

The OIST Experiment

Building a World-Class Scientific Research University



OIST

OKINAWA INSTITUTE OF SCIENCE AND TECHNOLOGY GRADUATE UNIVERSITY
沖縄科学技術大学院大学

OIST

Interdisciplinary research university

offering a 5-year PhD program in science

All education and research is conducted entirely in English



79 Faculty Members

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79 Research Units

62% International



453 Researchers

55% International



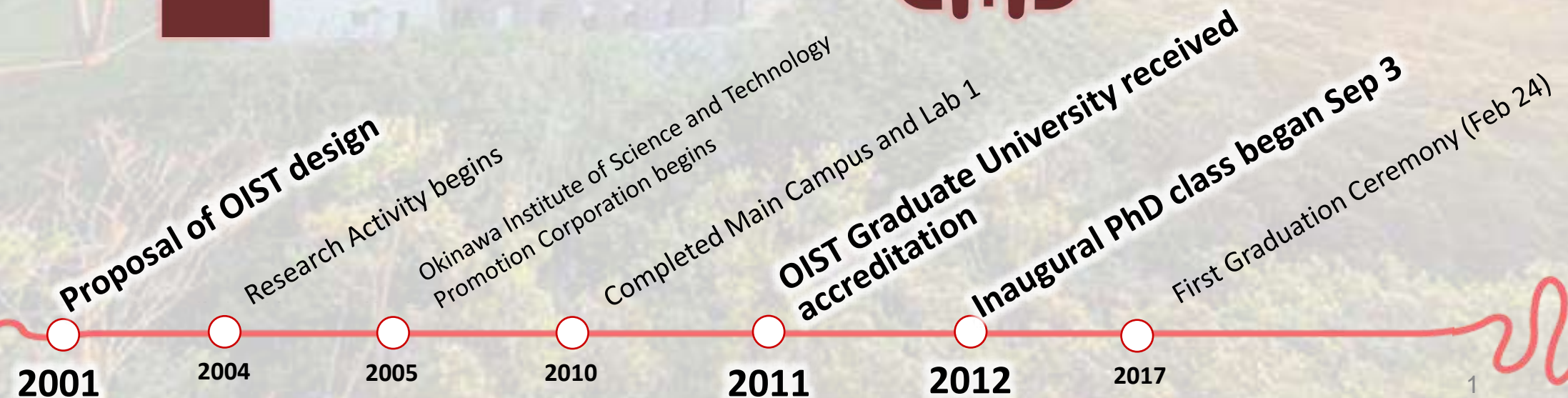
192 Students

85% International



Faculty : Students

1 : 2.5



Nature Index ranked **OIST #1 in Japan**,
and **#9 in the world** for scientific quality

Normalized rank	Share rank	Institution	Normalized Share 2018	Nature Index Share 2018	Dimensions natural science articles 2018	Nature Index Count 2018
1	347	Cold Spring Harbor Laboratory (CSHL), United States of America (USA)	0.17250	31.74	184	80
2	56	Weizmann Institute of Science (WIS), Israel	0.15298	173.17	1132	390
3	415	Institute of Science and Technology Austria (IST Austria), Austria	0.15039	23.61	157	55
4	430	Institute for Advanced Study (IAS), United States of America (USA)	0.14305	23.03	161	70
5	289	Brandeis University, United States of America (USA)	0.12787	42.71	334	119
6	155	The Rockefeller University, United States of America (USA)	0.12611	83.36	661	276
7	422	Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), India	0.11890	23.42	197	34
8	38	Swiss Federal Institute of Technology Lausanne (EPFL), Switzerland	0.11413	219.92	1927	542
9	360	Okinawa Institute of Science and Technology Graduate University (OIST), Japan	0.10940	29.76	272	65
10	25	Princeton University, United States of America (USA)	0.10903	282.39	2590	712

Source: *Nature Index* 2019. Vol. 570 No. 7761.

Rankings are based on proportion of publications in high-quality journals.

World-class Research Environment

Interdisciplinary Environment

No Departments, No Barriers – boundary-free campus design

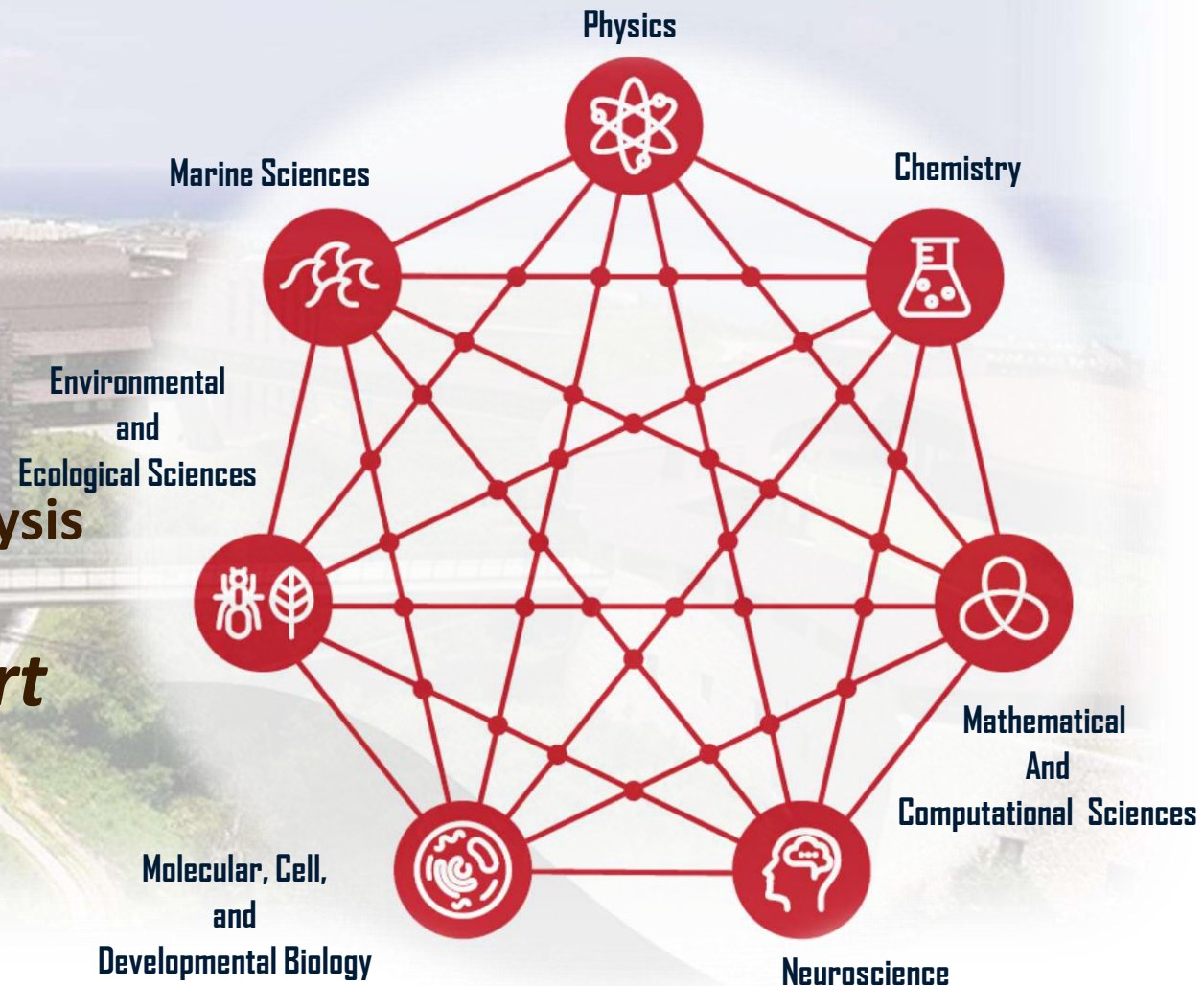
Research Support

Technical Support

- Shared equipment
- Flexible workspaces
- Consultation
- Data acquisition and analysis

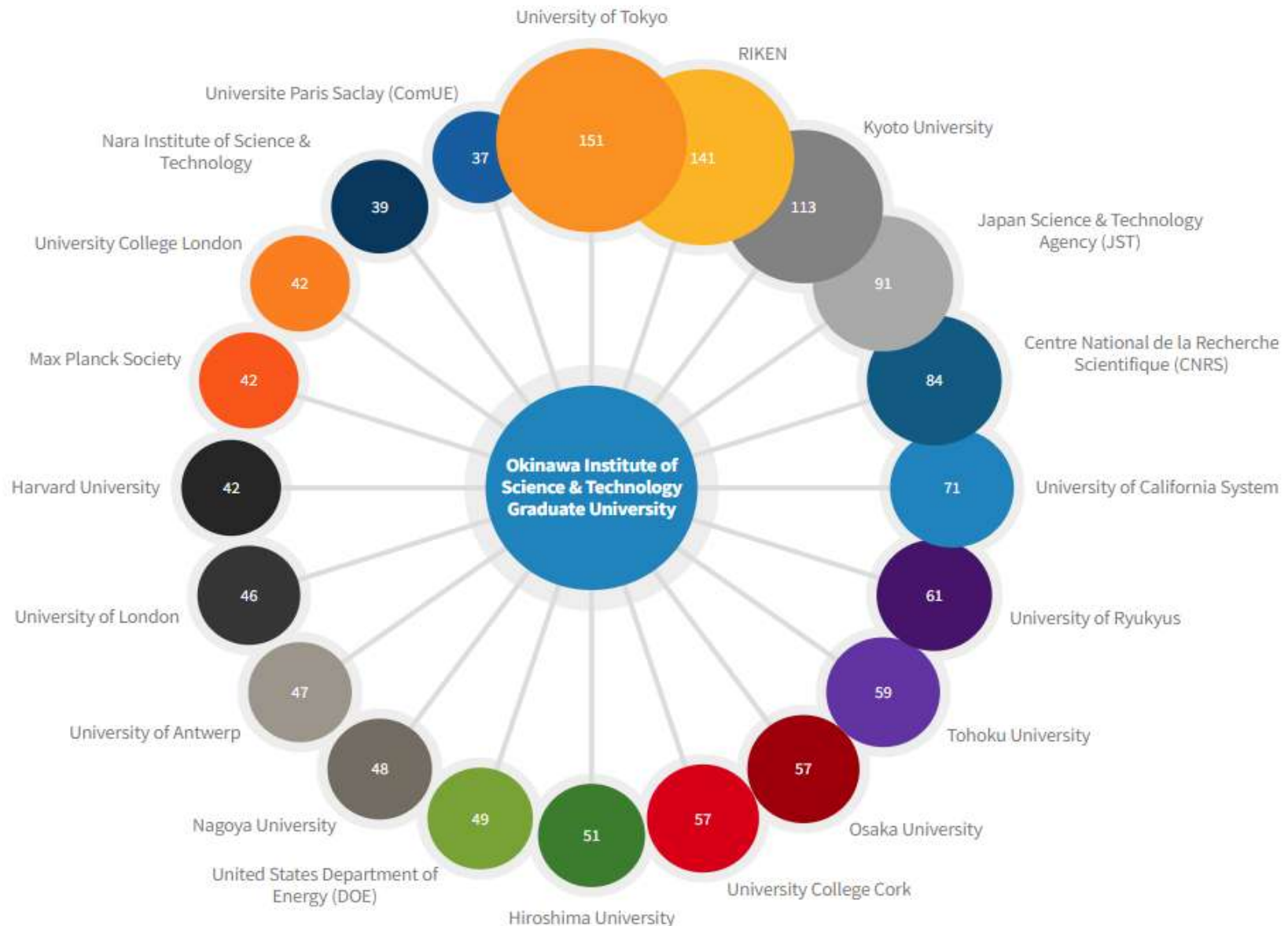
Administrative Support

- Grant Applications
- Collaborations
- Health and Safety



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

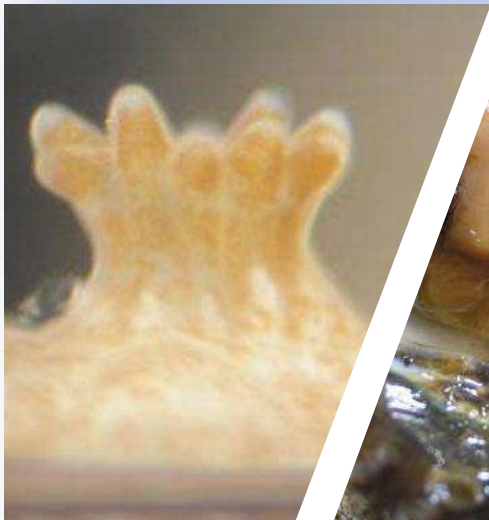




Marine Sciences



coral farming
-Yuna Zayasu (OIST)



Biological Complexity Unit

Computational
Neuroethology Unit

Evolution, Cell Biology, and
Symbiosis Unit

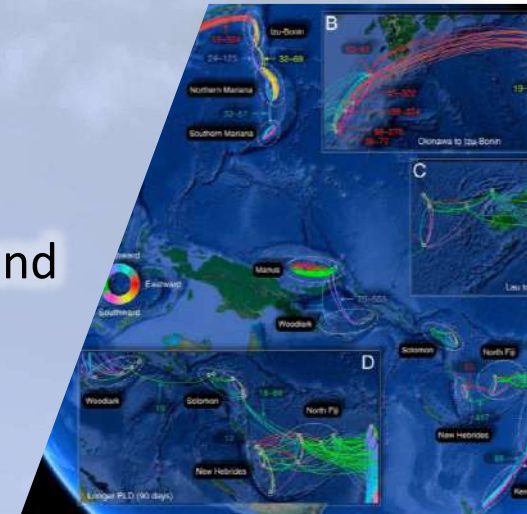
Evolutionary Neurobiology
Unit

Marine Climate Change Unit

Marine Biophysics Unit

Marine Eco-Evo-Devo Unit

Marine Genomics Unit

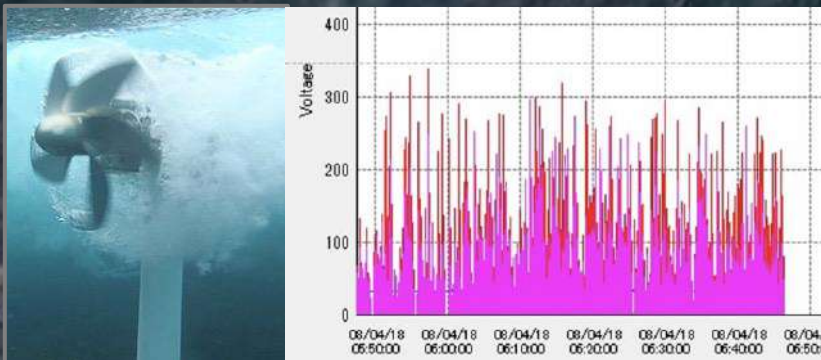




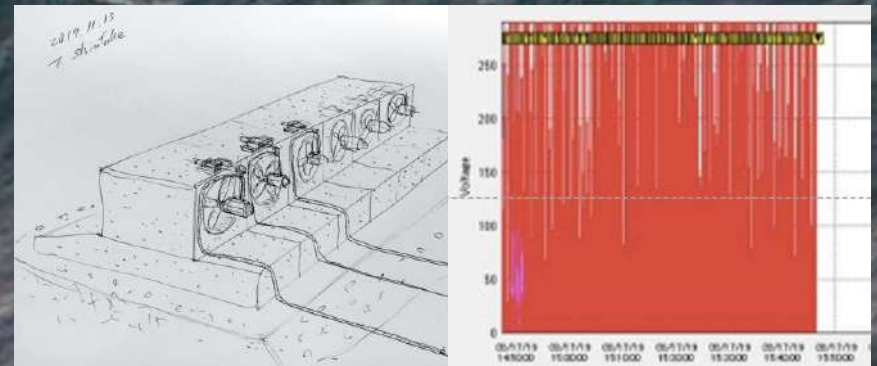
OIST Wave Energy Project

Tsumoru Shintake

Ocean Wave possesses tremendous amount of energy, and it will be a perpetual source of renewable energy.



Rotating turbine in the wave



Seawall with integrated Wave Energy Converter



OIST Clownfish Research
Tim Ravasi
Vincent Laudet

Mechanisms of symbiosis
(fish – sea anemone dinoflagellate)

LUXAQUA
AQUARIUM DESIGN & BUILD



Genomic effects of heat waves on
coral reef fishes (adults and larvae)
Transgenerational effects

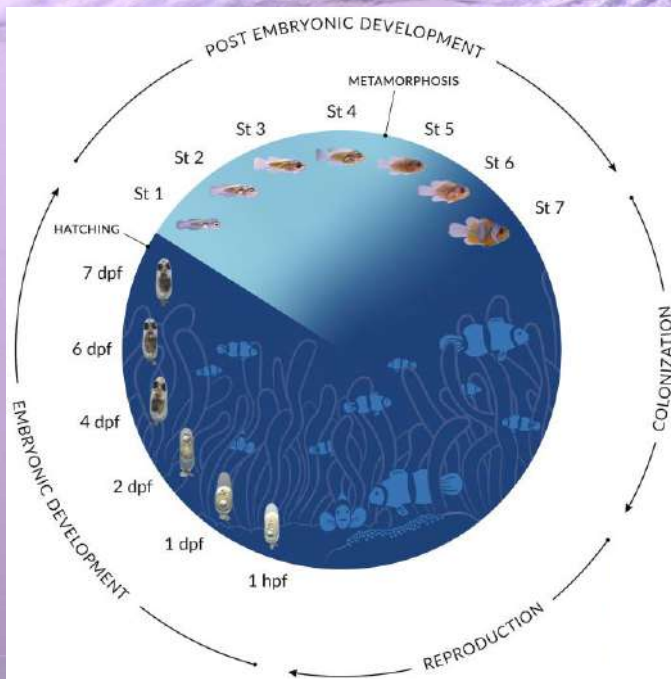


OIST Clownfish Research

Tim Ravasi

Vincent Laudet

Fish larvae remains the Terra Incognita of marine science



Understanding the adaptation of larvae to their local environment



Understanding how the metamorphosis is triggered and coordinated by hormones

Understanding metamorphosis control the “quality” of the juveniles

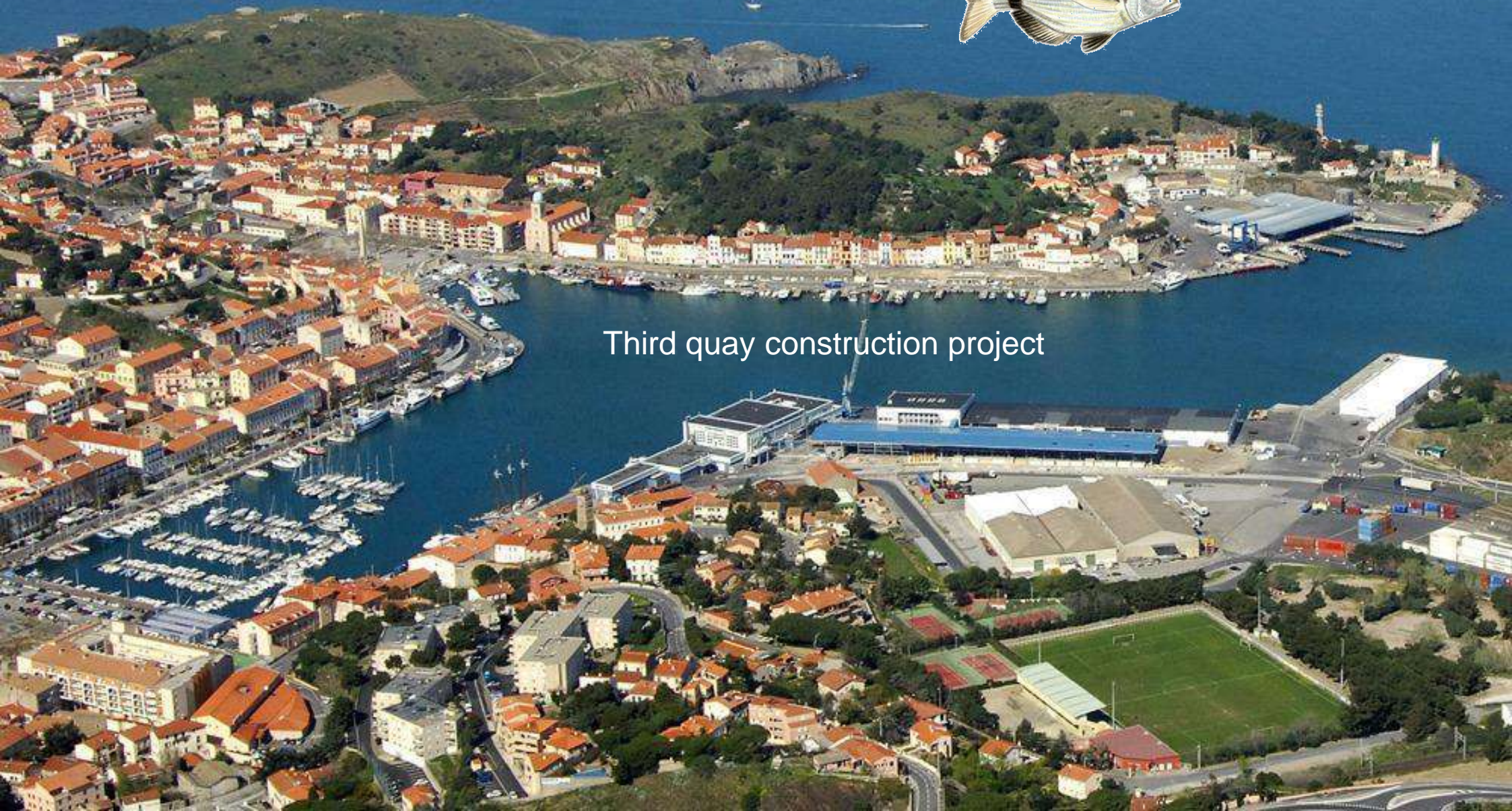
50 μ m

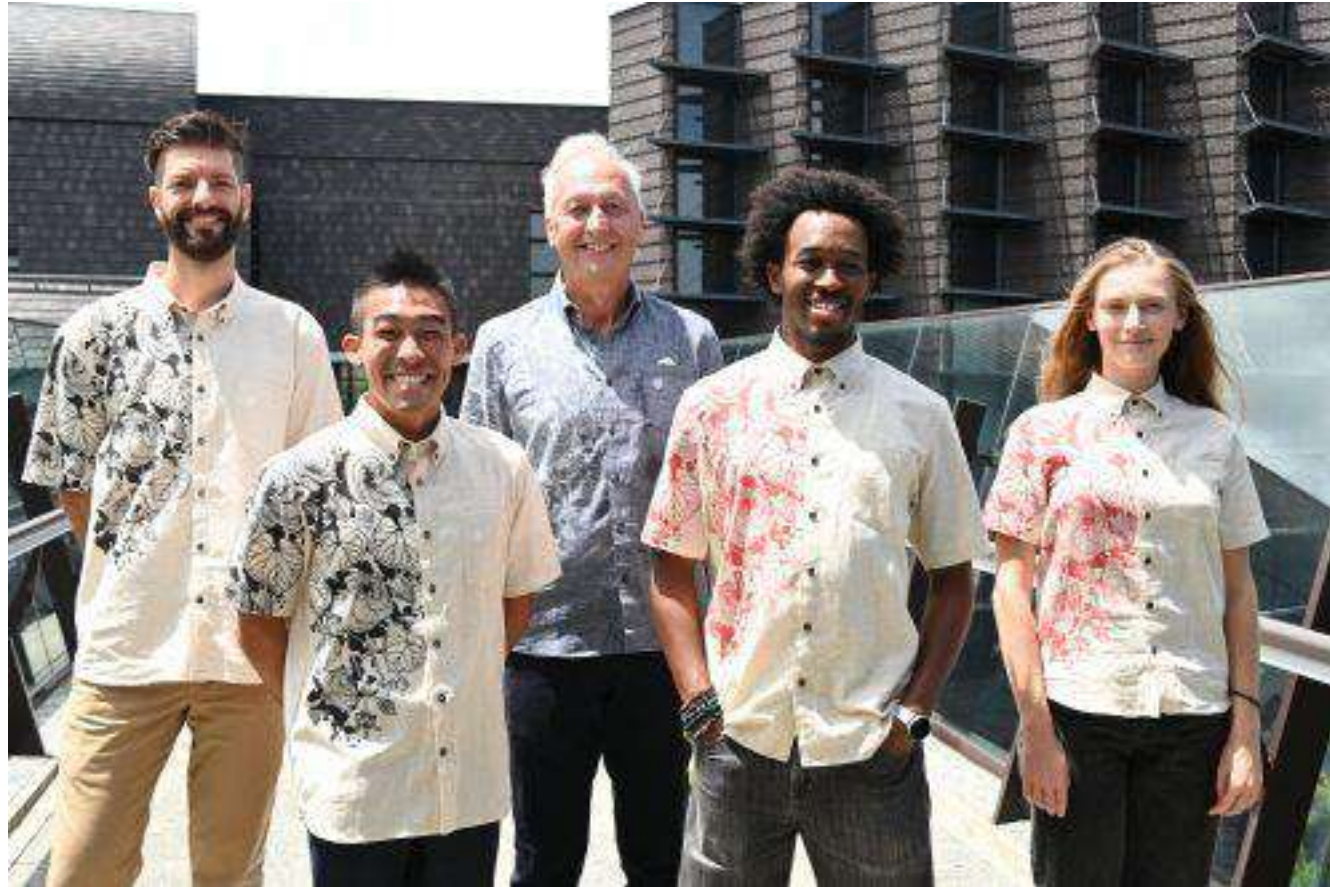
Fish larvae can serve to monitor underwater construction work

Laurence Besseau et Philippe Lenfant



Third quay construction project





ありがとうございました



Kariyushi shirts officially replace wearing ties in Okinawa !

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