34 Research Notes DIS 80 (July 1997)

1.0 (as in the case of XX; tra/tra males) irrespective of sexual phenotype, the template activity of the X chromosome is set at a female level. Similarly, in the case of XX; dsx/dsx individuals, the X chromosome is transcribed at female level. On the other hand, in XY; dsx/dsx individuals, the level of template activity is set at a male level. In summary, our data clearly indicate that the sex determining mutants, tra, ix and dsx have no role in regulating the template organization of the X chromosome(s) (see Table 1) for dosage compensation.

Acknowledgments: This work was partially supported by CSIR research grant to R.N.C. M.A. is a fellow of Lady Tata Memorial Trust.

References: Chatterjee, R.N., 1985, Chromosoma 91: 259; Smith, P.D., and J.C. Lucchesi 1969, Genetics 61: 607-618.

Alatortsev, V.E. Institute of Molecular Genetics, Russian Academy of Sciences, Kurchatov Sq.46, Moscow, 123182, Russia. Genetic loci in the *Pgd-K10* region of the *Drosophila* X chromosome.

The *Pgd-K10* region of the X chromosome is one of the most genetically investigated areas of the *Drosophila melanogaster* genome. The fine genetic structure of this region has been determined in several independent studies based on saturation of this region by lethal mutations and by rearrangements and

complementation analysis (Gvozdev et al., 1973; Perrimon, et al., 1984; Alatortsev and Tolchkov, 1985). For the descriptions of the individual complementation groups, see Lindsley and Zimm (1992).

There are some additions to the information about earlier described complementation groups. First, our complementation analysis showed that group N2 (Gvozdev et al., 1977) coincides with group l(1)C204 (Perrimon et al., 1985), as well as groups N7 and l(1)JA127. Thus, two pairs of groups were correctly jointed (Lindsley and Zimm, 1992). They were designated as wapl and l(1)ZEa, respectively. Second, the l(1)90 mutation representing separate complementation group complements the JC105 deletion and must be situated to the left of wapl, between the Pgd and wapl loci.

Contiguous and overlapped DNA fragments from the Pgd-K10 region were cloned in several laboratories in the course of chromosomal walks along the Canton (Haenlin et al., 1985), Oregon (Dura et al., 1987), and gt w^a (Alatortsev, 1987) X chromosomes, and the physical map for the region was constructed. Molecular approaches allowed to expand our knowledge about genetic structure of the region. Thus, cluster containing four Cytochrome P450 genes was found in the interval between wapl and pn loci (Gandhi et al., 1992; Frolov and Alatortsev, 1994). Recently the Vinculin (Vinc) gene was described between the 2Ea and pcx loci (Alatortsev et al., 1997).

Current arrangement of genetic loci in the Pgd-K10 interval is shown in Figure 1.

Acknowledgment: This work was supported by an RBRF grant.

References: Alatortsev; V.E., 1987, Ph.D. Thesis, Inst. Mol. Genet., Moscow; Alatortsev, V.E., and E.V.

Figure 1. Arrangement of genetic loci in the *Pgd-K10* region of the *Drosophila X* chromosome. The orientation is from centromere-distal (left) to centromere-proximal (right). Added or changed loci are marked by asterisks (see text).

Tolchkov 1985, Dros. Inf. Serv. 61:24; Alatortsev, V.E., I.A. Kramerova, M.V. Frolov, S.A. Lavrov, and E.D. Westphal 1997, J. Biol. Chem. (submitted); Dura, J.-M., N. Randsholt, J. Deatrick, I. Erk, P. Santamaria, J. Freeman, S. Freeman, D. Weddell, and H. Brock 1987, Cell 51:829-839; Frolov, M.V., and V.E. Alatortsev 1994, DNA and Cell Biol 13:663-668; Gandhi, R., E. Varak, and M.L. Goldberg 1992, DNA and Cell Biol. 11:397-404; Gvozdev, V.A., S.A. Gostimsky, T.I. Gerasimova, and E.M. Gavrina 1973, Dros. Inf. Serv. 50:34; Haenlin, M., H. Steller, V. Pirrotta, and E. Mohier 1985, Cell 40:827-837; Lindsley, D., and G. Zimm 1992, *The Genome of* Drosophila melanogaster. Academic Press, San Diego, CA; Perrimon, N., L. Engstrom, and A. Mahowald 1984, Genetics 108:559-572; Perrimon, N., L. Engstrom, and A. Mahowald 1985, Genetics 111:23-41.