



生命科学セミナー 私立大学戦略的研究基盤形成支援事業  
「オルガネラゲノムの研究成果を基盤と  
する有用植物の育成」第10回セミナー

昨年末、本学との交流協定を締結したスペイン国立バレンシアポリテク大学から、Alejandro Ferrando 博士をお迎えしてセミナーを行います。ご自身の研究の他に、スペインにおける大学生活のお話もお聞きできると思います。学生の参加も大いに歓迎しますので、ふるってご参加下さい。

**eIF5A: a primitive and *polyamine*-dependent translation factor**

Alejandro Ferrando博士 (Instituto de Biología Molecular Celular de Plantas,  
CSIC/Universidad Politécnica de Valencia)

Dr. Ferrando has been working previously in the field of polyamines in plants and has recently focused his research activities in one pathway dependent on polyamines that controls the activity of the translation factor eIF5A. The polyamine spermidine provides the chemical group to be attached to eIF5A by two enzymatic steps, thus providing full activity to the mature eIF5A. To date this is the only protein that contains this posttranslational modification named hypusine. The hypusinated eIF5A factor is an essential protein in eukaryotes and is also conserved in arqueobacteria and his tertiary structure partially overlaps with similar factors in eubacteria. The recent studies in yeast and humans are beginning to elucidate unexpected roles for this protein that is becoming a promising biotechnological target. Studies in plant cells are very scarce, and Dr. Ferrando has focused on the characterization of this pathway in the model plant *Arabidopsis thaliana*. In the seminar, he will present the most recent unpublished data from his laboratory.

日時： 2012年5月29日(火) 午後4時～5時

場所： 15号館1階15102セミナー室

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