

Van Andel Institute and Affiliates

Consolidated Financial Statements and Supplemental
Consolidating Schedules as of and for the Years
Ended November 30, 2022 and 2021, Schedule of
Expenditures of Federal Awards and Schedule of
Findings and Questioned Costs for the Year Ended
November 30, 2022, and Independent Auditor's
Report

VAN ANDEL INSTITUTE AND AFFILIATES

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Independent Auditor's Report

To the Board of Trustees
Van Andel Institute and Affiliates

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of Van Andel Institute and Affiliates (VAIA), which comprise the consolidated statements of financial position as of November 30, 2022 and 2021 and the related consolidated statements of activities and changes in net assets and cash flows for the years then ended, and the related notes to the consolidated financial statements.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the financial position of VAIA as of November 30, 2022 and 2021 and the results of its activities, changes in net assets, and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audits of the Consolidated Financial Statements* section of our report. We are required to be independent of VAIA and to meet our ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Emphasis of Matter

As described in Note 2, the consolidated financial statements include investments valued at \$996,615 (49 percent of net assets) and \$880,474 (45 percent of net assets) as of November 30, 2022 and 2021, respectively, whose fair values have been estimated by management in the absence of readily determinable fair values. Management's estimates are based on information provided by the fund managers or the general partners. Our opinion is not modified with respect to this matter.

Responsibilities of Management for the Consolidated Financial Statements

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

In preparing the consolidated financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about VAIA's ability to continue as a going concern within one year after the date that the consolidated financial statements are issued or available to be issued.

To the Board of Trustees
Van Andel Institute and Affiliates

Auditor's Responsibilities for the Audits of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and, therefore, is not a guarantee that audits conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated financial statements.

In performing audits in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audits.
- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements.
- Obtain an understanding of internal control relevant to the audits 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 VAIA's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about VAIA's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audits, significant audit findings, and certain internal control-related matters that we identified during the audits.

Other Matter

Other Information

Our audits were conducted for the purpose of forming an opinion on the consolidated financial statements that collectively comprise Van Andel Institute and Affiliates' consolidated financial statements. The schedule of expenditures of federal awards is presented for the purpose 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* (the "Uniform Guidance"), and is not a required part of the consolidated financial statements.

The accompanying schedule of expenditures of federal awards is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the consolidated financial statements. The information has been subjected to the auditing procedures applied in the audits of the consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated 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 consolidated financial statements as a whole.

To the Board of Trustees
Van Andel Institute and Affiliates

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated April 10, 2023 on our consideration of VAIA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, 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 VAIA'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 VAIA's internal control over financial reporting and compliance.

Plante & Moran, PLLC

April 10, 2023

VAN ANDEL INSTITUTE AND AFFILIATES

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION AS OF NOVEMBER 30, 2022 AND 2021 (IN THOUSANDS)

ASSETS	2022	2021
CURRENT ASSETS:		
Cash and cash equivalents	\$ 470,647	\$ 366,281
Investments	18,205	5,806
Pledges receivable	198	281
Grant and contract receivables	4,565	4,357
Interest and other receivables	2,632	2,300
Prepaid expenses and other current assets	2,344	2,508
Total current assets	498,591	381,533
LONG-TERM ASSETS:		
Investments	1,597,558	1,617,544
Long-term investments pledged under security lending agreement	20,156	79,016
Funds pledged to creditor	5,000	69,280
Property and equipment—net of accumulated depreciation	175,045	176,636
Pledges receivable	18	33
Notes and other receivables	537	666
Other assets	1,025	999
Total long-term assets	1,799,339	1,944,174
TOTAL	\$ 2,297,930	\$ 2,325,707
LIABILITIES AND NET ASSETS		
CURRENT LIABILITIES:		
Accounts payable	\$ 4,107	\$ 2,534
Investments payable	43	19,672
Interest payable	728	728
Deferred revenue	1,165	2,126
Accrued expenses and other liabilities	10,607	10,238
Total current liabilities	16,650	35,298
LONG-TERM LIABILITIES:		
Long-term debt	219,704	219,689
Interest rate swap	23,674	92,584
Accrued expenses and other liabilities	34	479
Total long-term liabilities	243,412	312,752
Total liabilities	260,062	348,050
NET ASSETS:		
Net assets without donor restrictions	1,263,623	1,198,995
Net assets with donor restrictions	774,245	778,662
Total net assets	2,037,868	1,977,657
TOTAL	\$ 2,297,930	\$ 2,325,707

See notes to consolidated financial statements.

VAN ANDEL INSTITUTE AND AFFILIATES

CONSOLIDATED STATEMENTS OF ACTIVITIES AND CHANGES IN NET ASSETS FOR YEARS ENDED NOVEMBER 30, 2022 AND 2021 (IN THOUSANDS)

	2022			2021		
	Net Assets Without Donor Restrictions	Net Assets With Donor Restrictions	Total	Net Assets Without Donor Restrictions	Net Assets With Donor Restrictions	Total
REVENUES AND SUPPORT:						
Contributions	\$ 87,026	\$ 1,822	\$ 88,848	\$ 27,671	\$ 100,985	\$ 128,656
Grant and contract revenue	35,020	-	35,020	27,322	-	27,322
Investment return utilized	100,262	3,798	104,060	58,587	2,050	60,637
Other revenues	<u>2,405</u>	<u>-</u>	<u>2,405</u>	<u>1,949</u>	<u>-</u>	<u>1,949</u>
Total revenues	<u>224,713</u>	<u>5,620</u>	<u>230,333</u>	<u>115,529</u>	<u>103,035</u>	<u>218,564</u>
Net assets transferred or released from restrictions:						
Satisfaction of time or purpose restrictions	1,403	(1,403)	-	1,545	(1,545)	-
Dividends and interest earnings	904	(904)	-	562	(562)	-
Gain on investments	<u>2,894</u>	<u>(2,894)</u>	<u>-</u>	<u>1,489</u>	<u>(1,489)</u>	<u>-</u>
Total net assets transferred or released from restrictions	<u>5,201</u>	<u>(5,201)</u>	<u>-</u>	<u>3,596</u>	<u>(3,596)</u>	<u>-</u>
Total revenues and support	<u>229,914</u>	<u>419</u>	<u>230,333</u>	<u>119,125</u>	<u>99,439</u>	<u>218,564</u>
EXPENSES:						
Program	81,883	-	81,883	69,399	-	69,399
Management and general	32,033	-	32,033	28,372	-	28,372
Fundraising	<u>3,427</u>	<u>-</u>	<u>3,427</u>	<u>2,772</u>	<u>-</u>	<u>2,772</u>
Total expenses	<u>117,343</u>	<u>-</u>	<u>117,343</u>	<u>100,543</u>	<u>-</u>	<u>100,543</u>
Gain on interest rate swap	<u>(68,910)</u>	<u>-</u>	<u>(68,910)</u>	<u>(23,898)</u>	<u>-</u>	<u>(23,898)</u>
Total expenses and gain on interest rate swap	<u>48,433</u>	<u>-</u>	<u>48,433</u>	<u>76,645</u>	<u>-</u>	<u>76,645</u>
CHANGE IN NET ASSETS BEFORE OTHER CHANGES AND INCOME TAX EXPENSE	181,481	419	181,900	42,480	99,439	141,919
OTHER CHANGES IN NET ASSETS:						
Investment loss including amount utilized	(115,116)	(4,836)	(119,952)	189,075	11,404	200,479
INCOME TAX EXPENSE	<u>(1,737)</u>	<u>-</u>	<u>(1,737)</u>	<u>(22)</u>	<u>-</u>	<u>(22)</u>
CHANGE IN NET ASSETS	64,628	(4,417)	60,211	231,533	110,843	342,376
NET ASSETS—Beginning of year	<u>1,198,995</u>	<u>778,662</u>	<u>1,977,657</u>	<u>967,462</u>	<u>667,819</u>	<u>1,635,281</u>
NET ASSETS—End of year	<u>\$ 1,263,623</u>	<u>\$ 774,245</u>	<u>\$ 2,037,868</u>	<u>\$ 1,198,995</u>	<u>\$ 778,662</u>	<u>\$ 1,977,657</u>

See notes to consolidated financial statements.

VAN ANDEL INSTITUTE AND AFFILIATES

CONSOLIDATED STATEMENTS OF CASH FLOWS FOR YEARS ENDED NOVEMBER 30, 2022 AND 2021 (IN THOUSANDS)

	2022	2021
CASH FLOWS FROM OPERATING ACTIVITIES:		
Changes in net assets	\$ 60,211	\$ 342,376
Adjustments to reconcile increase in net assets to cash and cash equivalents used in operating activities:		
Depreciation and amortization	11,864	12,344
Permanently restricted contribution	(26)	(99,734)
Gain on interest rate swap	(68,910)	(23,898)
Loss (gain) on investments	35,964	(252,564)
Loss (gain) on sale of equipment	26	(132)
Contribution of investments	-	(112,525)
Changes in operating assets and liabilities:		
Grant and contract receivables	(208)	(596)
Deferred revenue	(961)	(650)
Accrued expenses and other liabilities	(76)	1,148
Other	1,606	(3,149)
Net cash and cash equivalents provided by (used in) operating activities	39,490	(137,380)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Payments to acquire property and equipment	(10,284)	(6,409)
Proceeds from sale of equipment	-	132
Purchase of investments	(1,951,305)	(2,277,134)
Proceeds from sale of investments	1,962,159	2,367,073
Payments of swap collateral	(35,470)	(29,290)
Proceeds from swap collateral	99,750	59,610
Net cash and cash equivalents provided by investing activities	64,850	113,982
CASH FLOWS FROM FINANCING ACTIVITIES:		
Permanently restricted contribution	26	99,734
Bond issuance cost	-	(314)
Proceeds from debt	-	110,000
Payments on debt	-	(110,000)
Net cash and cash equivalents provided by financing activities	26	99,420
NET INCREASE IN CASH AND CASH EQUIVALENTS	104,366	76,022
CASH AND CASH EQUIVALENTS—Beginning of year	366,281	290,259
CASH AND CASH EQUIVALENTS—End of year	\$ 470,647	\$ 366,281
SUPPLEMENTAL NONCASH ACTIVITIES:		
Change in collateral pledged under securities lending agreement	\$ (58,860)	\$ 41,257
Change in investments acquired but not settled	(19,629)	2,393
TOTAL SUPPLEMENTAL NONCASH ACTIVITIES	\$ (78,489)	\$ 43,650
SUPPLEMENTAL CASH FLOW INFORMATION:		
Cash paid during the year for interest	\$ 8,773	\$ 8,649
Cash paid during the year for income taxes	1,749	23

VAN ANDEL INSTITUTE AND AFFILIATES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED NOVEMBER 30, 2022 AND 2021 (IN THOUSANDS)

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization and Tax Status—Van Andel Institute and Affiliates (VAIA) consists of the following entities: Van Andel Institute (VAI), Van Andel Research Institute (VARI), and Van Andel Education Institute (VAEI). VAI is organized and operated for the benefit of, to perform the functions of, or to carry out the purposes of one or both of VARI, a Michigan charitable trust organized and operated as a medical research organization, and VAEI, a Michigan charitable trust organized and operated as an educational organization.

VAI has been recognized by the Internal Revenue Service (IRS) as exempt from federal income tax under Section 501(a) of the Internal Revenue Code (the “Code”) as a not-for-profit organization and public charity as described in Sections 501(c)(3) and 509(a)(3) of the Code, respectively. In order for VAI to retain its public charity status, it must make certain minimum distributions annually to both VARI and VAEI. These annual distribution requirements have been satisfied for the years ended November 30, 2022 and 2021.

VARI, a Michigan charitable trust, has been recognized as a medical research organization described in the Code Section 170(b)(1)(A)(iii), operating as a supported entity in connection with VAI. Since its inception, VARI has been recognized by the IRS as exempt from federal income taxes under Section 501(a) as a result of being organized and operated as an organization described in Section 501(c)(3). In order for VARI to retain its public charity status as a medical research organization, it must meet certain minimum asset usage and expenditure requirements. These requirements have been satisfied for the years ended November 30, 2022 and 2021.

VAEI, a Michigan charitable trust, has been recognized as an educational organization described in the Code Section 170(b)(1)(A)(ii), operating as a supported entity in connection with VAI. VAEI has been recognized by the IRS as exempt from federal income taxes under Section 501(a) as a result of being organized and operated as an organization described in Section 501(c)(3). In order for VAEI to retain its public charity status, it must maintain certain spending requirements. These spending requirements have been satisfied for the years ended November 30, 2022 and 2021.

VAEI’s principal operations include the operation of the Van Andel Institute Graduate School and the Science Academy.

Principles of Consolidation—The consolidated financial statements include VAI and its wholly owned and related affiliates. All significant intercompany accounts and transactions have been eliminated in consolidation. Investments in affiliated companies that are owned 50% or less are accounted for under the applicable cost or equity method, based on significant influence over operations.

Basis of Financial Presentation—The accompanying consolidated financial statements are prepared on the accrual basis and in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP).

Use of Estimates—The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents—Cash and cash equivalents are any short-term, highly liquid investments that are both readily convertible to known amounts of cash and are so near their maturity that they present insignificant risk of changes in value due to changes in interest rates. These include cash on deposit with banks, money market accounts, certificates of deposit, and highly liquid investments with an original maturity of six months or less, excluding amounts whose use is limited under contractual and donor agreements. VAIA has cash deposits that are uninsured by the FDIC. VAIA has evaluated the financial institutions with which it deposits funds; however, it may not be practical to insure all cash deposits.

Investments—Investments include bonds and equities with readily determinable market values, which are carried at fair value based on quoted market prices for those or similar investments. Hedge funds, real estate, private equity, other types of limited partnerships and non-publicly traded investments are carried at estimated fair market value based on the net asset value (NAV) of the fund. Management reviews such valuations for appropriateness. Net realized and unrealized gains and losses are included in investment return utilized and investment return excluding amount utilized in the consolidated statements of activities and changes in net assets.

Investment Risks—Investment securities are exposed to various risks, such as interest rate, market, and credit. Due to the level of risk associated with certain investment securities and the level of uncertainty related to changes in the value of investment securities, it is at least reasonably possible that changes in values in the near term could materially affect the amounts reported in the accompanying consolidated financial statements.

Investments are routinely reviewed for other-than-temporary declines in fair value below the cost basis, and when events or changes in circumstances indicate the carrying value of an asset may not be recoverable, the security is written down to fair value, establishing a new cost basis.

Securities Lending—VAI participates in a securities lending program with its custodian bank. Under the terms of its securities lending agreement, VAI requires initial collateral of a value at least equal to 102% of the fair value of loaned investments. All cash collateral received is invested in approved money market and short-term funds. Effective control is maintained of the loaned investments during the term of the agreement. At November 30, 2022, VAI had loaned securities with a total market value of \$20,156 and received related cash collateral of \$0 and noncash collateral of \$20,274. At November 30, 2021, VAI had loaned securities with a total market value of \$79,016 and received related cash collateral of \$0 and noncash collateral of \$81,328.

Property and Equipment—Property and equipment purchased are stated at cost. Contributed property is stated at estimated fair value on the date of contribution. Depreciation is computed on a straight-line basis over the estimated useful lives of the respective assets, as follows: building, 39 years; improvements, seven to 15 years; leasehold improvements, the shorter of remaining life of lease or estimated useful life of the improvement; furniture and equipment, five to seven years; computer hardware and software, three years; vehicle, five years; intangible assets with finite lives, seven years; and artwork and intangible assets with infinite lives are considered inexhaustible and, therefore, are not depreciated. Maintenance and repairs are charged to operating expenses as incurred.

Long-lived Asset Impairment—Long-lived assets are reviewed for impairment when events or changes in business conditions indicate that their carrying values may not be recoverable. Assets are considered impaired and are adjusted to fair value for significant adverse changes in physical condition. No long-lived assets were impaired as of November 30, 2022 and 2021.

Derivative and Hedging Activities—The derivative instrument is an interest rate swap and is recognized as a liability within the consolidated statements of financial position and measured at fair value in accordance with ASC 815, *Derivatives and Hedging*. Changes in fair value of derivative instruments are recognized in the consolidated statements of activities and changes in net assets.

Deferred Revenue—Deferred revenue represents funds received from grants for which expenses have not been incurred, the unamortized portion of licensing agreement receipts, and ticket and sponsorship revenue for future events yet to be earned.

Pledges Receivable—Pledges receivable represent amounts committed by donors that have not been received. An allowance for uncollectible contributions is provided when evidence indicates amounts promised by donors may not be collectible. As of November 30, 2022, and 2021, no allowance has been established, as all amounts are considered fully collectible.

Net Assets—Resources are classified for accounting and reporting purposes into one of two net asset classes, determined based on the existence or absence of donor-imposed restrictions.

- a. Net assets with donor restrictions result from contributions whose use is limited by donor-imposed stipulations. Some donor restrictions are temporary in nature; those restrictions will be met by actions of VAIA or by the passage of time. Other donor restrictions are perpetual in nature, whereby the donor has stipulated the funds be maintained in perpetuity.
- b. Net assets without donor restrictions result from all other activities not classified as restricted.

Net assets are reclassified when contributed assets have been expended in accordance with the donor's stipulations or when the passage of time causes amounts to be available for current purposes. Accordingly, certain assets were released from donor restrictions due to spending in accordance with the donor's stipulation or the passage of time.

Revenues and Support—Revenues and support are recognized when contributions, including unconditional promises to give, are received. Grant and contract revenue consist of funding from various governmental and private institutions, including federal grants from the National Institutes of Health, and are recognized when expenses are incurred or in accordance with contract agreements. All grant and contract revenues were granted for specific research and educational activities. Other revenue consists of facility rent, fees for research services to third parties, and program revenue for education. Other revenue is recognized when the service is provided. In accordance with Accounting Standards Update (ASU) 2018-08, grants and contracts are accounted for as conditional contributions, being nonexchange in nature, and are recognized as revenue as the qualifying expenses are incurred and in accordance with the contract agreements. The remaining conditional balance of these grants total \$1,152 and \$2,108 as of November 30, 2022 and 2021, respectively.

Functional Allocation of Expenses—Costs of providing program and support services have been reported on a functional basis in the consolidated statement of activities and changes in net assets. The financial statements report certain categories of expenses that are attributable to more than one program or supporting function. Therefore, these expenses required allocation on a reasonable basis that is consistently applied. Salaries and related expenses are allocated on the basis of time and effort. Depreciation and occupancy expenses are allocated based on square footage. All other expenses are allocated based upon direct identification and utilization. Although the methods of allocation used are considered appropriate, other methods could be used that would produce different amounts.

Nonoperating Expenses—The following activities are presented outside of operations within the statements of activities and changes in net assets: gain (loss) on interest rate swap, investment return (loss) not utilized and income tax expense.

2. INVESTMENTS

Short-term investments as of November 30, 2022 and 2021 are summarized as follows:

	2022	2021
Fixed income	\$ 18,205	\$ 5,806

Long-term investments as of November 30, 2022 and 2021 are summarized as follows:

	2022	2021
Fixed income	\$ 201,459	\$ 312,492
Equities	414,157	498,106
Alternative investments	996,615	880,474
Other investments held at lower of cost or market	<u>5,483</u>	<u>5,488</u>
Total	<u>\$ 1,617,714</u>	<u>\$ 1,696,560</u>

Certain investments are held in foreign currencies. The translation from the applicable foreign currencies to U.S. dollars is performed using current exchange rates in effect at November 30, 2022 and 2021. Gains or losses resulting from foreign currency translation and transactions are reflected in the consolidated statements of activities and changes in net assets. Approximately \$50,200 and \$37,682 were held in foreign currency and were subject to such foreign exchange risk as of November 30, 2022 and 2021, respectively.

Investments in futures contracts are recorded on the trade date and open contracts are stated in the consolidated financial statements at their fair value on the last business day of the reporting period, based on quoted market prices. Accordingly, such contracts are classified as Level 1 fair value estimates under the fair value hierarchy as described within ASC Topic 820, *Fair Value Measurements and Disclosures*. Gains or losses are realized when contracts are liquidated, on a first-in-first-out basis. Both realized and unrealized gains are presented net of losses for financial reporting purposes. Interest income is recognized on an accrual basis.

During 2022 and 2021, VAI executed investment transactions utilizing acquisition indebtedness through a brokerage and clearing firm. Securities purchased under the terms of this agreement are subject to certain collateral requirements and VAI is required to maintain equity in its account equal to the value of securities borrowed prior to any market value declines. VAI was compliant with all collateral requirements at November 30, 2022 and 2021.

Investments payable on the consolidated statement of financial position represents amounts due for pending unsettled securities transactions and short-term futures positions with a negative market value.

Net assets with donor restrictions of \$774,245 and \$778,662 are included in cash and cash equivalents, investments, and long-term investments pledged under securities lending agreement as of November 30, 2022 and 2021, respectively.

3. FAIR VALUE MEASUREMENTS

VAIA follows guidance included in ASC 820, which defines fair value, establishes a framework for measuring fair value, and requires disclosures about fair value measurements. The fair value hierarchy is as follows:

Level 1—Observable, quoted (unadjusted) prices for identical assets or liabilities in active markets.

Level 2—Other observable inputs, either directly or indirectly, including:

- Quoted prices for similar assets or liabilities in active markets
- Quoted prices for identical or similar assets or liabilities in nonactive markets (few transactions, limited information, noncurrent prices, high variability over time, etc.)
- Inputs other than quoted prices that are observable for the asset or liability (interest rates, yield curves, volatilities, default rates, etc.)
- Inputs that are derived principally from or corroborated by other observable market data

Level 3—Unobservable inputs that cannot be corroborated by observable market data. These should be based on the best information available. The organization should utilize all reasonably available information but need not incur excessive cost or effort to do so.

Information about the fair value of VAIA's financial instruments as of November 30, 2022 and 2021, according to the valuation techniques of VAIA used to determine their values, is as follows:

Description	Level 1— Quoted Prices in Active Markets for Identical Assets	Level 2— Significant Other Observable Inputs	Level 3— Significant Other Unobservable Inputs	Net Asset Value	Total— November 30, 2022
Cash equivalents	\$ 470,338	\$ -	\$ -	\$ -	\$ 470,338
Mutual funds	20,981	-	-	-	20,981
Exchange-traded funds - Equities	26,993	-	-	-	26,993
Asset-backed securities:					
Commercial mortgage backed	-	10,969	-	-	10,969
Nongovernment-backed C.M.O.	-	1,301	-	-	1,301
Other	-	30,859	-	-	30,859
Corporate bonds	-	64,809	-	-	64,809
Government-issued securities:					
Government bonds	-	9,540	-	-	9,540
Government M.B.S.	-	48,911	-	-	48,911
Other	-	12,352	-	-	12,352
Common stock - Domestic	406,665	-	-	-	406,665
Alternative investments:					
Real estate	-	-	-	46,161	46,161
Private equity	-	-	-	488,552	488,552
Hedge funds:					
Long/short	-	-	-	144,387	144,387
Absolute return	-	-	-	290,688	290,688
Credit manager	-	-	-	26,827	26,827
	924,977	178,741	-	996,615	2,100,333
Interest rate swap	-	(23,674)	-	-	(23,674)
Total	<u>\$ 924,977</u>	<u>\$ 155,067</u>	<u>\$ -</u>	<u>\$ 996,615</u>	<u>\$ 2,076,659</u>

Description	Level 1— Quoted Prices in Active Markets for Identical Assets	Level 2— Significant Other Observable Inputs	Level 3— Significant Other Unobservable Inputs	Net Asset Value	Total— November 30, 2021
Cash equivalents	\$ 366,016	\$ -	\$ -	\$ -	\$ 366,016
Mutual funds	106,344	-	-	-	106,344
Exchange-traded funds - Equities	20,925	-	-	-	20,925
Asset-backed securities:					
Commercial mortgage backed	-	17,613	-	-	17,613
Nongovernment-backed C.M.O.	-	5,440	-	-	5,440
Other	-	40,804	-	-	40,804
Corporate bonds	-	65,150	-	-	65,150
Government-issued securities:					
Government bonds	-	65,283	-	-	65,283
Government M.B.S.	-	13,814	-	-	13,814
Other	-	3,428	-	-	3,428
Common stock - Domestic	477,604	-	-	-	477,604
Alternative investments:					
Real estate	-	-	-	34,809	34,809
Private equity	-	-	-	455,468	455,468
Hedge funds:					
Long/short	-	-	-	123,273	123,273
Absolute return	-	-	-	238,354	238,354
Credit manager	-	-	-	28,570	28,570
	970,889	211,532	-	880,474	2,062,895
Interest rate swap	-	(92,584)	-	-	(92,584)
Total	<u>\$ 970,889</u>	<u>\$ 118,948</u>	<u>\$ -</u>	<u>\$ 880,474</u>	<u>\$ 1,970,311</u>

The following methods and assumptions were used to estimate the fair value of each class of financial instrument:

Cash Equivalents—VAIA’s cash equivalents consist of money market funds and certificates of deposit.

Mutual Funds, Exchange Traded Funds, Fixed-Income Securities, and Common Stock—Fair values of these securities are based on quoted market prices, where available. VAI obtains one price for each security, primarily from a third-party pricing service, which generally uses Level 1 or Level 2 inputs for the determination of fair value. The pricing service normally derives the security prices through recently reported trades for identical (Level 1) or similar securities (Level 2), making adjustments through the reporting date based upon available observable market information. For securities not actively traded, the pricing service may use quoted market prices of comparable instruments or discounted cash flow analyses, incorporating inputs that are currently observable in the markets for similar securities. Inputs that are often used in the valuation methodologies include, but are not limited to, nonbinding broker quotes, benchmark yields, credit spreads, default rates, and prepayment spreads. VAI performs monthly analyses on the prices received from the pricing service to determine whether the prices are reasonable estimates of fair value.

Interest Rate Swap— The interest rate swap is valued as a fixed/float swap product within Bank of America / Merrill Lynch. The fixed leg is calculated by the coupon rate set at the time of the agreement, 3.4811 percent. The floating leg relates to future changes in interest rates using the US Libor rate index. Floating rates include several risk statistics such as modified duration, convexity, and basis point value. The swap risk statistics are based on the risk statistics for the individual legs of the swap.

Alternative Investments—Alternative investments are recorded at NAV reported by the respective general partners of the partnerships, which VAI has concluded approximate fair value. Assets in hedge funds are redeemable at NAV under the original terms of the agreements. However, it is possible that these redemption rights may be restricted or eliminated by the partnerships in the future in accordance with the underlying fund agreements. Due to the nature of the investments held by the partnerships, changes in market conditions and the economic environment may significantly impact the NAV of the partnerships and, consequently, the fair value of VAI’s interests in the partnerships. Although a secondary market exists for these investments, it is not active and individual transactions are typically not observable. When transactions do occur in this limited secondary market, they may occur at discounts to the reported NAV. It is, therefore, reasonably possible that if VAI were to sell these investments in the secondary market, a buyer may require a discount to the reported NAV, and the discount could be significant.

VAI has commitments of approximately \$203,604 and \$178,412 to fund various investor groups in non-publicly traded entities as of November 30, 2022 and 2021, respectively. The commitments are callable at any time. The private equity funds have restrictions on the removal of capital investments. These restrictions could prevent the removal of capital for up to 13 years from the initial date of the investment.

The fair value and equity measurements in alternative investments calculated using a NAV (or its equivalent) with redemption restrictions are as follows:

	Fair Value 2022	Fair Value 2021	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
1. Long/short hedge	\$ 144,387	\$ 123,273	None	Quarterly	0–90 days
2. Absolute return hedge	290,688	238,354	None	Quarterly	0–90 days
3. Credit manager hedge	26,827	28,570	None	Quarterly	0–90 days
4. Private equity	488,552	455,468	203,604	n/a	n/a
5. Real estate	46,161	34,809	None	Quarterly	90 days

1. Long/short hedge includes investments in hedge funds that seek to diversify risks and improve risk adjusted returns. The funds invest in public equities, fixed income, and distressed debt and look to hedge various company, sector, market, and macro-specific risk factors. They can profit from increases or decreases in the public securities in which they are invested.
2. Absolute return hedge includes investments in hedge funds that seek to diversify risks and improve risk adjusted returns. The funds invest in diversified strategies, including event-driven, macro, arbitrage, commodity, equity, and fixed-income strategies using qualitative and quantitative risk controls.
3. Credit manager hedge includes investments in hedge funds that seek attractive total returns from income and price appreciation by investing in a globally diversified portfolio of multi-currency debt issued by corporations, non-government issuers and government issuers.
4. Private equity includes investments in various partnership funds that specialize in large- and middle-market buyouts, secondary private equity transactions, venture capital, distressed debt, litigation financing, and natural resources.
5. Real estate includes investments in private real estate. These funds invest directly in residential, office, industrial, retail, and lodging real estate. There are also investments in public mortgage-backed securities.

4. PLEDGED ASSETS

VARI is subject to collateral posting obligations as required under the terms of the interest rate swap agreement described in Note 6. Collateral must be posted equal to the excess of the fair market value of the swap net of the then-prevailing collateral threshold. The prevailing collateral threshold is dependent upon VAI's cash-to-debt ratio as defined in the agreement, ranging from less than 1.2 to 1.7 and above. Acceptable collateral includes cash and cash equivalents and certain investment securities as defined in the agreement.

At November 30, 2022 and 2021, certain investment securities and cash with a carrying value of approximately \$5,000 and \$69,280, respectively, are pledged as collateral.

5. PROPERTY AND EQUIPMENT

Property and equipment as of November 30, 2022 and 2021 are summarized as follows:

	2022	2021
Building and improvements	\$ 239,392	\$ 238,272
Furniture and equipment	59,886	57,011
Land and improvements	11,854	11,565
Computer hardware and software	11,294	11,128
Artwork	435	435
Intangibles	214	214
Leasehold improvements	1,338	1,338
Vehicles	66	66
Construction in progress	4,550	1,330
	<hr/>	<hr/>
Total property and equipment	329,029	321,359
Accumulated depreciation	(153,984)	(144,723)
	<hr/>	<hr/>
Property and equipment—Net	<u>\$ 175,045</u>	<u>\$ 176,636</u>

Depreciation expense was \$11,851 and \$12,096 in 2022 and 2021, respectively.

6. INTEREST RATE SWAP

On May 1, 2008, VARI entered into an interest rate swap agreement to hedge exposure to interest rate risk. The agreement was amended and extended as of November 15, 2018. The notional amount of the swap is \$220,000. On a monthly basis, VARI paid a fixed rate of 3.48% under the amended agreement. VARI received a floating rate equal to 80% of one-month London InterBank Offered Rate (LIBOR) under the amended agreement. Obligations by VARI under the swap agreement are guaranteed by VAI. The amended agreement extended the termination date from May 1, 2033 to April 1, 2043, unless terminated earlier at the election of VARI. The swap agreement contains additional provisions permitting each party to terminate in the event of the occurrence of certain events related to the performance or creditworthiness of the other party. Bank of America may, on May 1, 2038, terminate and cash settle this transaction.

VARI recognized a net gain of \$68,910 and \$23,898 in 2022 and 2021, respectively, related to the interest rate swap as reflected in the consolidated statements of activities and changes in net assets. The estimated fair value of the swap is included in long-term liabilities in the consolidated statements of financial position. Amounts paid on the swap are included in interest expense.

From time to time, while the reissued Series 2013 Bonds are outstanding, VARI may enter into additional derivative contracts in order to hedge against certain risks associated with their debt or investment portfolios.

7. LONG-TERM DEBT

To realize cost savings, on October 1, 2018, the Michigan Strategic Fund (the “Fund”), for the benefit of VARI, amended the \$220,000 tax-exempt Limited Obligation Refunding Revenue Bonds, Series 2013A and Series 2013B (the “Bonds”). The initial Series 2013 Bonds were issued to realize cost savings, and refunded and redeemed the Series 2008 Bonds, which were issued to provide additional funding to construct, equip, and furnish the second phase of VARI’s research facility, and to refinance Series 1997, 1999, 2001, and 2007 bonds on a long-term basis. The 1997, 1999, 2001, and 2007 variable rate demand limited obligation revenue bonds were legally defeased in accordance with the bond indenture.

The Reissued Series 2013A Bond was amended as of September 1, 2021, due to the mandatory tender date of October 1, 2021. Bond debt totaling \$110,000 is therefore classified as long term for fiscal years ending November 30, 2022 and 2021 respectively. To realize additional cost savings, the Reissued Series 2013B Bond was extended and a new bank purchase rate was negotiated.

Both Reissued Series 2013A and 2013B Bonds will mature in full on April 1, 2043 and may be prepaid at VARI’s discretion. The outstanding balance of the Reissued Series 2013A Bonds and Series 2013B Bonds was \$220,000 as of November 30, 2022 and 2021, respectively. Included in the long-term balance is the unamortized portion of the debt issuance costs totaling \$296 and \$311 at November 30, 2022 and 2021, respectively.

Under the terms of the loan agreements amended and extended during 2021, VARI is obligated to pay interest monthly as follows: Reissued Series 2013A Bonds - 80% of one-month LIBOR plus 48 basis points; Reissued Series 2013B Bonds - 80% of one-month LIBOR, plus 50 basis points. Interest rates reset monthly and effective interest rates were 3.494% on the Reissued Series 2013A and 3.514% on the Reissued Series 2013B as of November 30, 2022 and 0.549% on the Reissued Series 2013A and 0.569% on the Reissued Series 2013B as of November 30, 2021.

The various agreements require VARI, and supporting organization VAI, to meet certain financial covenants, generally relating to the preservation of the tax-exempt status of the Bonds and the maintenance of a liquidity ratio. These financial covenants were met for the years ended November 30, 2022 and 2021.

The payment of debt service on the Bonds is guaranteed by VAI pursuant to the amended guaranty agreements dated as of October 1, 2018, which obligates VAI to make payments if VARI fails to perform its financial obligation. VAI absolutely and unconditionally guarantees the full and punctual payment of the principal and interest of the Bonds payable when the Bonds become due, whether at the stated maturity thereof, by acceleration, call for redemption, or otherwise. The agreement shall terminate when notice of dissolution has been received by the banks and all indebtedness has been paid in full.

Interest expense for 2022 and 2021 was \$8,773 and \$8,921, respectively.

8. INCOME TAXES

Due to charitable contribution carryforwards, a deferred tax liability and a deferred tax asset have been recorded as of November 30, 2022 and 2021. A valuation allowance has been recorded to reflect the estimated portion of charitable contribution carryforwards that will likely not be utilized. The charitable contribution carryforwards expire at various intervals between 2023 and 2027.

Income tax expense for the years ended November 30, 2022 and 2021 consists of current tax expense of \$1,737 and \$22, respectively.

Deferred tax assets and liabilities resulting from temporary differences as of November 30, 2022 and 2021 are as follows:

	2022	2021
Charitable contribution carryforwards	\$ 158,877	\$ 119,485
Valuation allowance	<u>(158,877)</u>	<u>(119,485)</u>
Deferred tax liability	<u>\$ -</u>	<u>\$ -</u>

VAI and VARI file unrelated business income tax returns in the U.S. federal jurisdiction and various state jurisdictions. The three-year statute of limitations remains open for the tax years ended November 30, 2019, November 30, 2020 and November 30, 2021. For VAI, the statute of limitations for tax years ended November 30, 2011, November 30, 2012 and November 30, 2013 has been extended to December 31, 2023.

9. NET ASSETS WITH DONOR RESTRICTIONS

Net assets with donor restrictions as of November 30, 2022 and 2021 are available for the following purposes:

	2022		
	Temporarily Restricted	Permanently Restricted	Total
Cardiovascular research	\$ 286	\$ -	\$ 286
Education	254	400	654
Epigenetics research	1	-	1
General and other cancer research	1,104	102	1,206
General and other neurological disorders research	6,591	54,503	61,094
Metabolism research	2,838	49,866	52,704
Other research and education	700	655,634	656,334
Time restricted	872	-	872
Women's health research	1,094	-	1,094
	<u>\$ 13,740</u>	<u>\$ 760,505</u>	<u>\$ 774,245</u>

	2021		
	Temporarily Restricted	Permanently Restricted	Total
Cardiovascular research	\$ 431	\$ -	\$ 431
Education	271	350	621
Epigenetics research	2	-	2
General and other cancer research	825	102	927
General and other neurological disorders research	8,695	54,503	63,198
Metabolism research	5,557	49,867	55,424
Other research and education	815	655,634	656,449
Time restricted	1,003	-	1,003
Women's health research	607	-	607
	<u>\$ 18,206</u>	<u>\$ 760,456</u>	<u>\$ 778,662</u>

10. RETIREMENT SAVINGS AND INCENTIVE PLAN

VARI sponsors a 401(k) defined-contribution retirement savings plan covering substantially all employees of VARI and VAEI. This retirement savings plan matches employee contributions up to 5% of the employee's annual compensation subject to certain eligibility criteria as stated in the plan document. Discretionary contributions may also be made to the plan. Employer contributions totaled approximately \$3,848 and \$3,422 for the years ended November 30, 2022 and 2021, respectively.

11. ENDOWMENT FUNDS

VAI's endowment consists of individual funds established for a variety of purposes, including donor-designated endowment funds and funds designated by the Board of Trustees to function as endowments. As required by U.S. GAAP, net assets associated with endowment funds are classified and reported based on the existence or absence of donor-imposed restrictions.

Interpretation of Relevant Law—VAI is subject to the State Prudent Management of Institutional Funds Act (SPMIFA) and, thus, classifies amounts in its donor-restricted endowment funds as net assets with donor restrictions because those net assets are time restricted until the Board of Trustees appropriates such amounts for expenditures. Most of those net assets are also subject to purpose restrictions that must be met before reclassifying those net assets to net assets without donor restrictions. When reviewing its donor-restricted endowment funds, VAI considers a fund to be underwater if the fair value of the fund is less than the sum of (a) the original value of the initial and subsequent gift amounts donated to the fund, and (b) any accumulations to the fund that are required to be maintained in perpetuity in accordance with the direction of the applicable donor gift instrument. VAI has interpreted SPMIFA to permit spending from underwater funds in accordance with the prudent measures required under this law. Additionally, in accordance with SPMIFA, VAI considers the following factors in making a determination to appropriate or accumulate donor-restricted endowment funds.

- i. The duration and preservation of the fund
- ii. The purposes of the organization and the donor-restricted endowment fund
- iii. General economic conditions
- iv. The possible effect of inflation and deflation
- v. The expected total return from income and the appreciation of investments
- vi. Other resources of the organization
- vii. The investment policies of the organization

Endowment net asset composition by type of fund as of November 30, 2022 and 2021 are as follows:

2022			
	Net Assets Without Donor Restrictions	Net Assets With Donor Restrictions	Total
Donor-restricted endowment corpus	\$ -	\$ 760,505	\$ 760,505
Board-designated endowment corpus	1,333,028	-	1,333,028
Accumulated investment gains	-	7,758	7,758
Total	<u>\$ 1,333,028</u>	<u>\$ 768,263</u>	<u>\$ 2,101,291</u>

2021			
	Net Assets Without Donor Restrictions	Net Assets With Donor Restrictions	Total
Donor-restricted endowment corpus	\$ -	\$ 760,456	\$ 760,456
Board-designated endowment corpus	1,287,814	-	1,287,814
Accumulated investment gains	-	12,594	12,594
Total	<u>\$ 1,287,814</u>	<u>\$ 773,050</u>	<u>\$ 2,060,864</u>

Changes in endowment net assets for the years ended November 30, 2022 and 2021 are as follows:

	2022		
	Net Assets Without Donor Restrictions	Net Assets With Donor Restrictions	Total
Endowment net assets—beginning of year	\$ 1,287,814	\$ 773,049	\$ 2,060,863
Investment return:			
Investment income	24,106	912	25,018
Net appreciation (realized and unrealized)	(43,481)	(1,949)	(45,430)
Total investment return	(19,375)	(1,037)	(20,412)
Swap collateral borrowings	64,470	-	64,470
Contributions	84,850	49	84,899
Appropriation of endowment assets for expenditure	(84,731)	(3,798)	(88,529)
Endowment net assets—end of year	\$ 1,333,028	\$ 768,263	\$ 2,101,291

	2021		
	Net Assets Without Donor Restrictions	Net Assets With Donor Restrictions	Total
Endowment net assets—beginning of year	\$ 1,029,779	\$ 661,929	\$ 1,691,708
Investment return:			
Investment income	19,156	569	19,725
Net appreciation (realized and unrealized)	225,460	12,868	238,328
Total investment return	244,616	13,437	258,053
Swap collateral borrowings	30,383	-	30,383
Contributions	25,177	99,734	124,911
Appropriation of endowment assets for expenditure	(42,141)	(2,050)	(44,191)
Endowment net assets—end of year	\$ 1,287,814	\$ 773,050	\$ 2,060,864

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 or SPMIFA requires VAI to retain as a fund of perpetual duration. There were no such deficiencies at VAI as of November 30, 2022 and 2021.

Endowment Investment Policy—VAI’s endowment mandate is to support the core research and education missions of VARI and VAEI by supplying a steady source of income for each of their respective operating budgets.

VAI’s primary investment goal is to preserve purchasing power of future endowment payouts and to the extent this is achieved, cause the principal to grow in value over time.

Other VAI goals include maximizing return within reasonable and prudent levels of risk and maximizing the value of the endowment while maintaining necessary liquidity to support spending in prolonged down markets.

Key responsibilities in the oversight and management of the VAI endowment are as follows:

- a. The Board of Trustees has established a Finance Committee (the “Committee”), charged with oversight responsibility for the management of investments on behalf of the trustees. Their responsibilities include approval of investment policies, oversight of the investment management process, and approving endowment payout.
- b. The Committee has delegated to the chief financial officer and investment office responsibility for all investment matters, including the implementation of investment policies established by the Committee.

VAI’s investment risk is managed consistent with levels deemed prudent and reasonable given medium- to long-term capital market conditions and the investment objectives of the endowment. Consistent with modern portfolio theory, risk cannot be eliminated, but should be managed and fiduciaries have the obligation to utilize risk efficiently. Risk exposures are identified, measured, monitored, and tied to responsible parties. Risk is taken consistent with return expectations.

Investment Objectives and Risk Parameters—VAI’s performance objectives are established for the total endowment, asset class composites, and individual manager portfolios. VAI’s investment strategy has been developed in the context of long-term capital market expectations, as well as multi-year projections of spending and inflation. Investment objectives and strategies emphasize a long-term outlook and interim performance fluctuations are viewed with corresponding perspective.

There are four principal factors that affect the VAI endowment fund’s financial status:

1. Contributions from donors
2. Annual payout
3. Biomedical research inflation
4. Investment performance

Risk tolerance takes all four factors into account. At certain asset levels and a given spending policy, it is possible that investment returns may not support desired spending goals. If this occurs, the spending policy will be revised downward, contributions will have to increase, or risk tolerance changed. Rates of return will be calculated based on a time-weighted rate of return formula and will be reported net of all fees and costs.

Overall, VAI endowment performance is measured relative to policy benchmarks. Total endowment return is expected to match or exceed the total endowment-weighted benchmark return, net of all fees and expenses, on a consistent basis over time.

Spending Policy—VAI has a policy of appropriating for distribution 4% - 7% of its endowment in any given fiscal year depending upon operating requirements. In establishing this policy, VAI considered the long-term expected rate of return on its endowment. Accordingly, over the long term, VAI expects the current spending policy to allow its endowment to grow nominally at a targeted rate of 3.5% annually.

12. INVESTMENT RETURN UTILIZED

Investment return utilized includes amounts appropriated from donor-restricted endowment funds and investment return on individual endowment funds as reported in Note 11. The following tables summarize total investment return for the years ended November 30, 2022 and 2021:

	2022		
	Without Donor Restrictions	Net Assets With Donor Restrictions	Total
Interest and dividends on investments	\$ 26,912	\$ 911	\$ 27,823
Net depreciation of investments	(41,766)	(1,949)	(43,715)
Total investment loss	(14,854)	(1,038)	(15,892)
Investment return utilized	(100,262)	(3,798)	(104,060)
Investment loss including amount utilized	\$ (115,116)	\$ (4,836)	\$ (119,952)

	2021		
	Without Donor Restrictions	Net Assets With Donor Restrictions	Total
Interest and dividends on investments	\$ 21,832	\$ 569	\$ 22,401
Net appreciation of investments	225,830	12,885	238,715
Total investment return	247,662	13,454	261,116
Investment return utilized	(58,587)	(2,050)	(60,637)
Investment return excluding amount utilized	\$ 189,075	\$ 11,404	\$ 200,479

13. LIQUIDITY

VAIA's financial assets available within one year of the statement of financial position for general expenditure at November 30, 2022 and 2021 are as follows:

	2022	2021
Financial assets at year end:		
Cash and cash equivalents	\$ 470,647	\$ 366,281
Pledges receivable	198	281
Grant and contract receivables	4,565	4,357
Interest and other receivables	2,632	2,300
Investments and funds pledged to creditor	1,640,919	1,771,646
Total financial assets	2,118,961	2,144,865
Less amounts not available to be used within one year:		
Board designated endowment funds	(1,333,028)	(1,287,814)
Less 7% Board-designated endowment spending	93,312	90,147
Net assets with donor restrictions	(774,245)	(778,662)
Financial assets available to meet cash needs for general expenditures within one year	\$ 105,000	\$ 168,536

VAIA has a goal to maximize the value of the endowment while maintaining liquidity needed to support spending in prolonged down markets. VAIA's liquidity target is based on six months endowment funded cash needs for operating activities, which are, on average, approximately \$36,530 and \$30,319 at November 30, 2022 and 2021, respectively. VAIA structures its financial assets to be available as its general expenditures, liabilities, and other obligations come due. In addition, VAIA invests cash in excess of daily requirements in various short-term investments, including certificates of deposit and short-term treasury instruments.

VAIA also realizes there could be unanticipated liquidity needs.

Income from donor-restricted endowments is restricted for specific purposes and, therefore, is not available for general expenditure. As described in Note 11, the endowment has a spending rate of 4% - 7% in any given fiscal year depending upon operating requirements.

14. NATURAL CLASSIFICATION

The natural classification of expenses shows expenses by the nature of the expense rather than by functional classification. Total expenses by natural classification for the years ended November 30, 2022 and 2021 are as follows:

2022				
	Program	Management and General	Fundraising	Total
Salary and benefits	\$ 40,850	\$ 18,215	\$ 1,810	\$ 60,875
Depreciation	9,856	1,995	-	11,851
Interest	6,779	1,994	-	8,773
Materials and supplies	13,223	1,902	104	15,229
Professional fees	2,311	2,425	206	4,942
Office and laboratory facilities	2,384	754	208	3,346
Other	<u>6,480</u>	<u>4,748</u>	<u>1,099</u>	<u>12,327</u>
Total expenses before income tax expense	81,883	32,033	3,427	117,343
Income tax expense	<u>-</u>	<u>1,737</u>	<u>-</u>	<u>1,737</u>
Total expenses	<u>\$ 81,883</u>	<u>\$ 33,770</u>	<u>\$ 3,427</u>	<u>\$ 119,080</u>

2021				
	Program	Management and General	Fundraising	Total
Salary and benefits	\$ 35,636	\$ 16,397	\$ 1,555	\$ 53,588
Depreciation	10,035	2,061	-	12,096
Interest	6,896	2,025	-	8,921
Materials and supplies	9,828	2,298	77	12,203
Professional fees	1,087	2,197	187	3,471
Office and laboratory facilities	2,158	741	243	3,142
Other	<u>3,759</u>	<u>2,653</u>	<u>710</u>	<u>7,122</u>
Total expenses before income tax expense	69,399	28,372	2,772	100,543
Income tax expense	<u>-</u>	<u>22</u>	<u>-</u>	<u>22</u>
Total expenses	<u>\$ 69,399</u>	<u>\$ 28,394</u>	<u>\$ 2,772</u>	<u>\$ 100,565</u>

15. SUBSEQUENT EVENTS

Events or transactions occurring after the statement of net position date have been evaluated through April 10, 2023, the date of the consolidated financial statements were available to be issued. The consolidated financial statements do not reflect events or transactions after this date. All material transactions identified are disclosed below.

On December 14, 2022, VARI executed an early termination of its interest rate swap agreement paying \$26,976 to settle the agreement. The payment reflected \$26,813 for the remaining swap obligation and \$163 for debt service non-interest costs.

On December 28, 2022, VARI paid in full the outstanding Reissued Series 2013A Bond distributing \$110,312 to the lender. The payment represented the principle of the loan totaling \$110,000 and outstanding interest totaling \$312.

On January 3, 2023, VARI paid in full the outstanding Reissued Series 2013B Bond distributing \$110,360 to the lender. The payment represented the principle of the loan totaling \$110,000 and outstanding interest totaling \$360.

On March 10, 2023, Silicon Valley Bank (“SVB”) was closed by the California Department of Financial Protection and Innovation, which appointed the Federal Deposit Insurance Corporation (“FDIC”) as receiver. At the time of the bank closing, VAIA had no cash on deposit, no investments directly held at SVB, and no direct banking relationship with SVB. As of November 30, 2022, the fair market value of alternative investments held by VAIA with direct or indirect banking relationship exposure to SVB totaled \$337,221. On March 12, 2023, the U.S. Department of Treasury, Federal Reserve, and FDIC announced SVB depositors would have access to all their money starting March 13, 2023, through the newly created Silicon Valley Bridge Bank, N.A. (“SVBB”), allowing the bank to continue its normal operations during this period. VAIA does not anticipate the closure of SVB to have a material impact on its financial condition or operation.

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SUPPLEMENTAL CONSOLIDATING SCHEDULES

Independent Auditor's Report on Supplemental Information

To the Board of Trustees
Van Andel Institute and Affiliates

We have audited the consolidated financial statements of Van Andel Institute and Affiliates as of and for the years ended November 30, 2022 and 2021 and have issued our report thereon dated April 10, 2023, which contained an unmodified opinion on those consolidated financial statements. Our audits were performed for the purpose of forming an opinion on the consolidated financial statements as a whole. The supplemental consolidating statement of financial position information and consolidating statement of activities and changes in net assets information are presented for the purpose of additional analysis rather than to present the financial position, results of operations, and cash flows of the individual companies and are not a required part of the consolidated 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 consolidated financial statements. The information has been subjected to the auditing procedures applied in the audits of the consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated 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 consolidated financial statements as a whole.

A handwritten signature in black ink that reads "Plante & Moran, PLLC".

April 10, 2023

VAN ANDEL INSTITUTE AND AFFILIATES

CONSOLIDATING STATEMENT OF FINANCIAL POSITION INFORMATION AS OF NOVEMBER 30, 2022 (IN THOUSANDS)

	VAI	VARI	VAEI	Elimination	Total
ASSETS					
CURRENT ASSETS:					
Cash and cash equivalents	\$ 439,087	\$ 31,471	\$ 89	\$ -	\$ 470,647
Investments	18,205	-	-	-	18,205
Pledges receivable	53	105	40	-	198
Grant and contract receivables	-	4,565	-	-	4,565
Interest and other receivables	1,790	842	-	-	2,632
Related-party receivables	5,825	5,364	369	(11,558)	-
Prepaid expenses and other current assets	-	2,334	10	-	2,344
Total current assets	464,960	44,681	508	(11,558)	498,591
LONG-TERM ASSETS:					
Investments	1,586,429	6,405	4,724	-	1,597,558
Long-term investments pledged under security lending agreement	20,156	-	-	-	20,156
Funds pledged to creditor	-	5,000	-	-	5,000
Property and equipment—net of accumulated depreciation	10,662	163,115	1,268	-	175,045
Pledges receivable	-	18	-	-	18
Notes and other receivables	-	537	-	-	537
Other assets	783	242	-	-	1,025
Total long-term assets	1,618,030	175,317	5,992	-	1,799,339
TOTAL	\$ 2,082,990	\$ 219,998	\$ 6,500	\$ (11,558)	\$ 2,297,930
LIABILITIES AND NET ASSETS (DEFICIT)					
CURRENT LIABILITIES:					
Accounts payable	\$ 83	\$ 3,979	\$ 45	\$ -	\$ 4,107
Investments payable	43	-	-	-	43
Related-party payable	3,960	6,193	1,405	(11,558)	-
Interest payable	-	728	-	-	728
Deferred revenue	11	884	270	-	1,165
Accrued expenses and other liabilities	965	9,348	294	-	10,607
Total current liabilities	5,062	21,132	2,014	(11,558)	16,650
LONG-TERM LIABILITIES:					
Long-term debt	-	219,704	-	-	219,704
Interest rate swap	-	23,674	-	-	23,674
Accrued expenses and other liabilities	27	-	7	-	34
Total long-term liabilities	27	243,378	7	-	243,412
Total liabilities	5,089	264,510	2,021	(11,558)	260,062
NET ASSETS (DEFICIT):					
Net assets without donor restrictions	1,309,977	(50,211)	3,856	-	1,263,622
Net assets with donor restrictions	767,924	5,699	623	-	774,246
Total net assets (deficit)	2,077,901	(44,512)	4,479	-	2,037,868
TOTAL	\$ 2,082,990	\$ 219,998	\$ 6,500	\$ (11,558)	\$ 2,297,930

See note to supplemental consolidating schedules.

VAN ANDEL INSTITUTE AND AFFILIATES

CONSOLIDATING STATEMENT OF FINANCIAL POSITION INFORMATION AS OF NOVEMBER 30, 2021 (IN THOUSANDS)

	VAI	VARI	VAEI	Elimination	Total
ASSETS					
CURRENT ASSETS:					
Cash and cash equivalents	\$ 366,117	\$ 116	\$ 48	\$ -	\$ 366,281
Investments	5,806	-	-	-	5,806
Pledges receivable	36	245	-	-	281
Grant and contract receivables	-	4,357	-	-	4,357
Interest and other receivables	1,408	892	-	-	2,300
Related-party receivables	69,999	3,937	264	(74,200)	-
Prepaid expenses and other current assets	-	2,499	9	-	2,508
Total current assets	443,366	12,046	321	(74,200)	381,533
LONG-TERM ASSETS:					
Investments	1,606,216	6,402	4,926	-	1,617,544
Long-term investments pledged under security lending agreement	79,016	-	-	-	79,016
Funds pledged to creditor	-	69,280	-	-	69,280
Property and equipment—net of accumulated depreciation	10,760	164,513	1,363	-	176,636
Pledges receivable	-	33	-	-	33
Notes and other receivables	-	666	-	-	666
Other assets	773	226	-	-	999
Total long-term assets	1,696,765	241,120	6,289	-	1,944,174
TOTAL	\$ 2,140,131	\$ 253,166	\$ 6,610	\$ (74,200)	\$ 2,325,707
LIABILITIES AND NET ASSETS (DEFICIT)					
CURRENT LIABILITIES:					
Accounts payable	\$ 29	\$ 2,499	\$ 6	\$ -	\$ 2,534
Investments payable	19,672	-	-	-	19,672
Related-party payable	2,468	70,098	1,634	(74,200)	-
Interest payable	-	728	-	-	728
Deferred revenue	18	1,803	305	-	2,126
Accrued expenses and other liabilities	1,204	8,821	213	-	10,238
Total current liabilities	23,391	83,949	2,158	(74,200)	35,298
LONG-TERM LIABILITIES:					
Long-term debt	-	219,689	-	-	219,689
Interest rate swap	-	92,584	-	-	92,584
Accrued expenses and other liabilities	32	418	29	-	479
Total long-term liabilities	32	312,691	29	-	312,752
Total liabilities	23,423	396,640	2,187	(74,200)	348,050
NET ASSETS (DEFICIT):					
Net assets without donor restrictions	1,343,968	(148,782)	3,808	-	1,198,994
Net assets with donor restrictions	772,740	5,308	615	-	778,663
Total net assets (deficit)	2,116,708	(143,474)	4,423	-	1,977,657
TOTAL	\$ 2,140,131	\$ 253,166	\$ 6,610	\$ (74,200)	\$ 2,325,707

See note to supplemental consolidating schedules.

VAN ANDEL INSTITUTE AND AFFILIATES

CONSOLIDATING STATEMENT OF ACTIVITIES AND CHANGES IN NET ASSETS INFORMATION FOR YEAR ENDED NOVEMBER 30, 2022 (IN THOUSANDS)

	VAI			VARI		
	Net Assets Without Donor Restrictions	Net Assets With Donor Restrictions	Total	Net Assets Without Donor Restrictions	Net Assets With Donor Restrictions	Total
REVENUES AND SUPPORT:						
Contributions	\$ 86,561	\$ 11	\$ 86,572	\$ 92,958	\$ 1,650	\$ 94,608
Grant and contract revenue	-	-	-	34,985	-	34,985
Investment return utilized	97,286	3,798	101,084	2,808	-	2,808
Other revenues	536	-	536	1,846	-	1,846
Total revenues	184,383	3,809	188,192	132,597	1,650	134,247
Net assets transferred or released from restrictions:						
Satisfaction of time or purpose restrictions	-	-	-	1,251	(1,251)	-
Dividends and interest earnings	904	(904)	-	-	-	-
Gain on investments	2,894	(2,894)	-	-	-	-
Total net assets transferred or released from restrictions	3,798	(3,798)	-	1,251	(1,251)	-
Total revenues and support	188,181	11	188,192	133,848	399	134,247
EXPENSES:						
Program	97,120	-	97,120	77,845	-	77,845
Management and general	5,941	-	5,941	25,390	-	25,390
Fundraising	2,474	-	2,474	946	-	946
Total expenses	105,535	-	105,535	104,181	-	104,181
Gain on interest rate swap	-	-	-	(68,910)	-	(68,910)
Total expenses and gain on interest rate swap	105,535	-	105,535	35,271	-	35,271
CHANGE IN NET ASSETS BEFORE OTHER CHANGES AND INCOME TAX EXPENSE	82,646	11	82,657	98,577	399	98,976
OTHER CHANGES IN NET ASSETS						
Investment loss including amount utilized	(114,906)	(4,827)	(119,733)	-	(8)	(8)
INCOME TAX EXPENSE	(1,731)	-	(1,731)	(6)	-	(6)
CHANGE IN NET ASSETS	(33,991)	(4,816)	(38,807)	98,571	391	98,962
NET ASSETS (DEFICIT)—Beginning of year	1,343,968	772,740	2,116,708	(148,782)	5,308	(143,474)
NET ASSETS (DEFICIT)—End of year	\$ 1,309,977	\$ 767,924	\$ 2,077,901	\$ (50,211)	\$ 5,699	\$ (44,512)

See note to supplemental consolidating schedules.

(Continued)

VAN ANDEL INSTITUTE AND AFFILIATES

CONSOLIDATING STATEMENT OF ACTIVITIES AND CHANGES IN NET ASSETS INFORMATION FOR YEAR ENDED NOVEMBER 30, 2022 (IN THOUSANDS)

	VAEI			Elimination		Total		
	Net Assets Without Donor Restrictions	Net Assets With Donor Restrictions	Total	Net Assets Without Donor Restrictions	Total	Net Assets Without Donor Restrictions	Net Assets With Donor Restrictions	Total
REVENUES AND SUPPORT:								
Contributions	\$ 4,627	\$ 161	\$ 4,788	\$ (97,120)	\$ (97,120)	\$ 87,026	\$ 1,822	\$ 88,848
Grant and contract revenue	35	-	35	-	-	35,020	-	35,020
Investment return utilized	168	-	168	-	-	100,262	3,798	104,060
Other revenues	1,150	-	1,150	(1,127)	(1,127)	2,405	-	2,405
Total revenues	5,980	161	6,141	(98,247)	(98,247)	224,713	5,620	230,333
Net assets transferred or released from restrictions:								
Satisfaction of time or purpose restrictions	152	(152)	-	-	-	1,403	(1,403)	-
Dividends and interest earnings	-	-	-	-	-	904	(904)	-
Gain on investments	-	-	-	-	-	2,894	(2,894)	-
Total net assets transferred or released from restrictions	152	(152)	-	-	-	5,201	(5,201)	-
Total revenues and support	6,132	9	6,141	(98,247)	(98,247)	229,914	419	230,333
EXPENSES:								
Program	5,000	-	5,000	(98,082)	(98,082)	81,883	-	81,883
Management and general	867	-	867	(165)	(165)	32,033	-	32,033
Fundraising	7	-	7	-	-	3,427	-	3,427
Total expenses	5,874	-	5,874	(98,247)	(98,247)	117,343	-	117,343
Gain on interest rate swap	-	-	-	-	-	(68,910)	-	(68,910)
Total expenses and gain on interest rate swap	5,874	-	5,874	(98,247)	(98,247)	48,433	-	48,433
CHANGE IN NET ASSETS OTHER CHANGES AND INCOME TAX EXPENSE	258	9	267	-	-	181,481	419	181,900
OTHER CHANGES IN NET ASSETS								
Investment loss including amount utilized	(210)	(1)	(211)	-	-	(115,116)	(4,836)	(119,952)
INCOME TAX EXPENSE	-	-	-	-	-	(1,737)	-	(1,737)
CHANGE IN NET ASSETS	48	8	56	-	-	64,628	(4,417)	60,211
NET ASSETS (DEFICIT)—Beginning of year	3,808	615	4,423	-	-	1,198,994	778,663	1,977,657
NET ASSETS (DEFICIT)—End of year	\$ 3,856	\$ 623	\$ 4,479	\$ -	\$ -	\$ 1,263,622	\$ 774,246	\$ 2,037,868

See note to supplemental consolidating schedules.

(Concluded)

VAN ANDEL INSTITUTE AND AFFILIATES

CONSOLIDATING STATEMENT OF ACTIVITIES AND CHANGES IN NET ASSETS INFORMATION FOR YEAR ENDED NOVEMBER 30, 2021 (IN THOUSANDS)

	VAI			VARI		
	Net Assets Without Donor Restrictions	Net Assets With Donor Restrictions	Total	Net Assets Without Donor Restrictions	Net Assets With Donor Restrictions	Total
REVENUES AND SUPPORT:						
Contributions	\$ 26,779	\$ 99,744	\$ 126,523	\$ 52,354	\$ 1,148	\$ 53,502
Grant and contract revenue	-	-	-	27,280	-	27,280
Investment return utilized	55,681	2,050	57,731	2,830	-	2,830
Other revenues	496	-	496	1,609	-	1,609
Total revenues	82,956	101,794	184,750	84,073	1,148	85,221
Net assets transferred or released from restrictions:						
Satisfaction of time or purpose restrictions	-	-	-	1,495	(1,495)	-
Dividends and interest earnings	562	(562)	-	-	-	-
Gain on investments	1,489	(1,489)	-	-	-	-
Total net assets transferred or released from restrictions	2,051	(2,051)	-	1,495	(1,495)	-
Total revenues and support	85,007	99,743	184,750	85,568	(347)	85,221
EXPENSES:						
Program	55,836	-	55,836	66,117	-	66,117
Management and general	5,774	-	5,774	21,871	-	21,871
Fundraising	1,891	-	1,891	875	-	875
Total expenses	63,501	-	63,501	88,863	-	88,863
Gain on interest rate swap	-	-	-	(23,898)	-	(23,898)
Total expenses and gain on interest rate swap	63,501	-	63,501	64,965	-	64,965
CHANGE IN NET ASSETS BEFORE OTHER CHANGES AND INCOME TAX EXPENSE	21,506	99,743	121,249	20,603	(347)	20,256
OTHER CHANGES IN NET ASSETS						
Investment return excluding amount utilized	188,539	11,280	199,819	28	108	136
INCOME TAX EXPENSE	(21)	-	(21)	(1)	-	(1)
CHANGE IN NET ASSETS	210,024	111,023	321,047	20,630	(239)	20,391
NET ASSETS (DEFICIT)—Beginning of year	1,133,944	661,717	1,795,661	(169,412)	5,547	(163,865)
NET ASSETS (DEFICIT)—End of year	\$ 1,343,968	\$ 772,740	\$ 2,116,708	\$ (148,782)	\$ 5,308	\$ (143,474)

See note to supplemental consolidating schedules.

(Continued)

VAN ANDEL INSTITUTE AND AFFILIATES

CONSOLIDATING STATEMENT OF ACTIVITIES AND CHANGES IN NET ASSETS INFORMATION FOR YEAR ENDED NOVEMBER 30, 2021 (IN THOUSANDS)

	VAEI			Elimination		Total		
	Net Assets Without Donor Restrictions	Net Assets With Donor Restrictions	Total	Net Assets Without Donor Restrictions	Total	Net Assets Without Donor Restrictions	Net Assets With Donor Restrictions	Total
REVENUES AND SUPPORT:								
Contributions	\$ 4,374	\$ 94	\$ 4,468	\$ (55,836)	\$ (55,836)	\$ 27,671	\$ 100,985	\$ 128,656
Grant and contract revenue	42	-	42	-	-	27,322	-	27,322
Investment return utilized	76	-	76	-	-	58,587	2,050	60,637
Other revenues	947	-	947	(1,103)	(1,103)	1,949	-	1,949
Total revenues	5,439	94	5,533	(56,939)	(56,939)	115,529	103,035	218,564
Net assets transferred or released from restrictions:								
Satisfaction of time or purpose restrictions	50	(50)	-	-	-	1,545	(1,545)	-
Dividends and interest earnings	-	-	-	-	-	562	(562)	-
Gain on investments	-	-	-	-	-	1,489	(1,489)	-
Total net assets transferred or released from restrictions	50	(50)	-	-	-	3,596	(3,596)	-
Total revenues and support	5,489	44	5,533	(56,939)	(56,939)	119,125	99,439	218,564
EXPENSES:								
Program	4,220	-	4,220	(56,774)	(56,774)	69,399	-	69,399
Management and general	892	-	892	(165)	(165)	28,372	-	28,372
Fundraising	7	-	7	-	-	2,772	-	2,772
Total expenses	5,119	-	5,119	(56,939)	(56,939)	100,543	-	100,543
Gain on interest rate swap	-	-	-	-	-	(23,898)	-	(23,898)
Total expenses and gain on interest rate swap	5,119	-	5,119	(56,939)	(56,939)	76,645	-	76,645
CHANGE IN NET ASSETS OTHER CHANGES AND INCOME TAX EXPENSE	370	44	414	-	-	42,480	99,439	141,919
OTHER CHANGES IN NET ASSETS								
Investment return excluding amount utilized	508	16	524	-	-	189,075	11,404	200,479
INCOME TAX EXPENSE	-	-	-	-	-	(22)	-	(22)
CHANGE IN NET ASSETS	878	60	938	-	-	231,533	110,843	342,376
NET ASSETS (DEFICIT)—Beginning of year	2,930	555	3,485	-	-	967,462	667,819	1,635,281
NET ASSETS (DEFICIT)—End of year	\$ 3,808	\$ 615	\$ 4,423	\$ -	\$ -	\$ 1,198,995	\$ 778,662	\$ 1,977,657

See note to supplemental consolidating schedules.

(Concluded)

VAN ANDEL INSTITUTE AND AFFILIATES

NOTE TO THE SUPPLEMENTAL CONSOLIDATING SCHEDULES AS OF AND FOR THE YEARS ENDED NOVEMBER 30, 2022 AND 2021 BASIS OF PRESENTATION

The primary financial statements of Van Andel Institute and Affiliates are the consolidated financial statements. Amounts reflected in the consolidating schedules for Van Andel Institute and Van Andel Research Institute do not reflect the ownership interest in the controlled entities within the consolidating statement of financial position information or in the consolidating statement of activities and changes in net assets information.

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

Independent Auditor's Report

To Management and the Board of Trustees
Van Andel Institute and Affiliates

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 consolidated financial statements of Van Andel Institute and Affiliates (VAIA), which comprise the consolidated statements of financial position as of November 30, 2022 and the related consolidated statements of activities and changes in net assets and cash flows for the year then ended, and the related notes to the consolidated financial statements and have issued our report thereon dated April 10, 2023.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the consolidated financial statements, we considered VAIA's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the consolidated financial statements, but not for the purpose of expressing an opinion on the effectiveness of VAIA's internal control. Accordingly, we do not express an opinion on the effectiveness of VAIA'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 VAIA's consolidated 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 or significant deficiencies may exist that have not been identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether VAIA's consolidated 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 consolidated financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

To Management and the Board of Trustees
Van Andel Institute and Affiliates

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 VAIA's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering VAIA's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Plante & Moreau, PLLC

April 10, 2023

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

Independent Auditor's Report

To the Board of Trustees
Van Andel Institute and Affiliates

Report on Compliance for Each Major Federal Program

Opinion on Each Major Federal Program

We have audited Van Andel Institute and Affiliates' (VAIA) compliance with the types of compliance requirements identified as subject to audit in the Office of Management and Budget (OMB) Compliance Supplement that could have a direct and material effect on VAIA's major federal program for the year ended November 30, 2022. VAIA's major federal program is identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

In our opinion, VAIA complied, in all material respects, with the compliance requirements referred to above that could have a direct and material effect on the major federal program for the year ended November 30, 2022.

Basis for Opinion on Each Major Federal Program

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America (GAAS); 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* (the "Uniform Guidance"). Our responsibilities under those standards and the Uniform Guidance are further described in the *Auditor's Responsibilities for the Audit of Compliance* section of our report.

We are required to be independent of VAIA and to meet our other ethical responsibilities in accordance with relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on compliance for the major federal program. Our audit does not provide a legal determination of VAIA's compliance with the compliance requirements referred to above.

Responsibilities of Management for Compliance

Management is responsible for compliance with the requirements referred to above and for the design, implementation, and maintenance of effective internal control over compliance with the requirements of laws, statutes, regulations, rules, and provisions of contracts or grant agreements applicable to VAIA's federal program.

Auditor's Responsibilities for the Audit of Compliance

Our objectives are to obtain reasonable assurance about whether material noncompliance with the compliance requirements referred to above occurred, whether due to fraud or error, and express an opinion on VAIA's compliance based on our audit. Reasonable assurance is a high level of assurance but is not absolute assurance and, therefore, is not a guarantee that an audit conducted in accordance with GAAS, *Government Auditing Standards*, and the Uniform Guidance will always detect material noncompliance when it exists. The risk of not detecting material noncompliance resulting from fraud is higher than for that resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Noncompliance with the compliance requirements referred to above is considered material if there is a substantial likelihood that, individually or in the aggregate, it would influence the judgment made by a reasonable user of the report on compliance about VAIA's compliance with the requirements of the major federal program as a whole.

To the Board of Trustees
Van Andel Institute and Affiliates

In performing an audit in accordance with GAAS, *Government Auditing Standards*, and the Uniform Guidance, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material noncompliance, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding VAIA's compliance with the compliance requirements referred to above and performing such other procedures as we considered necessary in the circumstances.
- Obtain an understanding of VAIA's internal control over compliance relevant to the audit in order to design audit procedures that are appropriate in the circumstances 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 VAIA's internal control over compliance. Accordingly, no such opinion is expressed.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and any significant deficiencies and material weaknesses in internal control over compliance that we identified during the audit.

Report on Internal Control Over Compliance

Our consideration of internal control over compliance was for the limited purpose described in the *Auditor's Responsibilities for the Audit of Compliance* section above and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies in internal control over compliance, and, therefore, material weaknesses or significant deficiencies may exist that were not identified. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, as discussed below, we did identify a certain deficiency in internal control over compliance that we consider to be a significant deficiency.

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 a 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. We consider the deficiency in internal control over compliance described in the accompanying schedule of findings and questioned costs as Finding 2022-001 to be a significant deficiency.

Our audit was not designed for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, no such opinion is expressed.

Government Auditing Standards require the auditor to perform limited procedures on VAIA's response to the internal control over compliance finding identified in our audit and described in the accompanying schedule of findings and questioned costs. VAIA's response was not subjected to the other auditing procedures applied in the audit of compliance, and, accordingly, we express no opinion on it.

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.

Plante & Moreau, PLLC

April 10, 2023

**SUPPLEMENTAL SCHEDULE OF
EXPENDITURES OF FEDERAL AWARDS**

VAN ANDEL INSTITUTE

SUPPLEMENTAL SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS PERIOD ENDED NOVEMBER 30, 2022

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Assistance Listing Number	Pass-Through Number	Agency Number	Federal Expenditures	
				Total Amount Provided to Subrecipients	Total Federal Expenditures
RESEARCH AND DEVELOPMENT CLUSTER:					
National Science Foundation:					
Direct National Science Foundation:					
NATIONAL SCIENCE FOUNDATION - Biological Sciences					
Role of poly(ADP-ribose) polymerase 1 in regulating RNA polymerase II elongation and mRNA splicing	47.074		2230470	\$ 4,661	\$ 143,872
Subtotal Direct National Science Foundation				4,661	143,872
Pass-Through National Science Foundation:					
NATIONAL SCIENCE FOUNDATION - (Passed through Trustees of the University of Pennsylvania)					
Integrative Activities					
Consortium for Research Security Training: Risk Management and Mitigation	47.083	585895	OIA-2230535	-	264
Subtotal Pass-Through National Science Foundation				-	264
Total National Science Foundation				4,661	144,136
U.S. Department of Defense:					
Direct U.S. Department of Defense:					
U.S. ARMY MEDICAL RESEARCH ACQUISITION ACTIVITY - Military Medical Research and Development					
Airborne Pollutants as Triggers of Parkinson's Disease via the Olfactory System	12.420		W81XWH-17-1-0534	-	116,323
U.S. ARMY MEDICAL RESEARCH ACQUISITION ACTIVITY - Military Medical Research and Development					
Targeting P53-Associated Therapy Resistance in NF1-Related MPNSTs	12.420		W81XWH-19-1-0483	-	254,625
U.S. ARMY MEDICAL RESEARCH ACQUISITION ACTIVITY - Military Medical Research and Development					
Alternative NF1 Isoforms in RAS Deregulation and Breast Cancer Progression	12.420		W81XWH-21-1-0224	-	59,790
U.S. ARMY MEDICAL RESEARCH ACQUISITION ACTIVITY - Military Medical Research and Development					
Defining the Effects of A-Synuclein Pathology on the Amygdala Circuitry: Relevance to Neuropsychiatric Dysfunction in Parkinson's Disease	12.420		W81XWH-21-1-0943	-	319,795
U.S. ARMY MEDICAL RESEARCH ACQUISITION ACTIVITY - Military Medical Research and Development					
The Role of NF1 in Mammary Development, Breast Cancer, and Endocrine Resistance	12.420		W81XWH-21-1-0759	-	188,322
Subtotal Direct U.S. Department of Defense				-	938,855
Pass-Through U.S. Department of Defense:					
U.S. ARMY MEDICAL RESEARCH ACQUISITION ACTIVITY - (Passed through The Regents of the University of California, San Francisco)					
Military Medical Research and Development					
Aryl Hydrocarbon Receptor Activation in PTSD and co-morbid Psychological Disorders	12.420	13973sc	W81XWH-22-1-0942	-	1,815
Subtotal Pass-Through U.S. Department of Defense				-	1,815
Total U.S. Department of Defense				-	940,670
U.S. Department of Energy					
Direct U.S. Department of Energy					
U.S. DEPARTMENT OF ENERGY - Office of Science Financial Assistance Program					
Structural Mechanism of Energy Conservation in Hypothermophiles	81.049		DE SC0020085	-	209,063
Total U.S. Department of Energy				-	209,063
U.S. Department of Health and Human Services:					
Direct U.S. Department of Health and Human Services:					
NATIONAL INSTITUTES OF HEALTH/ NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES - Environmental Health					
Molecular Underpinnings in the Establishment of an Oncogenic 3D Genome in Response to Environmental Arsenic Exposure	93.113		R01 ES031846	8,872	406,106
NATIONAL INSTITUTES OF HEALTH/ NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES - Environmental Health					
Identification of environmental chemicals capable of inducing health impairments acutely and across generations	93.113		R21 ES032060	-	290,463
NATIONAL INSTITUTES OF HEALTH/ NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES - Environmental Health					
Molecular mechanisms of iAs-mediated carcinogenesis through the lens of histone H2B variants	93.113		R01 ES034253	-	457,099
NATIONAL INSTITUTES OF HEALTH/ NATIONAL INSTITUTE OF DENTAL & CRANIOFACIAL RESEARCH - Oral Diseases and Disorders Research					
Deciphering the Role of Frizzled Receptors in Palatal Development	93.121		K08 DE031039	-	126,359
NATIONAL INSTITUTES OF HEALTH/NATIONAL HUMAN GENOME RESEARCH INSTITUTE - Human Genome Research					
Epigenomics Workshop for Graduate Students	93.172		R25 HG011020	-	40,575
NATIONAL INSTITUTES OF HEALTH/NATIONAL HUMAN GENOME RESEARCH INSTITUTE - Human Genome Research					
Epigenetic control and probabilistic disease programming	93.172		R21 HG011964	-	330,917
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE ON DEAFNESS AND OTHER COMMUNICATION DISEASES - Research Related to Deafness and Communication Disorders					
Linking Synucleinopathy and Dysfunction of Olfactory Pathways	93.173		R01 DC016519	181,588	374,014
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF MENTAL HEALTH - Mental Health Research Grants					
Inflammatory Factors and Kynurenine Metabolites Tracking Suicidal Behavior	93.242		R01 MH118211	321,767	718,296
NATIONAL INSTITUTES OF HEALTH/ NATIONAL HUMAN GENOME RESEARCH INSTITUTE - Trans-NIH Research Support					
Master regulators of unexplained variation in disease risk	93.310		R01 HG012444	913,624	2,109,493
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE - Cancer Cause and Prevention Research					
Role of GAS41 in Human Cancer	93.393		R01 CA204020	-	91,146

See notes to supplemental schedule of expenditures of federal awards.

VAN ANDEL INSTITUTE

SUPPLEMENTAL SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS PERIOD ENDED NOVEMBER 30, 2022

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Assistance Listing Number	Pass-Through Number	Agency Number	Federal Expenditures	
				Total Amount Provided to Subrecipients	Total Federal Expenditures
RESEARCH AND DEVELOPMENT CLUSTER (Continued):					
U.S. Department of Health and Human Services (Continued):					
Direct U.S. Department of Health and Human Services (Continued):					
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
Cancer Cause and Prevention Research					
Targeting DNA Methylation and the Cancer Epigenome	93.393		R35 CA209859	\$ 100,585	\$ 1,154,471
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
Cancer Cause and Prevention Research					
DNA Hypermethylation in Lung Tumors	93.393		R01 CA234595	-	524,920
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
Cancer Cause and Prevention Research					
Research Specialist Support-Targeting DNA Methylation and the Cancer Epigenome	93.393		R50 CA243878	-	64,830
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
Cancer Detection and Diagnosis Research					
Detection and Prognosis of Early-Stage Pancreatic Cancer by Interdependent	93.394		U01 CA152653	83,487	204,890
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
Cancer Detection and Diagnosis Research					
Subpopulations of Pancreatic Cancer Cells Defined by Glycan Markers	93.394		U01 CA226158	195,845	741,881
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
Cancer Detection and Diagnosis Research					
Integrative Cancer Epigenomic Data Analysis Center (ICE-DAC)	93.394		U24 CA264023	-	479,153
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
Cancer Treatment Research					
Discovery of small molecules targeting the histone acetylation reader ENL	93.395		R01 CA255506	25,452	447,378
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
Cancer Treatment Research					
High Throughput Screen for Inhibitors of the YEATS2 Histone Acylation Reader	93.395		R01 CA268440	15,375	433,477
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
Cancer Treatment Research					
Understanding the effects of dietary interventions on pancreatic ductal adenocarcinoma therapy cancer	93.395		R00 CA255928	-	47,502
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
Cancer Biology Research					
High-throughput Epigenomic Mapping of Regulatory Elements in Ovarian Cancer at Basepair Resolution	93.396		R37 CA230748	84,440	516,632
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
Cancer Biology Research					
The Structure and Function of Eukaryotic Protein Glycosylation Enzymes	93.396		R01 CA231466	-	435,211
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
Cancer Biology Research					
Cellular Epigenetic Heterogeneity as a Predeterminant of Malignant Transformation Potential	93.396		R01 CA234125	-	916,080
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE					
Cancer Research Manpower					
Defining the regulation of UHRF1 and DNMT1 for maintenance of the epigenome	93.398		F32 CA260116	-	72,371
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE					
Cancer Research Manpower					
Mechanisms of DNMT3B-mediated DNA Methylation Maintenance	93.398		F31 CA257440	-	45,223
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE					
Cancer Research Manpower					
A Molecular Case Series: Deep Cellular and Spatial Epigenetic Characterization of Human Colorectal Cancer	93.398		F30 CA268840	-	16,902
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE					
Cancer Research Manpower					
Cancer Epigenetics Training (CET) Program	93.398		T32 CA251066	-	89,653
NATIONAL INSTITUTES OF HEALTH/NATIONAL HEART, LUNG, AND BLOOD INSTITUTE					
Cardiovascular Diseases Research					
Structural and functional studies of the human TRPM4 and TRPM5 channels	93.837		R01 HL153219	-	567,982
NATIONAL INSTITUTES OF HEALTH/NATIONAL HEART, LUNG, AND BLOOD INSTITUTE -					
Blood Diseases and Resources Research					
The Role of Wnt Signaling in Normal and Abnormal Hematopoiesis	93.839		R00 HL133458	-	358,456
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF ARTHRITIS AND MUSCULOSKELETAL AND SKIN DISEASES					
Arthritis, Musculoskeletal and Skin Diseases Research					
5-methylcytosine oxidation in development and disease	93.846		R01 AR079174	-	463,519
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
Structural and Functional Studies on Proton-activated Chloride (PAC) Channel	93.853		K99 NS128258	-	26,681
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE -					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
Mechanisms of VPS35-Dependent Neurodegeneration in Parkinson's Disease	93.853		R01 NS105432	-	374,452
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
Combining Synucleinopathy and Mitochondrial Deficits in a Novel Mouse Model of Parkinson's Disease	93.853		R33 NS106078	22,174	248,637
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
Structural and functional studies of the TRPM2 channel	93.853		R01 NS111031	-	445,524
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
Structural and functional studies of the TRPM2 channel	93.853		R01 NS111031-S1	-	318,183
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
Structural and Functional Studies of CALHM Channels	93.853		R01 NS112363	-	553,823

See notes to supplemental schedule of expenditures of federal awards.

VAN ANDEL INSTITUTE

SUPPLEMENTAL SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS PERIOD ENDED NOVEMBER 30, 2022

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Assistance Listing Number	Pass-Through Number	Agency Number	Federal Expenditures	
				Total Amount Provided to Subrecipients	Total Federal Expenditures
RESEARCH AND DEVELOPMENT CLUSTER (Continued):					
U.S. Department of Health and Human Services (Continued):					
Direct U.S. Department of Health and Human Services (Continued):					
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
Epigenetic Contributions to Symptom Asymmetry in Parkinson's Disease	93.853		R01 NS113894	\$ -	\$ 580,100
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
The Contribution of the Vermiform Appendix to Parkinson's Disease	93.853		R01 NS114409	12,574	349,834
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
Exploring Mechanisms of Parkinson's Disease-Linked D620N VPS35 in Rat Models	93.853		R01 NS117137	-	477,719
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
Role of T cells in alpha-synuclein pathology	93.853		R21 NS122376	96,326	263,309
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
Motor cortical circuitry adaptations in experimental Parkinson's disease	93.853		R01 NS121371	18,009	447,660
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
LRRK2 Enzymatic Mechanisms of Neurodegeneration in Parkinson's Disease	93.853		R01 NS120489	-	422,255
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
Molecular mechanisms for sorting lysosomal proteins	93.853		R01 NS127292	-	159,844
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES -					
Allergy and Infectious Diseases Research					
Structural Biology of Proteostasis in M. Tuberculosis	93.855		R01 AI070285	-	528,116
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES -					
Allergy and Infectious Diseases Research					
Chromatin Architecture as a Determinant of Dendritic Cell Function	93.855		R21 AI153997	-	118,754
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES -					
Allergy and Infectious Diseases Research					
Ketone Body Metabolism in CD8+ T Cell Responses	93.855		R01 AI165722	-	393,155
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES -					
Allergy and Infectious Diseases Research					
The roles of genetics, hormones, and gender in sexually dimorphic immune response	93.855		R01 AI171984	-	77,165
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES -					
Allergy and Infectious Diseases Research					
Mechanisms of histone crosstalk with bacterial pathogens	93.855		R21 AI173758	-	713
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES -					
Biomedical Research and Research Training					
Analyzing the Role of TXNIP as a Universal Regulator of Glucose Transport	93.859		R01 GM120129	-	310,971
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES -					
Biomedical Research and Research Training					
Molecular Mechanisms of Chromatin and Epigenetic Regulation	93.859		R35 GM124736	-	282,753
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES -					
Biomedical Research and Research Training					
Epigenetic Mechanisms of Retrotransposon Silencing	93.859		R35 GM147261	-	158,944
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES -					
Biomedical Research and Research Training					
A novel process safeguards genome integrity in the mammalian germ line	93.859		R01 GM143308	-	268,002
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES -					
Biomedical Research and Research Training					
Structural Mechanism of DNA Replication	93.859		R35 GM131754	-	772,741
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES -					
Biomedical Research and Research Training					
Elucidating Structures and Molecular Mechanisms of Pannexin Channels	93.859		R35 GM138321	-	461,278
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES -					
Biomedical Research and Research Training					
Understanding WNT9A/FZD9 Trafficking and Signaling	93.859		R35 GM142779	-	513,059
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE ON AGING -					
Aging Research					
Role of Desumoylase SENP6 in Joint Aging and Osteoarthritis Development	93.866		R01 AG061086	-	543,379
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE ON AGING -					
Aging Research					
Network and cellular vulnerability to pathological protein progression	93.866		R01 AG077573	12,703	272,556
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE ON AGING -					
Aging Research					
Alzheimer's Disease Genetic Architecture in the Portuguese Population	93.866		R01 AG067426	-	846,995
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE ON AGING -					
Aging Research					
Progressive DNA Hypomethylation as a Measure of Mitotic History and Potential Contributor to Replicative Senescence	93.866		R01 AG066764	-	904,061

See notes to supplemental schedule of expenditures of federal awards.

VAN ANDEL INSTITUTE

SUPPLEMENTAL SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS PERIOD ENDED NOVEMBER 30, 2022

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Assistance Listing Number	Pass-Through Number	Agency Number	Federal Expenditures	
				Total Amount Provided to Subrecipients	Total Federal Expenditures
RESEARCH AND DEVELOPMENT CLUSTER (Continued):					
U.S. Department of Health and Human Services (Continued):					
Direct U.S. Department of Health and Human Services (Continued):					
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE ON AGING -					
Aging Research					
Role of the endolysosomal pathway in Lewy body dementia from population genomics to single cells	93.866		R56 AG070857	\$ -	\$ 148,830
Subtotal Direct U.S. Department of Health and Human Services				2,092,821	23,794,492
Pass-Through U.S. Department of Health and Human Services:					
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES -					
(Passed through The John Hopkins University)					
Environmental Health					
DNA Methyltransferase Gene Expression in Colon Cancer	93.113	2004252807	R01 ES011858	-	98,948
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF MENTAL HEALTH -					
(Passed through The Regents of the University of California, San Francisco)					
Mental Health Research Grants					
Gut Microbiota Dysbiosis in Major Depressive Disorder is Associated with Altered Production of Aryl Hydrocarbon Receptor Ligands and Altered Microglia Function	93.242	14013sc	K08MH126192	-	592
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
(Passed through The Board of Regents of the University System of Georgia)					
Trans-NIH Research Support					
Annotating dark ion-channel functions using evolutionary features, machine learning and knowledge graph mining	93.310	SUB00002836	U01 CA271376	-	31,323
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
(Passed through University of Pittsburgh)					
Cancer Detection and Diagnosis Research					
Validation of Biomarkers Early Diagnosis & Risk Prediction Pancreatic Neoplasms	93.394	CNVA00047829(134287-2)	U01 CA200466	-	22,621
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
(Passed through The Icahn School of Medicine at Mount Sinai)					
Cancer Treatment Research					
Development of Novel PROTACs Targeting the ENL YEATS Domain for Treating MLL-rearranged Leukemias	93.395	0255-E741-4609	R01 CA260666	-	395,067
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
(Passed through the University of Michigan)					
Cancer Biology Research					
Highly Specific, Amplification-Free, Single-Molecule Counting of Rare Methylated DNA Cancer Biomarkers	93.396	SUBK00012016	R21 CA225493	-	23,702
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
(Passed through the Coriell Institute for Medical Research)					
Cancer Centers Support Grants					
Epigenetic Therapies – New Approaches, Project 2	93.397	A22-0002-S005	P50 CA254897	-	307,435
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
(Passed through the Coriell Institute for Medical Research)					
Cancer Centers Support Grants					
Epigenetic Therapies – New Approaches, Admin Core	93.397	A22-0002-S003	P50 CA254897	-	123,040
NATIONAL INSTITUTES OF HEALTH/NATIONAL CANCER INSTITUTE -					
(Passed through the Coriell Institute for Medical Research)					
Cancer Centers Support Grants					
Epigenetic Therapies – New Approaches, Pathology Core	93.397	A22-0002-S007	P50 CA254897	-	189,845
NATIONAL INSTITUTES OF NEUROLOGICAL DISORDERS AND STROKE					
(Passed through Oregon Health & Science University)					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
LRRK2 in Parkinson's Disease Neurodegeneration	93.853	1020233_VARI	R01 NS119226	-	41,260
NATIONAL INSTITUTES OF NEUROLOGICAL DISORDERS AND STROKE					
(Passed through J. David Gladstone Institutes)					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
Dissecting the Etiology of The Lewy Body Dementias	93.853	SC-00076	RF1 NS124848	-	57,359
NATIONAL INSTITUTES OF NEUROLOGICAL DISORDERS AND STROKE					
(Passed through University of California, Davis)					
Extramural Research Programs in the Neurosciences and Neurological Disorders					
Activation and Inhibition Mechanisms of Calcium-Activated Nonselective Cation Channels	93.853	A23-0280-S001	R01 NS128180	-	58,674
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES -					
(Passed through New York University School of Medicine)					
Allergy and Infectious Diseases Research					
C-Terminal Proteolysis in the Pseudomonas Aeruginosa Cell Envelope	93.855	17-A0-00-008513-01	R01 AI136901	-	34,602
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES -					
(Passed through Joan & Sanford I. Weill Medical College of Cornell University)					
Allergy and Infectious Diseases Research					
Selective Plasmodium Proteasome Inhibitors as Novel Multi-Stage Antimalarials	93.855	203000	R01 AI143714	-	93,568
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES -					
(Passed through Z Biotech, LLC)					
Biomedical Research and Research Training					
Bioinformatic Tools for Interpretation of Glycan Array Data	93.859	R44GM131430	R44 GM131430	-	273,027
NATIONAL INSTITUTES OF HEALTH/EUNICE SHRIVER NATIONAL INSTITUTE OF CHILD HEALTH & HUMAN DEVELOPMENT -					
(Passed through Michigan State University)					
Child Health and Human Development Extramural Research					
Patient-Specific Targeting of Uterine Fibroids	93.865	RC110267VARI	R01 HD096259	-	83,857
NATIONAL INSTITUTES OF HEALTH/EUNICE SHRIVER NATIONAL INSTITUTE OF CHILD HEALTH & HUMAN DEVELOPMENT -					
(Passed through Michigan State University)					
Child Health and Human Development Extramural Research					
Stem Cell Epigenetics in Uterine Fibroids	93.865	RC111283VARI	R21 HD102907	-	70,285

VAN ANDEL INSTITUTE

SUPPLEMENTAL SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS PERIOD ENDED NOVEMBER 30, 2022

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Assistance Listing Number	Pass-Through Number	Agency Number	Federal Expenditures	
				Total Amount Provided to Subrecipients	Total Federal Expenditures
RESEARCH AND DEVELOPMENT CLUSTER (Continued):					
U.S. Department of Health and Human Services (Continued):					
Pass-through U.S. Department of Health and Human Services (Continued):					
NATIONAL INSTITUTES OF HEALTH/NATIONAL INSTITUTE ON AGING -					
(Passed through University of California, Los Angeles)					
Aging Research					
Alpha-Synuclein Induced Network Hyperexcitability in Lewy Body Dementias	93.866	1580 G ZC848	R56 AG074473	\$ -	\$ 86,512
Subtotal Pass-Through U.S. Department of Health and Human Services				-	1,991,720
Total U.S. Department of Health and Human Services				2,092,821	25,786,211
Total Research and Development Cluster				2,092,821	27,080,081
Total Expenditures of Federal Awards				\$ 2,097,482	\$ 27,080,081

(Concluded)

The accompanying notes are an integral part of this schedule.

VAN ANDEL INSTITUTE AND AFFILIATES

NOTES TO SUPPLEMENTAL SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS YEAR ENDED NOVEMBER 30, 2022

1. BASIS OF PRESENTATION

The accompanying schedule of expenditures of federal awards (the "Schedule") includes the federal grant activity of Van Andel Institute and Affiliates ("VAIA") under programs of the federal government for the year ended November 30, 2022. 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* (the "Uniform Guidance"). Because the Schedule presents only a selected portion of the operations of VAIA, it is not intended to and does not present the financial position, changes in net assets, or cash flows of VAIA.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accompanying Schedule includes the federal award programs administered by VAIA for the fiscal year ended November 30, 2022.

Expenditures reported on the Schedule are reported on the same basis of accounting as the consolidated financial statements. Such expenditures are recognized following the cost principles contained in Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, wherein certain types of expenditures are not allowable or are limited as to reimbursement. Pass-through entity identifying numbers are presented where available.

VAIA has elected not to use the 10 percent *de minimis* indirect cost rate to recover indirect costs, as allowed under the Uniform Guidance.

VAN ANDEL INSTITUTE AND AFFILIATES

SCHEDULE OF FINDINGS AND QUESTIONED COSTS YEAR ENDED NOVEMBER 30, 2022

SECTION 1 - SUMMARY OF AUDITOR'S RESULTS

FINANCIAL STATEMENTS

Type of auditor's report issued: Unmodified

Internal control over financial reporting:

- Material weakness(es) identified? _____ Yes X No
- Significant deficiency(ies) identified that are not considered to be material weaknesses? _____ Yes X None reported

Noncompliance material to financial statements noted? _____ Yes X No

FEDERAL AWARDS

Internal control over major programs:

- Material weakness(es) identified? _____ Yes X No
- Significant deficiency(ies) identified that are not considered to be material weaknesses? X Yes _____ None reported

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

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

Identification of major programs:

<u>Assistance Listing Numbers</u>	<u>Name of Federal Program or Cluster</u>	<u>Opinion</u>
12.420, 47.074, 47.083, 81.049, 93.113, 93.121, 93.172, 93.173, 93.242, 93.310, 93.393, 93.394, 93.395, 93.396, 93.397, 93.398, 93.837, 93.839, 93.846, 93.853, 93.855, 93.859, 93.865, 93.866	Research and Development Cluster	Unmodified

Dollar threshold used to distinguish between type A and type B programs: \$812,402

Auditee qualified as low-risk auditee? X Yes _____ No

SECTION 2 - CONSOLIDATED FINANCIAL STATEMENT AUDIT FINDINGS

None

VAN ANDEL INSTITUTE AND AFFILIATES

SCHEDULE OF FINDINGS AND QUESTIONED COSTS YEAR ENDED NOVEMBER 30, 2022

SECTION 3 – FEDERAL PROGRAM AUDIT FINDINGS

Reference Number	Finding	Questioned Costs
2022-001	<p>Assistance Listing Number, Federal Agency, and Program Name – 93.395, U.S. Department of Health and Human Services, Cancer Treatment Research, Research and Development Cluster; 93.173, U.S. Department of Health and Human Services, Research Related to Deafness and Communication Disorders, Research and Development Cluster; 93.393, U.S. Department of Health and Human Services, Cancer Cause and Prevention Research, Targeting DNA Methylation and Cancer Epigenome, Research and Development Cluster</p> <p>Federal Award Identification Number and Year – R01 CA255506, R01 CA268440, R01 DC016519, R35 CA209859</p> <p>Pass-through Entity – N/A – direct award</p> <p>Finding Type – Significant deficiency</p> <p>Repeat Finding - No</p> <p>Criteria – In accordance with 45 CFR 75.305 2 (b), for nonfederal entities other than states, payment methods must minimize the time elapsing between the transfer of funds from the United States Treasury or the pass through entity and the disbursement by the nonfederal entity whether the payment is made by electronic funds transfers, or issuance or redemption of checks, warrants, or payments by other means.</p> <p>In accordance with 45 CFR 75.305 (3), when the reimbursement method is used, the federal awarding agency or pass through entity must make payment within 30 calendar days after receipt of billing, unless it is believed the request to be improper.</p> <p>Condition – Controls in place did not minimize the time elapsing between the transfer of funds and disbursement to VAIA's subrecipients.</p> <p>Questioned Costs - None</p> <p>Identification of How Questioned Costs Were Computed – Not applicable as there are no questioned costs.</p> <p>Context – In 4 out of 7 transactions sampled for testing, it took VAIA greater than 30 calendar days to make payment to a subrecipient after receipt of billing.</p> <p>Cause and Effect – For a period of the year, the controls in place were not followed in the normal timeline, resulting in VAIA not making payments within 30 calendar days to its subrecipients, after receipt of billing. It took VAIA between 41 and 75 days to make payment to its subrecipients. Late payments could impact the subrecipients abilities to continue the programmatic activities if not paid timely.</p> <p>Recommendation – We recommend that VAIA review its procedures and controls to ensure disbursement of funds to its subrecipients is consistent with laws and regulations.</p>	None

VAN ANDEL INSTITUTE AND AFFILIATES

SCHEDULE OF FINDINGS AND QUESTIONED COSTS YEAR ENDED NOVEMBER 30, 2022

Views of Responsible Officials and Corrective Action Plan - Prior to the auditor's testing that resulted in this finding, the Office of Sponsored Research (OSR) had created a new Sponsored Research Administrator role dedicated, in part, to proactive subrecipient monitoring and invoicing. This individual reports directly to the Director of Sponsored Research and meets with the Director monthly to monitor the subaward invoicing and routing process. Subaward invoicing activities were fully transitioned to the Sponsored Research Administrator (SRA) in October 2022.

As part of the transition to this new SRA role, existing subaward checklists and process documentation were reviewed and improved. OSR also updated the subrecipient payment process document to include an explicit statement indicating invoices must be paid within 30 days of receipt unless the invoice is reasonably believed to be improper.

Additional planned corrective actions include:

- Further refining policies and procedures and roles and responsibilities related to subrecipient monitoring and invoice payments.
- Implementing a formal backup plan for subrecipient payments to ensure timely payment during the absence or work overload of the SRA.
- Weekly reporting on subaward invoices and payments by the SRA to OSR leadership.
- Updating OSR's invoice tracking tools to include 'Invoice Date – Received' and 'Invoice Date – Paid' fields to highlight aged invoices and enable expedited resolution plans.
- Providing continuing education for the OSR team on subrecipient compliance and regulatory timelines.



Van Andel Institute & Affiliates

November 30, 2022

Corrective Action Plan

Finding Number: 2022-001

Condition: Controls in place did not minimize the time elapsing between the transfer of funds and disbursement to VAIA's subrecipients.

Planned Corrective Action: Prior to the auditor's testing that resulted in this finding, the Office of Sponsored Research (OSR) had created a new Sponsored Research Administrator role dedicated, in part, to proactive subrecipient monitoring and invoicing. This individual reports directly to the Director of Sponsored Research and meets with the Director monthly to monitor the subaward invoicing and routing process. Subaward invoicing activities were fully transitioned to the Sponsored Research Administrator (SRA) in October 2022.

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- Updating OSR's invoice tracking tools to include 'Invoice Date – Received' and 'Invoice Date – Paid' fields to highlight aged invoices and enable expedited resolution plans.
- Providing continuing education for the OSR team on subrecipient compliance and regulatory timelines.

Contact person responsible for corrective action: Jeff Richardson, Director, Office of Sponsored Research

Anticipated Completion Date: 6/1/2023