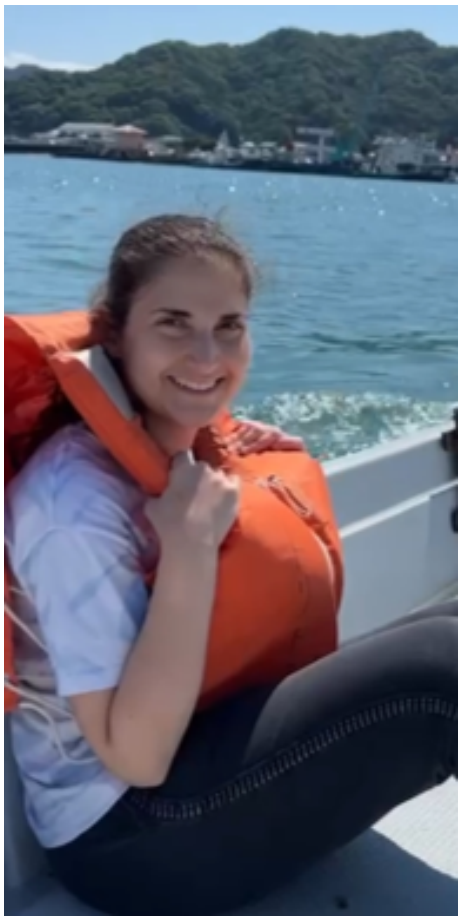
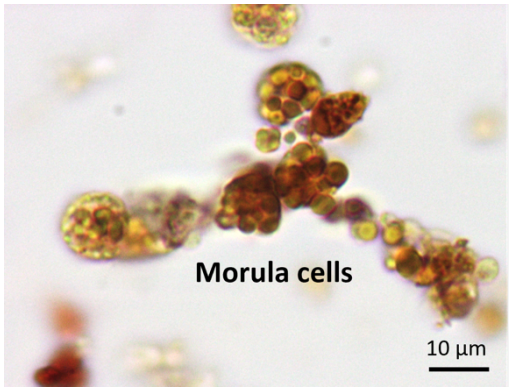
DC セミナー／化学生命理工学セミナー

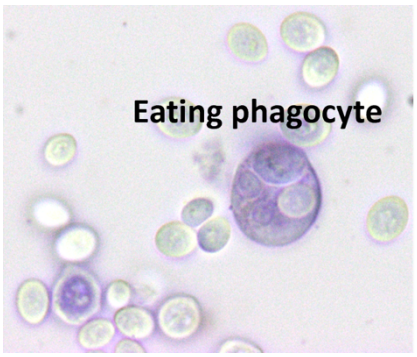


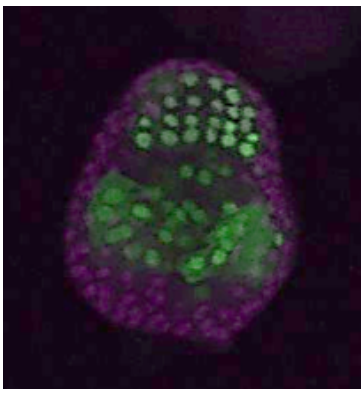
A TALE ON MOLECULAR MARKERS OF STRESS GRANULES IN ASCIDIANS

講師：　Laura Drago 先生
Università degli Studi di Padova (Italia)
日時：　2023 年 7 月 31 日（月）14:50〜16:20
場所：　理工学部 共通講義室 3

Stress granules are cytoplasmic foci, in which mRNA translation is rapidly and temporarily blocked in response to stressful conditions thanks to the presence of nucleic acid binding proteins, such as TIAR, G3BP and TTP. These proteins are widely used as stress granules molecular markers in studies on vertebrates but they are not so deeply investigated in invertebrates, especially in marine organisms. *Ciona robusta* and *Botryllus schlosseri*, respectively solitary and colonial ascidian, belonging to the subphylum Tunicata (Phylum Chordata), are the model organisms of my research on immune responses and embryonic and non-embryonic development at the Lagoon of Venice, Italy. As colonial ascidian, *B. schlosseri* is able to both sexual and asexual reproduction, the last characterized by the simultaneous presence of three blastogenetic generations which guarantee the cyclical renewal of the colony. During the generation change, called　take-over, tissues of old adults undergo cell death by apoptosis and are cleared by phagocytes, once recruited by morula cells. Phagocytes and morula cells are the two circulating immunocytes of ascidians, operating in the two fundamental processes of innate immunity: phagocytosis and inflammation.







お問い合わせは理工学部・藤原滋樹（ tatataa@kochi-u.ac.jp ）まで