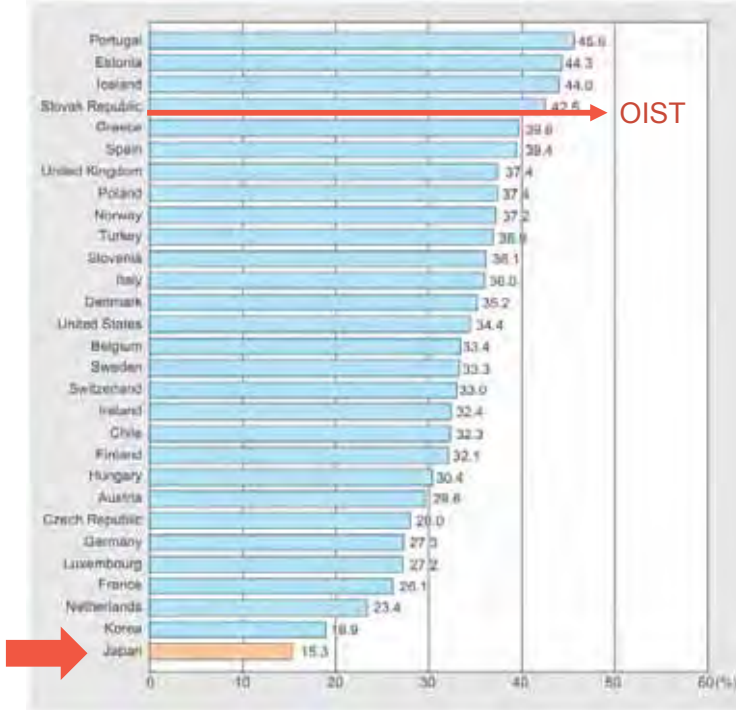


Gender Equality at OIST

Proportion of Female Researchers Low in Japan



OIST Employees (as of May 2018)

	Japan	Intl.	% of Women	Total
Faculty	22	35	21%	57
Research Units Staff	198	240	43%	438
Research Support Staff	65	16	43%	81
Administrative Staff	261	50	62%	311

OIST Students (as of May 2018)

	Total	% Japan	% Women
Students	156	16%	40%



Source: "Men and Women in Japan 2017". Gender Equality Bureau Cabinet Office.

RECENT FACULTY RECRUITS 新任教員

Molecular and Cell Biology

生物学

Tom Bourguignon



Keiko Kono
河野 恵子

Paola Laurino

Simone Piglotti

Physics

物理学

Yejun Feng

Akihiro Kusumi
楠見 明弘

Yasha Neiman

Yoshinori Okada
岡田佳憲

Fabian Pauly



Neuroscience

神経科学

Izumi Fukunaga
福永泉美

Marylka Yoe Uusisaari

Jun Tani
谷 淳



Mathematics

数学

Anastasiia Tsvietkova



Research Highlights 研究ハイライト



CAPTURING ELECTRON MOVEMENT
電子の動きを捉える

Researchers in the Femtosecond Spectroscopy Unit, led by Prof. Keshav Dani, combined a femtosecond laser and an electron microscope into a powerful system that captures both the time and spatial scale of the motion of electrons.

ケシャブ・ダニ准教授率いるフェムト秒分光法ユニットの研究者らがフェムト秒レーザーと電子顕微鏡を組み合わせたパワフルな装置を用い、電子の動きの時間的・空間的動きを捉えることに成功。



SUPRAMOLECULAR ASSEMBLIES
超分子集合体

Prof. Ye Zhang and the Bioinspired Soft Matter Unit recently published their work on molecular scaffolds inspired by the extracellular matrix in *Angewandte Chemie International Edition*.

生体模倣ソフトマターユニットとイェ・ジャン准教授が、細胞外のマトリックスに触発された分子足場のついでの研究を「国際版応用化学」誌に発表



ROBOT LEARNING ロボットによる学習

The Neural Computation Unit, led by Prof. Kenji Doya, investigates how robots can utilize simulation, similar to humans, to learn faster. Prof Doya is leading the Kakenhi project “Correspondence and Fusion of Artificial Intelligence and Brain Science”

銅谷賢治教授率いる神経計算ユニットは、人間と同様にロボットがシミュレーションを利用しながら、いかに早く学ぶことができるかを研究中。銅谷教授は科研費を用い、「人工知能と脳科学の対照と融合」というプロジェクトを進行中



See the new [OIST Brochure](#) for more success stories

Research Highlights 研究ハイライト



ENERGY FROM THE OCEAN
海からのエネルギー

Professor Tsumoru Shintake and the Quantum Wave Microscopy Unit reach for a clean future with energy powered by ocean waves.

新竹積教授率いる量子波光学顕微鏡ユニットでは、海の波の力を利用したクリーンなエネルギーを開発中



ADVANCED SOLAR CELLS
次世代太陽電池

Prof. Yabing Qi and the Energy Materials and Surface Sciences Unit work to improve the lifespan, performance and production of perovskite solar cells.

ヤビン・チー教授率いるエネルギー材料と表面科学ユニットでは、ペロブスカイト太陽電池の耐用年数、性能、製造工程を改良すべく研究中



NEW BIOSENSORS
新たなバイオセンサー

Researchers in the Micro/Bio/Nanofluidics Unit, led by Prof. Amy Shen, conduct fundamental research to develop a wide range of biosensors and other devices.

エイミー・シェン率いるマイクロ・バイオ・ナノ流体ユニットでは、広範囲に用いられるバイオセンサーやその他の装置の開発のため、基礎研究を続行中



See the new [OIST Brochure](#) for more success stories

Research Highlights 研究ハイライト



OIST CHILDREN'S RESEARCH CENTER OIST子供研究センター

The Children's Research Center, led by Prof. Gail Tripp, aims understand the causes of Attention Deficit Hyperactivity Disorder (ADHD) to help aid treatment for children. Researchers in the Center have advanced degrees and licenses in psychology and are experienced working with children.

ゲイル・トリップ教授率いる子供研究センターでは、注意欠陥多動性障害（ADHD）の原因を理解することを目的としながら、子供たちの治療をサポートしています。当センターには、心理学分野で博士号やライセンスを持つ研究員が複数おり、子供達への対応において豊富な経験を持つ。



OKEON PROJECT OKEONちゅら森プロジェクト

Prof. Evan Economo leads the Okinawa Environmental Observation Network (OKEON) project to monitor the terrestrial environment of Okinawa, involving researchers at OIST, collaborators a various institutions, museums and high schools across Okinawa, and the local community.

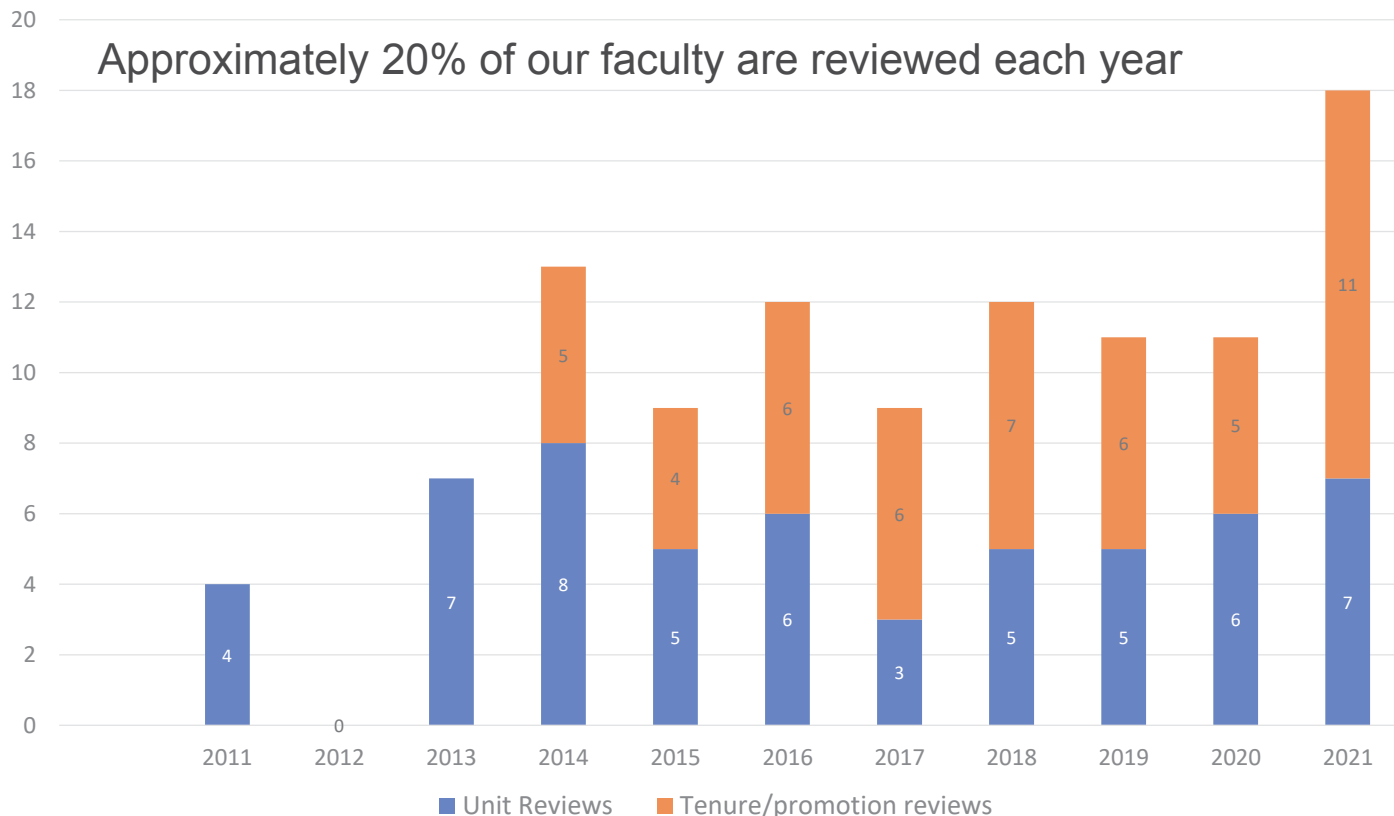
エヴァン・エコノモ准教授は、OKEONちゅら森プロジェクトを統括し、OIST研究員、諸機関、博物館、沖縄県内の高校や地域社会と協働しながら、沖縄の陸上環境のモニタリングを行っている。



See the new [OIST Brochure](#) for more success stories

Faculty Reviews per year

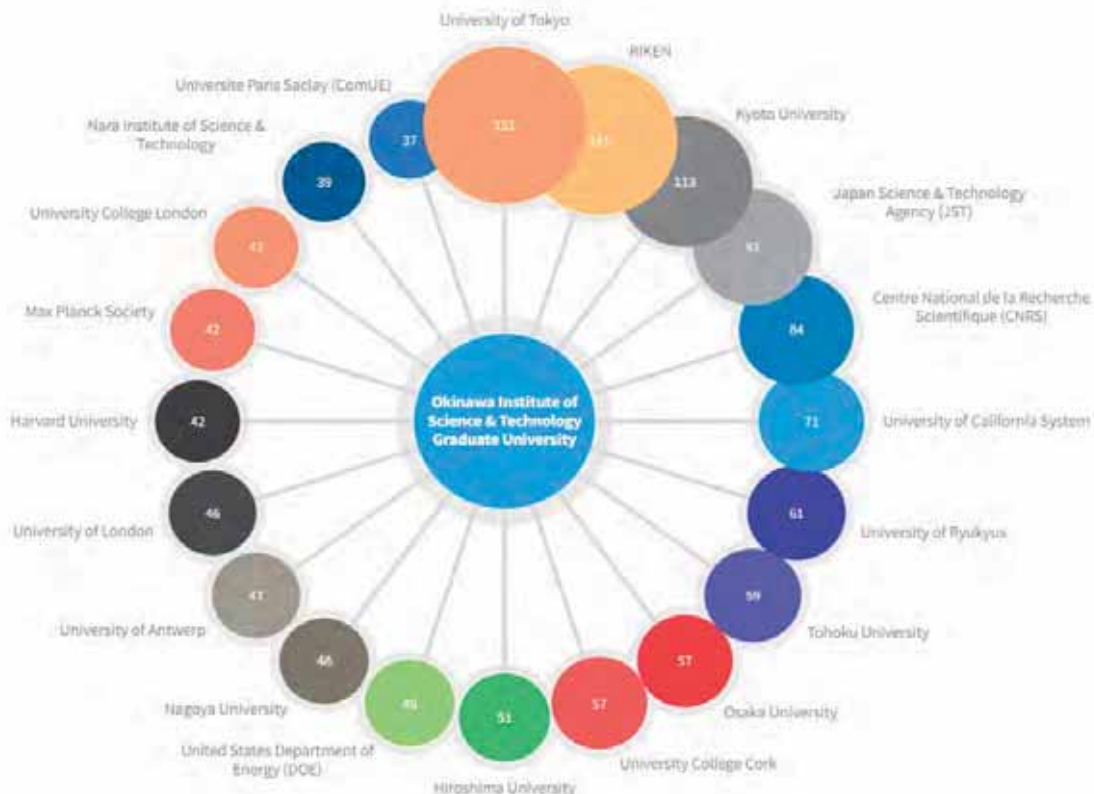
Approximately 20% of our faculty are reviewed each year



Collaborations are actively encouraged

Number of co-authored publications with collaborators outside of OIST

他大学との連携を積極的に推進: 学外研究者との共著論文数



InCites dataset updated Jul 28, 2018. Includes Web of Science content indexed through May 31, 2018.

Promoting partnerships: “KICKS” and “JUMPS”

OIST Kick Start Funds

- Internal, competitive program designed to provide support for new collaborative research
- Funding: 10M Yen per year per project
- Number of awards: 5 per year
 - Fund destinations:
 - **Japan:** Kyoto University, Tohoku University, RIKEN
 - **USA:** UC Berkeley, Iowa State
 - **Germany:** Trier U
 - **Brazil:** IDOR
 - **Taiwan:** National Chiao Tung University

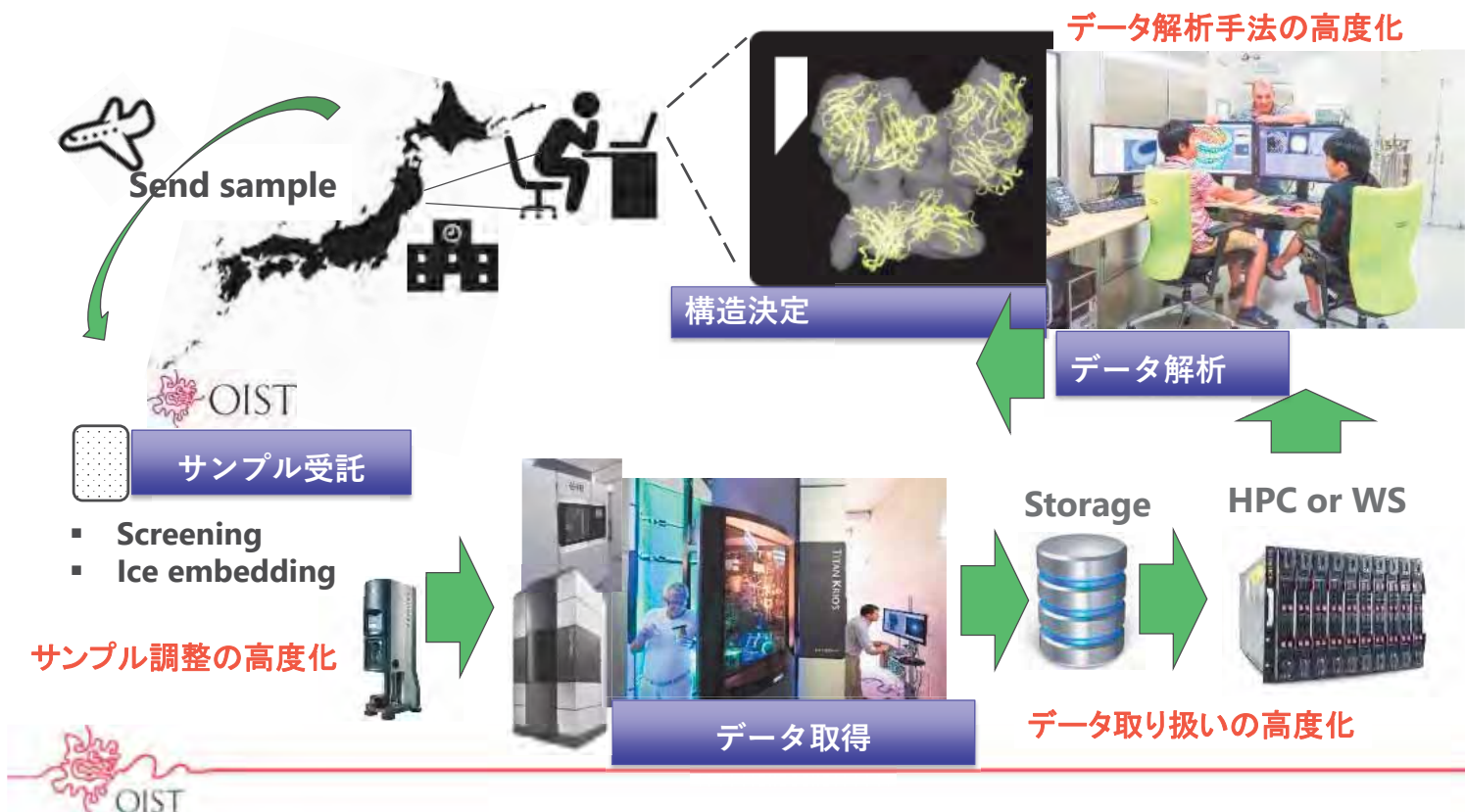
Jump-start Networking in Japan

- Provides funds for Japanese researchers to collaborate with the OIST Research Support Division and use OIST facilities
- Funding: up to 1M yen per project per year
- Number of awards: up to 10 per year

創薬等先端技術支援基盤プラットフォーム



クライオ電顕によるタンパク質構造解析支援と技術の高度化



Basis of structural analysis support at OIST

OISTにおける構造解析支援の基盤

タンパク質構造解析の技術 1. Protein Structural Analysis



トモグラフィー法
Cryo-EM Tomography
Prof. Ulf SKOGLUND



Dr. Lars-Goran OFVERSTEDT



単粒子解析法
Single Particle Analysis
Prof. Matthias WOLF



単粒子解析アルゴリズム開発
Algorithm Development
Dr. Kun-Yi HSIN

クライオ電子顕微鏡の設備 2. Cryo-electron Microscope



Titan Krios
(300keV)



Talos Arctica
(200keV)

研究支援体制 3. Research Support



Principal Investigator 研究代表者
Dr. Bruno HUMBEL
Imaging Section Leader



Dr. Mary COLLINS
Dean of Research



Dr. Mizuki SHIMANUKI
Research Resources Manager



Dr. Eddy TAILLEFER
Scientific Computing & Data
Analysis Section

Resources added to OIST by the AMED funding

AMEDからの資金によって
OISTに追加された研究資源

Electron microscope 電子顕微鏡



Talos L120C
(120keV)
March, 2018

EM Staff 電子顕微鏡スタッフ



Dr. Ryo KANNO
Cryo-EM specialist
April, 2018



Dr. Malgorzata HALL
Cryo-EM specialist
June, 2018

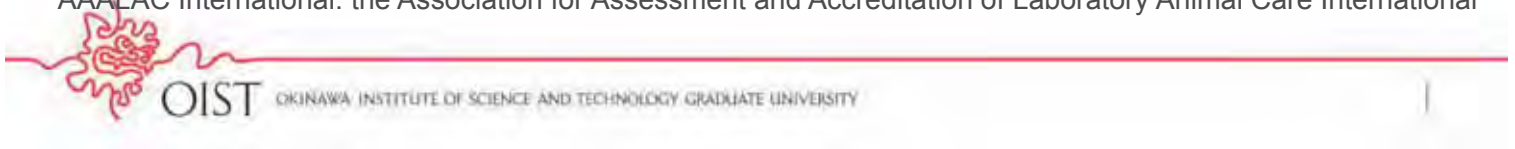


Peer reviews of research support sections

All sections will receive peer review by the end of FY2019

Timing	Section
Jul 2014	Animal Resources Section (As a part of accreditation of AAALAC International)
Jul 2016	Okinawa Marine Science Support Section (As a part of OIST International Advisory Board meeting on Marine Science)
Nov 2016	Scientific Computing & Data Analysis Section
Jun 2017	DNA Sequencing Section
Jul 2017	Okinawa Marine Science Support Section (Same as above)
Sep 2018	Okinawa Marine Science Support Section (Same as above)
Dec 2018	Mechanical Engineering & Microfabrication Support Section
Jan 2019	Instrumental Analysis Section
Late 2019	Imaging Section

*AAALAC International: the Association for Assessment and Accreditation of Laboratory Animal Care International



Outline

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

