

GENETICS

PUSHING THE LIMITS OF CYTOGENETIC FISH

20.08.2006

-moblog- HMG has an interesting paper of [Fei Sun and Renee H. Martin](#) – showing a first visible recombination map of the male human genome. They obtained testicular samples from 10 males where each contributed 100 pachytene-stage cells. Chromosomes were identified by blue CREST centromere coloring and yellow MHL1 coloring of crossing over sites. Unfortunately the paper is not so easy to read but they have excellent figures. On average there are 50 cross-overs per set (which is more than I expected). The total number goes down from 52 at age 30y to 46 at age 80y (which may explain the higher chance of aneuploidy at a higher age). Individual crossover frequencies look extremely variable, chromosomal locations are clustering at different site -see my recent blog on [recombinogenic sequences](#). Activity at centromeres was always low while chromosome 21q showed a high individual variability. Why was there never detailed workup of [physical and linkage map](#)? Nay, nay.

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