



DIPARTIMENTO DI BIOMEDICINA COMPARATA E ALIMENTAZIONE

AVVISO DI SEMINARIO

Il giorno mercoledì **2 marzo 2016** alle ore 14.30, presso l'Aula Magna M. Bonsembiante, dell'Edificio Pentagono, si terrà un seminario, aperto a tutti, dal titolo:

Bioinformatics of High-throughput DNA sequencing

tenuto dal prof. Anders Krogh, Department of Biology, University of Copenhagen.



New technologies for DNA sequencing are revolutionizing research in many areas of the life sciences. Not only is it possible to sequence complete genomes at an unprecedented rate, but also use sequencing for genotyping, gene expression analysis (RNA-seq), mapping of protein binding in DNA (ChIP-seq), study of ecosystems (metagenomics), and many other applications. Computational methods are needed to analyze the large amounts of data from these experiments. In this talk, I will first discuss mapping of DNA reads to a reference genome, which is one of the most common first task. Special care must be taken, when dealing with short reads and I will present a mapping method that builds on a probabilistic basis. I will then present a fast and sensitive method for taxonomic classification of metagenomic reads, which compares reads translated to proteins using a Burrows-Wheeler index.

Per eventuali informazioni rivolgersi al prof. Piero Fariselli (piero.fariselli@unipd.it, interno: 2895)