

Stellingen
Behorende bij het proefschrift

Genetic Approaches to Appearance and Ancestry: Improving Forensic DNA Analysis

- 1.** Forensic DNA Phenotyping. i.e. the prediction of appearance and ancestry from forensic DNA, provides impetus to police investigations in tracing unknown perpetrators not identifiable via current DNA profiling.
- 2.** Europeans have remarkable eye, hair and skin colour variation.
- 3.** The IrisPlex system for eye color prediction from DNA is easily implementable and applicable across forensic laboratories around the world with varying pre-existing experiences (This Thesis)
- 4.** The HIrisPlex system for simultaneous prediction of eye and hair color from DNA is suitable for analysing skeletal remains of World War II victims. (This Thesis)
- 5.** The HIrisPlex-S system allows simultaneous prediction of eye, hair and skin colour from DNA. (This Thesis)
- 6.** The intriguing features of mitochondrial DNA have made it an invaluable tool in forensic practice.
- 7.** Forensic validation of the IrisPlex, HIrisPlex, HIrisPlex-S and the mitochondrial DNA genotyping assays provide important prerequisites for their application in routine forensic casework. (This Thesis)
- 8.** Next generation or massively parallel sequencing technologies have unlocked new possibilities for research and applications in the forensic field.
- 9.** Simultaneous whole mitochondrial genome analysis via the short amplicon-based tiling approach is feasible using massively parallel sequencing. (This Thesis)
- 10.** Mitochondrial haplogroups have become a marker of an individual's ancestry. (Sosa et al., 2012)
- 11.** If you want to shine like a sun, first burn like a sun. (Dr.A.P.J.Abdul Kalam)