



Okinawa Institute of Science and Technology
Postdoctoral Scholar or Staff Scientist in Fish Biomechanics

The Okinawa Institute of Science and Technology Graduate University (OIST; see www.oist.jp) is a dynamic new graduate university of science and technology in Okinawa Prefecture, Japan. The university is located on 85 hectares of protected forestland overlooking beautiful shoreline and coral reefs. The campus is striking architecturally, and the facilities are outstanding ([OIST campus video tour](#)). There are no academic departments, which facilitates multidisciplinary research. Outstanding resources and equipment are provided and managed to encourage easy access and collaboration. English is the official language of the University, and the university research community is fully international, with more than 50 countries represented. OIST is rapidly gaining recognition in the worldwide academic community as a model for excellence in education and research.

Working Location:

1919-1 Tancha, Onna-son, Okinawa, Japan 904-0495

Position summary:

A postdoctoral scholar (PhD <5 years) or staff scientist position (PhD >5 years) in fish biomechanics is available in the new [Marine Macroevolution Unit](#) at OIST. We seek a highly motivated, expert researcher with a track record of excellence and deep interest in fish biomechanics, including but not limited to locomotion, feeding, and experimental approaches. The researcher will pursue groundbreaking projects on the functional morphology of living and fossil fishes, as well as the function of specific traits using models and/or living fishes.

Report To:

Prof. Lauren Sallan, Marine Macroevolution Unit

Responsibilities:

1. Lead innovative projects focused on the biomechanical interests of the Marine Macroevolution Unit.
2. Publish results in high-quality journals.
3. Present at national and international conferences.

Qualifications:

(Required)

1. PhD in Biomechanics, Ecology and Evolutionary Biology, Organismal Biology, Fisheries, Systematics or related field with dissertation focused on fish biomechanics.
2. Deep experience and understanding of functional morphology across a breadth of



fishes.

3. Interest in biomechanics questions and the origins and function of specific traits.
4. Familiarity with various experimental and quantitative methods in Biomechanics (e.g. Digitization, Experiments with Live Animals, CT Imaging, Modeling, 3D printing, Computational Fluid Dynamics, Biomaterials testing).
5. Willingness to develop knowledge about areas and clades of interest to the unit if outside of past experience (e.g. fossil fishes).
6. Willingness to learn new methods as needed.
7. Willingness to collaborate with other relevant labs at OIST and outside, such as those using fishes, or engineering approaches to fluid dynamics and biomechanics.
8. Willingness to travel to outside labs or museum collections as needed.
9. Good spoken and written English skills, including for scientific terms and concepts. Japanese is not required but classes are provided to OIST employees and their families.

(Preferred)

1. Proficiency in 3D imaging and modeling of anatomy (e.g. Amira/Mimics or equivalents, Blender, Autocad, etc), as well as translating these to 3D prints.
2. Proficiency in quantitative and experimental methods relevant to Fish Biomechanics (e.g. Computational Fluid Dynamics, video processing; experiments with flow tanks).
3. Experience and interest in fish scale morphology, body form, and fin structure and/or jaw mechanics.
4. Proficiency in R or other programming language.
5. Proficiency in specimen processing.
6. Track record of publications demonstrating broad interests in biomechanics of fishes or biomechanically similar species.

Starting Date:

Negotiable

Term & Working hours:

Full-time. The postdoctoral position (PhD<5 years) is initially for one year and can be extended to 2 more years based on performance and mutual agreement. The staff scientist position (PhD>5 years) is initially for one year and can be extended further based on performance and mutual agreement.

Working hours: Discretionary working hours



Compensation & Benefits:

Compensation in accordance with the OIST Employee Compensation Regulations

Benefits:

- Relocation, housing and commuting allowances
- Annual paid leave and summer holidays
- Health insurance (Private School Mutual Aid <http://www.shigakukyosai.jp/>)
- Welfare pension insurance (kousei-nenkin)
- Worker's accident compensation insurance (roudousha-saigai-hoshou-hoken)

How to Apply:

Apply by uploading your submission documents [HERE](#)*.

*This is a secure file uploading system for handling confidential materials.

Submission Documents:

Single PDF with Title "LastName_FirstName_PositionArea" including:

- 1) Cover letter including brief statements of research interests and interest in the unit (3 pages max).
- 2) List of top three representative publications (or manuscripts in prep) with one paragraph summary of key findings and scientific value for each.
- 3) Contact information for 3 recommendations (will be contacted after first evaluation)
- 4) Full CV including publication list.

* Prior to the start of employment all new hires are required to successfully complete a background check. Personal information including employment history and academic background should be submitted to third-party administrators after a conditional offer of employment.

Application Due Date:

Initial review of applications will begin on June 15, but applications will be accepted until filled.

Declaration:

- * OIST Graduate University is an equal opportunity, affirmative action educator and employer and is committed to increasing the diversity of its faculty, students and staff. The University strongly encourages applications from underrepresented groups.
- * Information provided by applicants or references will be kept confidential, documents will



not be returned. All applicants will be notified regarding the status of their applications. [OIST](#)

[Privacy Policy](#)

* Please view our policy for rules on external professional activities

(<https://groups.oist.jp/acd/information-disclosure/>).

* Further details about the University can be viewed on our website (<https://www.oist.jp>).