



Molecular Biotechnology Programme
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Title (English) Development of strategy for finding of non-coding RNA pol III genes		
Title (Swedish)		
Abstract <p>A strategy to find novel non-coding pol III gene products was developed. It is based on a hidden semi-Markov model that finds pol III promoter containing sequences given a genomic sequence. These sequences are filtered by searching for secondary structures and conservation between organisms. A project working in parallel has implemented the model and a verification of the program has been done by searching chromosomes 1-10 in <i>Sacharomyces cerevisiae</i> for a certain well-defined class of tRNAs. 24 out of 24 predicted tRNAs were confirmed using a BLAST similarity search. Verification of novel candidates has not been done due to the need for expression analysis <i>in vivo</i>. These experiments will follow this work and will indicate if this is a successful strategy or not.</p>		
Keywords <p>RNA polymerase III, Hidden semi-Markov model, Non-coding RNA</p>		
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