

## Molecular Epidemiology Laboratory

Example of experiments and measures (others are set up as needed):

- ELISA to detect levels of cotinine (tobacco-derived carcinogen)
- ELISA to evaluate diurnal salivary cortisol (as a stress marker)
- Gene expression / qPCR
- Lipid profiling, glycosylated hemoglobin
- Sanger sequencing for screening of mutations
- Genotyping of candidate polymorphisms: MassArray, RFLP, Sequencing, Fragment size analysis
- Analysis of methylation (low throughput)
- Quality controls and preparation of specimens for ddPCR and for NGS
- Extraction of nucleic acids from micro-punch biopsies
- Co-extraction of DNA/RNA and extraction of DNA from various sources of tissues
- Preparation and QC of samples for next gen sequencing