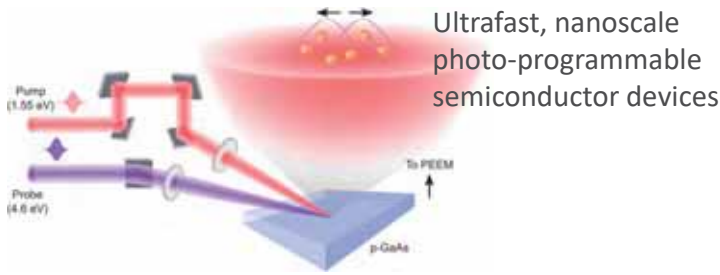




Technology Development & Innovation Center

TECHNOLOGY DEVELOPMENT RESEARCH

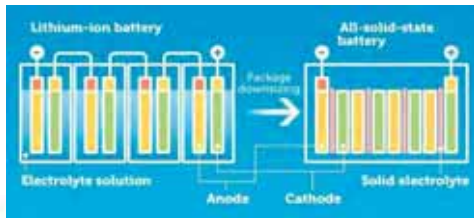


Ultrafast, nanoscale photo-programmable semiconductor devices



Developing synthetic polypeptides to control the outbreak of crown-of-thorns starfish in coral reefs

NEW POC PROJECTS (2018) Innovative Technology Research



All-solid-state Li-ion batteries with improved stability



Evaluating the effectiveness of a parenting program for Japanese mothers of children with ADHD



Technology Development & Innovation Center

TECHNOLOGY DEVELOPMENT RESEARCH



Portable nanoplasmonic device for biomedical applications in the field



Combined mass- and ion-mobility spectrometry to identify novel chemical structures

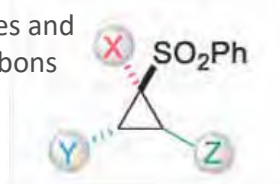
Metabolic biomarkers of aging



New variety of rice with non-digestible starch, adapted to grow in Okinawa

NEW POC PROJECTS (2018) Phase I/II Pre-Commercialization

One-step method for synthesizing new classes of cyclopropanes and linear hydrocarbons

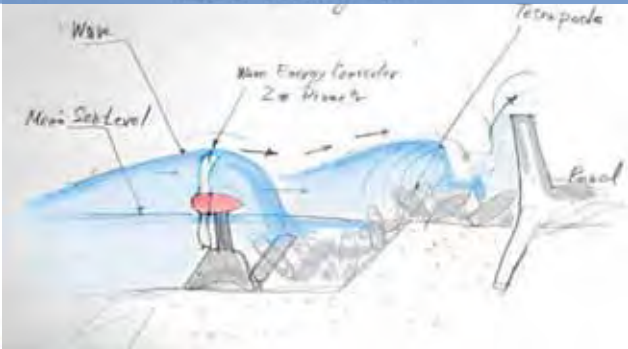


Optimizing MFC technology to treat agricultural waste



Pilot project in the Maldives to test prototypes of a new turbine designed to convert energy from breaking waves to electricity

モルディブにて沿岸の砕波エネルギーを利用する新型タービンの試作品基の実証実験を開始



Holiday Inn Kandooma Maldives



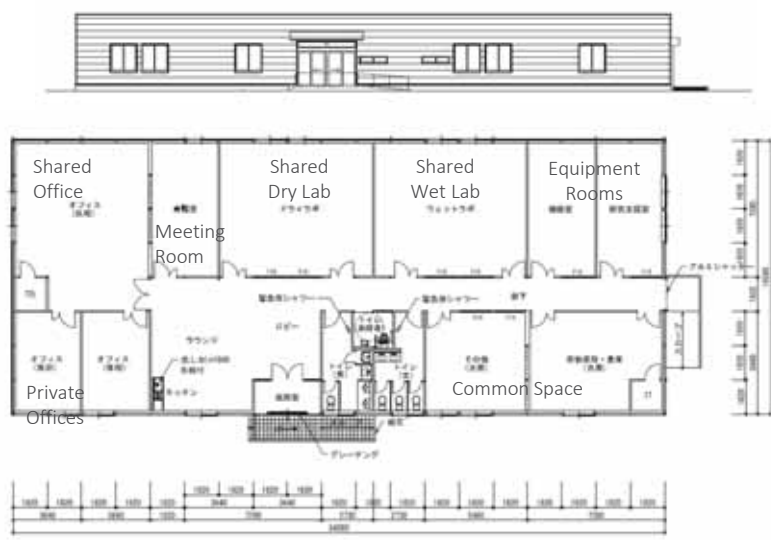
Technology Development & Innovation Center
ENTREPRENEURSHIP & INNOVATION

INNOVATION INCUBATOR: LAYOUT レイアウト

Phase I: 500m2 Pre-fab building with temporary infrastructure
 フェーズI: 500m2 プレハブ施設 仮インフラ



example of similar building



Space Use Allocation 用途	Size (m2) 面積
Shared Office (10 desks) 共有オフィス	53
Private Offices (2) 専用オフィス	40
Shared Dry Lab (6 benches) 共有ドライラボ	60
Shared Wet Lab (6 benches) 共有ウェットラボ	60
Shared Equipment Rooms 共有機器室	53
Meeting Room 会議室	26
Common Space (kitchen, storage) 共有スペース (キッチン・倉庫)	149
Other (entryway, hallways) その他 (玄関、廊下)	62
Total 合計	503





INNOVATION INCUBATOR: OCCUPANTS

INCUBATOR OCCUPANCY TIMELINE

Category	FY2018/H30			FY2019/H31			FY2020/H32			FY2021/H33			FY2022/H34			FY2023							
	2018			2019			2020			2021			2022			2023							
	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2
STARTUPS				MICROBIAL FUEL CELLS						NEXT GENERATION SOLAR ENERGY													
				NANOPLASMONIC BIOSENSORS						METABOLOMICS OF AGING													
				WAVE ENERGY						NANOPARTICLE ENVIRONMENTAL SENSORS													
				SHOREDITCH-SON			Accelerator Startup			Accelerator Startup			Accelerator Startup										
				Accelerator Startup			Accelerator Startup			Accelerator Startup			Accelerator Startup										
							Accelerator Startup			Accelerator Startup			Accelerator Startup										
										Accelerator Startup			Accelerator Startup										
INDUSTRY PARTNERS				Industry Partner (in negotiation)																			
				Industry Partner (in negotiation)																			

LEGEND

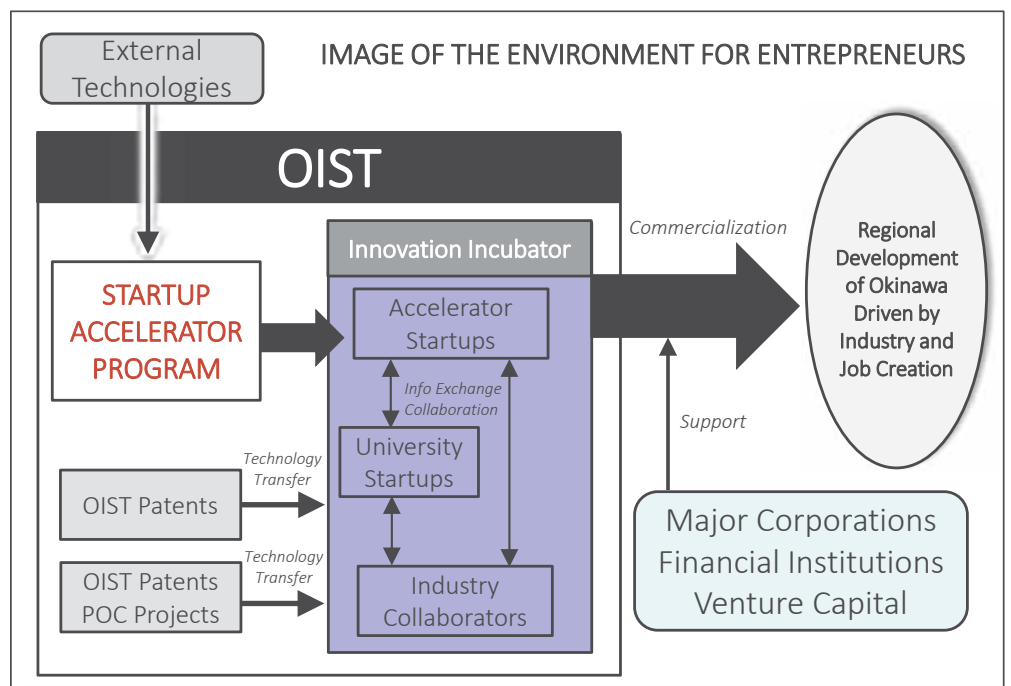
- OIST STARTUPS
- EXTERNAL ACCELERATOR STARTUPS
- EXTERNAL INDUSTRY PARTNERS



STARTUP ACCELERATOR PROGRAM: NEW MODEL

NEW MODEL TO PROMOTE STARTUPS IN OKINAWA

1. Recruit science innovators to join OIST as Entrepreneurs-in-Residence, bringing in external technologies
2. Integrate infrastructure, training, and funding into a comprehensive platform to support innovation
3. Network with the private sector to invest in spin-off companies



Adapted from: <https://newswitch.jp/p/12456>

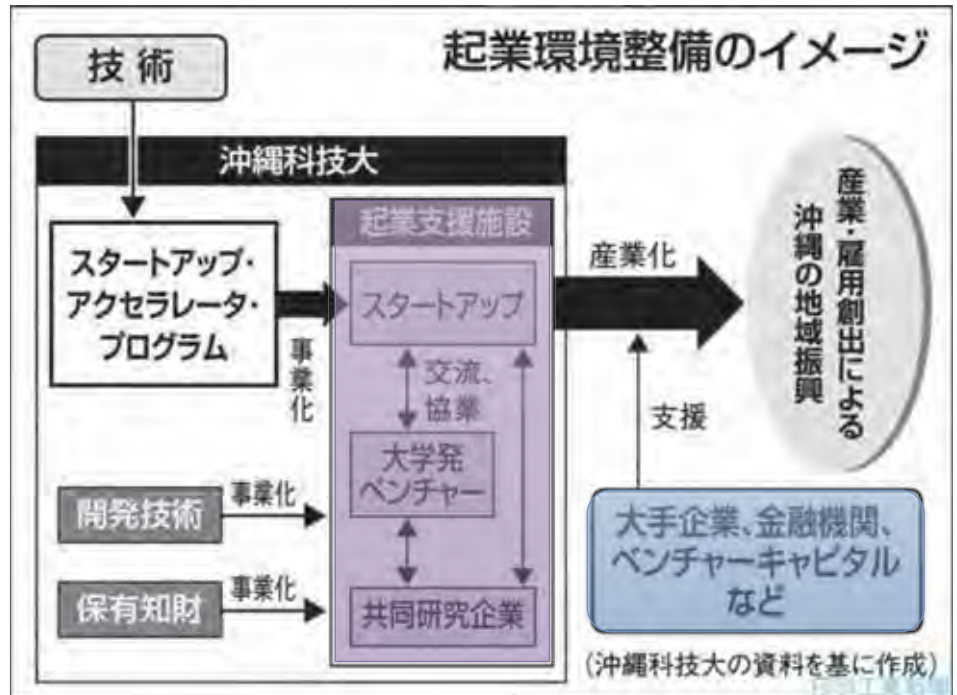
L. Ha & R. Baughman



スタートアップ・アクセラレータープログラム: 新モデル

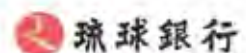
沖縄におけるスタートアップ
促進の新モデル

1. 採用: 客員起業家(EIR)として科学分野の革新者をOISTに採用することで外部のテクノロジーを呼び込む
2. 統合: インフラ基盤、研修プログラム、助成金をイノベーション支援の包括的なプラットフォームに統合する
3. ネットワーク: スピンオフ会社への投資のために民間セクターとのネットワークを広げる

Source: <https://newswitch.jp/p/12456>

起業家育成ネットワーク: ベンチャーキャピタル、金融機関、企業

- 6件のMOUおよび契約を締結
- DEEPCOREとのMOUを締結
 - ソフトバンクグループの100%子会社
 - 東京を拠点にハイテク技術のアクセラレーター、インキュベーター、ベンチャー投資などを行う
 - 下記共同プロジェクトにおいてMOUを締結:
 - 起業家開発
 - 技術開発などにおける企業との共同研究
 - スタートアップ投資



地域経済活性化支援機構 Regional Economy Vitalization Corporation of Japan (REVIC)



Outline

- Overview and brief history of OIST
- Excellence in Research
- Excellence in Education
- Excellence in Innovation
- **External funding**
- Plans for growth
- Roadmap towards 2021



The Mid-Term Strategy for External Funding **外部資金中期戦略**

The plan for raising external funds encompasses the following categories of income:

外部資金中期戦略には、以下の区分が含まれます。

- Research (Grant) funding 研究助成金
- Business Development funding 事業開発
- Donations 寄付金



Results:

Comparison of external funding acquisition results and original plan developed in May 2013
(Million yen) 本学の外部資金の獲得額と2013年5月に策定した外部資金中期計画における「当初見込」額との比較 (百万円)

No	Item		FY2013	FY2014	FY2015	FY2016	FY2017
1	Research Funding 研究助成金	Original 当初見込	282	318	384	466	542
2		Actual 実績	294	333	291	360	648
3		Difference 差	12	15	-93	-106	106
4	Business Development 事業開発	Original 当初見込	97	86	101	123	148
5		Actual 実績	113	81	141	230	211
6		Difference 差	16	-5	40	107	63
7	Donation 寄付金	Original 当初見込	23	30	45	55	55
8		Actual 実績	8	1	36	11	35
9		Difference 差	-15	-29	-9	-44	-20
10	Endowment 基金からの利払い	Original 当初見込	0	1	10	39	97
11		Actual 実績	0	0	0	0	0
12		Difference 差	0	-1	-10	-39	-97
13	Total 合計	Original 当初見込	402	435	540	683	842
14		Actual 実績	415	415	469	600	894
15		Difference 差	13	-20	-71	-83	52

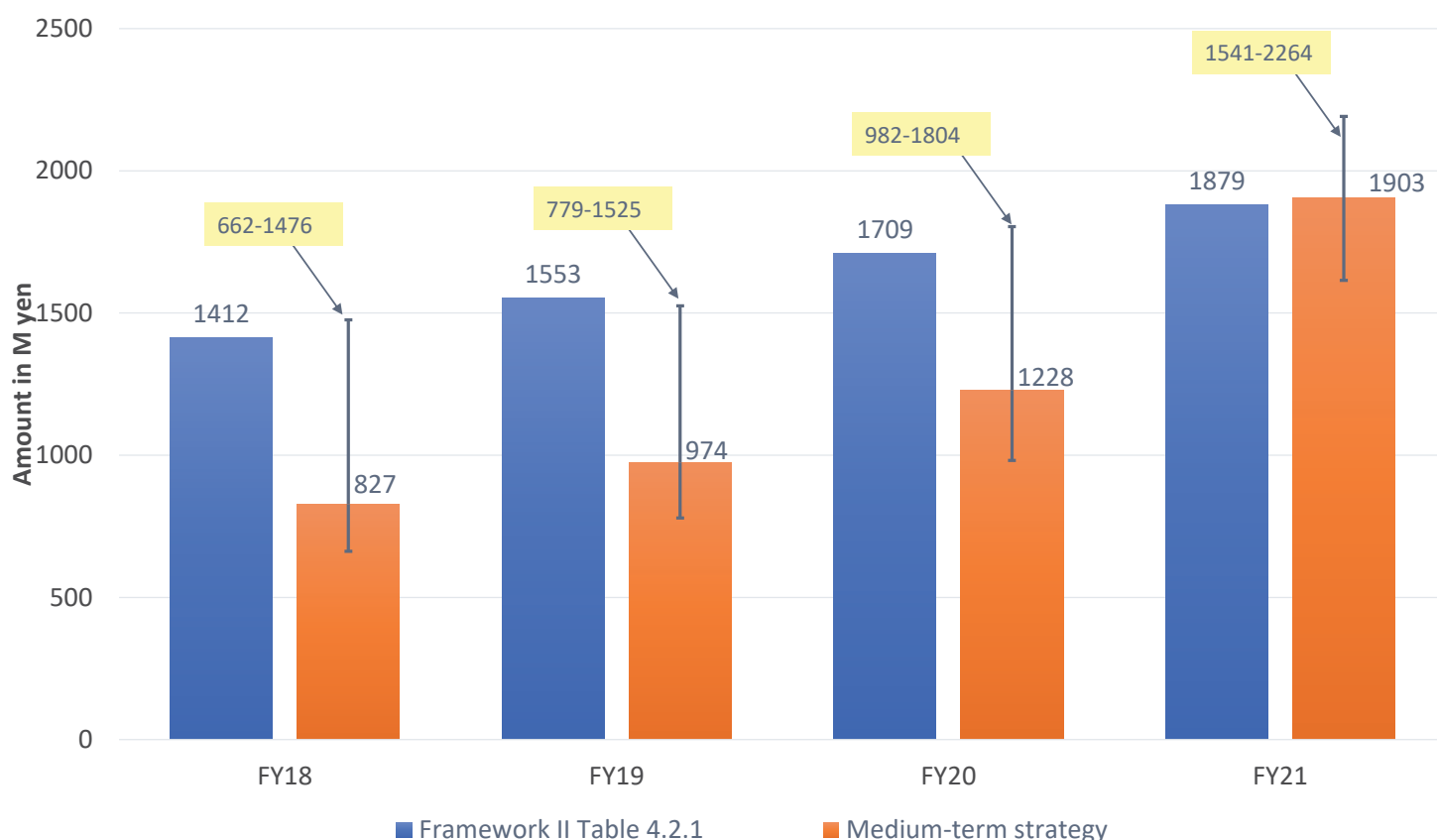


Results:

- In FY17, OIST had exceeded the original goal for external funding acquisition set forth in the Mid-term strategy for External Funding in 2013.
- 平成29年度の時点で、当初の予測額を上回っている。
- Though there is no endowment and a small number of donations, OIST has made large advances in obtaining research funding and business development funding.
- 基金からの利払い及び寄付金の獲得額は十分ではないが、研究助成金と事業開発の区分で大きな実績を上げている。
- Thus, the projection was re-assessed based on our current capabilities and compared to the external funding figures in Framework II Table 4.2.1.
- これら実績を踏まえ、外部資金中期計画における予測を見直した。



Projected External Funding



Denotes range of potential external funds based on grant results

FY2018 KAKENHI Adoption (as of April 1, 2018)

平成30年度科研費採択状況（平成30年4月1日現在）

	平成29年度 vs 平成30年度	平成29年度	平成30年度
	FY2017 vs FY2018	FY2017	FY2018
応募数	# of application	126	115
採択数	Adoption	31	38
採択率	Success rate	24.6%	38.4%
交付額(新規+継続)	Amount (new + continuous)	245 M yen	260 M yen

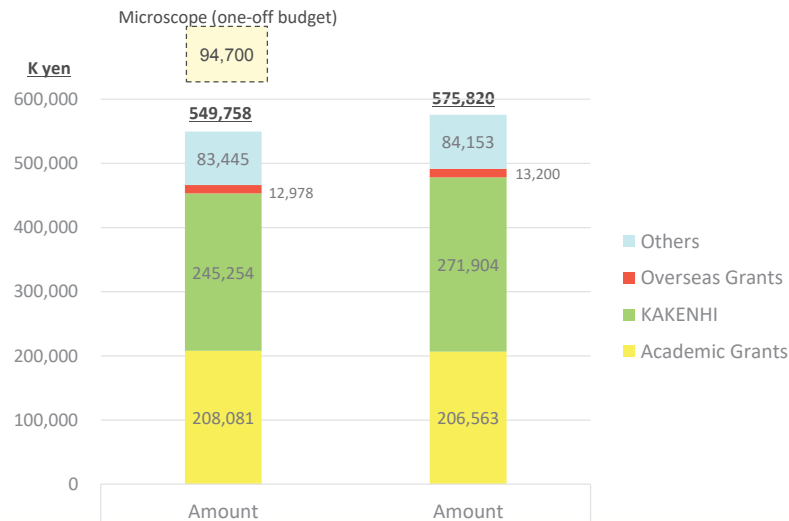
	ポジション	応募数	採択数	採択率
	Position	# of application	Adoption	Success rate
教員	Faculty	17	7	41.2%
研究員	Researcher	77	30	39.0%
その他	Others	5	1	20.0%
審査中	TBDs	16	TBD	TBD
	Total	115	38	38.4%

38 out of 99 excl. TBDs
99件中38件(審査中を除く)

Academic External Funding FY17 vs FY18

As of Aug 1, 2018

Category	FY2017		FY2018	
	# of grant	Amount	# of grant	Amount
Academic Grants	10	208,081	9	206,563
KAKENHI	86	245,254	107	271,904
Overseas Grants	1	12,978	1	13,200
Others	35	83,445	41	84,153
Total	132	549,758	158	575,820



Business Development Funding: Performance

Efforts to increase external funding for research and technology transfer

事業開発 外部資金：成果 研究および技術移転のための外部資金の増加に向けた取り組み



External Funding: Philanthropy



- As of August 31, 2018, the Okinawa Institute of Science and Technology Foundation, Inc. was officially established as a New York State non-profit entity.
- Four initial trustees:
 - Julie Meier-Wright, California Council on Science and Technology**
 - Edward Kuba, Attorney, former University of Hawai'i Regent**
 - Rhonda Donahoe, CFO of NJK Holding Corporation**
 - David Janes (as Secretary), OIST**
- Seeking additional nominations for trustees
- Will work closely with incorporate.com (with over 100 years experience in this field) and the founding trustees to move forward: 501-c-3 filings, bylaw development, opening bank account, structuring giving opportunities with OIST, charitable solicitation filings



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