Bioinformatik- projekt på LCB

Multivariate models for predictive toxicology

Wanted: Students for 20p examensarbete VT2008 for a new activity at the Linnaeus Centre for Bioinformatics.

The main project is about constructing multivariate models for toxicogenomics, especially models for cross-prediction of compound (ie drug) effects using a new technique based on hierarchical decomposition of the relationships between PLS models. Data has been generated using microarrays to probe liver toxicity liability. Both in vitro and in vivo data is available, I'm interested in exploring the predictive relationships within between these domains. This is important, because if you can replace an animal study with a cellular assay, you use fewer animals and make decisions earlier in drug development.

Interest in machine learning, multivariate analysis, fluency with MATLAB/R or similar, and an interest in genomics is needed. Att ska kunna bra engelska är bra, men inte nödvändigt!

Other possible projects could be in the application of multivariate models to complex disease SNP data, or on miRNA models (in both cases with a focus on schizophrenia)

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Företag/institution: Linnaeus center for bioinformatics
Plats: Uppsala