



Why Are Coral Reef Fish So Beautiful?

Photo Credit: The clownfish Nemo (Amphiprion ocellaris) by Kina Hayashi, OIST, MEEDU unit.

教授からのコメント /

COMMENT FROM PROFESSOR

«We discovered in my lab that clownfish use their brilliant colors as a language in their complex social life, but we need to understand better this unique communication system. Also, we must analyze how human impact may affect the life in clownfish colonies and to develop restoration programs»



Dr. Vincent Laudet

Professor

Marine Eco-Evo-Devo Unit

2020-Now: Faculty at OIST and Research

Fellow at Academia Sinica, Taiwan

2015-2020: Director, Marine Station of
Banyuls-sur-Mer, France

2008-2015: Directeur, Functional Genomics
Institute, Lyon, France

研究概要 / SUMMARY

You all know Nemo and his brilliant colors. In general, most coral reef fishes have an incredible variety of colors and this explains why they are such fascinating tourist attractions. But, why are they so colorful? And how does their color pattern originate? Using the clownfish Nemo as a model we decipher the origins of the colors and how the fish are using them. We also reproduce natural environment in the lab to study how clownfish use their colors for their social life using cutting edge video tracking system... And the preliminary results are exciting because a clownfish colony is a very complex micro-society. For example, we recently discovered that clownfish are able to distinguish other fishes with different number of vertical bars.

寄附金の使途 / USE OF DONATIONS

1. Sequence the complete genomes of many different color variants to understand the genetic basis of color pattern formation.
2. Establish and maintain clownfish colonies in environmental like condition (mesocosm) to track their social life using 3D video tracking system.
3. Develop clownfish restoration programs to sustain populations decreased by pollution, overfishing or habitat destruction.

寄附金の特典 / BENEFITS

1. The contribution will be acknowledged in any scientific or outreach paper we produce.
2. We will be happy to organize a discovery tour of our clownfish husbandry and show all that is fascinating about clownfish.
3. We can participate in workshops for kids and teenagers, using clownfish as an iconic fish to explain why it is so important to protect coral reefs.