Special Issue

Reviews in Actin Cytoskeletal Dynamics

Message from the Guest Editors

While the last ~75 years of research into the dynamic structure of actin and the multitude of actin binding proteins that regulate it has significantly advanced the field's understanding of actin, much still remains to be learned in these areas. Similarly, how actin dynamics impact life by regulating cellular structure, migration, adhesion, mechanotransduction and morphogenesis remain active areas of investigation. To probe the regulation and function of actin dynamics, quantitative techiques to assess actin in vitro and tools to visualize actin dynamics within tissues and organisms have been developed. In the last two decades, it has been well established that actin not only functions within the cytoskeleton but translocates to the nucleus where it has a range of activities. However, much remains to be learned about the structure, dynamics, and regulation of nuclear actin. This Special Issue will be a place for reviews on the field's current understanding of actin dynamics, actin binding proteins, the in vivo functions of actin—both in the cytoplasm and the nuclues, and the technologies used to study actin.

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A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

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