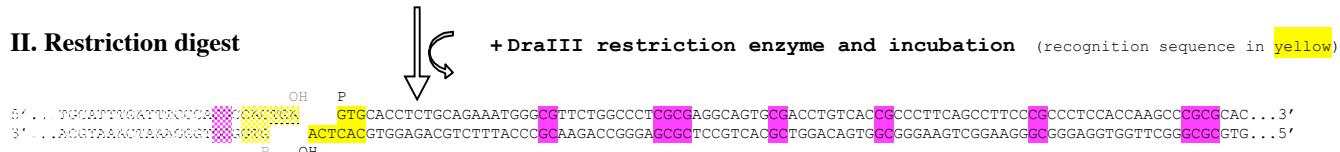


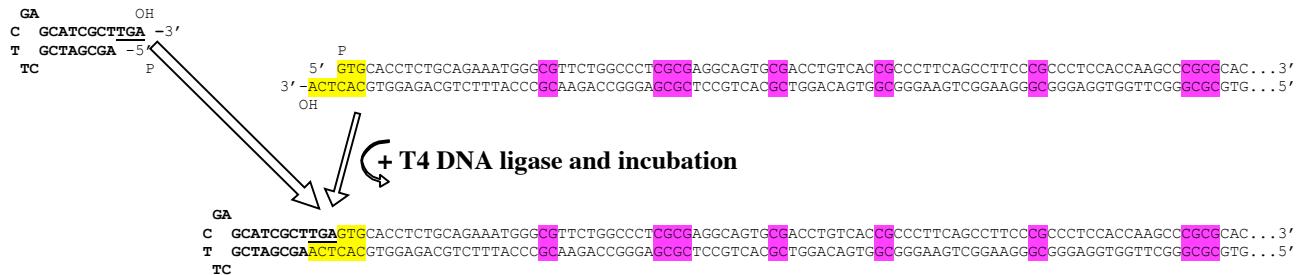
I. Genomic double stranded DNA (portion of the CpG island of FMR1)

5'...CGATGCATTGATTCCACCCACTGAGTCACCTCTGCAGAAATGGCGTTCTGGCCCTCCCGAGGCAGTCACGCCCTCAGCCTCCGCCCTCCACCAAGCCCGCAC...3'
3'...GCTACGAACTAAAGGTGGGTGACTCACGTGGAGACGTCTTACCCGAAGACGGGAACGCTCGTCAGCTGGACAGTGGGGAGTCGAAGGGGGAGGTGGTCGGCGGTG...5'

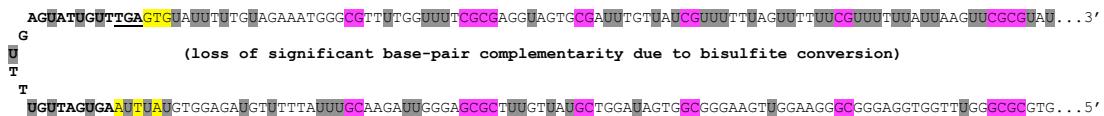
II. Restriction digest



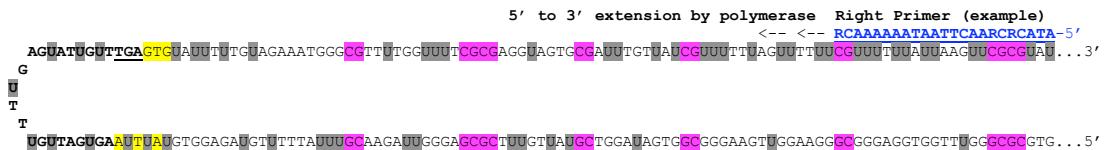
III. Addition and ligation of hairpin linker



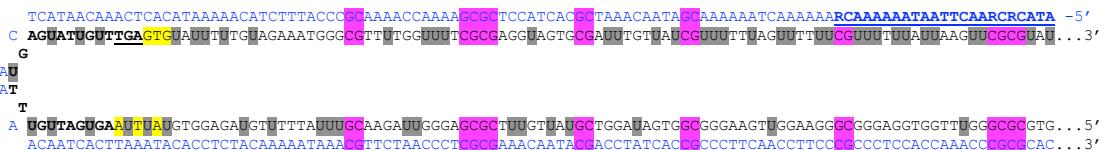
IV. Sodium bisulfite conversion of cytosine (but not methyl-cytosine) to uracil



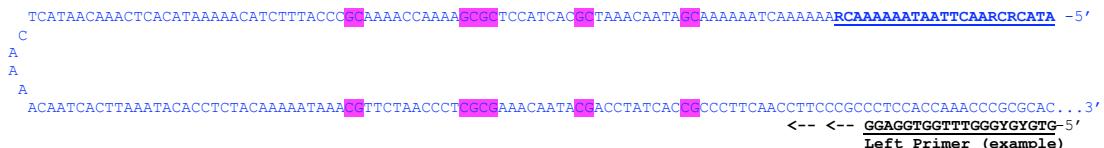
V. Right primer anneals during 1st round of PCR amplification



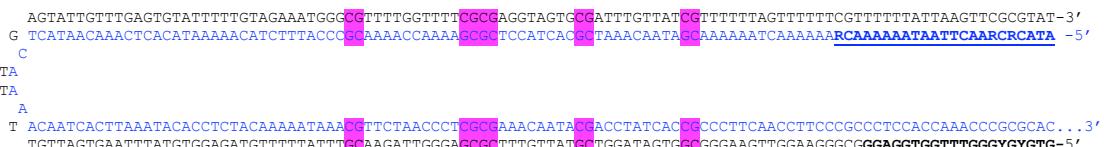
VI. Right primer extends to make complementary copy of top and bottom strands



VII. Left primer anneals during 2nd round of PCR amplification



VIII. Left primer extends



PCR now proceeds in the conventional fashion