GENETICS

HERITABILITY NOT LIMITED TO DNA SEQUENCE DIFFERENCES

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It has been our gut feeling for many years – first with candidate gene studies, then with the large scale GWAs that show ridiculous low effect sizes.
A new Canadian study now reports DNA methylation at 12 K sites in dizygotic twins. Although they may not have always tested the right spots (see the CpG island shore! paper in the same issue) they were attributing discordances mainly to zygote differences – monochorionic MZ were more variable than dichorionic who split of the blastomere within 4 days (see figure) – divergence starts early and then goes on rapidely!
According to the supplemental data the B cell differentiation and T cell proliferation ontologies have the highest intraclass correlation coefficients in WBC – maybe that's a clue to asthma genetics? I am currently analysing segregation of methylation status – something that would be also an interesting expansion of this twin study, yea, yea.