
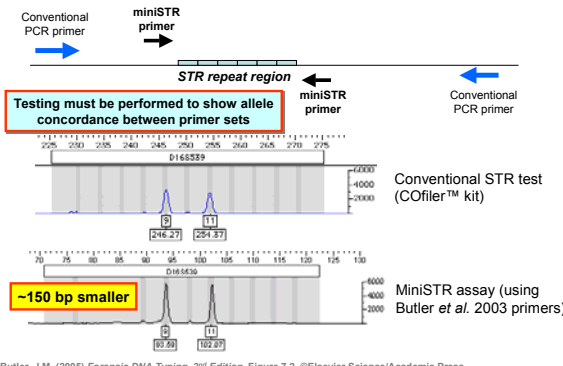


MiniSTR's for Low Copy Number and Degraded DNA

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A miniSTR is a reduced size STR amplicon that enables higher recovery of information from degraded DNA samples



Butler, J.M. (2005) *Forensic DNA Typing, 2nd Edition*, Figure 7.2, ©Elsevier Science/Academic Press

Why go beyond CODIS loci?

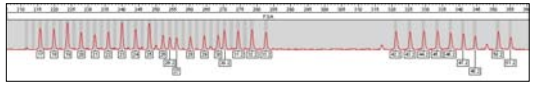
“STRs have proven to be highly successful [for mass disasters] in the past e.g. Waco disaster and various air disasters. However, even if the DNA is high quality there are occasions when there are insufficient family members available to achieve a high level of confidence with an association.”

“To achieve this purpose, either *new STRs could be developed*, or alternatively, existing STRs could be supplemented with a SNP panel.”


Gill, P., Werrett, D.J., Budowle, B. and Guerrieri, R. (2004) An assessment of whether SNPs will replace STRs in national DNA databases-Joint considerations of the DNA working group of the European Network of Forensic Science Institutes (ENFSI) and the Scientific Working Group on DNA Analysis Methods (SWGDM). *Science&Justice*, **44**(1): 51-53.

Why Go Beyond the CODIS Loci?

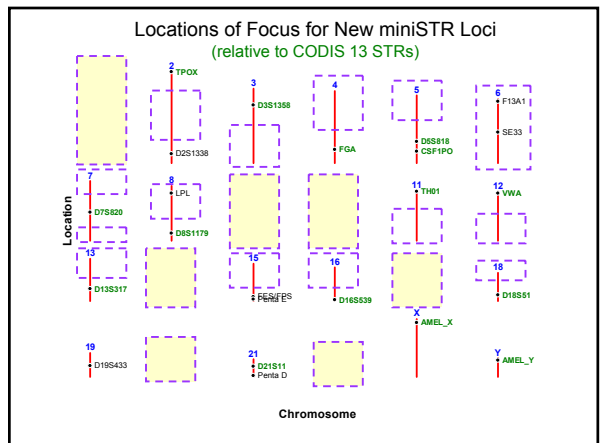
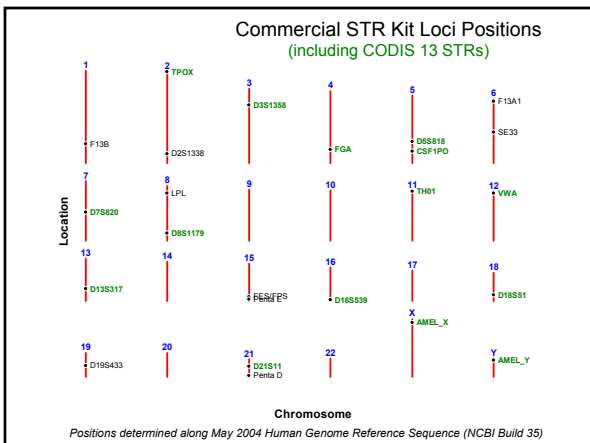
(1) Large Allele Ranges (e.g. FGA)

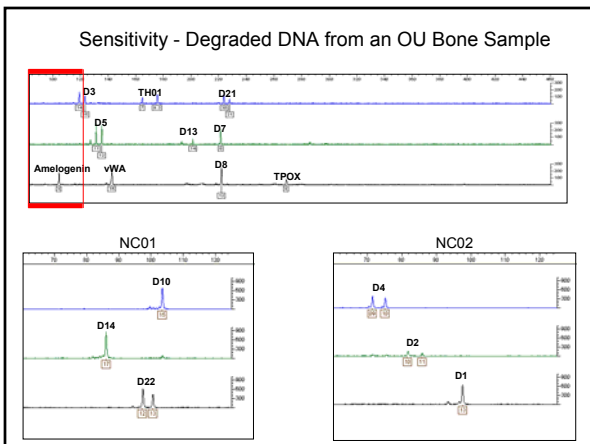
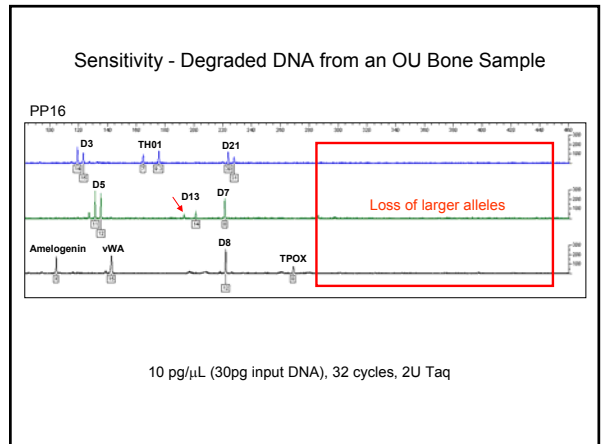
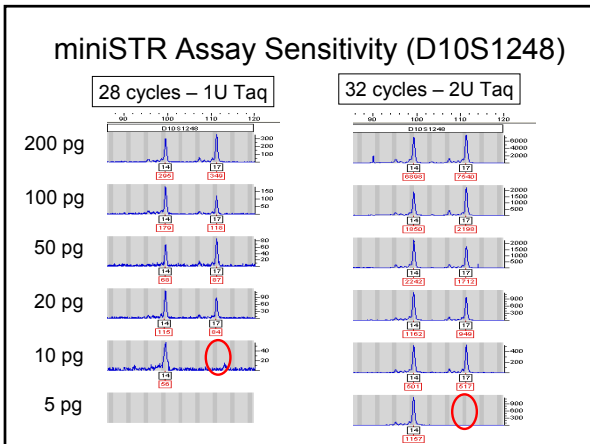
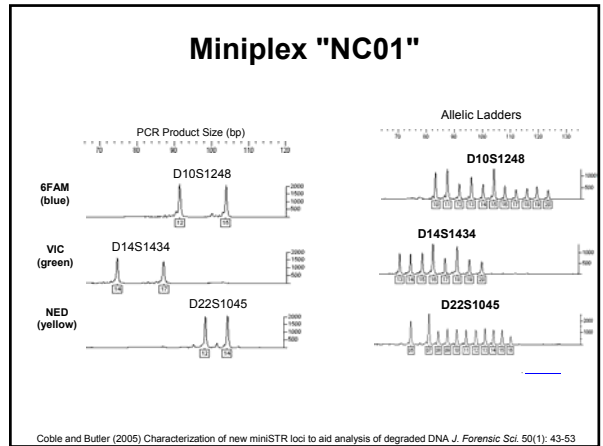
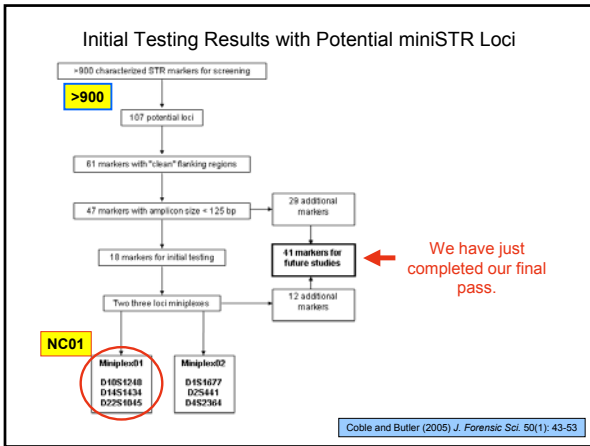


(2) “Unclean” Flanking Sequences (e.g. D7S820)



Butler, JM, Shen, Y., McCord, BR (2003) *JFS* 48(5): 1054-1064





EDNAP Exercise on Degraded DNA

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Analysis of artificially degraded DNA using STRs and SNPs—results of a collaborative European (EDNAP) exercise

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