Symposium 2 Molecular and Cellular Biology of Protozoa

Organizers: Shan Gao (China) and De-Hua Lai (China)

Synopsis: Parasitic and free-living protozoans are eukaryotic pathogens and/or biomass of medical and ecological importance. Numerous features of protozoa, such as nuclear dualism, specified cell structure or organelle, distinct cell cycles and phenotypic/genotypic strain diversity, account for their contribution to molecular and cellular biology. Historical highlights of discoveries include telomere and telomerase, ribozyme, histone modifications, microtubule motors, RNA editing, small RNA-directed DNA elimination, and so on. Nonetheless, mechanisms that govern the accuracy of DNA elimination, synaptonemal complex-independent meiosis, stage specific metabolism and regulation, stage differentiation and species diversification remain elusive. This symposium will bring together a diverse group of young researchers interested in revealing molecular and cellular biological machinery of both parasitic and free-living protozoans. A combined tool of conventional and molecular genetics, biochemistry, cytology, and bioinformatics was applied to address how protozoans maintain the genome integrity, survive in competition, and diversify. Many of their findings have much to offer for future studies of protozoans themselves and consequently humanrelated basic and medical biology.



Speakers :

K. Kataoka (Japan), F. Li (Singapore), X. Zhao (China), S. Long (China), M. Tian (China), and N. Gupta (Germany)