Journal of
Developmental Biology

IMPACT FACTOR 2.7
Indexed in: PubMed
CITESCORE 3.7

an Open Access Journal by MDPI

Cilia in Development

Guest Editor:

Dr. Aimin Liu
Department of Biology, Eberly College of Science, The Pennsylvania State University, University Park, PA, USA

Deadline for manuscript submissions:
closed (30 June 2023)

Message from the Guest Editor

The last two decades have seen an explosion in new discoveries in the roles of cilia in animal development and human diseases. Cilia and flagella have been described in various organisms and tissues for many years, but earlier studies mainly focused on their motile functions, such as propelling the sperm or moving mucus. It was not until around the turn of the century when the nonmotile primary cilia were shown to influence many signaling pathways essential for animal development, including hedgehog, PDGF, Wnt, Hippo pathways, and affect cancer progression. Importantly, many previously unrelated disease conditions were subsequently found to share a common cellular basis of abnormal cilia function, hence the birth of a new term: ciliopathies.

In this Special Issue, we hope to capture this momentum and showcase a collection of reviews and research articles reflecting the latest findings and understanding of the roles of all kinds of cilia (motile cilia, primary cilia, nodal cilia, flagella) and cilia-related molecules (proteins, non-coding RNAs, lipids, small molecules, etc) in animal development. Studies using all kinds of animal models are welcome.