

Joseph Tin Yum WONG

Nature is not separated into physics, chemistry and biology, but that is instituted for the sake of focus and manageable scope. With the advent of artificial intelligence, these artificial boundaries will be merging. Creativity is also the shared root for arts and science but is rarely appreciated. As with *Beauty and the Beast*, either of human surreal patronage, cross-synergy will be empowering for the betterment of humanity.

Independent Research and Academic Appointments

Professor, Division of Life Science, HKUST

(2016-18, recovered from HepA-mediated acute liver failure)

Professor, Department of Biotechnology and Marine Biology, HKUST

Professor, Department of Biology, HKUST

Associate Professor, Department of Biology, HKUST

Assistant Professor, Department of Biology, HKUST

Research Fellow (independent research appointment)

Marine Biological Association of the United Kingdom, Plymouth, U.K.

with training secondment to Paul M. Nurse laboratory, Oxford University

Postdoctoral Training Fellow

Imperial Cancer Research Fund Cell Cycle Control Group, Microbiology Laboratory, Biochemistry Department, Oxford University (Paul M. Nurse, NL)

Postdoctoral fellow

Natural Environment Research Council Institute of Environmental Microbiology, Oxford (David H. Bishop, DSc)

PhD. University of Stirling; Larval development and population genetics

MSc. in Aquaculture and Fisheries Management, Institute of Aquaculture (Distinction)
University of Stirling.

B.Sc. in Marine Biology and Oceanography (Chemical)

University College of North Wales, Bangor.

Leighton Park School, Reading.; La Salle College, Hong Kong

Research Goals: *Application of creativity to solve strategic problems, and to seek novel questions.*

Supervision of students and postdoctoral associates

12 MPhils, 11 PhDs, 6 Postdoctoral Associates >40 final year research project students, 5 MSc,

Research Grants over 30 internal and external grants as principal investigator (50K -1.9M HKd ea.); as co-investigator (up to 89 M HKd ea.) co-I: *State Key Laboratory of Molecular Neuroscience*

Teaching: Founding member of the Nanoscience and Technology Program, HKUST

Scientific publications: ~70 peer review journals. The accumulated data during my recovery will be progressively published in the next few years.

Guest Editors: *Neural Signals* (2002-4),

Editorial Board. *Biology* <https://www.mdpi.com/journal/biology>

Organizing committee: First Asia Pacific Coral Reef Symposium <https://www.apcrs2023.org/about/about-us/>

Co-Chair: The 11th AEARU Workshop on Molecular Biology and Biotechnology. Physical Biology: Interface between physical and biological sciences. Editor for Biology section: 22nd International Liquid Crystal Conference (ILCS) 2009, Jeju Island, South Korea

Recent talks: (Invited Oral presentation), Wong JTY (June 22-27, 2025) *Functional Genomics of Dinoflagellates.*

MiniSymposium of Dinoflagellates. In The 16th International Congress of Protistology (ICOP/ISOP 2025) (Seoul, Korea). (Keynote Speech: Advances in DNA and RNA Research) *Dinoflagellate quasi condensed chromosomes: Karyogenomic Architecture and Responses to UVc irradiation*

The 2nd Symposium on World Cell and Molecular Biology. (Oral presentation) The Dinoflagellate inner Compartment The 65th Annual Meeting of the Japanese Society of Plant Physiologists, Kobe, Japan. (March 2024) https://jspp.org/annualmeeting/65/e_sanka.php (Oral presentation

The Dinoflagellate Cellulosic Thecal Plates as a Biomimetic Model for Cellulose Synthesis. International Conference on Nano Research and Development, ICNRD-Dec, 2023, Singapore. <https://istci.org/icnrd2023/Speakers.asp>

2019 April *Liquid crystalline Macromolecules in vivo.* Okinawa Institute of Science and Technology, Japan. Dec 2023 *Dinoflagellate Cellulosic Thecal Plates, a biomimetic study system for cellulose nanocomposites* International Congress of Nanoscience Research and Development.

ScienceArt Commune 1: Wong, J.T.Y., Whirling with Waters. Art and Science 2024, 8, <https://www.openscience.fr/ScienceArt-Commune-1-Whirling-with-Waters>

Accumulated artworks will support several artscience communes in climate change, neurosciences, and cancer survivors (esp. prostate cancer). Futher chapters will be progressively curated, for engagement and for reach out.