総合生命科学部　生命科学セミナー

Plant mitochondria: unusual strategies of gene expression

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The production of mitochondrial mRNAs for essential respiratory proteins is surprisingly complex in plants, and requires unusual events like RNA editing, trans-splicing and multiple end-cleavages. Plant mitochondrial introns belong to an intriguing family of mobile element ribozymes and some have aberrant RNA structures with novel splicing biochemistry. In addition, the recombinogenic nature of the large mitochondrial genomes can result in differences in gene structure/expression among even closely-related plants. We have observed shifts in mitochondrial mRNA maturation events during wheat embryo-to-seedling development, as well as with cold treatment. Plants are also quite unique in that successful movement of mitochondrial genes to the nucleus is still occurring (albeit sporadically) during evolution, and we have tracked several instances to gain insight into their adaptation strategies.

日 時：　２０１８年 ５月 ２日（水）　午後３時～４時３０分
（講演は４時ぐらいまで、その後、大学院生や GSC の学生さんなどとのフリーディスカッションタイムを設けます）

場 所：　１５号館１階　15102 セミナー室

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共　催：植物ゲノム科学研究センター