

**Bermuda Institute of  
Ocean Sciences (BIOS), Inc.**

Financial Statements and  
Uniform Guidance Schedules  
Together With Independent Auditors' Reports

December 31, 2016 and 2015

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## **Independent Auditors' Report**

**Board of Trustees**  
**Bermuda Institute of Ocean Sciences (BIOS), Inc.**

### **Report on the Financial Statements**

We have audited the accompanying financial statements of Bermuda Institute of Ocean Sciences (BIOS), Inc. ("BIOS"), which comprise the statements of financial position as of December 31, 2016 and 2015, and the related statements of activities and cash flows for the years 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.

### ***Auditors' Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits 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 auditors' 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 Bermuda Institute of Ocean Sciences (BIOS), Inc. as of December 31, 2016 and 2015, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

***Other Matters***

*Report on Supplementary Information*

Our audits were conducted for the purpose of forming an opinion on the financial statements as a whole. The accompanying schedule of expenditures of federal awards on pages 16 and 17 is presented for purposes of additional analysis as required by Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, 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 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 April 19, 2017 on our consideration of BIOS's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is 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 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 BIOS's internal control over financial reporting and compliance.

*PKF O'Connor Davies, LLP*

April 19, 2017

**Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Statements of Financial Position

	December 31,	
	2016	2015
<b>ASSETS</b>		
Cash and cash equivalents	\$ 855,045	\$ 2,446,303
Grants and accounts receivable	663,417	692,226
Contributions receivable, net (Note 4)	4,454,992	5,065,125
Inventory and prepaid expenses	117,150	33,636
Investments (Note 5)	14,504,921	14,182,476
Property and equipment, net (Note 6)	<u>16,034,500</u>	<u>16,100,305</u>
	<u>\$ 36,630,025</u>	<u>\$ 38,520,071</u>
<b>LIABILITIES AND NET ASSETS</b>		
Liabilities		
Accounts payable and accrued expenses	\$ 1,177,017	\$ 704,709
Grants and other advances	375,016	330,528
Loans payable (Note 9)	<u>5,458,368</u>	<u>5,202,427</u>
Total Liabilities	<u>7,010,401</u>	<u>6,237,664</u>
Net Assets		
Unrestricted	9,746,051	11,255,422
Temporarily restricted (Note 11)	10,093,625	11,272,387
Permanently restricted (Note 11)	<u>9,779,948</u>	<u>9,754,598</u>
Total Net Assets	<u>29,619,624</u>	<u>32,282,407</u>
	<u>\$ 36,630,025</u>	<u>\$ 38,520,071</u>

See notes to financial statements

**Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Statement of Activities  
Year Ended December 31, 2016  
(with summarized totals for the year ended December 31, 2015)

	2016			Total	2015 Total
	Unrestricted	Temporarily Restricted	Permanently Restricted		
<b>REVENUE AND OTHER SUPPORT</b>					
Contributions	\$ 637,538	2,076,250	\$ 25,350	\$ 2,739,138	\$ 8,331,735
Grants and contracts					
U.S. government and corporations	8,236,567	-	-	8,236,567	6,716,489
Bermuda government	317,821	-	-	317,821	344,914
Tuition, guest services and other income	1,684,617	2,077	-	1,686,694	2,304,918
Investment return	96,465	417,705	-	514,170	(250,229)
Net assets released from restrictions (Note 11)	3,674,794	(3,674,794)	-	-	-
Total Revenue and Other Support	<u>14,647,802</u>	<u>(1,178,762)</u>	<u>25,350</u>	<u>13,494,390</u>	<u>17,447,827</u>
<b>EXPENSES</b>					
Program Services					
Scientific research	12,792,629	-	-	12,792,629	9,134,943
Education	1,843,847	-	-	1,843,847	2,052,412
Guest and residential services	<u>225,332</u>	<u>-</u>	<u>-</u>	<u>225,332</u>	<u>297,116</u>
Total Program Services	14,861,808	-	-	14,861,808	11,484,471
Development and public relations	653,720	-	-	653,720	577,167
Management and general	<u>641,645</u>	<u>-</u>	<u>-</u>	<u>641,645</u>	<u>837,531</u>
Total Expenses	<u>16,157,173</u>	<u>-</u>	<u>-</u>	<u>16,157,173</u>	<u>12,899,169</u>
Change in Net Assets	(1,509,371)	(1,178,762)	25,350	(2,662,783)	4,548,658
<b>NET ASSETS</b>					
Beginning of year	<u>11,255,422</u>	<u>11,272,387</u>	<u>9,754,598</u>	<u>32,282,407</u>	<u>27,733,749</u>
End of year	<u>\$ 9,746,051</u>	<u>\$ 10,093,625</u>	<u>\$ 9,779,948</u>	<u>\$ 29,619,624</u>	<u>\$ 32,282,407</u>

**Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Statement of Activities  
Year Ended December 31, 2015

	2015			Total
	Unrestricted	Temporarily Restricted	Permanently Restricted	
<b>REVENUE AND OTHER SUPPORT</b>				
Contributions	\$ 650,109	\$ 7,653,962	\$ 27,664	\$ 8,331,735
Grants and contracts				
U.S. government and corporations	6,716,489	-	-	6,716,489
Bermuda government	344,914	-	-	344,914
Tuition, guest services and other income	2,304,919	-	-	2,304,918
Investment return	(45,690)	(204,539)	-	(250,229)
Net assets released from restrictions (Note 11)	3,366,925	(3,366,925)	-	-
Total Revenue and Other Support	<u>13,337,666</u>	<u>4,082,498</u>	<u>27,664</u>	<u>17,447,827</u>
<b>EXPENSES</b>				
Program Services				
Scientific research	9,134,943	-	-	9,134,943
Education	2,052,412	-	-	2,052,412
Guest and residential services	297,116	-	-	297,116
Total Program Services	<u>11,484,471</u>	<u>-</u>	<u>-</u>	<u>11,484,471</u>
Development and public relations	577,168	-	-	577,167
Management and general	837,531	-	-	837,531
Total Expenses	<u>12,899,170</u>	<u>-</u>	<u>-</u>	<u>12,899,169</u>
Change in Net Assets	438,496	4,082,498	27,664	4,548,658
<b>NET ASSETS</b>				
Beginning of year	<u>10,816,926</u>	<u>7,189,889</u>	<u>9,726,934</u>	<u>27,733,749</u>
End of year	<u>\$ 11,255,422</u>	<u>\$ 11,272,387</u>	<u>\$ 9,754,598</u>	<u>\$ 32,282,407</u>

**Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Statements of Cash Flows

	Year Ended December 31,	
	2016	2015
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Change in net assets	\$ (2,662,783)	\$ 4,548,657
Adjustments to reconcile change in net assets to net cash from operating activities		
Net depreciation (appreciation) in fair value of investments	(329,754)	431,355
Depreciation	1,294,911	1,204,131
Gain on disposal of property and equipment	(6,774)	-
Contributions, grants and contracts classified as financing activities	(743,815)	(219,912)
Change in discount of unconditional promises to give	(174,039)	308,442
Changes in operating assets and liabilities (Note 12)	1,246,263	(4,772,197)
Net Cash from Operating Activities	(1,375,991)	1,500,476
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Proceeds from sale of investments	1,250,740	6,460,952
Purchases of investments	(1,243,431)	(6,279,369)
Proceeds from sale of property and equipment	8,500	-
Expenditures for property and equipment	(1,230,832)	(1,188,983)
Net Cash from Investing Activities	(1,215,023)	(1,007,400)
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Permanently restricted contributions	25,350	27,664
Grants and contracts used for fixed asset acquisition	718,465	192,247
Proceeds of loans payable	1,800,000	200,000
Repayment of loans payable	(1,544,059)	(621,001)
Net Cash from Financing Activities	999,756	(201,090)
Net Change in Cash and Cash Equivalents	(1,591,258)	291,986
<b>CASH AND CASH EQUIVALENTS</b>		
Beginning of year	2,446,303	2,154,317
End of year	\$ 855,045	\$ 2,446,303

See notes to financial statements



## **Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Notes to Financial Statements  
December 31, 2016 and 2015

### **1. Organization**

Bermuda Institute of Ocean Sciences (BIOS), Inc., formerly The Bermuda Biological Station for Research, Inc., founded in 1903, was incorporated in the State of New York in 1926 as a U.S. not-for-profit research organization. BIOS is exempt from U.S. income taxes pursuant to Sections 501(c)(3) and 509(a) of the Internal Revenue Code. BIOS is also a Bermuda Registered Charity (Reg #116).

BIOS's mission is to seek and share fundamental knowledge of the oceans through state-of-the-art scientific research, world-class field expeditions, and comprehensive educational experiences.

The research conducted at BIOS is relevant to the waters surrounding Bermuda, as well as the global Earth system, and is multidisciplinary, spanning the biological, chemical, geological, and physical sciences. BIOS researchers are active partners in regional and international research collaborations that are working to address some of the most pressing issues of our time including climate change, marine conservation, ecosystem health, and natural-disaster risk assessment.

### **2. Summary of Significant Accounting Policies**

#### ***Basis of Accounting and Use of Estimates***

The financial statements are prepared in conformity with accounting principles generally accepted in the United States of America (US GAAP), which requires management to make estimates and judgments that affect the reported amounts of assets and liabilities and disclosures of contingencies at the date of the financial statements and reported amounts of revenues and expenses recognized during the reporting period. Actual results could differ from those estimates.

#### ***Financial Statement Presentation***

BIOS is required to report information regarding its financial position and activities according to three classes of net assets: permanently restricted, temporarily restricted, and unrestricted. Gifts and bequests that create endowment funds to provide a permanent source of income are classified as permanently restricted net assets. Gifts with stipulations that they be used for a particular purpose or for a specified time period are classified as temporarily restricted assets until the purpose or stipulated time restriction is met. All other net assets are classified as unrestricted.

#### ***Foreign Currency***

BIOS's functional currency is the U.S. dollar. There are no foreign currency transaction gains or losses from transacting in the Bermuda dollar because it is on parity with the U.S. dollar.

## **Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Notes to Financial Statements  
December 31, 2016 and 2015

### **2. Summary of Significant Accounting Policies (*continued*)**

#### ***Contributions***

Contributions, including unconditional promises to give, are recognized as revenue in the period received or pledged. Contributions of assets other than cash are recorded at their estimated fair value and are recorded as increases in unrestricted net assets unless the donor places restrictions on their use. Contributions due after one year are reported at their discounted net present value. Amortization of the discount is recorded annually as additional contribution revenue over the anticipated collection period of the pledge.

#### ***Cash Equivalents***

All highly liquid investments, with maturities of three months or less at the time of purchase are considered cash equivalents.

#### ***Allowance for Uncollectible Receivables***

An allowance for uncollectible receivables is estimated based on a combination of write-off history, aging analysis and any specific known troubled accounts. Management believes all receivables are fully collectible, therefore, no allowance for doubtful accounts is recognized at year-end.

#### ***Inventory***

Inventory is reported at the lower of cost or market (first in, first out) and consists of gift shop merchandise, cafeteria, laboratory and SCUBA supplies held for resale.

#### ***Fair Value Measurements***

BIOS follows US GAAP guidance on *Fair Value Measurements* which defines fair value and establishes a fair value hierarchy organized into three levels based upon the input assumptions used in pricing assets. Level 1 inputs have the highest reliability and are related to assets with unadjusted quoted prices in active markets. Level 2 inputs relate to assets with other than quoted prices in active markets which may include quoted prices for similar assets or liabilities or other inputs which can be corroborated by observable market data. Level 3 inputs are unobservable and are used to the extent that observable inputs do not exist.

#### ***Investment Valuation and Income Recognition***

Investments are carried at fair value. The fair value of the investment funds are reported at the net asset value as reported by management of the respective funds.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis and dividends are recorded on the ex-dividend date. Realized and unrealized gains and losses are included in the determination of the change in net assets.

## **Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Notes to Financial Statements  
December 31, 2016 and 2015

### **2. Summary of Significant Accounting Policies (*continued*)**

#### ***Grant support and revenue recognition***

Grants at BIOS are either reimbursement of costs limited by the maximums stated in the grant or are fixed price contracts. Support under grants for reimbursement of costs is recognized in the same period and in an amount equivalent to the aggregate of the incurred underlying costs. Revenue from fixed price grants is recognized proportionately over the life of the grant.

#### ***Property and Equipment***

Purchases of property and equipment are recorded at cost. Gifts or contributions of property and equipment are recognized at fair value at the time received. Property and equipment are depreciated using the straight-line method over the estimated useful lives of the assets. When items are disposed, the cost and accumulated depreciation are eliminated from the records of account, and a gain or loss is reported in current income. Repair and maintenance charges that do not increase the lives of the assets are expensed as incurred.

#### ***Accounting for Uncertainty in Income Taxes***

BIOS recognizes the effect of income tax positions only when they are more likely than not to be sustained. Management has determined that BIOS had no uncertain income tax positions that require financial statement recognition or disclosure. BIOS is no longer subject to examination by the applicable taxing jurisdictions for periods prior to 2013.

#### ***Reclassification***

Certain prior year amounts have been reclassified to conform with current year presentation.

#### ***Subsequent Events***

Management evaluated subsequent events for disclosure and/or recognition in the financial statements through April 19, 2017, the date financial statements were available for issuance. Management's evaluation noted no matters requiring recognition or additional disclosure.

### **3. Concentrations of Financial Risk**

Financial instruments that are exposed to concentrations of financial risk consist primarily of cash, managed investment funds, donated common stock, contributions and contributions receivable. Management believes the diversification and quality of managed investment funds minimizes risk concentration regarding investments other than fluctuations in the financial markets in general. At December 31, 2016 and 2015, contributions receivable due from one donor totaled approximately \$3,600,000 and \$4,799,000. At December 31, 2016 and 2015, contributions from one donor totaled approximately 36% and 72% of contributions.

**Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Notes to Financial Statements  
December 31, 2016 and 2015

**4. Contributions Receivable**

Contributions receivable at December 31 are expected to be collected as follows:

	<u>2016</u>	<u>2015</u>
Amount expected to be collected in:		
One year or less	\$ 1,661,724	\$ 1,559,023
Years two through five	<u>3,017,386</u>	<u>3,850,121</u>
	4,679,110	5,409,144
Less:		
Discount (5% per annum) to present value	<u>(224,118)</u>	<u>(344,019)</u>
	<u>\$ 4,454,992</u>	<u>\$ 5,065,125</u>

**5. Investments**

BIOS's investments consist of funds managed by Commonfund, The Investment Fund for Foundations' ("TIFF") Investment Program and by The Vanguard Group, Inc. Following are the investments at December 31, grouped by the fair value hierarchy for those investments measured at fair value on a recurring basis:

<u>Description</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Total</u>
<b>2016</b>			
Vanguard Federal Money Market Fund	\$ 751,705	\$ -	\$ 751,705
Commonfund:			
Global Multi-Asset Portfolio, LLC	<u>-</u>	<u>13,753,216</u>	<u>13,753,216</u>
	<u>\$ 751,705</u>	<u>\$ 13,753,216</u>	<u>\$ 14,504,921</u>
<b>2015</b>			
Vanguard Prime Money Market Fund	\$ 253,819	\$ -	\$ 253,819
Commonfund:			
Global Multi-Asset Portfolio, LLC	<u>-</u>	<u>13,928,657</u>	<u>13,928,657</u>
	<u>\$ 253,819</u>	<u>\$ 13,928,657</u>	<u>\$ 14,182,476</u>

## Bermuda Institute of Ocean Sciences (BIOS), Inc.

Notes to Financial Statements  
December 31, 2016 and 2015

### 6. Property and Equipment

Property and equipment, carried at cost, is comprised of the following at December 31:

	<u>Useful Lives</u>	<u>2016</u>	<u>2015</u>
Land and improvements		\$ 486,850	\$ 486,850
Buildings and improvements	20-40 years	16,878,346	16,706,898
Furniture, fixtures and equipment	5-15 years	5,934,807	5,331,207
RV Atlantic Explorer	25 years	9,040,227	8,604,126
Other fixed assets	10-50 years	758,392	758,392
		<u>33,098,622</u>	<u>31,887,473</u>
Less accumulated depreciation		<u>(17,064,122)</u>	<u>(15,787,168)</u>
		<u>\$ 16,034,500</u>	<u>\$ 16,100,305</u>

### 7. Sponsored Projects

Approximately 63% and 40% of revenues in each of 2016 and 2015 are awards for sponsored projects (governments and other sources). The awards generally provide for recovery of both direct and indirect costs. The indirect costs covered by the awards are determined as a negotiated or agreed-upon percentage of direct costs with certain exclusions.

### 8. Pension Plan

BIOS maintains a contributory pension plan for employees ages 23 and over who have worked at least 720 hours in any calendar year. Participation in the plan is mandatory for Bermudians and spouses of Bermudians until they are 65 years old. The plan is voluntary for all other employees. Each participating employee may contribute to the plan up to a maximum of 10% of their gross salary. Mandatory participants must contribute 5% or more. BIOS matches the employee contribution up to a maximum of 5% of gross salary in accordance with the plan documents and the Bermuda Occupational Pensions Act 1998. Pension expense for the years ended December 31, 2016 and 2015 approximated \$216,000 and \$196,000.

**Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Notes to Financial Statements  
December 31, 2016 and 2015

**9. Loans Payable**

Loans payable consist of the following at December 31:

	<u>2016</u>	<u>2015</u>
HSBC, secured by a mortgage on real property, due on demand, payable in monthly installments of interest only (1.2% and 1.3% at December 31, 2013 and 2012) increasing to 1.25% and 1.5% above three-month London Interbank Offered Rate ("LIBOR") in 2014 and 2015.	\$ 1,183,727	\$ 1,530,627
HSBC, secured by a mortgage on real property, due October 2020, payable in monthly installments of interest only (1.2% and 1.3% at December 31, 2013 and 2012) increasing to 1.25% and 1.5% above three-month LIBOR in 2014 and 2015.	639,504	820,158
Bank of NT Butterfield, for staff housing building, due February 2023, unsecured, payable in monthly installments of \$18,042 including interest at 1% above three-month LIBOR rate (1.2% and 1.3% at December 31, 2013 and 2012).	1,335,137	1,551,642
Bank of NT Butterfield, revolving loan, secured by investment portfolio, due October 2017, interest payable in monthly installments at 2.5% per annum above US LIBOR	<u>2,300,000</u>	<u>1,300,000</u>
	<u>\$ 5,458,368</u>	<u>\$ 5,202,427</u>

Aggregate maturities of loans payable approximate \$3,881,000 in 2017, \$403,000 in 2018, \$408,000 in 2019, \$298,000 in 2020, \$217,000 in 2021 and \$251,000 thereafter. Interest expense was approximately \$143,000 and \$112,000 for years ended December 31, 2016 and 2015.

**10. Endowment Funds**

Donor-restricted funds whose purpose is to provide long-term support for BIOS and its charitable programs are endowment funds. Net assets of endowment funds are classified as permanently restricted, temporarily restricted or unrestricted which classification is determined by the directions of donors, where applicable, and the provisions of the laws of the State of New York. Absent donor stipulations to the contrary, the provisions of New York State law do not impose either a permanent or temporary restriction on the income or capital appreciation derived from the original gift.

## **Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Notes to Financial Statements  
December 31, 2016 and 2015

### **10. Endowment Funds (continued)**

On September 17, 2010, New York State adopted its version of the Uniform Prudent Management of Institutional Funds Act (NYPMIFA). NYPMIFA includes provisions that differ from previous law, including the elimination of the historic dollar value rule with respect to endowment spending, establishment of new standards governing the expenditure and modification of restrictions on endowment funds, and revision of the prudence standard for the management and investment of endowment funds.

#### ***Interpretation of Law***

BIOS interprets NYPMIFA as requiring the preservation of the fair value of the original gift as of the date of the gift absent explicit donor stipulations to the contrary. As a result of this interpretation, BIOS classifies as permanently restricted net assets (a) the original value of gifts donated to the permanent endowment, (b) the original value of subsequent gifts donated to the permanent endowment, and (c) accumulations to the permanent endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund. The remaining portion of the donor restricted endowment fund that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure. Management has reviewed all BIOS funds and determined that net asset reclassification was not necessary.

#### ***Investment Return Objectives***

BIOS has adopted investment and spending policies for the BIOS endowment fund (the Fund) with the core objective to provide a reliable source of long-term financial support. It is the desire of the trustees that the Fund achieves a balance of growth and stability and thereby, over the long run, earns a competitive rate available in the capital markets at the risk level prescribed for the Fund.

#### ***Investment Philosophy***

The Fund has a long-term investment horizon and the trustees believe that asset allocation is the major determinant of investment performance. The asset allocation plan is based on a number of factors, including – projected spending needs, maintenance of sufficient liquidity to meet spending payments, and return objectives and risk tolerances. The asset allocation plan provides for diversification of assets to maximize the investment return and manage the endowment investments consistent with market conditions. Investments are made through recognized third-party providers of multimanager strategies.

#### ***Spending Policy***

It is BIOS's policy to annually distribute up to 5% of a three-year moving average of the Fund's market value as of June 30 of each year. This distribution will be sanctioned by the applicable laws of the state of New York. In 2016 and 2015, the full 5% was eligible for distribution to support the operations of BIOS.

**Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Notes to Financial Statements  
December 31, 2016 and 2015

**10. Endowment Funds (continued)**

**Spending Policy (continued)**

Cumulative investment returns in excess of the spending rate that are not donor-restricted are board designated unrestricted endowment funds. Temporarily restricted endowment funds represent cumulative investment returns which must be spent in accordance with the donors' intent. Permanently restricted endowments must be maintained in perpetuity.

**Activity Summary**

The following summarizes activity in endowment funds for years ended December 31:

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
<b>2016</b>				
Balance at January 1, 2016	\$ 1,344,297	\$ 2,811,246	\$ 9,754,598	\$ 13,910,141
Contributions	-	-	25,350	25,350
Investment income	33,688	148,748	-	182,436
Capital depreciation	60,862	268,957	-	329,819
Appropriated for expenditure	<u>(132,674)</u>	<u>(582,679)</u>	<u>-</u>	<u>(715,353)</u>
Balance at December 31, 2016	<u>\$ 1,306,173</u>	<u>\$ 2,646,272</u>	<u>\$ 9,779,948</u>	<u>\$ 13,732,393</u>
<b>2015</b>				
Balance at January 1, 2015	\$ 1,517,941	\$ 3,572,525	\$ 9,726,934	\$ 14,817,400
Contributions	-	-	27,664	27,664
Investment income	33,425	147,230	-	180,655
Capital depreciation	(79,618)	(351,768)	-	(431,386)
Appropriated for expenditure	<u>(127,451)</u>	<u>(556,741)</u>	<u>-</u>	<u>(684,192)</u>
Balance at December 31, 2015	<u>\$ 1,344,297</u>	<u>\$ 2,811,246</u>	<u>\$ 9,754,598</u>	<u>\$ 13,910,141</u>

**11. Restrictions on the Use of Net Assets**

**Temporarily Restricted Net Assets**

Temporarily restricted net assets at December 31 are available for the purposes listed:

	2016	2015
Scientific research	\$ 8,548,499	\$ 9,463,789
Education	1,376,538	1,632,208
Laboratory building	<u>168,588</u>	<u>176,390</u>
	<u>\$ 10,093,625</u>	<u>\$ 11,272,387</u>



**Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Notes to Financial Statements  
December 31, 2016 and 2015

**11. Restrictions on the Use of Net Assets (continued)**

***Net Assets Released from Restrictions***

Net assets released from restriction consist of the following for the years ended December 31:

	<u>2016</u>	<u>2015</u>
Scientific research	\$ 2,879,785	\$ 2,499,786
Education	767,858	691,057
Laboratory building	27,151	26,082
General operations	<u>-</u>	<u>150,000</u>
	<u>\$ 3,674,794</u>	<u>\$ 3,366,925</u>

***Permanently Restricted Net Assets***

Investment return from permanently restricted net assets is available to support the indicated activities at December 31:

	<u>2016</u>	<u>2015</u>
Scientific research	\$ 4,929,091	\$ 4,928,841
Education	3,372,886	3,347,786
Laboratory building	350,000	350,000
General operations	<u>1,127,971</u>	<u>1,127,971</u>
	<u>\$ 9,779,948</u>	<u>\$ 9,754,598</u>

**12. Statement of Cash Flows**

	<u>2016</u>	<u>2015</u>
Changes in operating assets and liabilities:		
(Increase) decrease in		
Grants and accounts receivable	\$ 28,809	\$ (206,827)
Contributions receivable	784,173	(4,592,143)
Inventory and prepaid expenses	(83,514)	32,358
Increase (decrease) in		
Accounts payable and accrued expenses	472,307	(48,988)
Grants and other advances	<u>44,488</u>	<u>43,403</u>
Changes in operating assets and liabilities	<u>\$ 1,246,263</u>	<u>\$ (4,772,197)</u>
Supplemental disclosure of cash flow information:		
Cash paid during the year for interest	\$ 142,753	\$ 112,465
Noncash transactions		
Equipment and services donated to BIOS	-	50,420

\* \* \* \* \*

**Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Uniform Guidance Reports and Schedules

December 31, 2016

**Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Schedule of Expenditures of Federal Awards  
Year Ended December 31, 2016

<u>Federal Grantor/Pass-through Grantor/Program or Cluster Title</u>	<u>Federal CFDA Number</u>	<u>Grant Number</u>	<u>Pass-Through Entity Identification Number</u>	<u>Passed Through to Subrecipients</u>	<u>Total Federal Expenditures</u>
<b>Research and Development – Cluster:</b>					
<b>National Science Foundation:</b>					
<b>Geosciences</b>					
<b>Direct:</b>					
Ship Operations - R/V Atlantic Explorer	47.050	OCE-1212814	N/A	\$ -	\$ 2,633,591
Collaborative Research: Seawater Inorganic and Organic Carbon Measurements for the US GEOTRACES Eastern Pacific Zonal Transect	47.050	OCE-1233706	N/A	-	134,303
Collaborative Research: The Bermuda Atlantic Time-Series Study: Sustained Biogeochemical, Ecosystem and Ocean Change Observations and Linkages in the Subtropical North Atlantic	47.050	OCE-1258622	N/A	76,562	1,051,686
Operation of a Community Marine Atmospheric Sampling Facility at Tudor Hill, Bermuda	47.050	OCE-1430741	N/A	-	93,188
Oceanographic Technical Services 2012-2016, R/V Atlantic Explorer	47.050	OCE-1216322	N/A	-	485,181
Time Series Particle Flux Measurements in the Sargasso Sea	47.050	OCE-1234294	N/A	119,653	149,638
The Panulirus Hydrographic Station - Years 59-64	47.050	OCE-1153693	N/A	-	114,669
REU Site: Fall Semester Marine Science Research in Bermuda	47.050	OCE-1262880	N/A	-	6,117
Collaborative Research: Ocean Acidification: Establishing the Links between Offshore Biogeochemistry, Coral Reef Metabolism and Acidification	47.050	OCE-1416670	N/A	-	12,836
REU Site: Fall Semester Student Research in Oceanography and Marine Science at BIOS	47.050	OCE-1460686	N/A	-	134,251
Time Series Particle Flux Measurements in the Sargasso Sea	47.050	OCE-1536644	N/A	172,878	314,304
2015 Shipboard Scientific Support Equipment RV Atlantic Explorer	47.050	OCE-1528282	N/A	-	7,420
2015 Oceanographic Instrumentation RV Atlantic Explorer	47.050	OCE-1527000	N/A	-	1,432
Collaborative Research: Identifying the Role of Basin-scale Climate Variability in the Decline of Atlantic Corals	47.050	OCE-1536547	N/A	-	35,865
Collaborative Research: The Oleander project: High-Resolution observations of the dynamic ocean between New Jersey and Bermuda	47.050	OCE-1536517	N/A	-	27,731
2016 Shipboard Scientific Support Equipment (RV Atlantic Explorer)	47.050	OCE-1630621	N/A	-	43,955
2016 Oceanographic Instrumentation (RV Atlantic Explorer)	47.050	OCE-1630314	N/A	-	201,559
<b>Polar Programs</b>					
<b>Direct:</b>					
Collaborative Research: Pacific-Arctic Carbon Synthesis - Transformations, Fluxes and Budgets	47.078	ARC-1107457	N/A	-	103,512
<b>Biological Sciences</b>					
<b>Direct:</b>					
Flow Cytometry and Molecular Multi-User Facility at BIOS	47.074	DBI-1522206	N/A	-	144,961
<b>Total National Science Foundation</b>				<u>369,093</u>	<u>5,696,199</u>

See independent auditors' report and notes to schedule of expenditures of federal awards

**Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Schedule of Expenditures of Federal Awards  
Year Ended December 31, 2016  
(Continued)

<u>Federal Grantor/Pass-through Grantor/Program or Cluster Title</u>	<u>Federal CFDA Number</u>	<u>Grant Number</u>	<u>Pass-Through Entity Identification Number</u>	<u>Passed Through to Subrecipients</u>	<u>Total Federal Expenditures</u>
<b>Research and Development – Cluster (continued) :</b>					
<i>Department of Commerce, National Oceanic and Atmospheric Administration (NOAA)</i>					
<i>Pass-through funds:</i>					
<i>The Trustees of Columbia University in the City of New York</i>					
NOAA Cooperative Institutes - Surface Water CO2 Measurements from Ships	11.432	UMIAMI S16-29	Subaward No. 1 (GG01087)	-	76,773
NOAA Cooperative Institutes - Surface Water CO2 Measurements from Ships	11.432	UMS14-0014	Subaward No. 1 (GG008022)	-	18,693
<b>Total National Oceanic and Atmospheric Administration, Department of Commerce</b>				-	95,466
<i>National Aeronautics and Space Administration</i>					
<i>Science</i>					
<i>Direct:</i>					
Research Opportunities in Space and Earth Science (ROSES-2014)	43.001	NNX15AR99G	N/A	39,161	51,933
NRA/Research Opportunities in Space and Earth Sciences-2013	43.001	NNX16AB05G	N/A	567,055	1,630,166
<i>Science</i>					
<i>Pass-through funds:</i>					
<i>The Regents of The University of California, Santa Barbara</i>					
Science - Bermuda Bio-Optics Project: Continuation of Time-series and Retrospective Data Analysis	43.001	NNX14AM83G	KK1504	-	108,760
<b>Total National Aeronautics and Space Administration</b>				606,216	1,790,859
<b>Total Expenditures of Federal Awards</b>				<b>\$ 975,309</b>	<b>\$ 7,582,524</b>

See independent auditors' report and notes to schedule of expenditures of federal awards

## **Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Notes to Schedule of Expenditures of Federal Awards  
Year Ended December 31, 2016

### **1 Basis of Presentation**

The accompanying Schedule of Expenditures of Federal Awards (the "Schedule") includes the federal award activity of BIOS under programs of the federal government for the year ended December 31, 2016. 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 BIOS, it is not intended to and does not present the financial position, changes in net assets or cash flows of BIOS.

### **2. Summary of 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 the Uniform Guidance, wherein certain types of expenditures are not allowable or are limited as to reimbursement. Pass-through entity identifying numbers are presented where available.

### **3. Indirect Cost Rate**

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

**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 Auditors' Report**

**Board of Trustees  
Bermuda Institute of Ocean Sciences (BIOS), Inc.**

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 Bermuda Institute of Ocean Sciences (BIOS), Inc. ("BIOS") which comprise the statement of financial position as of December 31, 2016, and the related statements of activities and cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated April 19, 2017.

**Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered BIOS'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 BIOS's internal control. Accordingly, we do not express an opinion on the effectiveness of BIOS'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.

### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether BIOS'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 entity'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.

*PKF O'Connor Davies, LLP*

April 19, 2017

**Report on Compliance for Each Major Federal Program and Report on Internal Control  
Over Compliance Required by the Uniform Guidance**

**Independent Auditors' Report**

**Board of Trustees**

**Bermuda Institute of Ocean Sciences (BIOS), Inc.**

**Report on Compliance for Each Major Federal Program**

We have audited Bermuda Institute of Ocean Sciences (BIOS), Inc.'s ("BIOS") compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of BIOS's major federal programs for the year ended December 31, 2016. BIOS's major federal programs are identified in the summary of auditors' 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.

***Auditors' Responsibility***

Our responsibility is to express an opinion on compliance for each of BIOS'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 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 BIOS'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 BIOS's compliance.



***Opinion on Each Major Federal Program***

In our opinion, BIOS 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, 2016.

**Report on Internal Control Over Compliance**

Management of BIOS 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 BIOS'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 BIOS'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.

*PKF O'Connor Davies, LLP*

April 19, 2017

**Bermuda Institute of Ocean Sciences (BIOS), Inc.**

Schedule of Findings and Questioned Costs  
Year Ended December 31, 2016

Section I - Summary of Auditors' Results

Financial Statements

Type of auditors' report issued on whether the financial statements audited were prepared in accordance with GAAP: Unmodified

Internal control over financial reporting:

Material weakness(es) identified?  yes  no

Significant deficiency(ies) identified?  yes  none reported

Noncompliance material to financial statements noted?  yes  no

Federal Awards

Internal control over major federal programs:

Material weakness(es) identified?  yes  no

Significant deficiency(ies) identified?  yes  none reported

Type of auditors' report issued on compliance for major federal 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 program:

Bermuda Institute of Ocean Sciences (BIOS), Inc.'s major program is research and development. Accordingly, all grants listed on the schedule of expenditures of federal awards are considered a research and development major program cluster. BIOS has no other major programs.

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

Auditee qualified as low-risk auditee?  yes  no

Section II - Financial Statement Findings

During our audit, we noted no material findings for the year ended December 31, 2016.

Section III – Federal Award Findings and Questioned Costs

During our audit, we noted no material instances of non-compliance and none of the costs reported in the federal financially assisted programs are questioned or recommended to be disallowed.

Section IV – Prior Year Audit Findings

There were no prior year audit findings.