

# Special Issue

## Ascidian Early Development

### Message from the Guest Editors

Ascidians are a well-established model animal for understanding human beings as a member of the superphylum Chordata. After the draft genome of *Ciona intestinalis* was reported in 2002, molecular understandings of early development have been expanded. This Special Issue aims to summarize the current status of lower chordate biology and prospects for this new era, in which outcomes from ascidian biology have a great impact on medicine and human health. Potential topics include, but are not limited to, the following:

- Maternal information, including localized factors, transcriptional and translational regulation, and cytoskeletal rearrangement;
- Morphogenesis, tissue and organ development, cell-fate determination, and metamorphosis;
- Neuronal and hormonal signals, the development of the central and peripheral nervous systems, photoreception, memory, and behavior;
- Oogenesis and spermatogenesis, fertilization, self-nonsel self recognition, and the immune system;
- Molecular evolution, molecular phylogeny, and the origin of vertebrates.

Prof. Dr. Takeo Horie

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### Guest Editors

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### Deadline for manuscript submissions

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### Message from the Editor-in-Chief

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