to invest an additional \$6,934,699 in private capital as of December 31, 2018.

8. ENDOWMENT FUNDS

Interpretation of Relevant Law

The Board of Directors of the Institute has adopted the New York Prudent Management of Institutional Funds Act (NYPMIFA) and has interpreted NYPMIFA as requiring the preservation of the fair value of the original gift as of the gift date of the donor-restricted endowment absent explicit donor instructions to the contrary. As a result of this interpretation, the Institute classifies as net assets with donor restrictions (a) the original value of the gifts donated to the donor-restricted endowment, (b) the original value of subsequent gifts to the donor-restricted endowment, and (c) accumulations to the donor-restricted endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund.

Funds with Deficiencies

From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the level that the donor requires the Institute to retain as a fund of perpetual duration (underwater endowments). The Board of Directors of the Institute has interpreted NYPMIFA to permit spending from underwater endowments in accordance with prudent measures required under law. The Institute had no funds with deficiencies at either December 2018 or 2017.

Return Objectives and Risk Parameters

The Institute's long-term investment objective is to provide a predictable level of funding to programs supported by its endowment while seeking to maintain the purchasing power of the endowment assets with a moderate level of risk. The Institute expects its endowment funds, over time, to provide a rate of return that sustains its ability to continuously provide such support.

Strategies Employed for Achieving Objectives

To satisfy the long-term rate-of-return objective, the Institute relies on a total return strategy in which investment returns are achieved through both capital appreciation (realized and unrealized) and current yield (interest and dividends). The Institute employs a diversified asset allocation to achieve consistency of returns and to minimize risk.

Spending Policy and Related Investment Objectives

The long-term objective of the spending guidelines is to maintain the purchasing power of the endowment with the goal of providing a reasonable, predictable, stable, and sustainable level of income to support current operations. The Board of Directors has approved an annual spending rate of up to 3.7% of its endowment fund's average fair value over the prior 20 quarters through the calendar year end preceding the fiscal year in which the distribution is planned. The Institute appropriated 3.7% in both 2018 and 2017.

8. ENDOWMENT FUNDS (Continued)

Changes in the Institute's endowment consisted of the following during the years ended, December 31:

	<u>With Donor Restrictions</u>	<u>With Donor Restrictions to Remain in Perpetuity</u>	<u>Total</u>
Endowment net assets, January 1, 2017	\$ 1,164,446	\$ 3,022,200	\$ 4,186,646
Gain on investments	530,762	-	530,762
Appropriation for expenditure	<u>(117,440)</u>	<u>-</u>	<u>(117,440)</u>
Endowment net assets, December 31, 2017	1,577,768	3,022,200	4,599,968
Loss on investments	(396,570)	-	(396,570)
Appropriation for expenditure	<u>(113,756)</u>	<u>-</u>	<u>(113,756)</u>
Endowment net assets, December 31, 2018	<u>\$ 1,067,442</u>	<u>\$ 3,022,200</u>	<u>\$ 4,089,642</u>

9. PROPERTY AND EQUIPMENT

Property and equipment consist of the following at December 31:

	<u>2018</u>	<u>2017</u>
Leasehold improvements	\$ 5,066,224	\$ 5,066,224
Equipment and furniture	<u>7,288,611</u>	<u>7,133,770</u>
	12,354,835	12,199,994
Less: accumulated depreciation	<u>(10,022,851)</u>	<u>(9,422,796)</u>
	<u>\$ 2,331,984</u>	<u>\$ 2,777,198</u>

Property and equipment includes equipment acquired under a capital lease obligation with a cost of \$533,531 at December 31, 2018 and 2017. Accumulated depreciation of this asset was \$106,706 and \$53,353 at December 31, 2018 and 2017, respectively.

10. DEFERRED COMPENSATION RETIREMENT PLAN

The Institute sponsors a deferred compensation plan for an officer. The Institute has recorded deferred compensation and severance payable for this plan of \$216,936 and \$212,230 at December 31, 2018 and 2017, respectively in the accompanying statement of financial position. Contributions to the plan can be made by both the participant and the Institute up to maximum allowed under the Internal Revenue Code. Institute contributions totaled \$18,500 and \$18,000 in 2018 and 2017, respectively. In addition to contributions, the plan is credited quarterly for earnings at the same rate as the performance of the Institute's investments.

11. CAPITAL LEASE OBLIGATION

During 2017, the Institute entered into a capital lease obligation for equipment totaling \$533,531 requiring monthly payments of \$10,431 including interest at 6.70% which matures in July 2022. The obligation is collateralized by the related equipment. The principal balance of the capital lease obligation was \$389,560 and \$485,127 at December 31, 2018, and 2017, respectively. Future repayments on the capital lease obligation are as follows for the years ended December 31:

2019	\$	125,172
2020		125,172
2021		125,172
2022		<u>62,629</u>
		438,145
Less: Amounts representing interest		<u>(48,585)</u>
		389,560
Less: Current portion		<u>(102,171)</u>
	\$	<u><u>287,389</u></u>

12. EMPLOYEE PENSION PLAN

General

The Institute had a defined benefit pension plan (the Plan) that covered substantially all employees who met certain service and age requirements. The Plan was frozen on January 1, 2012. On November 12, 2015, the Board of Directors of the Institute approved the termination of the Plan. The Plan was terminated on May 9, 2017, at which time all plan participant benefits were distributed. The Institute recognized a loss of \$1,594,976 relating to the change in funded status of the plan for the year ended December 31, 2017.

13. POSTRETIREMENT BENEFITS PLAN

General

The Institute offers eligible retirees the opportunity to participate in a postretirement medical and life insurance plan (the Postretirement Plan). Substantially all employees may become eligible for these benefits provided that the employee is at least 57 years of age and has 10 years of credited service at retirement. The medical plan is contributory, with the retiree contributions adjusted annually; the life insurance plan is noncontributory. Retiree medical and life insurance plans are not funded.

13. POSTRETIREMENT BENEFITS PLAN (Continued)

Measurement Date

The measurement date used to determine postretirement benefit measurements for the Postretirement Plan is December 31.

Funded Status

Obligations and funding status of the Postretirement Plan were as follows at December 31 and for the years then ended:

	<u>2018</u>	<u>2017</u>
Postretirement benefit obligation	\$ (2,723,804)	\$ (3,572,711)
Fair value of plan assets	<u>-</u>	<u>-</u>
Funded status	<u>\$ (2,723,804)</u>	<u>\$ (3,572,711)</u>
Employer contributions	\$ 77,504	\$ 78,252
Plan participants' contributions	\$ 77,504	\$ 76,237
Benefits paid	\$ 155,008	\$ 154,489

Financial Statement Recognition

As of December 31, the following amounts were recognized in the balance sheet:

	<u>2018</u>	<u>2017</u>
Accrued postretirement benefit obligation	\$ (2,723,804)	\$ (3,572,711)

Amounts recognized in the statement of activities and change in net assets for the years ended December 31 consist of:

	<u>2018</u>	<u>2017</u>
Net periodic benefit cost	\$ 190,513	\$ 206,203
Postretirement benefit related changes other than net periodic benefit cost	\$ 961,916	\$ 122,108

As of December 31, 2018, the following items included in net assets had not yet been recognized as components of benefit expense:

	<u>Prior Service Credit</u>	<u>Net Actuarial Gain</u>
Unrecognized amounts at December 31, 2018	\$ 246,250	\$ 1,190,411

The amortization of the above items expected to be recognized in net periodic benefit cost for the year ended December 31, 2019 is (\$186,518).

13. POSTRETIREMENT BENEFITS PLAN (Continued)

Actuarial Assumptions

Assumptions used in determining the Plan's obligations and net periodic benefit cost were as follows:

	<u>2018</u>	<u>2017</u>
Discount rate	4.25%	3.50%
Expected long-term rate of return on Plan assets	n/a	n/a
Rate of compensation increase per year	n/a	n/a

Assumed healthcare cost trend rates are as follows at May 31:

	<u>2018</u>	<u>2017</u>
Healthcare cost trend rate assumed for next year	6.25%	6.50%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	4.50%	4.50%
Year that the rate reaches the ultimate trend rate	2026	2026

Assumed health care cost trend rates have a significant effect on the amounts reported for health care plans. In the actuary's estimation, the effect of a one percentage point increase or decrease in health care cost trend rates is as follows:

	<u>2018</u>	<u>2017</u>
Effect of one percentage point increase:		
On total service cost and interest cost components	\$ 60,020	\$ 56,972
On benefit obligations at end of year	\$ 415,941	\$ 600,050
Effect of one percentage point decrease:		
On total service cost and interest cost components	\$ (45,247)	\$ (43,813)
On benefit obligations at end of year	\$ (335,903)	\$ (479,272)

Contributions

The Institute expects to contribute \$114,400 to the Plan in 2019.

Future Benefit Payments

Benefits expected to be paid by the Plan during the ensuing five years and thereafter are as follows:

2019	\$ 114,400
2020	120,500
2021	129,100
2022	132,600
2023	138,100
Succeeding five years	<u>759,200</u>
	<u>\$ 1,393,900</u>

14. DEFINED CONTRIBUTION PLAN

Retirement Plan

The Institute sponsors a 403(b) plan for eligible employees. The Institute's policy is to contribute on behalf of all eligible employees, up to 4% of their contributions and a non-elective employer contribution of up to 12% based on years of service. The Institute made contributions of approximately \$840,000 and \$821,000 to this plan in 2018 and 2017, respectively.

15. SUBSEQUENT EVENTS

Subsequent events have been evaluated through May 14, 2019, which is the date the accompanying financial statements were available to be issued.

**INDEPENDENT AUDITOR'S 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**

May 14, 2019

To the Board of Directors of
Boyce Thompson Institute for Plant Research, Inc.:

We have audited, in accordance with 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 Boyce Thompson Institute for Plant Research, Inc. (a New York not-for-profit corporation), which comprise the statement of financial position as of December 31, 2018, and the related statements of activities and change in net assets, 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 May 14, 2019.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Boyce Thompson Institute for Plant Research, Inc.'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 Boyce Thompson Institute for Plant Research, Inc.'s internal control. Accordingly, we do not express an opinion on the effectiveness of Boyce Thompson Institute for Plant Research, Inc.'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 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 the 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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(Continued)

**INDEPENDENT AUDITOR'S 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***

(Continued)

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Boyce Thompson Institute for Plant Research, Inc.'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 Boyce Thompson Institute for Plant Research, Inc.'s internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Boyce Thompson Institute for Plant Research, Inc.'s internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE FOR EACH MAJOR FEDERAL PROGRAM AND ON INTERNAL CONTROL OVER COMPLIANCE REQUIRED BY THE UNIFORM GUIDANCE

May 14, 2019

To the Board of Directors of
Boyce Thompson Institute for Plant Research, Inc.:

Report on Compliance for Each Major Federal Program

We have audited Boyce Thompson Institute for Plant Research, Inc.'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 Boyce Thompson Institute for Plant Research, Inc.'s major federal programs for the year ended December 31, 2018. Boyce Thompson Institute for Plant Research, Inc.'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 Boyce Thompson Institute for Plant Research, Inc.'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* 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 Boyce Thompson Institute for Plant Research, Inc.'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 Boyce Thompson Institute for Plant Research, Inc.'s compliance.

Opinion on Each Major Federal Program

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

(Continued)

**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE FOR EACH MAJOR
FEDERAL PROGRAM AND ON INTERNAL CONTROL OVER COMPLIANCE
REQUIRED BY THE UNIFORM GUIDANCE**

(Continued)

Report on Internal Control over Compliance

Management of Boyce Thompson Institute for Plant Research, Inc. 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 Boyce Thompson Institute for Plant Research, Inc.'s internal control over compliance with the types of compliance 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 Boyce Thompson Institute for Plant Research, Inc.'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.

BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC.

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED DECEMBER 31, 2018**

Federal Grantor/pass-through Grantor/ Program or Cluster Title	Federal CFDA Number	Pass-through Entity Identifying Number	Federal Expenditures	Expenditures to Subrecipients
Research and Development Cluster				
U.S. Department of Agriculture:				
Agricultural Research - Basic and Applied Research	10.001	N/A	\$ 619,360	\$ -
Biotechnology Risk Assessment Research	10.219	N/A	61,691	-
Passed through Kansas State University - Specialty Crop Research Initiative	10.309	70016-23028	535,308	-
Passed through Michigan State University - Specialty Crop Research Initiative	10.309	2015-51181-24285	171,595	-
			<u>706,903</u>	<u>-</u>
Agriculture and Food Research Initiative (AFRI)	10.310	N/A	800,622	43,266
Passed through Cornell University - Agriculture and Food Research Initiative (AFRI)	10.310	2016-67013-24414	49,921	-
			<u>850,543</u>	<u>43,266</u>
Total U.S. Department of Agriculture			<u>2,238,497</u>	<u>43,266</u>
U.S. Department of Defense Advanced Research Projects Agency:				
Research and Technology Development	12.910	N/A	2,936,062	2,232,512
Passed through Johns Hopkins University - Research and Technology Development	12.910	HR00118C0146	31,169	-
Total U.S. Department of Defense Advanced Research Projects Agency			<u>2,967,231</u>	<u>2,232,512</u>
U.S. Department of Health and Human Services:				
Biomedical Research and Research Training	93.859	N/A	487,993	150,971
Passed through University of Wisconsin - Biomedical Research and Research Training	93.859	1R01GM112739-01	76,454	-
Passed through Rockefeller University - Biomedical Research and Research Training	93.859	1U01GM110714	194,668	-
			<u>759,115</u>	<u>150,971</u>
Passed through University of Massachusetts - Diabetes, Digestive, Kidney Diseases	93.847	1R01DK115690-01	151,448	-
Passed through Massachusetts Institute of Technology - Research and Training in Complementary and Integrative Health	93.213	1R01AT008764-01	238,910	-
Passed through University of Georgia - Trans-NIH Research Support	93.310	IOS-1564366	44,395	-

BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC.

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED DECEMBER 31, 2018**

(Continued)

Federal Grantor/pass-through Grantor/ Program or Cluster Title	Federal CFDA Number	Pass-through Entity Identifying Number	Federal Expenditures	Expenditures to Subrecipients
Research and Development Cluster (Continued)				
U.S. Department of Health and Human Services (Continued):				
Passed through Cornell University - Extramural Research Programs in the Neurosciences and Neurological Disorders	93.853	IOS-1339287	45,551	-
Total U.S. Department of Health and Human Services			<u>1,239,419</u>	<u>150,971</u>
U.S. Department of Energy:				
Office of Science Financial Assistance Program Passed through University of Nebraska - Lincoln - Office of Science Financial Assistance Program	81.049	N/A	224,268	-
Passed through Sandia National Laboratories - National Nuclear Security Administration	81.049	DE-SC0014395	158,541	-
Passed through Texas A&M University - Office of Science Financial Assistance Program	81.049	DE-NA0003525	60,001	-
Office of Science Financial Assistance Program	81.049	DE-SC0014037	184,780	-
Total U.S. Department of Energy			<u>627,590</u>	<u>-</u>
National Science Foundation:				
Biological Sciences Passed through Cornell University - Biological Sciences	47.074	N/A	2,275,879	969,475
Passed through Cold Spring Harbor - Biological Sciences	47.074	IOS-1339287	556,291	-
Passed through Noble Foundation - Biological Sciences	47.074	IOS-1237880	273,827	-
Passed through University of Florida - Biological Sciences	47.074	IOS-1127155	63,146	-
Passed through Donald Danforth Plant Science Center - Biological Sciences	47.074	UF 10029	259,008	-
Passed through University of California San Diego - Biological Sciences	47.074	IOS-1546882	76,285	-
Passed through University of California San Diego - Biological Sciences	47.074	IOS-1444435	198,588	-
Passed through University of Georgia - Biological Sciences	47.074	IOS-1564366	147,417	-
			<u>3,850,441</u>	<u>969,475</u>
Passed through Texas A&M University - Engineering Grants	47.041	02-S130213	18,700	-
Total National Science Foundation			<u>3,869,141</u>	<u>969,475</u>
Total Research and Development Cluster			<u>\$ 10,941,878</u>	<u>\$ 3,396,224</u>

The accompanying notes are an integral part of this schedule.

BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC.

NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS FOR THE YEAR ENDED DECEMBER 31, 2018

1. BASIS OF PRESENTATION

The accompanying schedule of expenditures of federal awards (the Schedule) includes the federal award activity of Boyce Thompson Institute for Plant Research, Inc. (the Institute) under programs of the federal government for the year ended December 31, 2018. The information in the 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, change in net assets, or cash flows of the Institute.

2. BASIS OF ACCOUNTING

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.

3. INDIRECT COST RATE

The Institute has elected not to use the 10% de minimis indirect cost rate as allowed under the Uniform Guidance.

BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC.

SCHEDULE OF FINDINGS AND QUESTIONED COSTS FOR THE YEAR ENDED DECEMBER 31, 2018

A. SUMMARY OF AUDITOR'S RESULTS

1. The independent auditor's report expresses an unmodified opinion on whether the financial statements of Boyce Thompson Institute for Plant Research, Inc. (the Institute) were prepared in accordance with accounting principles generally accepted in the United States of America.
2. No material weaknesses or significant deficiencies related to the audit of the financial statements are reported in the Independent Auditor's 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*.
3. No instances of noncompliance material to the financial statements of the Institute, which would be required to be reported in accordance with *Government Auditing Standards*, were disclosed during the audit.
4. The independent auditor's report expresses an unmodified opinion on compliance for each of the major federal award programs for the Institute.
5. No material weaknesses or significant deficiencies relating to the audit of the major federal award programs are reported in the Independent Auditor's Report on Compliance For Each Major Federal Program and on Internal Control over Compliance Required by the Uniform Guidance.
6. There are no audit findings relative to the major federal program for the Institute that are required to be reported in accordance with 2 CFR Section 200.516(a).
7. The programs tested as a major program include:
 - Research and Development Cluster:
 - CFDA No. 10.001 Agricultural Research – Basic and Applied Research
 - CFDA No. 10.219 Biotechnology Risk Assessment Research
 - CFDA No. 10.309 Specialty Crop Research Initiative
 - CFDA No. 10.310 Agriculture and Food Research Initiative (AFRI)
 - CFDA No. 12.910 Research and Technology Development
 - CFDA No. 47.041 Engineering Grants
 - CFDA No. 47.074 Biological Sciences
 - CFDA No. 81.049 Office of Science Financial Assistance Program
 - CFDA No. 93.213 Research and Training in Complementary and Integrative Health
 - CFDA No. 93.310 Trans-NIH Research Support
 - CFDA No. 93.847 Diabetes, Digestive, Kidney Diseases
 - CFDA No. 93.853 Extramural Research Programs in the Neurosciences and Neurological Disorders
 - CFDA No. 93.859 Biomedical Research and Research Training
8. The threshold used for distinguishing between Type A and B programs was \$750,000.
9. The Institute was determined to be a low-risk auditee.

B. FINDINGS - FINANCIAL STATEMENTS AUDIT

None.

C. FINDINGS AND QUESTIONED COSTS - MAJOR FEDERAL AWARD PROGRAM AUDIT

None.

D. SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS

None.