



**UNIVERSITA'**  
**di VERONA**

Centro  
PIATTAFORME  
TECNOLOGICHE

In collaborazione con



**Giovedì 24 ottobre 2019 14:00 -16:00**

Auletta di Farmacologia - Borgo Roma – Palazzina di medicina Legale  
Piazzale L. Scuro, 10 Verona

**Presenta un seminario dal titolo**

## **Xdrop™ - Targeted Sequencing of challenging genomic landscapes**

**Relatore:**

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Sequencing of difficult genomic landscapes such as regions with repeat sequences, or high GC content remains a challenge with current technologies. Most sequencing strategies including targeted enrichment struggle to achieve sufficiently high coverage or read mapping during such regions.

The Xdrop™ technology, a novel automated microfluidics-based targeted enrichment system, enables fast targeted enrichment while maintaining the quality of the DNA and thus makes it possible to avoid PCR errors and bias previously introduced in enrichment.

At this seminar, we will present the Xdrop™ system being employed to sequence integrated viruses and their surrounding unknown chromosomal sequence, sequence long GC repeats, and we show phasing of mutations from sub-nanograms of DNA. Regions up to 100 kb are enriched and sequenced using Illumina, PacBio, and Oxford Nanopore sequencing at high coverage. We also show that the Xdrop™ system can be used for general, unbiased isothermal amplification of small amounts of samples of DNA for any type of downstream sequencing.

**Contatti:**

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