



SEMINAR

Tues, 15 Sept 2026 | 4:30 pm | S3-05-02 Conference Room 1

Hosted by Assoc Prof Steven Fong

Early life history of spiny and slipper lobsters: insights for aquaculture development

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Spiny and slipper lobsters are the most valuable crustacean resources worldwide, supporting important fisheries and aquaculture industries. However, commercial seed production remains challenging because of their complex early life histories, characterized by prolonged larval development, multiple metamorphic transitions, and specific environmental requirements. Understanding these early developmental stages is essential for advancing sustainable aquaculture technologies. This seminar explores the developmental biology of spiny and slipper lobsters, from embryonic development through larval growth, settlement, and juvenile recruitment. Particular attention is given to the phyllosoma larval stage, which exhibits unique morphology, behavior, and feeding strategies, as well as the non-feeding transition stage. Recent findings on larval biology including nutrition, physiology, behavior, and responses to environmental stressors will be highlighted to illustrate how developmental processes influence survival and growth. The seminar will also discuss current challenges and opportunities in hatchery production. By integrating knowledge from developmental biology, ecology, and aquaculture research, this presentation demonstrates how studies of early life history can contribute to reliable seed production and the sustainable expansion of lobster aquaculture.

Dr. Kaori Wakabayashi is an accomplished academic and researcher specializing in the sciences, currently serving as an Associate Professor at Hiroshima University, Japan. She earned her Doctoral Degree in Science from the University of Toyama in 2009. Following graduation, she built a strong foundation in marine science and technology by completing two postdoctoral fellowships at the Tokyo University of Marine Science and Technology, including a prestigious fellowship with the Japan Society for the Promotion of Science (JSPS) in 2013. Dr. Kaori Wakabayashi expanded her international research network in 2014 as a Visiting Researcher at Curtin University in Australia. She returned to Japan to join the faculty at Hiroshima University, where she was appointed Assistant Professor in 2015 and subsequently promoted to Associate Professor in 2019.