Semiconductor Research Corporation

# 2018

## Annual Report

## Building the Future

In 2018, SRC continued its growth trajectory with the addition of new industry members and government agency awards resulting in a significant increase in research activity. The combined Joint University Microelectronics Program (JUMP) in partnership with DARPA and the nanoelectronic Computing Research (nCORE) program in partnership with NSF and NIST consisting of eleven industry sponsors launched in 2018.

Renewal for SRC is vital. SRC is developing new programs and providing thought leadership for the semiconductor industry. SRC held Workshops in three emerging areas: Bioelectronic Medicine (BEM), Semiconductor Synthetic Biology (SSB), and Verification, Validation and Test of Machine Learning Systems. Additionally, SRC hosted half day Colloquiums on the topics of Heterogeneous Integration and Fabrics of Security. Furthermore, SRC led an effort to create and publish the first ever roadmaps in the BEM and SSB domains. Lastly, SRC initiated an effort to create a Decadal Plan for Semiconductors that will guide researchers in the 2020s.

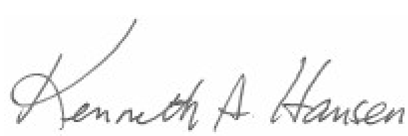
2018 was a very solid year for SRC executing to our strategy and positioning the company well for the upcoming years.

## Extending the SRC Global Footprint

With the addition of SK hynix in 2018, SRC continues to extend its footprint beyond the U.S. borders. Furthermore, SRC membership now includes all five of the top five semiconductor companies in the world.

## Looking ahead to 2019

After two consecutive years of double digit growth, the industry expects to see a decline in 2019 which is a headwind to recruiting new industry members. A focus will be placed on engaging more deeply with the current set of industry members. SRC continues to refresh and diversify the overall research agenda and portfolio in an effort to reflect the new needs of the future. Progress has been excellent, but there is still much more to do. You can count on SRC to follow through.



Ken Hansen, President and CEO

Electors of SRC are on the SIA board and financials will be sent to the SIA CEO to be delivered to the SIA board members.

The combined financial statements are presented for convenience and information purposes only, and while reasonable efforts have been made to ensure the integrity of such information, they should not be relied on. A copy of the printed combined financial statements will be provided on request.

# Semiconductor Research Corporation and Affiliates

## Combined Financial Statements

Years Ended December 31, 2018 and 2017

# Semiconductor Research Corporation and Affiliates

Combined Financial Statements
Years Ended December 31, 2018 and 2017

# Semiconductor Research Corporation and Affiliates

## Contents

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# Independent Auditor's Report

The Board of Directors
Semiconductor Research Corporation

## Report on the Financial Statements

We have audited the accompanying combined financial statements of Semiconductor Research Corporation and its affiliates (collectively referred to as "SRC"), which comprise the combined statement of financial position as of December 31, 2018, and the related combined statements of activities and cash flows for the year then ended, and the related notes to the combined financial statements.

***Management's Responsibility for the Combined Financial Statements***

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

***Auditor's Responsibility***

Our responsibility is to express an opinion on these combined financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the combined financial statements are free from material misstatement.

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

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

### *Opinion*

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

### *Emphasis of Matter*

As discussed in Note 1 to the combined financial statements, in the year ended December 31, 2018, the Company adopted new accounting guidance Financial Accounting Standards Board Accounting Standard Update 2016-14*, Not-for-Profit Entities (Topic 958): Presentation of Financial Statements of Not-for-Profit Entities* ("ASU 2016-14"). Our opinion is not modified with respect to this matter.

### *Other Matters*

*Other Information*

Our audit was conducted for the purpose of forming an opinion on the combined financial statements as a whole. The accompanying schedule of expenditures of federal awards, as required by Title 2 U.S. Code of Federal Regulations ("CFR") Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* is presented for purposes of additional analysis and is not a required part of the combined 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 combined financial statements. The information has been subjected to the auditing procedures applied in the audit of the combined financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the combined financial statements or to the combined 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 combined financial statements as a whole.

*Other Matter*

The 2017 combined financial statements of SRC were audited by other auditors, whose report dated March 15, 2018 expressed an unmodified opinion on those statements.

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated July 25, 2019 on our consideration of SRC's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is 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 SRC'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 SRC's internal control over financial reporting and compliance.

BDO USA, LLP

July 25, 2019

# Combined Financial Statements

# Semiconductor Research Corporation

## Combined Statements of Financial Position

*(in thousands of dollars)*

| *Year ended December 31,* | | **2018** | | 2017 |
|---|---|---|---|---|
| **Assets** | | | | |
| Current assets | | | | |
| Cash and cash equivalents | **$** | **53,506** | $ | 38,573 |
| Investments | | **15,584** | | 18,621 |
| Membership fees receivables | | **2,261** | | 572 |
| Other current assets | | **291** | | 554 |
| Total current assets | | **71,642** | | 58,320 |
| Fixed assets | | | | |
| Computer and office equipment | | **798** | | 798 |
| Furniture and fixtures | | **231** | | 231 |
| Total fixed assets | | **1,029** | | 1,029 |
| Less - accumulated depreciation | | **(965)** | | (907) |
| Net fixed assets | | **64** | | 122 |
| Other noncurrent assets | | **1,135** | | 1,540 |
| **Total Assets** | **$** | **72,841** | $ | 59,982 |
| **Liabilities and Net Assets** | | | | |
| **Liabilities** | | | | |
| Current liabilities | | | | |
| Research contracts payable | **$** | **26,245** | $ | 21,088 |
| Accounts payable and accrued expenses | | **2,022** | | 1,847 |
| Deferred revenue | | **9,208** | | 9,588 |
| Deferred tax liability | | **32** | | 796 |
| Total current liabilities | | **37,507** | | 33,319 |
| Other noncurrent liabilities | | **1,233** | | 1,651 |
| **Total Liabilities** | **$** | **38,740** | $ | 34,970 |
| **Net Assets** | | | | |
| Net assets without donor restrictions | **$** | **27,864** | $ | 20,686 |
| Net assets with donor restrictions | | **6,237** | | 4,326 |
| **Total Net Assets** | **$** | **34,101** | $ | 25,012 |
| **Total Liabilities and Net Assets** | **$** | **72,841** | $ | 59,982 |

*See accompanying notes to combined financial statements.*

# Semiconductor Research Corporation

## Combined Statements of Activities

*(in thousands of dollars)*

| *Years ended December 31,* | **2018** | 2017 |
|---|---|---|
| **Change in Net Assets Without Donor Restrictions** | | |
| Revenues and gains | | |
| Member fees - undesignated and participant revenue | **$ 10,756** | $ 11,696 |
| Infrastructure member fees | **685** | 450 |
| Thrust member fees | **4,833** | 2,933 |
| Grant revenue | **168** | 90 |
| Investment return | **(729)** | 2,557 |
| Fellowship revenue | **147** | 89 |
| Management fee revenue | **173** | 151 |
| Other | **12** | 7 |
| Total revenues and gains | **16,045** | 17,973 |
| Expenses | | |
| Contract research and grant expense | **9,600** | 8,304 |
| Graduate fellowship program | **260** | 434 |
| Management and general | **3,828** | 4,504 |
| Income tax expense | **(515)** | 807 |
| Total expenses | **13,173** | 14,049 |
| Focus Center Research Program | | |
| Participant fees | **-** | 23,205 |
| Grant revenue | **3,979** | 15,552 |
| Investment return | **3** | 41 |
| Other income | **-** | - |
| Contract research and grant expense | **(33)** | (33,677) |
| Management and general | **(13)** | (1,817) |
| Total Focus Center Research Program | **3,936** | 3,304 |
| New Science Team program | | |
| Participant fees | **29,515** | - |
| Other income | **7,424** | - |
| Investment return | **51** | - |
| Contract research and grant expense | **(32,854)** | - |
| Management and general | **(2,223)** | - |
| Total New Science Team Program | **1,913** | - |

# Semiconductor Research Corporation

## Combined Statements of Activities (continued)

*(in thousands of dollars)*

| *Years ended December 31,* | | **2018** | | 2017 |
|---|---|---|---|---|
| **Change in Net Assets Without Donor Restrictions (continued)** | | | | |
| SRC Education Alliance Program | | | | |
| Participant fees | **$** | **698** | $ | 821 |
| Investment return | | **(11)** | | 19 |
| Contract research and grant expense | | **(664)** | | (783) |
| Management and general | | **(89)** | | (198) |
| Total SRC Education Alliance Program | | **(66)** | | (141) |
| Nanoelectronics Research Program | | | | |
| Participant fees | | **-** | | 4,350 |
| Grant revenue | | **-** | | 115 |
| Investment return | | **6** | | 12 |
| Contract research and grant expense | | **(1,299)** | | (7,255) |
| Management and general | | **(184)** | | (879) |
| Total Nanoelectronics Research Corporation Program | | **(1,477)** | | (3,657) |
| **Change in Net Assets Without Donor Restrictions** | **$** | **7,178** | $ | 3,430 |
| **Change in Net Assets With Donor Restrictions** | | | | |
| Member fees - designated (SRC) | **$** | **7,624** | $ | 7,321 |
| Member fees - designated (NERC) | | **-** | | 150 |
| Contract research and grant expense | | **(5,713)** | | (6,038) |
| **Change in Net Assets With Donor Restrictions** | **$** | **1,911** | $ | 1,433 |
| **Change in Net Assets** | | **9,089** | | 4,863 |
| **Net Assets**, at beginning of year | | **25,012** | | 20,149 |
| **Net Asset**, end of year | **$** | **34,101** | $ | 25,012 |

*See accompanying notes to combined financial statements.*

# Semiconductor Research Corporation

## Combined Statements of Cash Flows

*(in thousands of dollars)*

| *Years ended December 31,* | | **2018** | | 2017 |
|---|---|---|---|---|
| **Operating Activities** | | | | |
| Change in net assets | **$** | **9,089** | $ | 4,863 |
| Adjustments to reconcile change in net assets to net cash provided by (used in) operating activities: | | | | |
| Depreciation | | **58** | | 115 |
| Gain on sale of fixed assets | | **-** | | (1) |
| Deferred taxes | | **(764)** | | 686 |
| Net realized losses (gains) and change in net unrealized losses (gains) on investments | | **1,086** | | (1,928) |
| Changes in operating assets and liabilities: | | | | |
| Membership fees receivable | | **(1,689)** | | 788 |
| Other assets | | **668** | | (27) |
| Research contracts payable | | **5,157** | | (8,338) |
| Accounts payable and accrued expenses | | **175** | | (668) |
| Deferred revenue | | **(380)** | | 1,131 |
| Other noncurrent liabilities | | **(418)** | | (123) |
| **Net Cash Provided by (Used in) Operating Activities** | | **12,982** | | (3,502) |
| **Investing Activities** | | | | |
| Purchases of investments | | **(33,890)** | | (9,756) |
| Purchases from sale of investments | | **35,841** | | 9,383 |
| Purchased of fixed assets | | **-** | | (4) |
| Proceeds from sale of fixed assets | | **-** | | 1 |
| **Net Cash Provided by (Used in) Investing Activities** | | **1,951** | | (376) |
| **Net Increase (Decrease) in Cash and Cash Equivalents** | | **14,933** | | (3,878) |
| **Cash and Cash Equivalents**, beginning of year | | **38,573** | | 42,451 |
| **Cash and Cash Equivalents**, end of year | **$** | **53,506** | $ | 38,573 |
| **Supplemental disclosures of cash flow information** | | | | |
| Federal and state income taxes paid | **$** | **11** | $ | 151 |

*See accompanying notes to combined financial statements.*

## 1. Description of Organization and Summary of Significant Accounting Policies

### *Background and Basis of Combination*

Semiconductor Research Corporation ("SRC" or the "Corporation") is a nonprofit taxable mutual benefit corporation formed in 1982 to conduct research in the fields of engineering and physical science related to semiconductor development and manufacturing. Activity has centered on initiation and administration of contract research with various institutions and universities. SRC has expended approximately $1.42 billion since inception through December 31, 2018 relating to fellowships, contract research and grant expenses and industry support activities. SRC's charter requires that member corporations (members and infrastructure members), which are corporations involved in the manufacturing, purchase, use or sale of semiconductors or semiconductor related equipment, software and materials, be assessed membership fees based on a percentage of their semiconductor sales, use or manufacture. These fees are subject to certain limitations.

SRC has created other classes of membership some of which allow organizations and companies otherwise not eligible for membership to join SRC. Adjunct, associate and affiliate members must undertake research and development of semiconductor devices; they have similar privileges of membership except they do not have direct representation on the Board of Directors. Thrust members are companies which are eligible to join SRC as a member or infrastructure member, but are only interested in a limited section of research. These members pay a set fee for membership in either one or multiple research thrusts.

The combined financial statements include the accounts of Semiconductor Research Corporation Education Alliance ("SRCEA"), SRCco Inc. ("SRCco"), formerly known as Microelectronics Advanced Research Corporation, and Nanoelectronics Research Corporation ("NERC"). SRCEA is a nonprofit 501(c)(3) education organization. The organization manages Scholarship and Fellowship Programs and Undergraduate Engineering Programs. SRCco is a nonprofit 501(c)(6) organization formed in 1997 and manages a U.S. university-based pre-competitive New Science Team ("NST") Initiative in semiconductor technology. NERC is a nonprofit 501(c)(6) research management organization formed to manage the Nanoelectronic Research Initiative ("NRI") program. SRCco, SRCEA, and NERC have been combined with SRC in the accompanying combined financial statements because SRC maintains control of a majority voting interest in all entities. All significant transactions and balances between affiliates have been eliminated in combination.

### *Basis of Accounting and Presentation*

The combined financial statements of SRC have been prepared on the accrual basis of accounting.

Net assets, revenues, expenses, gains and losses are classified based on the existence or absence of donor-imposed restrictions. Accordingly, net assets of SRC and changes therein are classified and reported as follows:

- Net assets without donor restrictions – net assets that are not subject to member-imposed stipulations.

- Net assets with donor restrictions – net assets subject to member-imposed stipulations that are expected to be met either by actions of SRC and/or the passage of time.

Revenues are reported as increases in net assets without donor restrictions unless use of the related assets is limited by member-imposed restrictions. Expenses are reported as decreases in net assets without donor restrictions. Gains and losses on investments and other assets or liabilities are reported as increases or decreases in net assets without donor restrictions unless their use is restricted by explicit member stipulation or by law. Expirations of restrictions on net assets with donor restrictions (i.e., the member-stipulated purpose has been fulfilled and/or the stipulated time period has elapsed) are reported as either revenue or contract research and grants.

***Use of Estimates***

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses and related disclosures. Actual results could differ from those estimates.

***Cash and Cash Equivalents***

Cash equivalents consist of various short-term investments which have original maturities of three months or less.

***Investments***

SRC invests primarily in mutual funds and U.S. equities in order to provide a balanced return of investment income and principal appreciation to SRC with a limited risk of loss exposure.

Investments are carried at estimated market values. Changes in the estimated market value of investments are reflected as unrealized gains or losses, which are included in the investment return amount, in the accompanying combined statements of activities.

***Membership Fees Receivable***

Membership fees receivable include amounts billed and not yet received from members.

***Fixed Assets***

Computer and office equipment and furniture and fixtures are recorded at cost, and depreciation is calculated using the straight-line method over the estimated useful life as follows:

| | |
|---|---|
| Computer and office equipment | 3 years |
| Furniture and fixtures | 3-5 years |

***Member Fees***

Revenue from members, associate members, infrastructure members, thrust members and adjunct members is recognized ratably over the membership term, starting at the beginning of the membership term. Revenues from affiliate members are recognized upon receipt as participation in the program is voluntary.

### Participant Revenue

Revenue from government participants is recognized ratably over the participant term, starting at the beginning of the participant term. In the event that the related research projects are delayed, participant revenue is deferred until the related research projects commence.

### Participant Fees

Revenue from NST participants is recognized ratably over the participant term. The contracts between SRCco and NST participants stipulate that any net assets which have been accumulated by SRCco from NST activities shall be returned to NST participants upon termination of the NST.

Revenue from NRI participants is recognized ratably over the participant term.

### Management Fee Revenue

Revenue from fees charged to establish research projects for member specific research and is recognized immediately upon issuance of the invoice.

### Grant Revenue

Revenue from government sponsored grants is recognized upon satisfaction of funding agreement conditions.

### Deferred Revenue

Membership fees or Participant fees received in advance of the term of the membership agreement or participant agreement are recorded as deferred revenue. Participant fees received or receivable are deferred until specified research projects commence. For a specific participant agreement, amounts totaling $3,075 and $3,632 were included in deferred revenue as of December 31, 2018 and 2017, respectively, of which no amounts are in accounts receivable. All amounts received and receivable not committed to research projects and the related management expense are fully refundable.

### Contract Research and Grants Expense

For all programs, contract research expense is recognized ratably over the term of the contract unless qualified costs billed by the recipient are greater than the ratable amounts; in that case the actual amount billed is recognized. Billings from the recipients are typically delayed. In order to prepare timely financial statements, SRC employs the practice of recognizing contract expense ratably over the term of the contract. This method approximates actual costs incurred under the contract.

Included within contract research and grants expense in the accompanying combined statements of activities are industry support expenses totaling approximately $907 and $1,774 for the years ended December 31, 2018 and 2017, respectively. These expenses relate to special projects undertaken by SRC and are recognized as incurred.

Unrestricted grants awarded to others are expensed at the time the grant is awarded.

***Research Customization Program***

SRC has designated certain assets to the Research Customization Program which commenced in January 1997. This program allows members to direct up to 20% of their fees for domestic members and up to 40% of their fees for infrastructure and international members to select university projects which are of particular interest to those members. These funds are accounted for as Net assets with donor restrictions due to the third party restriction.

***Methods Used for Allocation of Expenses***

General and administrative costs that benefit multiple functional areas have been allocated across programs on the proportion of a program's research units as a total of all programs research units.

***Income Taxes***

SRC operates as a nonprofit taxable mutual benefit corporation, incorporated in the State of California. SRCco and NERC are exempt from federal income taxes under Section 501(c)(6) of the Internal Revenue Code. The SRCEA is exempt from federal income taxes under Section 501(c)(3) of the Internal Revenue Code.

The Corporation may recognize an income tax benefit from an uncertain position only if it is more likely than not that the position is sustainable, based solely on its technical merits and consideration of the relevant taxing authority's widely understood administrative practices and precedents. If this threshold is met, the Corporation measures the tax benefit as the largest amount of the benefit that has greater than a 50% likelihood of being realized upon ultimate settlement.

*(in thousands of dollars)*

### *Liquidity and Availability of Financial Resources*

The Corporation's financial assets available within one year of the combined statements of financial position date for general expenditures are as follows:

| *Years ended December 31,* | **2018** | 2017 |
|---|---|---|
| Cash and cash equivalents | **$ 53,506** | $ 38,573 |
| Investments | **15,584** | 18,621 |
| Membership fees receivable | **2,261** | 572 |
| Total financial assets available within one year | **71,351** | 57,766 |
| **Less:** | | |
| Amounts unavailable for general expenditures within one year, due to: | | |
| Restricted by donor with purpose restrictions | **(6,237)** | (4,326) |
| Amounts unavailable to management without Board's approval:` | | |
| Cash and cash equivalents | **(2,546)** | (441) |
| Investments | **(15,584)** | (18,621) |
| Total amounts unavailable to management without Board's approval | **(18,130)** | (19,062) |
| Total Financial assets available to management for general expenditure within one year | **$ 46,984** | $ 34,378 |

### *Recent Accounting Pronouncements*

In February 2016, the Financial Accounting Standards Board ("FASB") issued Auditing Standard Update ("ASU") 2016-02, *Leases (Topic 842)* ("ASU 2016-02"), which requires lessees to recognize the following for all leases (with the exception of short-term leases) at the commencement date: a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis and a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. Certain targeted improvements were made to align, where necessary, lessor accounting with the lessee accounting model and Topic 606, Revenue from Contracts with Customers. ASU 2016-02 is effective for annual periods beginning after December 15, 2019. Early application is permitted for all public business entities and all nonpublic business entities upon issuance. Lessees (for capital and operating leases) and lessors (for sales-type, direct financing, and operating leases) must apply a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The modified retrospective approach would not require any transition accounting for leases that expired before the earliest comparative period presented. Lessees and lessors may not apply a full retrospective transition approach. The

(in thousands of dollars)

Corporation is currently evaluating the impact of adopting this ASU on the Corporation's combined financial statements.

During the year ended December 31, 2018, the Corporation adopted ASU 2016-14, *Not-for-Profit Entities (Topic 958): Presentation of Financial Statements of Not-for-Profit Entities* ("ASU 2016-14"). This guidance is intended to improve the net asset classification requirements and the information presented in the financial statements and notes about a not-for-profit entity's liquidity, financial performance, and cash flows. Main provisions of this guidance include: presentation of two classes of net assets versus the previously required three; recognition of capital gifts for construction as a net asset without donor restrictions when the associated long-lived asset is placed in service; and recognition of underwater endowment funds as a reduction in net assets with donor restrictions. The guidance also enhances disclosures for board designated amounts, composition of net assets without donor restrictions, liquidity, and expenses by both their natural and functional classification.

A recap of the net asset reclassifications driven by the adoption of ASU 2016-14 as of December 31, 2018 follows:

| | ASU 2016-14 Classifications | | |
|---|---|---|---|
| **Net Assets Classifications** | **Without Donor Restrictions** | **With Donor Restrictions** | **Total Net Assets** |
| As previously presented: | | | |
| Unrestricted | $ 27,864 | $ - | $ 27,864 |
| Temporarily restricted | - | 6,237 | 6,237 |
| Net assets, as reclassified | $ 27,864 | $ 6,237 | $ 34,101 |

***Investments***

The cost and estimated market values of investments at December 31 are as follows:

| | **2018** | | 2017 | |
|---|---|---|---|---|
| | **Cost** | **Estimated Market Value** | **Cost** | **Estimated Market Value** |
| U.S. equities | $ 3 | $ 3 | $ 3 | $ 4 |
| Mutual funds | 10,978 | 11,002 | 15,424 | 17,351 |
| Mortgage and asset backed securities | 51 | 50 | 59 | 60 |
| Exchange traded products | 4,417 | 4,529 | 963 | 1,206 |
| Total | $ 15,449 | $ 15,584 | $ 16,449 | $ 18,621 |

At December 31, 2018 and 2017, SRC's investment portfolio included $2,546 and $441, respectively, in money market funds which are reflected as cash and cash equivalents in the accompanying combined statements of financial position.

*(in thousands of dollars)*

The components of investment return in the accompanying combined statements of activities for the years ended December 31, 2018 and 2017 are as follows:

| *Years ended December 31,* | **2018** | 2017 |
|---|---|---|
| Interest and dividend income, including earnings on cash and cash equivalents | **$ 442** | $ 732 |
| Net realized gains | **959** | 69 |
| Change in net unrealized (losses) gains | **(2,045)** | 1,859 |
| Investment fees | **(36)** | (31) |
| Net investment return | **$ (680)** | $ 2,629 |

***Fair Value Measurements***

The Corporation adopted the provisions of the Topic 820 - *Fair Value Measurement* (Topic 820) of the FASB Accounting Standards Codification effective January 1, 2009. Under this standard, fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., the "exit price") in an orderly transaction between market participants at the measurement date. Fair value measurements and related disclosures utilize the fair value hierarchy required by Topic 820, which prioritizes the inputs to valuation techniques used to measure fair value into three broad levels:

Level 1 - Quoted prices in active markets for identical debt and equity securities.

Level 2 – Prices determined using quoted prices in markets that are not active or for which all significant inputs are not observable, either directly or indirectly.

Level 3 - Prices determined using significant unobservable inputs. Unobservable inputs reflect the Corporation's own assumptions about the factors that other market participants would use in pricing an investment, and would be based on the best information available in the circumstances.

Certain estimates and judgments were required to develop the fair value amounts, which are not necessarily indicative of the amounts that would be realized upon disposition, nor do they indicate the Corporation's intent or ability to dispose of such instruments.

The combined statements of financial position carrying amounts of receivables, other assets, research contracts and accounts payable, accrued liabilities and deferred revenue approximate fair value due to the short-term nature of these items.

*(in thousands of dollars)*

A summary of the inputs used in the measurement of fair value, as of December 31, 2018 and 2017, involving the Corporation's assets and liabilities carried at fair value, is as follows:

| Description | Level 1 | Level 2 | Level 3 | Total |
|---|---|---|---|---|
| Investments as of December 31, 2018 | **$ 15,534** | **$ 50** | **$ -** | **$ 15,584** |
| Investments as of December 31, 2017 | $ 18,561 | $ 60 | $ - | $ 18,621 |

## 2. Operating Leases

SRC leases office space under one noncancelable lease. The lease expires in October 2021 and has minimum rental payments as follows:

| *Year ending December 31,* | **Amount** |
|---|---|
| 2019 | **$ 313** |
| 2020 | **323** |
| 2021 | **276** |
| **Total** | **$ 912** |

Rent expense was approximately $288 and $312 for the years ended December 31, 2018 and 2017, respectively.

## 3. Benefit Plans

SRC sponsors a number of defined contribution plans. The two principal defined contribution plans are the 401(k) Deferred Compensation plan and the Money Purchase Plan (collectively referred to as the "Plans") which cover all employees. Contributions to the Plans are made by SRC based on percentages of eligible compensation as determined by the Board of Directors. Expense under the 401(k) Deferred Compensation plan was approximately $246 and $231 for the years ended December 31, 2018 and 2017, respectively. Expense under the Money Purchase Plan was $327 and $419 for the years ended December 31, 2018 and 2017, respectively.

SRC also has an unfunded supplemental deferred compensation plan in which senior executives participate. SRC established a Rabbi Trust to accumulate funds to satisfy its liabilities with respect to this plan. As of December 31, 2018 and 2017, the assets and the corresponding liability related to this plan were approximately $1,135 and $1,536, respectively. The assets are considered Level 1 investments. The assets and the liability are reported gross on the accompanying combined financial statements, within other noncurrent assets and other noncurrent liabilities, respectively.

*(in thousands of dollars)*

## 4. Commitments and Contingencies

Beginning January 1, 2018, SRC started two new research programs under SRCco. The Joint University Microelectronics Program ("JUMP") is a collaborative network of research centers sponsored by industry participants and the Defense Advanced research Projects agency ("DARPA"). The Nanoelectronic Computing Research program ("nCORE") is a collaborative effort between industry partners, the National Institute of Standards and Technology ("NIST") and the National Science Foundation ("NSF"). Expenditures under Federal contracts are subject to audit by the respective cognizant agency. As SRC has recorded contracts in accordance with the agency agreement, there are no reserves in its combined financial statements as of December 31, 2017 and 2018.

## 5. Income Taxes

SRC incurred income tax benefit of $515 and expense of $807 during the years ended December 31, 2018 and 2017, respectively.

Income tax benefit and expense consisted of the following:

| *Years ended December 31,* | | **2018** | | 2017 |
|---|---|---|---|---|
| **Current:** | | | | |
| Federal | **$** | **178** | $ | 89 |
| State | | **71** | | 32 |
| **Total current income tax expense** | | **249** | | 121 |
| **Deferred:** | | | | |
| Federal | | **(725)** | | 650 |
| State | | **(39)** | | 36 |
| **Total deferred income tax (benefit) expense** | | **(764)** | | 686 |
| **Total income tax (benefit) expense** | **$** | **(515)** | $ | 807 |

*(in thousands of dollars)*

Components of the net deferred income tax (liability) assets were as follows:

| *Years ended December 31,* | | **2018** | | 2017 |
|---|---|---|---|---|
| Fixed assets | **$** | **18** | $ | 66 |
| Net operating loss | | **908** | | 2,813 |
| **Total deferred tax assets** | | **926** | | 2,879 |
| Valuation allowance | | **(926)** | | (2,879) |
| **Total deferred tax assets, net** | | **-** | | - |
| Unrealized gain on investments | | **(32)** | | (796) |
| **Total deferred tax liability** | **$** | **(32)** | $ | (796) |

No unrecognized tax benefits existed as of December 31, 2018 and 2017. SRC did not have any additions to its unrecognized tax benefit resulting from uncertain tax positions related to either the current or prior years, and had no reductions resulting due to settlements. The Corporation does not expect any change in unrecognized tax benefits within the next fiscal year.

## 6. Net Assets

Net assets without donor restriction are comprised of the following components:

| *December 31,* | | **2018** | | 2017 |
|---|---|---|---|---|
| Net assets without donor restrictions (Undesignated) | **$** | **9,734** | $ | 1,624 |
| Net assets without donor restrictions (Board designated) | | **18,130** | | 19,062 |
| **Total** | **$** | **27,864** | $ | 20,686 |

Net assets with donor restrictions (purpose) are available for the following purposes:

| *December 31,* | | **2018** | | 2017 |
|---|---|---|---|---|
| Research | **$** | **6,237** | $ | 4,326 |
| **Total** | **$** | **6,237** | $ | 4,326 |

## 7. Related Parties

In 1996, SRC began utilizing personnel from members' companies to assist in program related activities. SRC pays for these services at rates consistent with other providers. Payments for administrative services received from these personnel for the years ended December 31, 2018 and 2017 were approximately $540 and $630, respectively, and are included within management and general expense in the accompanying combined statements of activities. Payments for research services received from these personnel for the years ended December 31, 2018 and 2017 were approximately $0 and $420, respectively, and are included within contract research and grant expense in the accompanying combined statements of activities.

## 8. Concentration of Credit Risk

A majority of SRC's and SRCco's revenues are generated from membership fees assessed to participating companies in the semiconductor industry. For the year ended December 31, 2018, three companies comprised 39.0%, 23.4% and 7.6% of SRC's membership revenues. For the year ended December 31, 2017, three companies comprised 44.0%, 26.4% and 8.3% of SRC's membership revenues. For the years ended December 31, 2018 and 2017, three companies comprised 49.5%, 9.3% and 8.3% of SRCco's membership revenues.

*(in thousands of dollars)*

## 9. Expenses by Both Nature and Function

The combined financial statements report certain categories of expenses that are attributable to one or more program or supporting functions of the Corporation. Functional expense by natural classification were as follows:

| *Year ended December 31, 2018* | SRC | STARnet | NST | NRI | SRCEA | Total |
|---|---|---|---|---|---|---|
| **Program Services** | | | | | | |
| Research contracts and grants given to universities | $14,770 | $ (179) | $32,759 | $ 1256 | $ 281 | $48,887 |
| Intellectual property | 199 | 212 | (50) | 43 | - | 404 |
| Hosted conferences and events | 344 | - | 105 | - | 13 | 462 |
| Student support, scholarships and awards | 260 | - | 40 | - | 370 | 670 |
| **Total Program Services** | 15,573 | 33 | 32,854 | 1,299 | 664 | 50,423 |
| **Management and General** | | | | | | |
| Salaries, employee benefits and related taxes | 2,775 | - | 1,427 | 105 | 56 | 4,363 |
| Professional fees and contract services | 774 | 11 | 366 | 42 | 32 | 1,225 |
| Conferences, travel and staff development | 79 | - | 61 | 11 | 1 | 152 |
| Occupancy and maintenance | 363 | - | 7 | - | - | 370 |
| Supplies, communications, shipping and other | 60 | 2 | 11 | 1 | - | 74 |
| Business insurance | 40 | - | - | - | - | 40 |
| Depreciation | 107 | - | - | - | - | 107 |
| Non payroll tax (benefit) expense | (510) | - | 1 | - | - | (509) |
| Cost allocation | (375) | - | 350 | 25 | - | - |
| **Total Management and General** | 3,313 | 13 | 2,223 | 184 | 89 | 5,822 |
| **Total Functional Expenses** | $18,886 | $ 46 | $35,077 | $ 1,483 | $ 753 | $56,245 |

*(in thousands of dollars)*

| *Year ended December 31, 2017* | SRC | STARnet | NRI | SRCEA | Total |
|---|---|---|---|---|---|
| **Program Services** | | | | | |
| Research contracts and grants given to universities | $ 13,511 | $ 33,081 | $ 6,868 | $ - | $ 53,460 |
| Intellectual property | 360 | 379 | 65 | - | 804 |
| Hosted conferences and events | 319 | 76 | 26 | 3 | 424 |
| Student support, scholarships and awards | 434 | 141 | 28 | 780 | 1,383 |
| Professional Fees and Contract Services | - | - | 420 | - | 420 |
| **Total Program Services** | 14,624 | 33,677 | 7,407 | 783 | 56,491 |
| **Management and General** | | | | | |
| Salaries, employee benefits and related taxes | 3,344 | 1,163 | 531 | 194 | 5,232 |
| Professional fees and contract services | 702 | 331 | 201 | - | 1,234 |
| Conferences, travel and staff development | 95 | 70 | 71 | 4 | 240 |
| Occupancy and maintenance | 424 | - | - | - | 424 |
| Supplies, communications, shipping and other | 91 | 8 | 5 | - | 104 |
| Business insurance | 43 | - | - | - | 43 |
| Depreciation | 115 | - | - | - | 115 |
| Non payroll tax (benefit) expense | 813 | - | - | - | 813 |
| Cost allocation | (316) | 245 | 71 | - | - |
| **Total Management and General** | 5,311 | 1,817 | 879 | 198 | 8,205 |
| **Total Functional Expenses** | $ 19,935 | $ 35,494 | $ 8,286 | $ 981 | $ 64,696 |

## 10. Subsequent Events

The Corporation has evaluated subsequent events in accordance with US GAAP through July 25, 2019, which was the date the combined financial statements were available to be issued. We have not identified any events that require disclosure.

## Reports and Schedules Required by *Government Auditing Standards* and the Uniform Guidance

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

The Board of Directors
Semiconductor Research Corporation

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the combined financial statements of Semiconductor Research Corporation and its affiliates (collectively referred to as "SRC"), which comprise the combined statement of financial position as of December 31, 2018, and the related combined statements of activities and cash flows for the year then ended, and the related notes to the combined financial statements, and have issued our report thereon dated July 25, 2019.

## Internal Control Over Financial Reporting

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

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's combined 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 and therefore, material weaknesses or significant deficiencies may exist that have not been identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify certain deficiencies in internal control, described in the accompanying schedule of findings and questioned costs as item 2018-001 that we consider to be a significant deficiency.

## Compliance and Other Matters

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

**Management's Response to Findings**

Management's response to the findings identified in our audit is described in the accompanying schedule of findings and questioned costs. Management's response was not subjected to the auditing procedures applied in the audit of the combined financial statements and, accordingly, we express no opinion on it.

**Purpose of this Report**

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

BDO USA, LLP

July 25, 2019

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## Independent Auditor's Report on Compliance for Each Major Federal Program and Report on Internal Control Over Compliance Required by the Uniform Guidance

The Board of Directors
Semiconductor Research Corporation

### Report on Compliance for Each Major Federal Program

We have audited Semiconductor Research Corporation and its affiliates' (collectively referred to as "SRC") compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of SRC's major federal programs for the year ended December 31, 2018. SRC's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

#### *Management's Responsibility*

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

#### *Auditor's Responsibility*

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

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

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

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

#### *Other Matters*

The results of our auditing procedures disclosed instances of noncompliance, which are required to be reported in accordance with the Uniform Guidance and which are described in the accompanying schedule of findings and questioned costs as items 2018-002 through 2018-004. Our opinion on each major federal program is not modified with respect to these matters.

SRC's response to the noncompliance findings identified in our audit is described in the accompanying schedule of findings and questioned costs. SRC's response was not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the response.

**Report on Internal Control Over Compliance**

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

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or 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.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that have not been identified. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, we did identify certain deficiencies in internal control over compliance, described in the accompanying schedule of findings and questioned costs as items 2018-002 through 2018-004 that we consider to be significant deficiencies.

SRC's response to the internal control over compliance findings identified in our audit is described in the accompanying schedule of findings and questioned costs. SRC's response was not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the response.

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.

BDO USA, LLP

July 25, 2019

# Semiconductor Research Corporation

## Schedule of Expenditures of Federal Awards

## Year Ended December 31, 2018

*(in thousands of dollars)*

| Federal Grantor/Program or Cluster Title | Federal CFDA Number | Total Federal Expenditures | Provided to Subrecipients |
|---|---|---|---|
| **EXPENDITURES OF FEDERAL AWARDS:** | | | |
| **Research and Development Cluster:** | | | |
| U.S. Department of Commerce: | | | |
| National Institute of Standards and Technology | | | |
| Measurement and Engineering Research and Standards | 11.609 | $ 1,133 | $ 826 |
| Arrangements for Interdisplinary Research Infrastructure | 11.619 | 168 | - |
| **Total U.S. Department of Commerce** | | 1,301 | 826 |
| **Total Research and Development Cluster** | | 1,301 | 826 |
| **TOTAL EXPENDITURES OF FEDERAL AWARDS** | | $ 1,301 | $ 826 |

*See accompanying notes to schedule of expenditures of federal and state awards.*

## 1. Basis of Presentation

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

## 2. Summary of Significant Accounting Policies

Expenditures reported on the Schedule are reported on the accrual basis of accounting. Such expenditures are recognized following the cost principles contained in the Uniform Guidance, wherein certain types of expenditures are not allowable or are limited as to reimbursement. Negative amounts shown on the Schedule represent adjustments or credits made in the normal course of business to amounts reported as expenditures in prior years.

## 3. Indirect Cost Rate

SRC has elected to use the 10-percent de minimis indirect cost rate allowed under the Uniform Guidance.

## 4. Contingencies

The grant revenue amounts received are subject to audit and adjustment. If any expenditures are disallowed by the grantor agencies as a result of such an audit, any claim for reimbursement to the grantor agencies would become a liability of SRC. In the opinion of management, and with the exception of certain findings presented in the accompanying schedule of findings and questioned costs, all grant expenditures are in compliance with the terms of the grant agreements and applicable federal and state laws and regulations.

### Section I - Summary of Auditor's Results

***Financial Statements***

| | |
|---|---|
| Type of report the auditor issued on whether the financial statements audited were prepared in accordance with GAAP | Unmodified |
| Internal control over financial reporting: | |
| • Material weakness(es) identified | ___ Yes  X No |
| • Significant deficiency(ies) identified? | X Yes  ___ None reported |
| Noncompliance material to financial statements noted? | ___ Yes  X No |

***Federal Awards***

| | |
|---|---|
| Internal control over major federal programs: | |
| • Material weakness(es) identified? | ___ Yes  X No |
| • Significant deficiency(ies) identified? | X Yes  ___ None reported |
| Type of auditor's report issued on compliance for major federal programs: | Unmodified |
| Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)? | X Yes  ___ No |

Identification of major federal programs:

| CFDA Number(s) | Name of Federal Program or Cluster |
|---|---|
| 11.609 and 11.619 | Research and Development Cluster |

| | |
|---|---|
| Dollar threshold used to distinguish between type A and type B programs: | $750,000 |
| Auditee qualified as low-risk auditee? | ___ Yes  X No |

### Section II – Financial Statement Findings

This section identifies the significant deficiencies, material weaknesses, fraud, noncompliance with provisions of laws, regulations, contracts and grant agreements, and abuse related to the financial statements for which *Government Auditing Standards* require reporting.

## FINDING 2018-001

***Criteria:***

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 *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. During our audit procedures we identified certain deficiencies with respect to the preparation of the Schedule of Expenditures of Federal Awards ("SEFA") and the recognition of grant contract research expense that we deemed to rise to the level of a significant deficiency.

***Condition:***

The SEFA was not prepared on the accrual basis of accounting for the year ended December 31, 2018. As a result, certain expenditures related to a prior fiscal period were inappropriately included in the balances reported on the SEFA for the year ended December 31, 2018. Additionally, expenses for certain research grant contracts that were recognized ratably over the term of the contract did not take into account delays in contract initiation, resulting in recorded expense that was materially in excess of actual costs.

***Cause:***

Insufficient internal controls and administrative oversight over the tracking and reconciliation of grant contract expenditures, federal expenditures and SEFA preparation.

***Effect or Possible Effect:***

Expenditures of Federal Awards were not properly reflected in the SEFA for the year ended December 31, 2018. Additionally, research expense for certain grant contracts was recognized in excess of actual costs.

***Recommendation:***

We recommend that the Company enhance policies, procedures and internal controls over the preparation of the SEFA to ensure that federal expenditures are properly reflected in accordance with the Company's basis of accounting. Additionally, we recommend that the Company enhance procedures and internal controls over the tracking and reconciliation of actual grant contract research expense incurred as compared to management's estimates for contract expense recognized.

***Views of Responsible Officials:***

Management agrees that due to an oversight in the initial draft of the Statement of Federal Expenditures, prior year expenses were included in error. The schedule was adjusted prior to issuance. Management will more carefully review timing of expenditures to ensure proper preparation. The preparation of the schedule will be moved to the Staff Accountant with review by the Chief Accounting Officer to provide additional oversight.

In future years, management will consider delays to programs when estimating contract expenses and will more closely monitor invoicing versus management's estimate.

## Section III - Federal Award Findings and Questioned Costs

This section identifies the audit findings required to be reported by 2 CFR 200.516(a) (for example, significant deficiencies, material weaknesses, material instances of noncompliance, including questioned costs and material abuse). Where practical, findings should be organized by federal agency or pass-through entity.

### FINDING 2018-002

***Federal Program Information:***

Research and Development Cluster (CFDA#: 11.609 and 11.619)

***Criteria or Specific Requirement (Including Statutory, Regulatory or Other Citation):***

*C. Cash Management* - Non-Federal entities must minimize the time elapsing between the transfer of funds from the U.S. Treasury or pass-through entity and disbursement by the non-Federal entity for direct program or project costs and the proportionate share of allowable indirect costs, whether the payment is made by electronic funds transfer, or issuance or redemption of checks, warrants, or payment by other means (2 CFR section 200.305(b)).

***Condition:***

The Company was unable to provide expenditure details that represented actual, incurred expenditures that reconcile to each draw request amount made during the year ended December 31, 2018.

***Cause:***

Insufficient internal controls, policies and procedures and administrative oversight resulted in adequate documentation not being retained to evidence the Company's compliance with Cash Management requirement.

***Effect or Potential Effect:***

Sufficient documentation was not retained to support that the Company minimized the time elapsing between the transfer of funds from the Federal awarding agency and subsequent disbursement for direct program costs.

***Questioned Costs:***

None.

***Context:***

Although expenditures for direct program or project costs, and the proportionate share of allowable indirect costs, exceeded amounts requested for reimbursement from the Federal awarding agency for the year ended December 31, 2018 in total, the Company was unable to reconcile expenditures at the transaction level to draw requests made during the year ended December 31, 2018.

***Repeat Finding***:

No similar findings noted in the prior year.

***Recommendation:***

We recommend that the Company implement internal controls and processes to track expenditures of federal funds at the transaction level, and request reimbursement from the Federal awarding agency based on the total expenditures incurred for the period. We also recommend that the Company retain documentation of the reconciliation of the expenditures to draw requests that were performed for each period.

***Views of Responsible Officials:***

Management agrees that transactions should be tied to drawdowns at a more granular level. All future drawdowns will have a list of transactions to support amounts requested and documentation will be maintained.

**FINDING 2018-003**

***Federal Program Information:***

Research and Development Cluster (CFDA#: 11.609 and 11.619)

***Criteria or Specific Requirement (Including Statutory, Regulatory or Other Citation):***

*B. Allowable Costs/Cost Principles (Effort Certification)* - Compensation for personal services includes all remuneration, paid currently or accrued, for services of employees rendered during the period of performance under the Federal award, including but not necessarily limited to wages and salaries. Compensation for personal services may also include fringe benefits. Costs of compensation charged to Federal awards are allowable to the extent that total compensation to the individual employee conforms to established policies of the institution, are consistently applied, and provided that the charges are for work performed. Per the Uniform Guidance §200.430, charges to federal awards for salaries and wages must be based on records that accurately reflect the work performed. These records must:

(i) Be supported by a system of internal control which provides reasonable assurance that the charges are accurate, allowable, and properly allocated;

(ii) Be incorporated into the official records of the non-Federal entity;

(iii) Reasonably reflect the total activity for which the employee is compensated by the non-Federal entity, not exceeding 100% of compensated activities;

(iv) Encompass both federally assisted and all other activities compensated by the non-Federal entity on an integrated basis, but may include the use of subsidiary records as defined in the non-Federal entity's written policy;

(v) Comply with the established accounting policies and practices of the non-Federal entity.

(vi) [Reserved]

(vii) Support the distribution of the employee's salary or wages among specific activities or cost objectives if the employee works on more than one Federal award; a Federal award and non-Federal award; an indirect cost activity and a direct cost activity; two or more indirect activities which are allocated using different allocation bases; or an unallowable activity and a direct or indirect cost activity.

(viii) Budget estimates (i.e., estimates determined before the services are performed) alone do not qualify as support for charges to Federal awards, but may be used for interim accounting purposes, provided that:

(A) The system for establishing the estimates produces reasonable approximations of the activity actually performed;

(B) Significant changes in the corresponding work activity (as defined by the non-Federal entity's written policies) are identified and entered into the records in a timely manner. Short term (such as one or two months) fluctuation between workload categories need not be considered as long as the distribution of salaries and wages is reasonable over the longer term; and

(C) The non-Federal entity's system of internal controls includes processes to review after-the-fact interim charges made to a Federal awards based on budget estimates. All necessary adjustment must be made such that the final amount charged to the Federal award is accurate, allowable, and properly allocated.

*G. Level of Effort* – Payroll charges may be made initially on the basis of estimates made before the services are performed, but the institution is required to subsequently confirm that the labor effort costs charged to an award reasonably represent the actual labor effort. To confirm that the distribution of activity represents a reasonable estimate of the work performed by the employee during the period, the reports must be signed by the employee or responsible official(s) using suitable means of verification that the work was performed. The Uniform Guidance also requires that the after-the-fact reporting be prepared each academic year, but no less frequently than every six months.

***Condition:***

Certain payroll expenditures identified in our sample represented personnel costs of employees that did not allocate time and effort to the grant award.

***Cause:***

Insufficient internal controls and administrative oversight over time and effort reporting.

***Effect or Potential Effect:***

The Company was not in compliance with the applicable requirements of the Allowable Cost/Cost Principles or Level of Effort compliance requirements.

***Questioned Costs:***

Below reporting threshold.

***Context:***

For 3 out of 4 employees selected for testing, time and effort certification records did not adequately support distribution of a portion of the employees' salary to the Federal Award that was commensurate with billed time and effort.

***Repeat Finding***:

No similar findings noted in the prior year.

***Recommendation:***

We recommend that the Company enhance internal controls and processes in place over the after-the-fact certification process. We recommend that the Company require employees to certify level of effort at least every six months and implement controls for the review and approval of completed after-the-fact certifications by a knowledgeable supervisor. Additionally, we recommend that the Company enhance procedures and controls over the review of personnel costs allocated to the grant as part of the expenditure reconciliation process, and verify that all personnel costs charged to the grant are commensurate with time and effort certified by employees prior to requesting reimbursement from the Federal awarding agency.

***Views of Responsible Officials:***

Management agrees that more clear certification of effort documentation should be maintained. All employees complete monthly timesheets and this award will be added as a separate item to be reported on. The hours reported will then be reviewed by both the employee's supervisor and the Finance office for reasonableness. Timesheet data will be maintained with documentation to support each drawdown.

## FINDING 2018-004

***Federal Program Information:***

Research and Development Cluster (CFDA#: 11.609)

***Criteria or Specific Requirement (Including Statutory, Regulatory or Other Citation):***

*M. Subrecipient Monitoring* - All pass-through entities must: (a) Ensure that every subaward is clearly identified to the subrecipient as a subaward and includes the following information at the time of the subaward and if any of these data elements change, include the changes in subsequent subaward modification. When some of this information is not available, the pass-through entity must provide the best information available to describe the Federal award and subaward. Required information includes: (1) Federal Award Identification. (i) Subrecipient name (which must match the name associated with its unique entity identifier); (ii) Subrecipient's unique entity identifier; (iii) Federal Award Identification Number (FAIN); (iv) Federal Award Date (see §200.39 Federal award date) of award to the recipient by the Federal agency; (v) Subaward Period of Performance Start and End Date; (vi) Amount of Federal Funds Obligated by this action by the pass-through entity to the subrecipient; (vii) Total Amount of Federal Funds Obligated to the subrecipient by the pass-through entity including the current obligation; (viii) Total Amount of the Federal Award committed to the subrecipient by the pass-through entity; (ix) Federal award project description, as required to be responsive to the Federal Funding Accountability and Transparency Act (FFATA); (x) Name of Federal awarding agency, pass-through entity, and contact information for awarding official of the Pass-through entity; (xi) CFDA Number and Name; the pass-through entity must identify the dollar amount made available under each Federal award and the CFDA number at time of disbursement; (xii) Identification of whether the award is R&D; and (xiii) Indirect cost rate for the Federal award (including if the de minimis rate is charged per §200.414 Indirect (F&A) costs) (2 CFR 200.331).

***Condition:***

Certain subaward contracts identified through our testing did not contain all necessary information required to be communicated to the respective subrecipients.

***Cause:***

Insufficient internal controls, policies and procedures and administrative oversight resulted in certain Federal award information being omitted from subaward contracts.

***Effect or Potential Effect:***

The Company is not in compliance with Subrecipient Monitoring requirements, and subrecipient entities were not notified timely of all Federal award information associated with the respective subaward which is necessary for proper reporting of Federal awards.

***Questioned Costs:***

None.

***Context:***

For 2 out of 2 subrecipient contracts selected for testing, the CFDA number of the Federal Award was not specified within the subaward contract.

***Repeat Finding***:

No similar findings noted in the prior year.

***Recommendation:***

We recommend that the Company enhance internal controls over the subaward process to ensure that all required information is included in subaward contracts, and communicated to subrecipients in a timely manner.

***Views of Responsible Officials:***

One of the two subrecipients was informally given the CFDA number through email. Both subrecipients were formally sent notifications of the CFDA number in July of 2019. An annual notification is sent to each subrecipient detailing other required information and the CFDA number will be added to this communication.

# Management's Corrective Action Plan

## Finding 2018-001

***Name(s) of Responsible Individual(s):*** Karen Di Spigna, Chief Accounting Officer

***Corrective Action:*** Management agrees that due to an oversight in the initial draft of the Statement of Federal expenditures, prior year expenses were included in error. The schedule was adjusted prior to issuance. Management will more carefully review timing of expenditures to ensure proper preparation. The preparation of the schedule will be moved to the Staff Accountant with review by the Chief Accounting Officer to provide additional oversight.

In future years, management will consider delays to programs when estimating contract expenses and will more closely monitor invoicing versus management's estimate.

***Anticipated Completion Date:*** December 31, 2019

## Finding 2018-002

***Name(s) of Responsible Individual(s):*** Karen Di Spigna

***Corrective Action:*** Management agrees that transactions should be tied to drawdowns at a more granular level. All future drawdowns will have a list of transactions to support amounts requested and documentation will be maintained.

***Anticipated Completion Date:*** July 23, 2019

## Finding 2018-003

***Name(s) of Responsible Individual(s):*** Karen Di Spigna, Chief Accounting Officer

***Corrective Action:*** Management agrees that more clear certification of effort documentation should be maintained. All employees complete monthly timesheets and this award will be added as a separate item to be reported on. The hours reported will then be reviewed by both the employee's supervisor and the Finance office for reasonableness. Timesheet data will be maintained with documentation to support each drawdown.

***Anticipated Completion Date:*** August 31, 2019

## Finding 2018-004

***Name(s) of Responsible Individual(s):*** Scott Dobson, Contracts and IP Specialist

***Corrective Action:*** One of the two subrecipients was informally given the CFDA number through email. Both subrecipients were formally sent notifications of the CFDA number in July of 2019. An annual notification is sent to each subrecipient detailing other required information and the CFDA number will be added to this communication.

***Anticipated Completion Date:*** July 11, 2019