生命機能研究科セミナー

平成26年 3月5日（水）16:00-17:30（45分×2演者）
生命機能研究科ナノバイオロジー棟3F セミナー室

Michael Way Ph.D.
London Research Institute, UK
Editor-in-Chief, Journal of Cell Science
Actin-based motility of Vaccinia virus:
unexpected insights into Arp2/3-driven actin polymerization

Sharon Ahmad Ph.D.
Executive Editor, Journal of Cell Science
Behind the Scenes of Scientific Publishing

（講演要旨は裏面をご覧下さい）
**Michael Way, Ph.D.**  
London Research Institute, UK  
Editor-in-Chief, Journal of Cell Science

“Actin-based motility of Vaccinia virus: unexpected insights into Arp2/3-driven actin polymerization”

Intracellular pathogens have developed numerous strategies to manipulate and use the many cellular systems of their hosts to facilitate their entry, replication, survival and spread. Investigating exactly how pathogens hijack and subvert their unwilling hosts offers a unique opportunity to obtain mechanistic insights into the regulation and function of a multitude of cellular processes. To this end, our lab uses a combination of quantitative imaging and biochemical approaches to study Vaccinia virus as a model system to interrogate the regulation and function of Src and Rho GTPase signalling networks, actin and microtubule-based transport as well as cell migration. I will discuss how studying Vaccinia has provided unprecedented insights into how a phosphotyrosine-based Nck, WIP and N-WASP signalling network activated by Src and Abl family kinases functions to stimulate Arp2/3 complex dependent actin polymerization. Our analyses have now uncovered a new level of regulation within the Arp2/3 complex that has important implications for a wide variety of actin dependent cellular processes.

**Sharon Ahmad, Ph.D.**  
Executive Editor, Journal of Cell Science

“Behind the Scenes of Scientific Publishing”

The Company of Biologists is a not-for-profit publisher of 5 journals in the biological sciences, including *Journal of Cell Science*. Led by Editor-in-Chief Michael Way, JCS is committed to publishing outstanding articles in the field of cell biology. We have seen a very large increase in submissions over the past few years, and have needed to tighten our acceptance requirements. In this talk, I will give a ‘behind the scenes’ perspective on what happens to a paper that is submitted to *Journal of Cell Science*. I will also discuss publication ethics, as well as the current state of scientific publishing, and where publishers are heading in the future.