$\label{eq:supplemental} \begin{array}{l} \mbox{Supplemental information for A.Samsonova} \ et \ al. \\ \mbox{Prediction of gene expression in embryonic structures of } Drosophila \\ melanogaster. \end{array}$

Functional	Training		Confirmed	
unit	\mathbf{Set}		de novo Predictions	
	(72)		(23)	
mat2pep			gastrulation	1.218E-7
	Ø	Ø	$\ $ e & m interaction	2.445E-6
			ectoderm development	0.00223
	(35)		(75)	
tma2smusclep			mesoderm development	2.5152E-8
	myogenesis	1.78404E-4	heart development	9.7760E-5
			myoblast fusion	2.1031E-4
	(54)		(73)	
aep2egut				
	Ø	Ø	Ø	Ø
	(40)		(46)	
pep2ebrain	^{‡‡} CNS development	1.59837E-5	nervous system development	2.4105E-7
	^{††} NB fate determination	3.30863E-4	**GMC fate determination	8.6352E-4
	ectoderm development	0.04427	ectoderm development	0.0024
	(34)		(202)	
	CNS development	4.61455E-6	CNS development	9.3945E-25
vna2lcord	NB fate determination	1.35891E-4	ectoderm development	3.0268E-20
	ventral cord development	0.01054	ventral cord development	6.3021E-15
			nervous system development	1.1861E-11
			NB fate determination	8.8756E-9
			axon guidance	5.012E-8
^{‡‡} Central nervous system *			**ganglion mother cell fate determination	
$\ $ ectoderm & mesoderm interaction			^{††} neuroblast fate determination	

Table 1: GO over-representation scores for the groups of genes that have been used to train the SVM classifier, i.e. where expression pattern is documented in the BDGP database (Training set) and for those genes where *in situ* expression pattern is annotated in FlyBase. Each cell in the table contains the number of genes in every functional unit and GO:Biological Process terms that are detected to be over-represented in it. The over-representation scores (e-scores) are calculated with GeneMerge software. \emptyset indicates that no over-represented GO terms are found for a given functional unit.