

Symposium 4

Algal cell biology: making sense of cell structure

Conveners

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Key-note speakers

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Symposium description

Algae are a vastly diverse assemblage of organisms found in a huge array of habitats. Although the ‘umbrella term’ algae suggests they are related, algal groups are actually scattered among several independent phylogenetic lineages. Algal body structures range from tiny unicells to complex multicellular organisms with specialized tissues composed of different cell types. Algae can be autotrophic or heterotrophic, free-living or involved in symbiotic or parasitic associations. Internal cell structure is similarly diverse and many unusual features, unique to specific algal groups, have been described. Understanding how these structures are assembled inside algal cells, their biochemical composition and function, and the way they are transmitted or re-assembled in the next generation of cells has long been an aim of Algal Cell Biology. Mapping the origin of specific cell structures onto phylogenetic trees is crucial in order to gain a true understanding of evolution in the algal clades.

