

### Introduction



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Science has the power to improve the world, but the journey from early-stage technology to commercialization is long and fraught with challenges. This is a significant challenge for universities as well, and strategic and continuous efforts are necessary to translate research outputs into societal benefits. At OIST, to overcome this challenge, OIST Innovation plays a central role in driving innovation.

OIST Innovation's mission is to maximize the power of science and contribute to humanity through managing intellectual property, collaborating with companies, negotiating licensing agreements, and fostering the creation and growth of startups.

We have increasingly focused on creating and nurturing startups in recent years. The accelerator program, which began in 2018, has selected two teams per year, but starting in 2024, it expanded to four teams. Additionally, the incubation facility established in 2019 has become a crucial hub for physically supporting the growth of startups and will further expand in scale and open in the spring of 2025. More than 20 startups have already emerged from OIST, and the entrepreneurial community around the university is also growing. These startups are working on developing innovative products and services across a wide range of fields, including biotechnology, environmental technology, AI, and more. We aim to contribute to the development of Okinawa's international innovation ecosystem as a hub for startups that solve human and planetary challenges with groundbreaking technologies.

OIST's support for startups cannot be achieved by OIST alone. Building an innovation ecosystem requires the participation and cooperation of diverse stakeholders. Entrepreneurs who have picked up this booklet, we invite you to join our community and take on these challenges together. Your innovative ideas and passion will be the driving force behind the next generation of groundbreaking products and services. Additionally, companies, investors, and supporters, we encourage you to collaborate with us to nurture innovative startups and deliver value to the world. We believe that by working together with like-minded individuals, we can create meaningful advancements through science and technology for Okinawa and Japan.

<sup>\*</sup>This booklet was created based on information available as of December 2024. Please note that the content may differ from the current situation. Please check the website for the latest information.



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### **About OIST**

The Okinawa Institute of Science and Technology (OIST), located in Onna Village, Okinawa, is an interdisciplinary graduate university offering a five-year doctoral program in science and technology. It was established to be a world-class research center and the intellectual hub that will promote technology transfer and innovation in Okinawa.

OIST, with its emphasis on interdisciplinarity, high-trust funding, and English as an official language, attracts the best researchers from around the world to conduct high-quality research. In 2019, OIST was ranked 9th in the world and the top university in Japan in terms of the quality of scientific publications in the Nature Index.

In addition to establishing itself as a world-leading interdisciplinary research institution, OIST's core values include fostering innovation and entrepreneurship, and contributing to the sustainable development of the Okinawan economy.



### **OIST Innovation**

OIST Innovation drives technology development and commercialization at the university, aiming to accelerate economic growth in Okinawa and beyond. It supports innovators through a comprehensive range of programs, networks, and resources, fostering both local and global collaborations. By leveraging world-class research, infrastructure, and an interdisciplinary environment, OIST Innovation transforms laboratory discoveries into impactful innovations.

Under the leadership of the Executive Vice President, the Technology Licensing Section, Technology Development Section, Business Development Section, and Venture Development Section are working to support different phases of innovation, from research to social implementation.





Number of startup teams participated in the OIST Innovation Accelerator Program

15

Number of tenants in the OIST Innovation Incubator

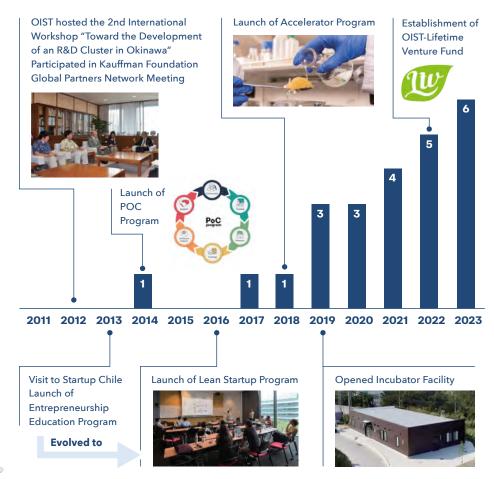
48

**Number of OIST Startups\*** 

26

\*"University-launched venture companies" are counted in the six categories of university-launched ventures (research venture, joint research venture, technology transfer venture, student venture, faculty venture, and related venture) as defined by METI. (as of December 2024)

### Development of startup support initiatives and the number of newly established university-launched venture companies



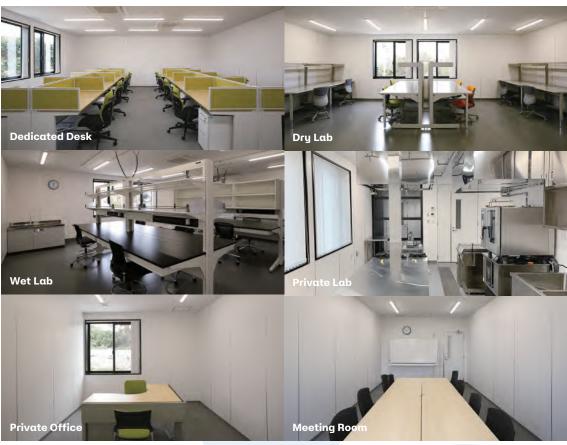


### **Incubator Facility**

### **OIST Innovation Incubator**

The OIST Innovation Incubator is an incubation facility for early-stage deep tech startups with shared offices as well as shared equipment and shared labs. The space offers entrepreneurs a supportive environment to assess their business potential and create prototypes. It also serves as a community space for innovation. The first building, which opened in 2019, houses about 50 companies, including startups as well as experts, supporters, and companies wishing to collaborate with OIST. In the spring of 2025, OIST will open two new buildings with a total floor space of 2,000 square meters to provide an environment that will attract even more companies and serve as a hub for innovation.





### **Startups**

### **EF Polymer Co., Ltd.**



The company manufactures 100% organic, completely biodegradable superabsorbent polymers using orange peels and other waste materials that would otherwise be discarded, and is expanding its business globally as an environmentally friendly agricultural material. In addition, the company is promoting environmental measures for products that have traditionally used petroleum-derived polymers, such as daily necessities and cosmetics. In 2019, EF Polymer was selected for the OIST Innovation Accelerator Program, and two of its founders came to Okinawa from India. OIST supported the company in developing its business in Okinawa and matching it with investors through the Accelerator Program. EF Polymer currently has its headquarters and development base in the OIST Innovation Incubator, and is providing products from Okinawa to solve environmental issues, particularly water shortages, around the world.



OIST Innovation has supported us at every stage of our business growth, from matching us with investors to coaching us on our pitches and helping us to raise funds. OIST is an indispensable presence for EF Polymer. As a startup from OIST, we hope to continue to work together to further develop the startup ecosystem around OIST.

——Narayan Gurjar (Founder and CEO)

### Watasumi



Watasumi is a startup founded in 2021 by David Simpson, who conducted research for 10 years in the Biological Systems Unit at OIST and went through OIST's POC (Proof of Concept) Program. The company provides wastewater treatment systems that utilize microorganisms to generate renewable energy, catering to small and medium-sized food and beverage manufacturers, and other organic wastestream. The POC Program provided funding for proof-of-concept experiments, in addition to entrepreneurial training and partner company matching support.



We are proud to be a startup to offer a tangible product that commercializes inventions developed in OIST's labs. Our company mission is to help society by making small and mediumsized enterprises (SMEs) more sustainable. SMEs represent approximately 90% of all firms.

——David Simpson (Founder and CEO, Watasumi)

### **Sage-Sentinel Smart Solutions**



Sage Sentinel provides Al-based system to predict and prevent falls to improve the safety and quality of life for the elderly and their caregivers. In 2020, they were selected for the OIST Innovation Accelerator Program, and the founder came to Okinawa. Through the accelerator program, OIST supported matching with investors and testing sites. They are currently based at the OIST Innovation Incubator and conducting pilot tests at the nearby elderly care facility, Tancha no Oka.



The support from OIST has been crucial in expanding our network, especially as we explore the Japanese market. The incubator's environment also facilitates valuable connections with other startups and researchers, providing us with essential networking opportunities and feedback on our product. We look forward to continuing our journey within this community as we scale our business.

-Khashayar Misaghian (Founder and CEO, Sage-Sentinel Smart Solutions)

### HerLifeLab



HerLifeLab is the femscience startup founded by Dr. Olga Eliseeva, a visiting researcher at OIST who was engaged in cancer immunotherapy research, inspired by her own experience with menopause. The company provides an online medical service called "Vivalle," designed specifically for menopausal women. In 2021, the startup was selected for the OIST Innovation Accelerator Program, where Dr. Eliseeva received training and mentoring to shift her mindset from researcher to entrepreneur, ultimately leading to the founding of her business.



Transitioning from a researcher's mindset to that of an entrepreneur was not easy, and without the strong support from OIST Innovation staff, HerLifeLab would not have been born. As an OIST-born startup, we've been fortunate to receive many opportunities for attention, which has been extremely helpful. Going forward, we aim to continue leveraging OIST's resources to further grow our business.

-Dr. Olga Eliseeva (Founder and CEO, HerLife Lab)

### Proof-of-Concept Program POC Program

OIST offers the Proof-of-Concept Program (POC Program), a competitive funding program for OIST researchers, to help translate discoveries made in the laboratory into commercial products. In addition to funding, the program provides a range of support, including training programs, mentoring, and patenting and licensing. To date, the program has supported more than 70 projects, ranging from early-stage applied research to researchers seeking to spin out as start-ups to advanced prototypes for licensing to industry.



### **Startups from POC Projects**





### **David Simpson**

Develops organic wastewater treatment systems that utilize bacteria to break down organic matter in wastewater, generating electricity and methane gas.





### Eisuke Hayakawa

Provides support for unknown compound analysis in various fields including food, manufacturing, environment, medicine, and drug discovery, using innovative data analysis technology.





### Takayuki Teruya

Conducts contract services and collaborative research on the qualitative and quantitative analysis of metabolites in biological samples based on our proprietary metabolomics technology.





### Lokesh Agrawal

SND Regenic pioneers neural tissue engineering with advanced 3D-bioprinting and specialized biomaterials, aiming to promote better research and medical therapies for nerve and spinal cord injuries.

### **Accelerator Program OIST Innovation Accelerator**

The OIST Innovation Accelerator is a global startup accelerator program created with the support of Okinawa Prefecture. Entrepreneurs with innovative technologies are selected from around the world to join OIST for approximately 10 months to establish and grow their businesses in Okinawa while taking advantage of OIST's people, facilities, and resources. Participants will receive up to 10 million yen in non-equity funding, as well as mentoring and support in matching them with companies and investors. Through this program, OIST aims to attract outstanding entrepreneurs from around the world and strengthen the innovation ecosystem around the university, thereby contributing to sustainable economic development in the region.

### **Venture Capital Fund OIST-Lifetime Ventures Fund**

The OIST-Lifetime Ventures Fund is a fund established through a partnership between OIST and Lifetime Ventures. The fund aims to create deep-tech solutions with significant social and environmental impact in fields such as Health & AgeTech (healthcare, medicine, elderly care, and the fusion of technology), Future of Work (transforming work through technology), Sustainable Living (technologies that enable harmonious living with the environment), and Blue Economy (new marine industries that protect the health of the ocean while promoting development).



At the OIST-Lifetime Ventures Fund, we support the creation of startups from OIST research and invest in startups that align well with the research and network of OIST. We aim to build a startup ecosystem centered around OIST.

Koshu Kunii (Managing Partner of Lifetime Ventures)



### **Mentoring Program** VMS [Venture Mentoring Service]

Inspired by the MIT Venture Mentoring Service, our program ensures that entrepreneurs receive comprehensive support from experienced mentors. Embracing conflict-free and impartial guidance, the OIST Innovation VMS fosters an environment conducive to transforming innovative ideas into successful ventures.

### **Events**

OIST Innovation holds a wide range of events such as seminars, and networking with investors and industry partners, with the aim of supporting the creation and growth of startups. Through our partnership network, OIST actively hosts events both within and beyond Okinawa.

### **Past Events**

### **OIST-Lifetime Startup Elevate**

Venue: OIST(Okinawa) Date: April 2024 Co-host: Lifetime Ventures

A two-day conference was held with pitch contests, talk sessions, and poster exhibitions, to connect startup companies in the healthcare and sustainability fields with investors. 41 startup companies from within and outside the prefecture, both established and pre-established, and over 100 investors participated.



### Okinawa Night -Innovation Starting from the Local Community-

Venue: AgVenture Lab (Tokyo) Date: August 2024 Co-host: AgVenture Lab

At this special event, we explored how innovation can drive positive change in rural communities. Co-hosted with AgVenture Lab, the evening explored how we can resolve social issues and create businesses in the agricultural field. The event featured a dynamic talk session with founders of rural-based startups, sharing insights on tackling local challenges and building sustainable businesses.



### Okinawa University-Startup Showcase

Venue: CIC Tokyo(Tokyo) Date: September 2024 Co-host: Startup Lab Ryudai

A pitch event was held in Tokyo to connect university startups from the University of the Ryukyus and OIST with investors and companies in Tokyo.

A total of nine startups took the stage, and more than 100 people participated online and offline.



### **Training Program**

With the aim of fostering the entrepreneurial spirit of researchers within the OIST community, we regularly invite external experts to provide basic courses on entrepreneurship.

### **Network**

We aim to provide comprehensive support for startups through collaboration with external partners.

























### Community

OIST supports networking with researchers, entrepreneurs, and startup supporters on and off campus through events of all sizes, both in person and in online communities.



### Your Questions, Answered

### Q. How can I get the latest information on startup support or participate in startup-related events hosted by OIST?

Information about startup support at OIST is provided on our website and through various social media. To get the latest information, please follow our social media accounts.









Website

inkedIn

Facebook

X(formerTwitter)

In addition, companies and individuals who participate in OIST's industry affiliates program (INO) are provided with more detailed information through e-mails and newsletters and invited to members-only events. If you are interested in joining, please visit our website for more information about the program.



(OIST Innovation Network)

### Q. How can I join the OIST Innovation Accelerator Program?

The OIST Innovation Accelerator is an accelerator program for innovative technology entrepreneurs from around the world. Applications are accepted once a year. Please visit the website for more details.



OIST Innovation Accelerator

### Q. Who can I talk to about fundraising with the OIST-Lifetime Ventures Fund?

The OIST-Lifetime Ventures Fund is managed by Lifetime Ventures. For funding inquiries, please contact them through the Lifetime Ventures website.



Lifetime Ventures Website

### Q. How can I set up an office or R&D center at OIST?

OIST has an incubation facility for early-stage deep tech startups with shared equipment, shared labs, and common offices. In addition to startups, the facility is also open to startup supporters, experts and companies wishing to collaborate with OIST. If you are interested the space, please visit our website for more information. (\*There is a screening process.)



OIST Innovation Incubator



### Q. How can I access and use OIST research equipment?

Some research equipment managed by the OIST Core Facilities is available for use by external users after completing a training course. Please contact **core-facilities@oist.jp** for more information about the equipment, use and rates. OIST's incubation facilities also have shared equipment and shared labs available for use by tenants. Please contact **incubator-help@oist.jp** for information on equipment available at the incubator, availability, and fees.

### Q. How can I conduct joint research with OIST researchers?

OIST Innovation's Business Development section actively promotes the building of strong networks with domestic and international companies. If you are interested in conducting collaborative or sponsored research with OIST researchers, please contact us through our website.



Industry-Academia
Collaborations

### Q. How can I collaborate with OIST on startup support initiatives?

OIST aims to provide comprehensive support for startups by collaborating with various organizations and companies outside the university. For proposals and consultations regarding collaboration on startup support, please contact innovation@oist.jp.

### Q. How can I connect with startups from OIST?

OIST-born startups (university-born ventures) and startups that are tenants of the incubator are featured on the website. For details, please refer to the websites of each company and please feel free to contact them directly.



**Related Startups** 



Incubator Members

### Q. How can I invite OIST startups to participate in our events and programs?

OIST operates a Slack group that connects OIST-related startups and researchers interested in entrepreneurship with startup supporters outside the university. Please use the Slack group to share information about events and programs for startups. If you would like to join the Slack group, please contact us using the form below.



Slack Group Registration Form



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