# Okinawa Institute of Science and Technology School Corporation

# **Financial Statements**

Year ended March 2024

From: April 1, 2023

To: March 31, 2024

# **Independent Auditor's Report**

June 19, 2024

The Board of Governors Okinawa Institute of Science and Technology School Corporation

Ernst & Young ShinNihon LLC Okinawa, Japan

Noboru Tajima
Designated Engagement Partner
Certified Public Accountant

Yosuke Fujimoto
Designated Engagement Partner
Certified Public Accountant

### **Opinion**

Pursuant to Article 12, Section 2 of the Okinawa Institute of Science and Technology School Corporation Act, we have audited the accompanying financial statements, which comprise the balance sheet, the statements of income, cash flows, appropriation of retained earnings, costs of conducting business, and notes on significant accounting policies, other explanatory notes to the financial statements, and the related supplementary schedules of Okinawa Institute of Science and Technology School Corporation (the OIST) applicable to the year ended March 31, 2024 based on Cabinet Office Notification No. 525 of November 1, 2011.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the OIST at March 31, 2024, the results of its operations, cash flows, and its costs of conducting business for the year then ended in conformity with accounting standards for the Okinawa Institute of Science and Technology School Corporation (Article 6 of Cabinet Office Ordinance No. 59, 2011).

## **Basis for Opinion**

We conducted our audit in accordance with auditing standards generally accepted in Japan. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the OIST in accordance with the ethical requirements that are relevant to our audit of the financial statements in Japan, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

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

# Responsibilities of the Governors and the Auditors (Mr. Ikeda, Mr. Kaneshima and Mr. Clark ) for the Financial Statements

The Governors are responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles of Okinawa Institute of Science and Technology School Corporation (Article 6 of Cabinet Office Ordinance No. 59, 2011), and for such internal control the Governors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Governors are responsible for assessing the OIST's ability to continue as a going concern and, if necessary, disclosing matters related to going concern.

The Auditors are responsible for overseeing the Governors' financial reporting process.

### Auditor (EY)'s Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the 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. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with auditing standards generally accepted in Japan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.
- Consider internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances for our risk assessments, while the purpose of the audit of the financial statements is not expressing an opinion on the effectiveness of the OIST's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Governors.
- Conclude on the appropriateness of the Governors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the OIST's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the OIST to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation in accordance with accounting principles of Okinawa Institute of Science and Technology School Corporation (Article 6 of Cabinet Office Ordinance No. 59, 2011).

We communicate with the Auditors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

#### **Conflicts of Interest**

We have no interest in the OIST which should be disclosed in accordance with the Certified Public Accountants Act.

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# **Balance Sheets** As of March 31, 2024

(Unit:Yen)

	(Unit: Y
Assets I Noncurrent assets	
1 Properties, plants, and equipment	
Land	1,659,667,000
	644,871
	865,633 48,780,779,238
	016,909 898,971 6,722,117,938
	792,783
	326,406 10,466,377
	089,438
Accumulated depreciation -26,656,	
Books	13,932,232
	813,443
	813,427 287,996
	287,996 0
Construction in progress	853,251,199
Total properties, plants, and equipment	64,361,850,376
2 Intangible assets net of amortization	
Patents	116,542,105
Trademark rights Software	208,077
Patents (in the process of filing)	68,361,432 102,896,771
Others	12,933,297
Total intangible assets, net	300,941,682
3 Investments and other assets	
Long-term deposits	150,000,000
Security deposits  Long-term prepaid expenses	775,000 13,518
Lease investment assets (Long-term)	4,732,438,961
Total investments and other assets	4,883,227,479
Total noncurrent assets	69,546,019,537
Current assets	6 227 704 202
Cash and cash equivalents	6,327,784,292
Accounts receivable Supplies	416,232,067 40,647,100
Advance payments	233,667
Prepaid expenses	88,454,347
Short-term loans receivable	105,000
Prepaid expenses (Out-of-pocket expenses)	62,544
Lease investment assets (Short-term)	164,029,274
Total current assets	7,037,548,291
Total assets	76,583,567,
iabilities  Noncurrent liabilities	
Encumbrance for assets - subsidy for operation	12,377,432,212
Encumbrance for assets - donation	125,173,828
Encumbrance for assets - donated by Japan government	3,826,986
Allowance-retirement benefits	132,710,600
Long-term accrued amounts payable	4,759,939,957
Other noncurrent liabilities	3,919,649,691
Total noncurrent liabilities	21,318,733,274
Current liabilities	
Advance received	296,475,976
Tuition Liabilities	10,340,000
Deposits received - subsidy for operation	10,010,000
	096,951
Deposits received - subsidy for facility 620,	615,019 904,711,970
Deposits received - donation	70,376,372
Deposits received - Kakenhi	179,340,513
Deposits received - others	283,900,968
Accounts payable	3,177,871,748
Accrued expenses	87,060,261
Other current liabilities Total current liabilities	
Total liabilities	26,437,690,
quities	
Contributions	04.017.601.064
Contributions from government	24,317,681,264
Total contributions	24,317,681,264
Additional paid-in contributions	
Additional paid-in contributions  Additional paid-in contributions	44,762,935,982
Accumulated depreciation - directly deducted from equity (-)	-23,144,959,498
	21,617,976,484
Total additional paid-in contributions	
Total additional paid-in contributions  I Retained earnings	
Total additional paid-in contributions  I Retained earnings Voluntary reserve funds	
Total additional paid-in contributions  I Retained earnings  Voluntary reserve funds  Special reserve funds	180,532,854
Total additional paid-in contributions  I Retained earnings  Voluntary reserve funds  Special reserve funds  Accumulated net income	180,532,854 4,029,686,988
Total additional paid-in contributions  I Retained earnings Voluntary reserve funds Special reserve funds Accumulated net income (Net income/(-loss) for the year)	$(\frac{180,532,854}{4,029,686,988} \\ (688,388,994)$
Total additional paid-in contributions  I Retained earnings Voluntary reserve funds Special reserve funds Accumulated net income (Net income/(-loss) for the year) Total retained earnings	180,532,854 4,029,686,988 ( 688,388,994 ) 4,210,219,842
Total additional paid-in contributions  II Retained earnings Voluntary reserve funds Special reserve funds Accumulated net income (Net income/(-loss) for the year)	$(\frac{180,532,854}{4,029,686,988} \\ (688,388,994)$

# **Profit and Loss Statements**

For the year ended March 31, 2024

(Unit:Yen)

0.5				(Unit: Yen)
Ordinary revenues				
Tuition fees			126,865,000	
Subsidy for operation			16,930,651,986	
Subsidy for facility			274,021,000	
Sponsored research from national and local governments			153,777,443	
Sponsored research from nongovernments			1,225,187,135	
Joint research			105,493,064	
Donations			38,747,449	
Subsidy for other			87,750,801	
Property rent revenue			9,598,604	
Land rent revenue			17,165,272	
Reversal of encumbrance for assets - subsidy for operation			2,654,427,640	
Reversal of encumbrance for assets - donations			59,686,275	
Financial revenues				
Interest income		100,216,685	100,216,685	
Miscellaneous revenues		,,	386,456,635	
Ordinary revenues total			300,430,033	22,170,044,989
Ordinary revenues total				22,170,044,707
Operating expenses				
Research and education expenses				
Personnel costs		7,533,535,756		
Other expenses		7,000,000,700		
Research supplies	1,087,249,293			
Supplies & Consumables	542,356,277			
Utilities  Utilities				
	1,511,453,425			
Travel and transportation	729,813,109			
Communication and transportation expenses	67,054,950			
Rent	547,371,548			
Outsource	822,504,939			
Repair costs	469,070,771			
Maintenance fees	2,109,537,567			
Library expenses	259,867,694			
Depreciation	3,140,857,788			
Others	172,327,271	11,459,464,632	18,993,000,388	
General and administrative expenses				
Personnel costs		1,302,049,066		
Other expenses				
Office supplies	55,094,885			
Travel and transportation	140,271,259			
Communication and transportation expenses	52,419,433			
Rent	59,249,365			
Outsource	335,780,007			
Service and advisory fees	67,103,422			
· · · · · · · · · · · · · · · · · · ·				
Advertising expenses	14,003,688			
Depreciation	47,703,990	1 000 500 050	2 204 620 026	
Others	310,964,811	1,082,590,860	2,384,639,926	
Financial expense		107.741.055		
Interest expense		107,541,366		
Foreign currency transaction loss		3,605,013	111,146,379	
Operating expenses total			-	21,488,786,693
Net ordinary income/(-loss)				681,258,296
Extraordinary income				
Reversal of encumbrance for assets - subsidy for operation			120	
Reversal of encumbrance for assets - donation			4,788,875	
Reversal of encumbrance for assets - donated by Japan government			1	
Gain on sales of fixed assets			7,868,271	
Total extraordinary income				12,657,267
Extraordinary loss				
Loss on retirement of noncurrent assets			5,526,569	
Total extraordinary loss				5,526,569
Net income/(-loss)			-	688,388,994
Gross income/(-loss)			-	688,388,994
			-	

# **Statements of Cash Flows**

From April 1, 2023 to March 31, 2024

	(Unit: Yen)
I Cash flows from operating activities	
Tuition fees	137,205,000
Funds received from government - subsidy for operation	19,811,033,964
Funds received from outside parties - sponsored research	1,326,864,658
Funds received from outside parties - donations	34,282,004
Funds received from government - subsidy for others	215,257,360
Funds received from employees - property rent - dormitory	9,683,295
Funds received from others	937,575,359
Net cash increase in advanced-received (Kakenhi:Grant-in-aid for scientific research)	25,120,798
Payments to employees	-8,846,511,136
Purchase of inventories	-11,479,242
Payments of other than payments to employees	-8,941,504,146
Net cash provided by operating activities	4,697,527,914
II Cash flows from investing activities	
Purchase of property, plant, and equipment	-2,988,637,498
Gain on sales of property, plant, and equipment	7,868,271
Purchase of intangible assets	-56,370,310
Funds received from government - subsidy for facility	242,527,916
Payments for other investing activities	-162,463,381
Subtotal	-2,957,075,002
Received interest and dividends	6,279
Net cash used in investing activities	-2,957,068,723
III Cash flows from financial activities	
Payments for finance lease liabilities	0
Net cash used in financial activities	0
IV Foreign exchange gain	-3,605,013
V Net cash increase/(decrease) in cash and cash equivalents	1,736,854,178
VI Cash and cash equivalents at beginning of year	4,590,930,114
VII Cash and cash equivalents at end of year	6,327,784,292

# **Profit Appropriation Statements As of March 31, 2024**

(Unit: Yen)

I Unappropriated retained earnings

Gross profit 688,388,994 Retained earnings at the beginning of a period 3,441,297,994

II Profit appropriation

Special reserve fund 100,000,000

II Retained earnings 4,029,686,988

Note) At the 44th Board of Governors meeting held on May 2024, it was decided to appropriate 50 million yen of the profit carried forward for the next fiscal year as a reserve for repairs(Special reserve fund)for large-scale repairs.

# **Statements of Administrative Service Costs**

From April 1, 2023 to March 31, 2024

1	,	(Unit: Yen)
I Ordinary expenses		
(1) Ordinary expenses stated on Profit and Loss Statements		
Research expenses	18,993,000,388	
General and administrative expenses	2,384,639,926	
Financial expenses	111,146,379	
Extraordinary loss	5,526,569	21,494,313,262
(2) (Less) Revenue from outside parties		
Tuition fees	$\triangle$ 126,865,000	
Sponsored research	$\triangle$ 1,378,964,578	
Joint research	△ 105,493,064	
Donations	△ 38,747,449	
Property rent revenue	$\triangle$ 9,598,604	
Land rent revenue	△ 17,165,272	
Reversal of encumbrance for assets donation	△ 59,686,275	
Financial revenue	△ 100,216,685	
Miscellaneous income	△ 277,036,078	△ 2,113,773,005
Total ordinary expenses	_	19,380,540,257
II Depreciation-directly deducted from equity		2,761,075,283
III Estimated allowance for retirement benefits		618,600
IV Opportunity costs		
Opportunity costs of free rental fee or reduction rental fee from national/local government	159,330,344	
Opportunity costs of national/local government	346,810,628	506,140,972
V Administrative service costs	_	22,648,375,112

#### Notes to Financial Statements

I. Important accounting policy

#### 1. Supplies

Others are reported at lower of cost or progressive average inventory method.

#### 2. Depreciation

#### (1) Property, plant, and equipment

Depreciation is recognized on the straight-line method under The Corporation Tax Law.

In accordance with OIST Accounting standards, Article 40 depreciation on specified assets is directly deducted from equity stated as

"Accumulated depreciation-directly deducted from equity."

# (2) Intangible Assets

Depreciation is calculated on the straight-line method.

Useful life of software for in-house use is amortized over five years.

#### 3. Allowance for retirement benefits

#### (1) Allowance-retirement benefits

Allowance for retirement benefits for employees is recognized on liability for FY2023 within estimated payment amount in the future.

#### 4. Opportunity costs on the statements of administrative service costs

(1) Calculation of opportunity costs of lending by means of free rental fee or reduction rental fee of the property of the national/local governments has been calculated based on the JASDF Onna Sub Base and agricultural land unit price.

#### (2) Interest rate used to calculate the opportunity cost pertaining to government contributions

Opportunity costs of the national/local government are calculated at the percentage of 0.725% which refers to the interest rate for 10-year government bonds at the end of March 2024.

#### 5. Foreign currency transactions

Foreign currency transactions are converted to yen at the spot exchange rate as of the closing date, and the translation difference is recorded in profit and loss.

#### 6. Leases

Finance lease transactions are calculated in accordance with standard sales transaction procedures.

Among those finance lease transactions, non-ownership transfer finance lease transactions where a total amount of leasing is less than 3 million yen, are calculated in accordance with standard operating lease transaction procedures.

#### 7. Accounting standards for income and expenses

(1) Accounting standards related to income from finance leases (lessor)

Accounted for based on the method of allocating an amount equivalent to the interest to each period without posting sales.

#### (2) Revenue of the services for educational research.

The University has revenue of tuition, sponsered research and joint research as the service of educational research.

Tuition revenue is recognized based on the amount received in the current fiscal year.

As for sponsered research revenue and Joint research revenue, in the case of multi-year contract,

the University recognizes revenue equivalent of expense amount for the research. In the last contract year, the University recognizes the remaining amount of total contract amount.

#### 8. Consumption tax

The tax-included method is adopted for consumption tax accounting.

#### II. Changes in accounting policies

Application of Accounting Standard for Revenue Recognition

The "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29, March 31, 2020) is applied from the beginning of this fiscal year,

The University will recognize revenue at the amount expected to be received in exchange for the promised goods or services when those are transferred to the customer.

There is no impact in the financial statement for the adoption of the revenue recognition accounting standard.

#### III. Additional information

#### 1. Summary of transactions and accounting treatment regarding the village zone housings

The University entered into a contract with OKINAWA SCIENTISTS VILLAGE Inc.. (hereafter the "Business Operator") on September 30, 2011, regarding the housings maintenance business. The Business Operator, based on the corresponding contract, was to construct housings located on premises owned by the University that would be for use by students and faculty staff members and transfer the housings to the University after its completion. Construction of the housings was to consist of three phases. The first phase, the second phase, the third-(1) phase and the third-(2) phase were completed at each fiscal year 2012, 2013, 2014 and 2015. The housings were then delivered to the University. The University entered into a contract with OKINAWA SCIENTISTS VILLAGE II Inc. (hereafter the "Business Operator") on June 11, 2019, regarding the housings maintenance business, and the Hill Side and South Hill A, B and C accommodations as Phase 2 of this project was completed and delivered in fiscal year 2020.

Upon completion of the received them from the Business Operator under a long-term installment purchase and at the same time entered into a building loan agreement by way of a periodic lease with the Business Operator, and is leasing the housings. The long-term installment purchase amount in accordance with the acquisition of the housings is the same amount as the lease payments relating to the housings. Further, the payment schedule and the amount to pay each year including interest are also set at the same amount. Hence, the payment amounts for each year are canceled out and no payments are made to each other. The building loan agreement by way of a periodic lease stipulates that the Business Operator cannot in principle cancel the lease contract during the term and that the housings will be returned to the University after the end of the lease term. Lease transactions between the University and the Business Operator are accounted for by treating them as a finance lease where ownership is not transferred (to the lessor).

Furthermore, when accounting for such transactions they are treated as a finance lease where ownership is not transferred (to the lessor),

Furthermore, when accounting for such transactions they are treated as a finance lease where ownership is not transferred (to the lessor), and an amount equivalent to the interest is allocated to each period without posting sales and the housings that were handed over is stated as a lease investment asset.

The University entered into a contract with OKINAWA SCIENTISTS VILLAGE IIInc. (hereafter the "Business Operator") on March 29, 2019, regarding the housings maintenance business, and the Gardens accommodations as Phase 3 of this project was completed and delivered in the Fiscal year 2021.

With the completion of housings, the university will take over the housings from the business operator, and at the same time, set the operating right for the housings and transfer it to the business operator. The consideration for acquiring the building and the consideration for transferring the operating right are the same, and the payments are offset and no payment is made to each other. The transferred housings are recorded in the building, and the consideration for the transferred operating rights is recorded in other fixed liabilities.

Buildings and other fixed liabilities are recorded as depreciation expenses and transferred to other revenues over the contract period.

#### IV. Balance sheets

#### 1. Subsidy for operation and facility

(1) Deposits received - subsidy for operation

Closing balance of encumbrance for construction in progress - subsidy for operation in SC	181,200,180 yen
Closing balance of encumbrance for patent - subsidy for operation in SC	102,896,771 yen
Total of closing balance	284,096,951 yen

#### (2) Deposits received - subsidy for facility

Closing balance of encumbrance for construction in progress - subsidy for facility in SC	620,615,019 yen
Total of closing balance	620,615,019 yen

#### V. Statement of Cash Flows

(1) Breakdown of the balance sheet by year-end balance of funds

Cash and cash equivalent	6,327,784,292 yen
Balance of funds at end of year	6,327,784,292 yen

# (2) Important non-financial transactions

Amount of investments related to finance leases (lessee) newly recognized in the term

O yen

Amount of lease payable related to acquisition of lease assets newly recognized in the term

O yen

# VI. Statements of administrative service costs

Estimated allowance for retirement benefits includes 618,600 yen concerning loaned employees from the government and other organizations.

#### VII. Notes to finance leases

#### 1. Lessee

(1) Details of lease assets

Service vehicles (OIST bus) and research equipment (X-ray photoelectron spectrometer)

(2) Depreciation method of lease assets

 $\leq$  Leased assets relating to ownership-transfer finance lease transactions  $\geq$ 

Ownership-transfer finance lease transactions are depreciated using the same method adopted for self-owned fixed assets.

< Leased assets relating to finance lease transactions without the transfer of ownership >

Depreciated using the straight-line method over the useful life of the lease term, with no residual value.

#### 2. Lessor

(1) Breakdown of investments in leases

(i) Investments and other assets

Portion of lease receivables 5,864,651,494yen Amount equivalent to interest income  $\Delta$ 1,132,212,533yen Lease investment assets 4,732,438,961yen

Bease investment asset

 (ii) Current assets
 260,890,329yen

 Portion of lease receivables
 260,890,329yen

 Amount equivalent to interest income
 △96,861,055yen

 Lease investment assets
 164,029,274yen

(2) Scheduled recoverable amount of the lease receivables part pertaining to lease investment assets after the closing date

(i) Investments and other assets

	Within 1 year		More than 2 year but not more than 3 years		year but not	More than 5 years
Portion of lease receivables	1	261,117,145	261,349,249	261,586,776	261,829,858	4,818,768,466

(Unit: Yen)

(ii) Current assets (Unit: Yen)

	Within 1 year	year but not	More than 2 year but not more than 3 years	year but not	year but not	More than 5 years
Portion of lease receivables	260,890,329	-	-	-	-	-

# VIII. Important subsequent events

Not applicable.

#### Annexed Detailed Statements

1. Acquisition, disposal and depreciation of fixed asset, and accumulated impairment loss

(Includes depreciation, which is excluded from ordinary expenses, specified in the OIST Accounting standards, Article 40, Accounting treatment for depreciation of specific asset).

(Unit: Thousand Yen)

				_		Accumulated de		Accumulated i	mpairment loss			.,
Asset		Beginning balance	Increase	Decrease	Closing balance		Depreciation for FY 2023		Included in ordinary expenses FY2023	Excluded in ordinary expenses FY2023	Closing net book value	Memo
	Buildings	14,741,736	402,700	-	15,144,436	4,082,562	641,890	-	-		11,061,874	
	Structures	483,089	5,244	-	488,334	274,389	19,315	-	-		213,944	
	Machinery	188,502	517	2,307	186,711	183,486	1,007	-	-		3,225	
Property, plant, and equipment	Equipment	29,458,388	3,629,109	412,208	32,675,288	26,475,825	2,468,273	-	-		6,199,463	
(Depreciation - Included in ordinary expenses)	Books	11,750	2,183	2	13,932	-	-	-	-		13,932	
	Vehicle and transportation equipment	25,813	-	-	25,813	25,813	-	-	-	-	0	
	Lease assets	1,240,287	-	-	1,240,287	1,240,287	-	-	-		-	
	Total	46,149,569	4,039,754	414,518	49,774,805	32,282,365	3,130,485	-	-		17,492,439	
	Buildings	57,516,208	-	-	57,516,208	19,797,303	2,400,030	-	-		37,718,904	
	Structures	9,638,682	-	-	9,638,682	3,130,509	324,723	-	-		6,508,173	
Property, plant, and equipment (Depreciation - Excluded from ordinary expenses)	Machinery	43,080	-	-	43,080	35,839	2,886	-	-	-	7,241	
(Depresiation - Excitated from ordinary expenses)	Equipment	302,800	-	-	302,800	180,627	33,380	-	-	-	122,172	
	Total	67,500,771	-	-	67,500,771	23,144,279	2,761,020	-	-	-	44,356,492	
	Land	1,659,667	-	-	1,659,667	-	-	-	-		1,659,667	
Non-depreciable assets	Construction in progress	932,999	831,165	910,914	853,251	-	-	-	-		853,251	
	Total	2,592,666	831,165	910,914	2,512,918	-	-	-	-		2,512,918	
	Land	1,659,667	-	-	1,659,667	-	-	-	-		1,659,667	
	Buildings	72,257,944	402,700	-	72,660,644	23,879,865	3,041,920	-	-		48,780,779	
	Structures	10,121,772	5,244	-	10,127,016	3,404,898	344,039	-	-		6,722,117	
	Machinery	231,583	517	2,307	229,792	219,326	3,893	-	-		10,466	
Total property, plant, and equipment	Equipment	29,761,188	3,629,109	412,208	32,978,089	26,656,453	2,501,653	-	-		6,321,636	
Total property, plant, and equipment	Books	11,750	2,183	2	13,932	-	-	-	-		13,932	
	Vehicle and transportation equipment	25,813	-	-	25,813	25,813	-	-	-		0	
	Lease assets	1,240,287	-	-	1,240,287	1,240,287	-	-	-		-	
	Construction in progress	932,999	831,165	910,914	853,251	-	-	-	-		853,251	
	Total	116,243,008	4,870,920	1,325,432	119,788,495	55,426,645	5,891,506	-	-		64,361,850	
	Patents	227,692	11,648	592	238,748	122,206	29,241	-	-		116,542	
Total distribution of the control of	Trademark right	1,451	-	-	1,451	1,243	33	-	-		208	
Intangible assets (Depreciation - Included in ordinary expenses)	Software	1,176,431	39,047	1,923	1,213,555	1,145,193	24,032	-	-		68,361	
	Other intangible assets	64,081	-	-	64,081	51,179	4,768		-		12,902	
	Total	1,469,657	50,695	2,515	1,517,837	1,319,823	58,075	-	-		198,013	
Intangible assets (Depreciation - Excluded from ordinary expenses)	Other intangible assets	711	-	-	711	679	54		-	-	31	
Non-depreciable assets	Patent in the process of filing	87,143	38,741	22,988	102,896	100.00	-	-	-	-	102,896	
	Patents	227,692	11,648	592	238,748	122,206	29,241	-	-	-	116,542	
	Trademark right	1,451	- 20.6:-	-	1,451	1,243	33	-	-		208	
Total intangible assets	Software	1,176,431	39,047	1,923	1,213,555	1,145,193	24,032	-	-	-	68,361	
-	Patent in the process of filing	87,143	38,741	22,988	102,896	-	-	-	-		102,896	
	Other intangible assets	64,792			64,792	51,859	4,823	-	-	-	12,933	
	Total	1,557,511	89,437	25,504	1,621,445	1,320,503	58,130	-	-	-	300,941	
	Long-term deposits	100,000	50,000	-	150,000	-	-	-	-	-	150,000	
	Investments in securities	5	-	5	-	-	-	-	-		-	
	Security deposit	775	-	-	775	-	-	-	-	-	775	
Investments and other assets	Prepaid expense (long-term)	3,211	-	3,198	13	-	-	-	-		13	
	lease investment assets	4,896,468	-	164,029	4,732,438		-		-	-	4,732,438	
	Total	5,000,460	50,000	167,232	4,883,227		-		-		4,883,227	

#### Notes:

<sup>1.</sup> Increased buildings: Lab5 related 265,362 thousand yen,Lab4 related 25,121 thousand yen

<sup>2.</sup> Increased structures: Outside parking lot lights 2,901 thousand yen

<sup>3.</sup> Increased equipment: Cryo focused ion beam scanning electron microscope 203,500 thousand yen, Ultra-fast nucleotide sequencing system 186,792 thousand yen

<sup>4.</sup> Increased construction in progress :3 aquarium systems 277,023thousand yen, Breeding cage cleaning system 412,500 thousand yen, Lab5 related 52,627 thousand yen,

# 2. Supplies

		Incr	ease	Deci	rease		
Item	Beginning balance	Purchase and Transfer	Others	Consumption and Transfer	Others	Closing balance	Memo
Research supplies	42,044	6,469	1	12,590	I	35,923	
Other	3,894	5,010	1	4,181	1	4,724	
Total	45,939	11,479	-	16,771	-	40,647	

# 3. Voluntary use of national property

Category	Item	Address	Space (m²)	Structure	Opportunity costs (Thousand yen)	Memo
Land	Campus	1919-1 Tancha, Onna-son Okinawa	624,751.77	-	157,437	
Land	Seragaki Marine Station	656 Seragakibaru, Seragaki, Onna-son Okinawa	7,511.50	-	1,892	
	Total		632,263.27	-	159,330	

# 4.PFI

Project	Outline	Туре	Contractor	Contract term	Description
Okinawa Institute of Science and Technology Housing Development Project	Housing development(building) and maintenance, administration, management	вто	OKINAWA SCIENTISTS VILLAGE INC.	From September 30, 2011 to March 31, 2045	First phase:Deliverd between August 2012 and January 2013 Second phase: Deliverd in June 2013 Third-1 phase: Deliverd in August 2014 Third-2 phase: Deliverd in August & October 2015
Okinawa Institute of Science and Technology Housing Development and Operation Project Phase II	Housing development(building) and maintenance, administration, management	вто	OKINAWA SCIENTISTS VILLAGE II INC.	From June 11, 2019 to March 31, 2060	Hill Side: Deliverd in July 2020  South Hill A: Deliverd in July 2020  South Hill B: Deliverd in September 2020  South Hill C: Deliverd in September 2020
Okinawa Institute of Science and Technology Housing Development and Operation Project Phase III	Housing development(building) and maintenance, administration, management	вто	OKINAWA SCIENTISTS VILLAGE III INC.	From March 29, 2019 to March 31, 2061	The Gardens: Deliverd in August 2021

# 5.Allowance-retirement benefits

Category		Beginning Balance	Increase	Decrease	Closing Balance	Memo
Total of accumulated benefits obligation		141,829	16,108	25,227	132,710	
	Obligation of retirement lump-sum grants	141,829	16,108	25,227	132,710	
Unrecognized prior service cost		-	-	-	-	
Unrecognized net actual loss on assets		-	-	-	-	
Pension asset		-	-	-	-	
Allowance-retirement benefits		141,829	16,108	25,227	132,710	

# 6.Contribution and additional paid-in contribution

	Category		Increase	Decrease	Closing balance	Memo
Contribution	Contribution from national government	24,317,681	-	-	24,317,681	
	Total	24,317,681	-	-	24,317,681	
Additional paid- in contribution	Additional paid-in contribution					
in contribution	Subsidy for Facility	44,762,935	-	-	44,762,935	
	Total	44,762,935	-	-	44,762,935	
	Accumulated depreciation directly deducted from equity	20,383,884	2,761,075	-	23,144,959	
	Balance	24,379,051	△ 2,761,075	-	21,617,976	

# 7. Changes in reserve fund

Category	Beginning balance	Increase	Decrease	Closing balance	Memo
Special reserve fund	58,867	-	-		With regards to allowance-retirement benefits for employees in the previous corporation that were not posted in the balance sheet in accordance with accounting standards for an independent administrative institution, at the beginning of the first fiscal year, we posted the required amount for the reserve as a liability and handled the corresponding reserve amount as a school subsidy in the same fiscal year. In this way, we monetized the required amount for the reserve.
Special reserve fund	21,665	-	-		With regards to allowance-bonuses in the previous corporation that were not posted in the balance sheet in accordance with accounting standards for an independent administrative institution, at the beginning of the first fiscal year, we posted the required amount for the reserve as a liability and handled the corresponding reserve amount as a school subsidy in the same fiscal year. In this way, we monetized the required amount for the reserve.
Special reserve fund	-	100,000	-	100,000	Reserve for major repairs to the domitories.
Total	80,532	-	-	180,532	

		(Unit: Thousand Yen
Account item	Amount	Memo
Research expenses Salaries - Base	6,272,745	
Salaries - Base Salaries - Allowance	337,054	
Salaries - Anowance Salaries - Commutation	58,085	
Salaries - Communication Salaries - Over time	52,385	
Salaries - Others	52,405	
Periodic retirement benefits	8,087	
Legal welfare	752,771	
Research supplies	1,087,249	
Supplies	282,986	
Consumables	259,369	
Utilities	1,511,453	
Travel and transportation - Domestic	118,036	
Travel and transportation - International	338,004	
Travel and transportation - Invite (Domestic)	111,904	
Travel and transportation - Invite (International)	151,002	
Travel and transportation - Others (Domestic)	2,416	
Travel and transportation - Others (International)	8,448	
Communication and transportation expenses	67,054	
Lease fees	72,875	
Rent fee - Land and buildings	427,316	
Rent fee - Others	47,179	
Welfare expenses	77	
Event expenses	26,964	
Payment commissions	5,892	
Membership fees	44,831	
Meeting expenses	5,690	
Training fees	6,123	
Honorariums	23,287	
Outsource	822,504	
Repair costs	469,070	
Maintenance fees	2,109,537	
Insurance - Property	22,431	
Advertising expenses	8,444	
Depreciation - Buildings	637,519	
Depreciation - Structures	19,268	
Depreciation - Machinery	1,007	
Depreciation - Equipment	2,455,962	
Depreciation - Intangible assets	27,099	
Library expenses	259,867	
Taxes and dues	4,044	
Import consumption tax	7,089	
Other expenses	17,394	
Total:	18,993,000	
General and administrative expenses		
Executive salaries	104,962	
Salaries - Exe commutation	174	
Salaries - Base	935,978	
Salaries - Allowance	56,784	
Salaries - Commutation	16,467	
Salaries - Over time	20,046	
Salaries - Others	2,497	
Periodic retirement benefits	8,226	
Legal welfare	156,911	
Research supplies	10,596	
Supplies	3,269	
Consumables	51,825	
Utilities	8,915	
Travel and transportation - Domestic	36,780	
Travel and transportation - International	22,231	
Travel and transportation - Invite (Domestic)	16,028	
Travel and transportation - Invite (International)	33,484	
Travel and transportation - Others (Domestic)	15,354	
Travel and transportation - Others (International)	16,390	
Communication and transportation expenses	52,419	
Lease fees	4,528	
Rent fee - Land and buildings	39,394	
Rent fee - Others	15,325	
Welfare expenses	10,757	
Event expenses	1,712	
Payment commissions	38,998	
Membership fees	7,329	
Meeting expenses	4,410	
Training fees	12,429	
Professional fees	41,214	
Honorariums	25,889	
Outsource		
	335 780	
Repair costs	335,780 2,131	
Repair costs  Maintenance fees	2,131	
Maintenance fees	2,131 29,847	
Maintenance fees Insurance - Property	2,131 29,847 34,613	
Maintenance fees Insurance - Property Advertising expenses	2,131 29,847 34,613 14,003	
Maintenance fees Insurance - Property Advertising expenses Patent expenses	2,131 29,847 34,613 14,003 20,034	
Maintenance fees Insurance - Property Advertising expenses Patent expenses Depreciation - Buildings	2,131 29,847 34,613 14,003 20,034 4,370	
Maintenance fees Insurance - Property Advertising expenses Patent expenses Depreciation - Buildings Depreciation - Structures	2,131 29,847 34,613 14,003 20,034 4,370 47	
Maintenance fees Insurance - Property Advertising expenses Patent expenses Depreciation - Buildings Depreciation - Structures Depreciation - Equipment	2,131 29,847 34,613 14,003 20,034 4,370 47 12,310	
Maintenance fees Insurance - Property Advertising expenses Patent expenses Depreciation - Buildings Depreciation - Structures Depreciation - Equipment Depreciation - Intangible assets	2,131 29,847 34,613 14,003 20,034 4,370 47 12,310 30,976	
Maintenance fees Insurance - Property Advertising expenses Patent expenses Depreciation - Buildings Depreciation - Structures Depreciation - Equipment Depreciation - Intangible assets Library expenses	2,131 29,847 34,613 14,003 20,034 4,370 47 12,310 30,976 2,003	
Maintenance fees Insurance - Property Advertising expenses Patent expenses Depreciation - Buildings Depreciation - Structures Depreciation - Equipment Depreciation - Intangible assets Library expenses Taxes and dues	2,131 29,847 34,613 14,003 20,034 4,370 47 12,310 30,976 2,003 94,892	
Maintenance fees Insurance - Property Advertising expenses Patent expenses Depreciation - Buildings Depreciation - Structures Depreciation - Equipment Depreciation - Intangible assets Library expenses Taxes and dues Import consumption tax	2,131 29,847 34,613 14,003 20,034 4,370 47 12,310 30,976 2,003 94,892 201	
Maintenance fees Insurance - Property Advertising expenses Patent expenses Depreciation - Buildings Depreciation - Structures Depreciation - Equipment Depreciation - Intangible assets Library expenses Taxes and dues	2,131 29,847 34,613 14,003 20,034 4,370 47 12,310 30,976 2,003 94,892	

(Unit: Thousand yen)

			•			
Category	Received amount	Encumbrance for construction in progress	Encumbrance for patents in the process of filing	Encumbrance for assets	Revenue from Subsidy for operation	Memo
The Granting of Subsidies to the Okinawa Institute of Science and Technology	19,809,133	72,643	35,285	2,781,343	16,919,861	
Total	19,809,133	72,643	35,285	2,781,343	16,919,861	

Notes: Revenue of Subsidy for operation on the P/L includes 9,732 thousand yen produced by transferring from Patents and construction (in the process of filing) acquired in the past fiscal year to patent other expenses.

# 10-1.Subsidy for facility

(Unit: Thousand yen)

			Transa	actions		
Category	Received amount	Encumbrance for construction in progress	Additional paid-in contribution	Deposits received- subsidy for facility	Others	Memo
OIST Subsidy for Facility as of December 14, 2022 2nd data center	25,586	25,586	-	1	-	
OIST Subsidy for Facility as of April 1, 2023 Infrastructure	360,677	91,386	-	-	269,291	
Subsidy for the Development of Facilities for Promoting Science and Technology based on Regional Industry-Academia-Government Collaboration	89,480	89,480	1	1	-	
Total	475,744	206,453	0	-	269,291	

# 10-2 Other subsidies

						(Cint. Thousand yen)	
			Transactions				
Category	Received amount	Encumbrance for assets	Deposits received - subsidy (long-term)	Revenue from Subsidy	Others	Memo	
OIST Projects to Solve SDGs Social Issues	20,741	-	-	20,741	-		
Project to promote Okinawa-style startup hubs	13,753	-	-	13,753	-		
Industry-academia collaboration promotion project	41,096	41,096	-	-	-		
AMED Grant: Project for Support the Advancement of Life Science (drug development etc)	26,125	-	-	26,125	-		
Project to promote decarbonization of septic tank systems	1,900	1,900	-	-	-		
Project to Support Businesses Receiving Special High-voltage Electricity	138,274	-	-	27,131	111,143	Others amounts to be returned	
Total	241,889	42,996	-	87,750	111,143		

# 11. Personnel costs for executives and employees

(Unit: Thousand yen)

Catagomy	Compensati	on/Salaries	Retirement benefits			
Category	Amount	Number of people	Amount	Number of people		
Executives	( 6,800 )	( 2 )	( - )	( - )		
Executives	98,336	3	18,832	1		
Employage	( 58,224 )	( 36 )	( - )	( - )		
Employees	7,746,226	1,202	6,394	1		
Total	( 65,024 )	( 38 )	( - )	( - )		
Total	7,844,563	1,205	25,227	2		

Notes: 1. Payments of compensation/salaries and retirement benefits for executives (including part-time executives) are made in conformity with the regulations as follows in principle:

Policy Library chapter 34 and chapter 35

2. Payments of compensation/salaries and retirement benefits for employees are made in conformity with the regulations as follows in principle:

Policy Library chapter 34 and chapter 35

- 3. Number of people is stated on a yearly average basis.
- 4. Personnel costs on the P/L includes legal welfare costs (909,683 thousand yen) other than the figures in the above table.
- 5. Figures for part-time executives and employees are put in parentheses, which is not included in each total amount.
- 6. Total amounts doesn't include allowance-retirement benefits and allowance-bonuses.

# 12. Segment information

(Unit: Thousand Yen)

Category	Research Unit	Research Service	Education	Subtotal	Administration	Total
Ordinary revenue						
Tuition fees	-	-	126,865	126,865	-	126,865
Subsidy for operation	7,577,374	4,958,736	1,719,555	14,255,667	2,674,984	16,930,651
Subsidy for facility	-	-	-	-	274,021	274,021
Sponsored research	1,218,906	209,892	946	1,429,745	54,711	1,484,457
Donation	14,183	3,790	1,623	19,597	19,150	38,747
Subsidy for others	-	39,878	-	39,878	47,872	87,750
Reversal of encumbrance for assets - subsidy for operation	1,185,750	1,423,076	2,235	2,611,062	43,365	2,654,427
Reversal of encumbrance for assets - donation	56,720	2,820	-	59,540	145	59,686
Miscellaneous revenue	3,403	157,130	2,876	163,411	249,808	413,220
Financial revenue	-	100,210	-	100,210	6	100,216
Total	10,056,339	6,895,536	1,854,102	18,805,979	3,364,065	22,170,044
Operating expenses	9,491,003	7,336,649	1,733,634	18,561,286	2,927,499	21,488,786
Net ordinary income	565,336	△441,112	120,468	244,692	436,565	681,258
Total assets	2,823,705	66,585,283	14,295	69,423,284	7,160,283	76,583,567

(Notes to segment information)

(1) Definition of segments and detailed activities

Contents of Activities

Research unit: Molecular science, neuroscience, promotion of research and development for mathematics and computer science,

the training of researchers, etc.

Research service: Support for research units, dissemination of research results, etc.

Education: Matters related to graduate student enrollment and education

(2) Amounts that are not allocatable and categorized as "Administration" are mainly related to administrative divisions as following.

Personnel costs1,302,049thousand yenOthers728,434thousand yenOutsource364,663thousand yen

(3) Total assets categorized as Administration mainly include:

Cash and cash equivalents 6,327,784 thousand yen
Accounts receivable 377,697 thousand yen

(4) Depreciation (directly deducted from equity) and estimated allowance for retirement benefits by segment are indicated below.

	Research Unit	Research Service	Education	Subtotal	Administration	Total
Depreciation (directly deducted from equity)	-	2,761,075	-	2,761,075	-	2,761,075
Estimated allowance for retirement benefits	-	-	-	1	618	618

# 13. Donation

Category	Received amount (Thousand yen)	Case	Memo
Research Unit	5,776	282	Donation of goods 280case: 5,702Thousands yen
Research Service	2,250	4	Donation of goods 0case: 0Thousands yen
Education	1,288	32	Donation of goods 29case: 986Thousands yen
Administration	29,238	645	Donation of goods 601case: 2,947Thousands yen
Total	38,553	963	

# 14. Sponsored research

Category	Beginning Balance	Received Amount	Sponsored Research Revenue	Closing Balance
Research Unit	406,947	836,564	1,115,805	127,707
Research Service	3,026	84,580	82,773	4,832
Education	-	946	946	-
Administration	1,398	66,575	54,711	13,261
Total	411,372	988,667	1,254,237	145,802

# 15. Joint research

Category	Beginning Balance	Received Amount	Joint Research Revenue	Closing Balance
Research Unit	118,076	125,435	103,101	140,410
Research Service	1,391	1,000	2,391	-
Total	119,467	126,435	105,493	140,410

# 16. Sponsored business

Category	Beginning Balance	Received Amount	Sponsored business Revenue	Closing Balance
Research Service	-	124,726	124,726	-
Total	-	124,726	124,726	-

# 17. Primary assets, liabilities, expenses, and revenues

# (1) Cash and bank deposits

(Unit: Thousand Yen)

Category	Amount	
Cash	325	
Bank deposits	6,327,458	
Total	6,327,784	
Long-term deposits	150,000	

Notes:1. Long-term deposits are funds set aside for major repairs to the dormitories.

# (2) Grant-in-aid for scientific research

(Unit: Thousand Yen)

Category	Received Amount	Number	Memo
9			
Scientific research (A)	( 14,300 )	( 7)	
	4,200	6	
G : «:G 1.(D)	( 115,875 )	( 39 )	
Scientific research (B)	33,060	33	
	( 40,240 )	( 39)	
Scientific research (C)	12,072	38	
	( 2,600 )	( 1)	
Scientific research (S)	780	1	
Challenging Bessensh	( 18,400 )	( 8)	
Challenging Research (Exploratory/Pioneering)	5,520	7	
(=::4			
Early Career Scientists	( 52,980 )	( 38 )	
	15,150	37	
JSPS Fellows	( 43,142 )	( 49 )	
	3,930	10	
Grant-in-Aid for Research Activity	( 9,900 )	( 9)	
Start-up	2,970	9	
Fund for the Promotion of Joint	( 17,000 )	( 2)	
International Research (Home-Returning	5,100	2	
Researcher Development Research) Fund for the Promotion of Joint	( - )	( -)	
International Research (Fostering Joint	3,510	1	
International Research (A)) Fund for the Promotion of Joint	( 1,000 )	( 1)	
International Research (Fostering Joint			
International Research (B)) Fund for the Promotion of Joint	300	1	
International Research (International	( 700 )	( 1 )	
Collaborative Research)	210	1	
Grant-in-Aid for Scientific Research on	( 2,183 )	( 3 )	
Innovative Areas	655	3	
Grant-in-Aid for Transformative	( 90,840 )	( 12 )	
Research Areas (A)	27,252	12	
Grant-in-Aid for Transformative	( 3,000 )	( 1)	
Research Areas (B)	900	1	
rana n	( 608 )	( 4)	
JSPS Research Support Allowance	-	-	
	( 3,000 )	( 1)	
Asahi Glass Foundation Research Grant		1	
	( 2,002 )	( 2)	
Iwatani Foundation Research Grant	2,002 )	2	
Proceeds Count from I. Clinical	700 \		
Research Grant from Japan Shirouri Anti- Corrosion Association	( 700 )		
Corrosion Association	- 1000 )	1	
Inamori Foundation Research Grant	( 1,000 )	( 1)	
	=	1	
Research Grant from Nakatsuji	( 1,000 )	( 1)	
Souchisha	-	1	
Total	( 420,472 )	( 220 )	
Total	115,609	168	

Notes:1. Received amount indicates the amount for administrative activities, and the amount for research activities are put in parenthesis, which is not included in each amount.

- Scientific research (A) Systematic understanding of the zooxanthellae symbiotic system that thrives on coral reefs; an approach through an interdisciplinary research system
  - Research on statistics and machine learning methods that support adaptive clinical research in personalized medicin
  - Elucidation of the role of biomineralization in the carbon cycle Research Project
  - Spin measurement of supermassive black holes and verification of rotational-energy extraction mechanism via magnetic field
  - Revealing the nano-liquid signaling platform by developing the ultrafast single-molecule super-resolution method
  - Large-scale distributed quantum computer architecture

#### Scientific research (B) - The neural mechanism of patience brought about by confidence that "behavior changes when the mind changes"

- Time-resolved ARPES of excitons in 2D semiconductors
- Adaptation of marine zooplankton to climate change conditions: a multi-omic study of molecular mechanisms
- DNA replication dynamics in living bacteria - Genetic targeting of a synthetic dye for voltage imaging of cerebellar Purkinje neurons during a tongue grasping task
- Imaging trions and their dynamics in momentum space
- Role of Dynein Heavy Chain 3`UTR in the axonal localization and translation of its mRNA
- Thyroid hormones and Pigmentation pattern evolution in clownfish
- Transcriptional and epigenetic programs of phenotypic plasticity to heatwaye in reef fish
- Visualization of degradation mechanisms and ions migration pathways in perovskite solar cells
- Revealing symbiotic mechanisms from useful metabolites of microorganisms in corals
- Construction of a simultaneous multi-point observation system for simultaneous spawning of corals using smartphone mobile communication networks
- Immune cell-like functions of epithelial cells induced by MHC-I signal
- Understanding and application of the mechanism by which glycolysis and JunB regulates chromatin states in autoimmune T cells
- Understanding genomic bases of coral-algae symbioses occurring in nature
- Diversification of termitophilic honeycakes associated with coevolution with host termite
- Significance, generality and mechanism of dynamic information representation by memory engrams
- Highly Efficient Organic Long-persistent Luminescent System by Improving Photo-Induced Charge Separation process
- Neural basis of novelty-seeking behavior interwoven with curiosity and memory and its variability
- Research and development of nonlinear Selective Inference for high-dimensional and small number of samples data
- Understanding the molecular basis of cellular senescence triggered by cell membrane damage and its significance in biological systems systems
- Evolutionary origins of the accumulative nervous system approached through developmental, physiological, and functional analysis of the pharyngeal nervous system of cnidarians
- Elucidation of Reproductive Division of Labor Control Mechanisms in Ant Societies Using an Automated Behavior Tracking System
- Development and implementation of protected area introduction designs that are robust to future uncertainties
- Elucidation of the neural mechanism based on serotonin in the functional difference between the orbitofrontal cortex and the medial prefrontal cortex
- $\hbox{-} \quad Elucidation of the biological mechanisms of reef-building coral-dinoflagellates symbiosis using in vitro system \\$
- Evaluation of molecular tracers for the quantification of anthropogenic secondary organic aerosol
- Complexity of unicellular organisms: approaching foraminiferal subsingle cell gene expression and hyperfine structure analysis
- Super random matrix theory and topological invariants
- Realization of high-fidelity quantum logic gates using electron spins on superfluid helium
- Establishment of an optimization method for home care care plans based on predictions of activities of daily living
- Nonlinear partial differential equations on sub-Riemannian manifolds based on viscosity solution theory
- Common principles of REM sleep revealed through comparative neuroscience
- Formation of scene representations in the cortex --- Hierarchical intermediate representations connecting surfaces, objects, and scenes
- Formation of object representations in the cortex --- Mixed simultaneous selectivity and collective encoding in the intermediate layer
- Elucidation of the functional structure of the dynein complex / cluster that controls the formation and placement of the mitotic spindle
- Elucidation of the neural mechanisms of higher-order functional development controlled by social vocal communication during early childhood
- Demonstration and miniaturization of a measurement method for "ease of particle filling" using gravitational action on a particle concentrated layer

#### Scientific research (C)

- 3D microfluidics for extensional rheometry
- Accounting for evolutionary and socioeconomic impacts in modern fisheries sci ence and management
- Translational pilot study for dissemination of ADHD parent training and teacher video materials - Dinuclear Cobalt Catalyst Activation of Molecular Hydrogen and Application to Nitrogen Molecular Reduction Reaction
- Development of Nano Gas Sensors Based on Single Atomically Precise Graphene Nanoribbons
- Drp1-mediated mechanism of endoplasmic reticulum / mitochondrial contact field formation and role of apoptosis induction - Elucidating the mechanism that measures mitotic duration to prevent proliferation of defective cells
- Fiber-integrated diamond-based whispering-gallery-mode magnetometers
- High-resolution spatiotemporal analysis of harmaline-induced tremor and inferior olive activity in living mice
- KLR algebras and wreath zigzag algebras
- large benthic foraminifera as a model for eukaryote-eukaryote photosymbiosis
- Mathematical Modeling of Human Neurophysiological Responses as Feedbacks for Generating Naturalistic Robot Behaviour
- Modeling plant adaptation in the context of climate change using genomics and epigenomics of stress tolerant Mangrove trees
- Photoinduced C-H bond fluoroalkylation and aryl-heteroatom coupling catalyzed by naphthyridine complexes of earth-abudant metals
- Role of amygdala in fear and anxiety behaviors
- Sorting and Imaging Micro- and Nano-Particle Pollutions in Aqueous Systems Using a Chiral Plasmonic Optical Tweezers
- The Mechanism of Endoplasmic Reticulum Proteostasis and Proteotoxicity in Retinal Degeneration
- Translational research: Incorporating experimental evidence on altered reward and punishment sensitivity into behavior management strategies for ADHD - Using symmetry to enhance quantum batteries and heat engines
- Analysis of the molecular mechanisms of early mouse embryonic morphogenesis regulated by the Wnt/PCP signaling pathway
- Effects of BVOC emissions from Yambaru forest on local atmospheric environment; machine learning based evaluation - Exploring the evolutionary process of migratory patterns; early life history and endocrine approach
- Nonlinear Partial Differential Equations on Metric Spaces
- Elucidation of a new control mechanism of the brain-spinal cord neural circuit during fine movements (fine movements of fingers)
- Spin-nematic states via a quantum spin solver specialized for high fields
- Unraveling taxonomic diversity and evolutionary dynamics of a remarkable ant radiation (Hymenoptera: Formicidae: Terataner) in Madagascar based on next-generation-sequencing and x-ray
- In vivo imaging of endocannabinoid-regulated neuronal network activity coupled with 3D movement analysis in freely behaving mice
- Elucidating the mechanisms underlying state dependent sensory processing
- Elucidating the regulatory mechanism of gene expression in pearl formation at the one-cell level - Diversity of synaptic mass establishment time that changes with neurotransmitter transport rate and its physiological significance
- Search for FGF ligands that induce lens fiber cell differentiation - Development of a patient-personalized synapse proteomics technology for advancing precision diagnosis of mental disorders.
- When did vertebrates lose chitin and establish a symbiotic relationship with mucus-layer-assimilated intestinal bacteria?
- Unravelling the mechanism of the bacterial flagellar hook polymerization dependent on the hook-capping protein - Understanding the adhesion mechanism of type V pili for the development of methods to control intestinal Flora
- Synaptic vesicle transport revealed by electrophysiological and imaging studies
- Elucidating the effect of boundary curvature on the wrinkling of thin suspended films by theory and experiment
- ATP-dependent liquid phase separation during aging and neurodegeneration

Scientific research (S)

- Working principle of the idling brain

- Challenging Research (Exploratory/Pioneering) Next generation XUV source for time-resolved nano-ARPES and PEEM
  - Toward the development of a high-throughput reconstruction method of termite gut bacterial genomes
  - Challenge to create cross-breeded seaweed Using Cladosiphon okamuranus
  - Controlling the Microstructure and Function of Graphene Nanoribbons Using Advanced Spectroscopy and Precision Synthesis
  - Reliving termite evolution through experimental replacement of gut microorganisms
  - Development of the ultrafast depolarization detection microscope and unravelling of actin membrane skeleton dynamics and neuronal diffusion barriers
  - Development of an accurate and noninvasive identification method for Ryukyuan textiles

#### Early Career Scientists -

- Adaptive RNA editing in Cephalopods Analysis of blow-up phenomena for nonlinear parabolic equations
- Colloidal-rods for examining polymer dynamics in complex flows
- De Novo Directed Evolution Approach to Study Complex Kinase Signaling
- Dispersive readout of the electrons on Helium Rydberg state with the Landau levels
- Enhancing the Site-directed RNA Editing Toolkit with Cryo-EM Structures of Native RNA Editing Complexes
- Evolutionary forces driving the diversity of protist symbioses
- Extending the scope of ancestral sequence reconstruction for protein engineering
- Health Policies, Human Capital Accumulation, and Intergenerational Mobility
- Hydrodynamic effect on the production and fate of coral mucus
- Impact of mitochondria dysfunction in motoneuron death in Amyotrophic lateral sclerosis: a new opportunity for biomarker and therapeutics discovery
- Interaction of non-Newtonian fluids with deformable structures in microscale biological process - Interaction-based markers of mental illnesses based on sensorimotor interaction patterns: towards the development of early, non-invasive, and specific measures of the risk for mental illness
- Irreducible representations of cyclotomic Hecke algebras
- Is active perception better than passive perception? Examining the role of action in perception through a systematic literature review and comprehensive behavioral experiments
- Microbubble resonator dispersion engineering for blue-band soliton comb generation
- Neural mechanisms underlying behavioral flexibility
- Numerical Study of Quantum Spin-Nematic Order in Frustrated Ferromagnets and its Relation to Quantum Spin Liquids
- Population genomics study of the cosmopolitan appendicularian Oikopleura dioica in northwest Pacific for uncovering population structure and genetic diversity
- Quasiconformal and Sobolev mappings on metric measure spaces
- Repeated evolution of ultra-fast mandibular attacks in termites
- Rydberg atoms interfaced with an optical nanofiber
- Statistics as a useful resource for work production: the Pauli engine
- Study of enzymes inside liquid-liquid phase separated crowded droplets
- The correlation and contribution of spatiotemporal firing pattern of inferior olive neurons to the cyclical movement
- The effects of leaf litter phytochemistry on the structure and functioning of microbial decomposer communities.
- The function of the NCM-HVC connection and its retraction in juvenile songbirds
- Unlocking the epigenetic potential of stress tolerance in rice
- Modeling neural language processing by attractor networks
- Basic research for device development using atomic layer semiconductor antimonene
- Contact-based behavioral rules for insect collective motion
- The evolutionary transition from minimal cells to organelles
- Ancestral Functions of PRXamide Neuropeitdes and Evolutionary Origin of Endocrine Systems: Insights from Functional Analysis in a Model Sea Anemone
- Control and characterization of cell differentiation and reprogramming by novel viral vectors
- Development of simultaneous ultra-fast 3D super resolution imaging and 3D single molecule tracking microscope system
- Elucidation of the role for transcription factor JunB in exhausted CD8 + T cells
- Regulatory mechanism of translocation of nascent proteins via translation rate change Drug-induced schizophrenia model primate common marmoset creation and pathological analysis
- JSPS Fellows Imaging Trions in 2D Dimensional Transition Metal Dichalcogenides Moire Heterostructures

#### BrainMaps - a unified web platform for novel model organism brain atlases

- Evaluating patterns in extinction through the ant fossil record
- The Evolution and Functional Morphology of Ant Legs
- Evolution of ant digestive systems in relation to ecology, behavior, and social organization
- Unlocking the epigenetic potential of stress tolerance in rice
- Effects of early auditory experiences on song discrimination in female zebra finches, Taeniopygia guttata
- Functional analysis of comb jelly Pou transcription factors reveals the evolutionary origins of nerves
- Foundation of plasticity in anemonefish pigmentation
  A new approach to address the mystery of cuttlefish camouflage
- The functional role of photosynthesis-related genes in non-photosynthetic symbionts of corals
- Elucidation of color patterns that control symbiosis and competition in coral reef fish communities
- Development of ultra-low-noise amplifier using spin maser in diamond for microwave quantum technologies
- Elucidation of balance function using the mouse tail
- Metamaterial Tweezers for Trapping Quantum Dots
- Elucidation of symbiotic metacommunity maintenance system using landscape genetics method
- Elucidation of the control mechanism of transgenerational epigenetic transmission by mobile molecules
- Macroscopic trends in social evolution of termites
- Building a skill development system for university staff in acquiring overseas research funds
- Elucidation of a critical disjoining pressure of particle-stabilized droplets under drying-induced compression
- Exploring natural analogues of future oceans to determine the adaptive potential of marine fishes to climate change Elucidating the effects of climate change-induced heat waves on coral reef fish
- Role of spontaneous activity in memory function
- Establishment of a model for the coral-zooxanthellae symbiotic system using symbiotic host cells and elucidation of the molecular mechanism
- Memory protected from extreme neuroplasticity: Insights from artificial hibernation
- Elucidation of the mutation rate as driver of insect endosymbiont genome evolution
- Research of decomposition mechanism of mixed cation-anionic metal halide perovskite material
- Cell cycle-dependent dynein adaptor switching
- Comprehensive identification of cell membrane repair factors and elucidation of novel transport mechanisms to membrane damage sites - Evolutionary process of termite construction revealed by comparative and constructive approach
- Understanding the cellular response to calcium influx based on endoplasmic reticulum-mitochondria interaction
- Cascading effects of microbial diversity on phytochemistry, herbivore immunity and predator behavior - Improvement of mental and physical functions by body modulation and nerve modulation
- Control of cortical dynamics by the claustrum and its neuromodulation by serotonin
- Generation of the whole-brain atlas of the cuttlefish via tissue clearing and 3D imaging Unconventional Excitations and Information Spreading in Frustrated Quantum Magnets
- Supramolecular Polycyclic Aromatic Hydrocarbons: Structure and Morphology in Self-Assemblies
- Synthesis of Water-Soluble Nanographene Fluorophores for Super-Resolution Imaging Computational functions of circuits in the apical cortex and thalamus under multisensory conflict
- Friend or foe? Investigating the role of microglia in chronic photoreceptor degeneration using zebrafish
- Is the Ubieda Poritidae community resistant to bleaching robust? Is it vulnerable? Verification from biology and geology-- Investigate the role of the immune system in modulating motor behavior in a maternal immune activation mouse model of autism spectrum disorder
- Development of an assessment method for ADHD based on reward and punishment sensitivity, and examination of its practicality,
- Effect of early-life stress on functional development of raphe-somatosensory neuron-astrocyte network

- Prevention and treatment: Utilizing the incubation period to prevent chronic epileptic seizures
- Effects of turbulence on feeding behavior and energy cost-benefit of coral reef fish
- Grant-in-Aid for Research Activity Start-up
- Elastic turbulence in micro canopy flows, effects of rheology and geometry
- Eleprep: Developing a Modular Electrochemical-Microfluidic Biosensor for Simultaneous Detection of Seven Foodborne Pathogens
- How Interaction of Family Friendly Policies and Firm Decisions Affects Fertility
- Identifying tipping points and safe operating spaces in sustainable fisheries management under future climate change
- Computational modeling of IP3 production in neuronal dendritic spines based on the distribution pattern of PIP2 and mGluRs
- Response diversity: elucidating the long sought-after mechanisms underpinning ecosystem stability Synergistic catalysis for the sustainable synthesis of semiconducting polymers
- Tracing the brain mechanisms of affective touch.
- Single-nucleus RNA sequencing for elucidation of neural circuit mechanisms in corticospinal tracts Home-Returning Researcher Development Research - Identification of brain-spinal cord neural circuits involved in fine motor movements (fine movements of hands) and elucidation of their control mechanisms
  - Control of the microstructure and function of graphene nanoribbons using advanced spectroscopy and precision synthesis
  - Fostering Joint International Research(A) Structure of animal cellulose synthase

  - Fostering Joint International Research(B) New trends in parabolic equations with nonlocal structures
- International Collaborative Research Ecomorphology driving adaptive radiation of cichlid fish in the three great ancient lakes of Africa
- Grant-in-Aid for Scientific Research on Innovative Areas Enhanced capacities of neuronal circuit by extensive song learning during development in zebra finches
  - Physical Properties of Quantum Liquid Crystals - Construction of quantum liquid crystal theory

  - Grant-in-Aid for Transformative Research Areas (A) Cellar and intracellular dynamics via reproductive-specific RNA silencing
    - Simultaneous voltage and calcium imaging and mRNA extraction from single neurons in-vivo
    - Decoding the astrocyte structural basis that integrates synaptic inputs
    - Higher functional adaptation census of auditory memory neural circuits during song learning development
    - Plant epigenome regulation under fluctuating environment
    - Elucidation of neural circuit mechanisms of sensory and motor cortices based on the duality of inference and control
    - Advanced Bioimaging Support
    - Brain function dynamics under low temperature conditions
    - Hibernation Biology 2.0 (Administrative Group)
    - Multi-layered regulatory system of plant resilience under fluctuating environment
    - Development and validation of a unified theory of prediction and action
    - Entanglement Witnesses in Quantum Frustrated Magnets

  - Grant-in-Aid for Transformative Research Areas (B) The role of substances in symbiosis, exploring related species that do or do not require symbiosis

    - JSPS Research Support Allowance JSPS Invitational Fellowships for Research in Japan(Long-tem)
      - JSPS Invitational Fellowships for Research in Japan(Short-tem)
      - JSPS Summer Program

    - Asahi Glass Foundation Research Grant Spin-based cryogenic microwave amplifier for quantum technologies
      - Iwatani Foundation Research Grant Design of protein wires for electron transmission as alternative for sustainable Energy - Hormone levels in fish as a measure for marine environmentalmonitoring

  - Research Grant from Japan Shirouri Anti-Corrosion Association Dynamic characteristics of barricade structures erected by termites and elucidation of the behavioral mechanisms that make them possible.
    - Inamori Foundation Research Grant Analysis of trait changes and gene expression in plants by manipulation of light quality conversion

    - Research Grant from Nakatsuji Souchisha Exploring the Genetic Background of the Evolution of the Xenoglossid Right-Handed Mussel

#### 18. Related Public Corporations

#### FRIENDS OF OIST, INC.

- (1) The purpose of the Friends of OIST foundation is to:
  - ① Promote science and technology to address global grand challenges through the support of research and educational activities conducted by the OIST and its collaborators and partners in the United States, Japan, and abroad.
  - ② Promote the globalization of science and technology research and education originating in Japan by increasing awareness of OIST and its research programs in the United States, and by expanding its global impact.
  - ③ Enable self-sustaining economic growth in Okinawa by fostering an environment that supports innovation, entrepreneurship, and the application of scientific and technological knowledge to meet the world's needs.
- (2) Relationship between the Board of Directors and OIST

Jerome Isaac Friedman, one of the former OIST BOG members, is a board member of the Friends of OIST, Inc.

- (3) Members of the Board of Directors:
  - ① Jerome Friedman: Director
  - ② Sachiko McAlinn: Director
- (4) Status of Capital funds

There are no membership fees, contributions and etc., burdened by OIST to contribute to capital fund of the foundation, operating expenses, project costs and etc.

(5) Status of business transactions with OIST

Not applicable.