

Training course on DNA sequence analysis and association genetics

Location: Valsain, Segovia (Spain)

Dates: 13-17th July, 2009

Program: 13-14th July: DNA sequence analysis: nucleotide diversity, linkage disequilibrium and recombination, demographical models and signatures of selection.

15th July: Quantitative genetic analyses of common garden experiment (BLUP analysis).

16-17th July: Association genetics: case-control studies, general linear models, mixed linear models, Bayesian methods and family-based approaches (QTDT).

Pre-course: CRIEC (Conifer Re-sequencing Initiative) workshop.

Sunday 12nd July: sequences assembly, post-processing and genomic resources exploitation.

Number of participants: the maximum number of participants is 20 (except for the precourse that is open to all CRIEC contributors).

Registration: Deadline: May 31st, 2009

Contact: Ricardo Alía (alia@inia.es)

Santiago C: Gonzalez-Martinez (santiago@inia.es)

Workshop: Organization: This workshop is an intensive 5-day (approx 40 hr) short-workshop, with topics organized into 9 modules (morning/afternoon sessions) and a focus on practical exercises. Theoretical and practical expertise in the analysis of DNA sequences and the development of association studies will be complemented with evening talks by leading researchers in the field. Modules will include both lectures (PowerPoint slides) and practical exercises (computer-based exercises). Analysis of own data-sets are encouraged during the practicals.

Audience: Post-docs, graduate students and advanced undergraduates within the NoE Evoltree (except for the pre-course that is open to all CRIEC contributors). For each module, basic concepts will be reviewed briefly prior to introducing more advanced content and the most commonly used methods will be applied in the practicals during the afternoon sessions. Resource / reference materials will be provided, using a combination of printed and online resources.