



What is unique about mammalian gut microbiota?

教授からのコメント /

COMMENT FROM PROFESSOR

«Gut microbes are indispensable for our healthy life. We uncovered a unique feature of mammalian gut microbes: Mucus colonization. This feature enables a much more intimate host-microbe association. It would be our great pleasure if we could contribute to the world through this project together with you»



Dr. Noriyuki Satoh

Professor
Marine Genomics Unit

Prof. Satoh has conducted genome-based research of animal evolution. His laboratory experience led to a unique idea about how microbes settled in the human gut and contributed to our health.

Past Awards: Alexander Kowalevsky Medal in 2005 (St. Petersburg Academy of Science) and Edwin Grant Conklin Medal in 2010 (Amer. Soc. Develop. Biol.).

研究概要 / SUMMARY

Gut microbiota is essential to human health, but it remains unclear how this animal-microbe association emerged in the long history of animal evolution. We found that mammalian gut environment is **unique** in that gut microbes colonize the mucus layer that covers the host's gut wall. This new system is established upon the loss of ancestral barrier system that limits microbial access to the gut wall in non-mammalian animals. We aim to illuminate the uniqueness of this new host-microbe mutually beneficial system for the better health of livestock, pets, and humans.

寄附金の使途 / USE OF DONATIONS

- Hire additional researchers
- Enable state-of-the-art solutions to technical challenges

寄附金の特典 / BENEFITS

1. The research project can be named after the sponsor.
2. Research outcomes can be a part of Corporate Social Responsibility actions on "Healthy Life".
3. Your support will be acknowledged in scientific publications and recognized by scientists around the world.