

NAME: Shinya Shikina

AFFILIATION(INSTITUTE/RESEARCH CENTER /DIVISION/DEPARTMENT) **Institute of Marine Environment and Ecology / National Taiwan Ocean University**

Current POSITION **Professor and Director**

Email: shikina@mail.ntou.edu.tw **Address:**

Expertise: Coral physiology, Coral aquaculture

Education:

04/2006-09/2009 Ph.D. in Graduate school of Marine Science and Technology
Tokyo University of Marine Science and Technology, Japan

04/2004-03/2006 M.S. in Graduate school of Marine Science and Technology
Tokyo University of Marine Science and Technology, Japan

04/2000-03/2004 B.S. in Department of Aquaculture
Tokyo University of Marine Science and Technology, Japan

Experience:

02/2022–Present Professor, National Taiwan Ocean University

02/2017–01/2022 Associate professor, National Taiwan Ocean University

08/2014–01/2017 Assistant professor, National Taiwan Ocean University

02/2013–07/2014 Assistant research fellow, National Taiwan Ocean University

05/2010–01/2013 Postdoctoral fellow, National Taiwan Ocean University

09/2009–04/2010 Postdoctoral fellow, Tokyo University of Marine Science and Technology, Japan

04/2008–03/2010 Research fellow, Japan Society for the promotion of Science (JSPS)

Research interests:

Fish physiology, molecular and cellular biology, Cell culture,
Reproductive biology of stony corals, coral physiology, Coral aquaculture

Major research achievements

Sexual reproduction (gametogenesis) of scleractinian corals, Coral mariculture, Coral neurobiology

List of representative publications within the past 3 years (*Corresponding author):

1. Chiu YL, Chang CF, Shikina S*. Development of an *in vitro* tissue culture system for hammer coral (*Fimbriaphyllia ancora*) ovaries. *Scientific Reports*, 11: 24338. 2021. *Corresponding author.
2. Zhang Y, Shikina S*, Ho Y, Chiu YL, Yao YC, Zatylny-Gaudin C, Dufor S, Chang CF. Involvement of RFamide neuropeptides in polyp contraction of the adult scleractinian corals *Euphyllia ancora* and *Stylophora pistillata*. *General and Comparative Endocrinology*, 285: 113270. 2021.
3. Chiu YL, Shikina S*, Yoshioka Y, Shinzato C, Chang CF. De novo transcriptome assembly from the gonads of a scleractinian coral, *Euphyllia ancora*: molecular mechanisms underlying scleractinian gametogenesis. *BMC Genomics*, 21:732. 2020

4. **Shikina S**, Chen CC, Chiu YL, Tsai PH, Chang CF. Apoptosis in gonadal somatic cells of scleractinian corals: Implications of structural adjustments for gamete production and release. *Proceedings of the Royal Society B: Biological Sciences*, 287:2020578. 2020.
5. Iwasaki-Takahashi Y, **Shikina S**[#], Watanabe M, Bamba A, Yagisawa M, Takahashi K, Fujihara R, Okabe T, Valdez Jr DM, Yamauchi A, Yoshizaki G. Production of functional eggs and sperm from in vitro-expanded type A spermatogonia in rainbow trout. *Communications Biology*, 3: 308. 2020. [#]Co-first author.
6. **Shikina S**^{*}, Chiu YL, Zhang Y, Yao YC, Liu TY, Tsai PH, Zatylny-Gaudin C, Chang CF. Involvement of GLWamide neuropeptides in polyp contraction of the adult stony coral *Euphyllia ancora*. *Scientific Reports*, 10:9427. 2020.
7. Zhang Y, Chiu YL, Chen CJ, Ho YY, Shinzato C, **Shikina S**^{*}, Chang CF^{*}. Discovery of a receptor guanylate cyclase expressed in the sperm flagella of stony corals. *Scientific Reports*, 9:14652. 2019.
8. Chiu YL, **Shikina S**^{*}, Chang CF^{*}. Testicular somatic cells in the stony coral *Euphyllia ancora* express an endogenous green fluorescent protein. *Molecular Reproduction and Development*, 86:798–811. 2019
9. **Shikina S**, Chiu YL, Ye MR, Yao IC, Chung YJ, Chen CJ, Chang CF^{*}. Molecular cloning and characterization of proliferating cell nuclear antigen (PCNA); a potential involvement of PCNA in germ cell development of stony corals. *Fisheries Science*, 84: 765-775. 2018.

Book chapter (invited)

1. **Shikina S**^{*}, Chang CF^{*}. Cnidaria. A chapter in *Encyclopedia of Reproduction*. Second edition. Michael Skinner (ed). Elsevier. 2018.