

# Mutation Analysis Facility



# **NEWSLETTER DECEMBER 2020**

Soon a whole year will have passed since the first news of a new virus reached us. Who could have predicted then how all our lives were to change? At MAF, we continue doing our bit to "flatten the curve". Only a limited number of staff are on-site in order to perform the necessary laboratory work.

### Agena SARS-CoV-2 assay and MAF CovGSA panel

As mentioned in the previous newsletter, Agena has developed a SARS-CoV-2 detection system, assaying five viral targets in the N and ORF genes. This assay panel has now been granted Emergency Use Authorization in the U.S as well as CE-IVD approval. MAF will shortly commence a validation study of this panel. Agena also offers the MassAR-RAY® SARS-CoV-2/Flu Panel (RUO) which simultaneously detects and differentiates between SARS-CoV-2 and Influenza A/B viral RNA from a single sample.

In a research collaboration, MAF has developed a first version of a **Covid-19 genotyping susceptibility assay panel**. The results of the validation study of this assay panel were promising. However, the panel is currently in the process of refinement following the recent and growing release of new data in the scientific community.

### **More Agena News**

Despite the current strain on the healthcare system, 452 samples have been analyzed for **Familiar Hypercholesterolemia (FH)** at MAF to date, in 2020. 32 clinics around Sweden are now sending their samples to MAF for FH analysis.

MAF has recently completed several **non-human genotyping** studies utilizing the Agena platform. The species studied have ranged from fish to cattle, showcasing the wide potential of this method.

Agena has evaluated and validated a targeted PIK3CA panel in response to the new guidelines from the National Comprehensive Cancer Network and the European Society of Medical Oncology. Analysis of PIK3CA mutations in patient tumor samples is recommended in routine clinical practice for therapy selection in metastatic breast cancer. The ClearSEEK PIK3CA Panel® covers 90% of known actionable PIK3CA mutations and detects mutations with very low frequency as well as in samples with limited and degraded DNA.

## Illumina News

Illumina launched its first non-human methylation microarray, the **Infinium Mouse Methylation BeadChip**. It features > 285k markers across the methylome for high-resolution epigenetic analyses of diverse murine strains.

#### **Accreditation and Quality assurance**

MAF was subject to a SWEDAC audit in October. We passed with flying colors and the technical assessor's closing remarks were "MAF is one of the best laboratories I have witnessed".

### **MAF and Biomedical Sciences Programme at KI**

During spring and autumn, MAF has lent a helping hand to the Biomedical Sciences programme at KI. This has entailed the examination of degree projects as well as Biomedical Sciences students shadowing MAF staff.

#### **Christmas at MAF**

MAF will be short-staffed from 21/12-11/1. Samples will be accepted during this period but not analyzed. Please contact available MAF staff via: maf@biosci.ki.se

Please visit our homepage for more information and current news: <a href="https://www.maf.ki.se">www.maf.ki.se</a>.

#### Contact

For more information concerning the applications in the newsletter, please contact lab manager Kristina Duvefelt: +46 8 585 83693 or kristina.duvefelt@ki.se.

