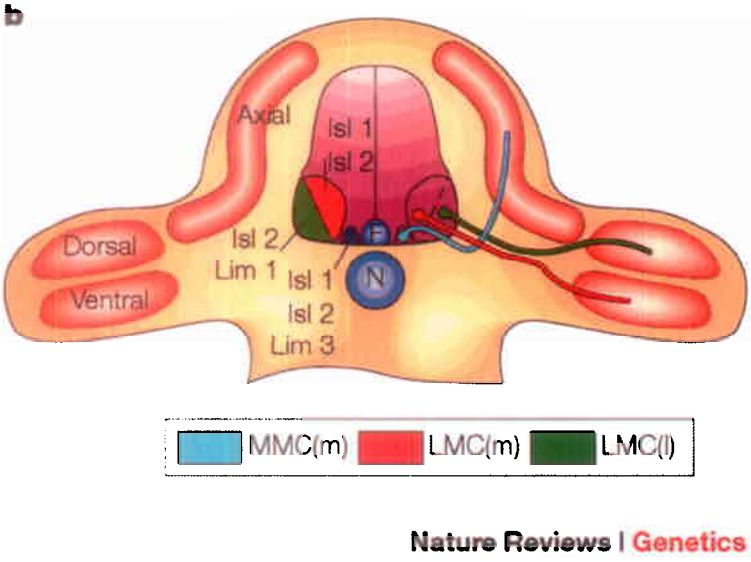

Fig. 1. Diagram displaying anatomical locations of the LMC and MMC motor neurons and their respective nerve projections that innervate the hindlimb and axial musculature within a cross-section of the lumbar spinal cord. Motor neurons are color-coded and *LIM* genes expressed by each motor neuron cell type are shown. Adapted from Jessell (2000).

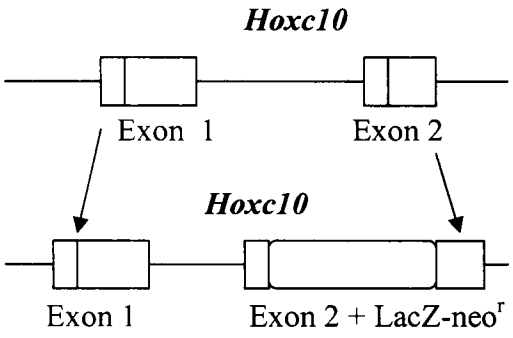

Fig. 2: Simplified diagram of *Hoxc10* gene and knock-in *Hoxc10* gene with insert of the lacZ-neo^r construct via gene targeting by homologous recombination. Mouse models carrying these knock-in *Hoxc10* genes will thus express an enzymatic product β-galactosidase from the inserted construct as it is transcribed and translated along with the entire *Hoxc10* gene.

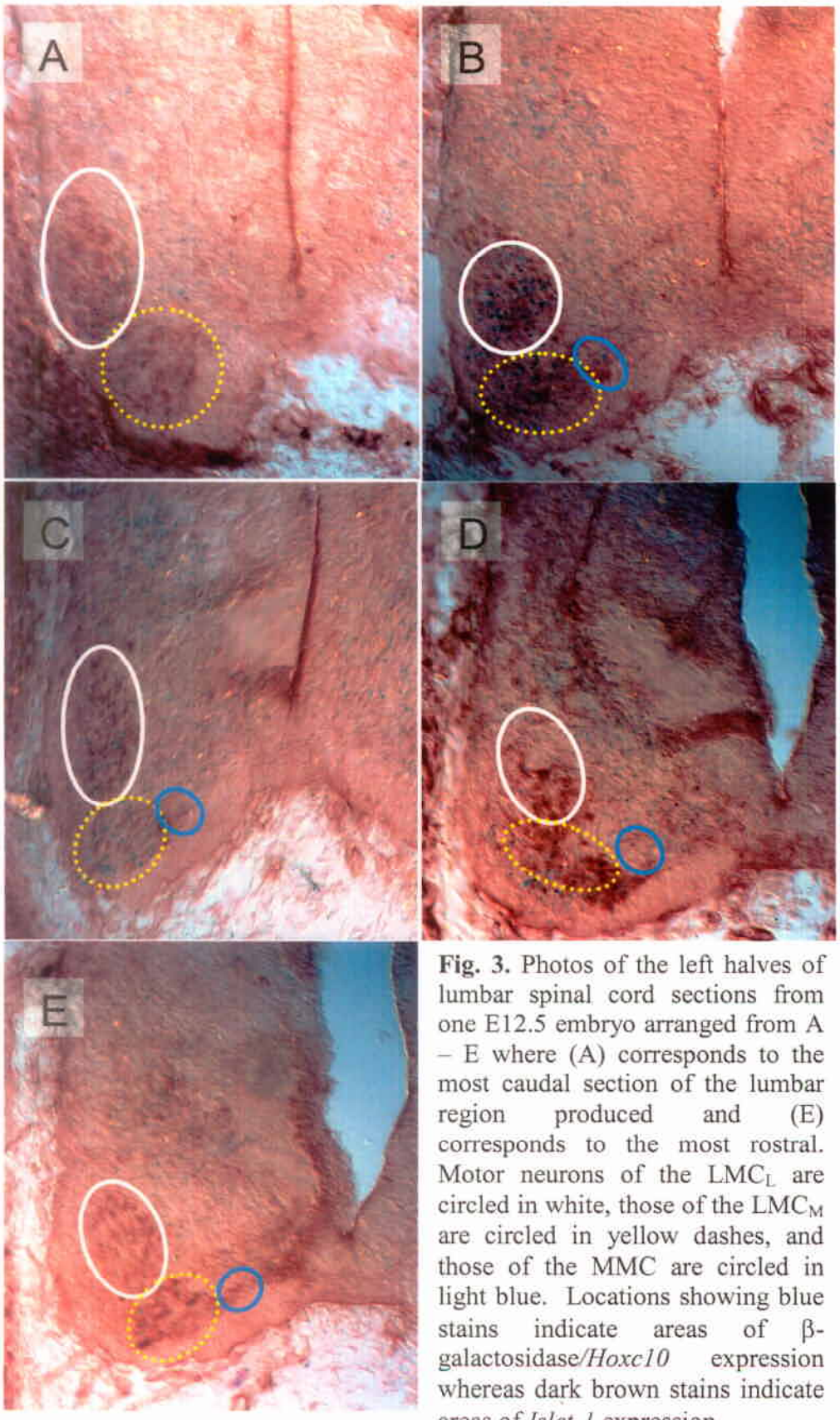

Fig. 3. Photos of the left halves of lumbar spinal cord sections from one E12.5 embryo arranged from A – E where (A) corresponds to the most caudal section of the lumbar region produced and (E) corresponds to the most rostral. Motor neurons of the LMC_L are circled in white, those of the LMC_M are circled in yellow dashes, and those of the MMC are circled in light blue. Locations showing blue stains indicate areas of β-galactosidase/*Hoxc10* expression whereas dark brown stains indicate areas of *Islet-1* expression.

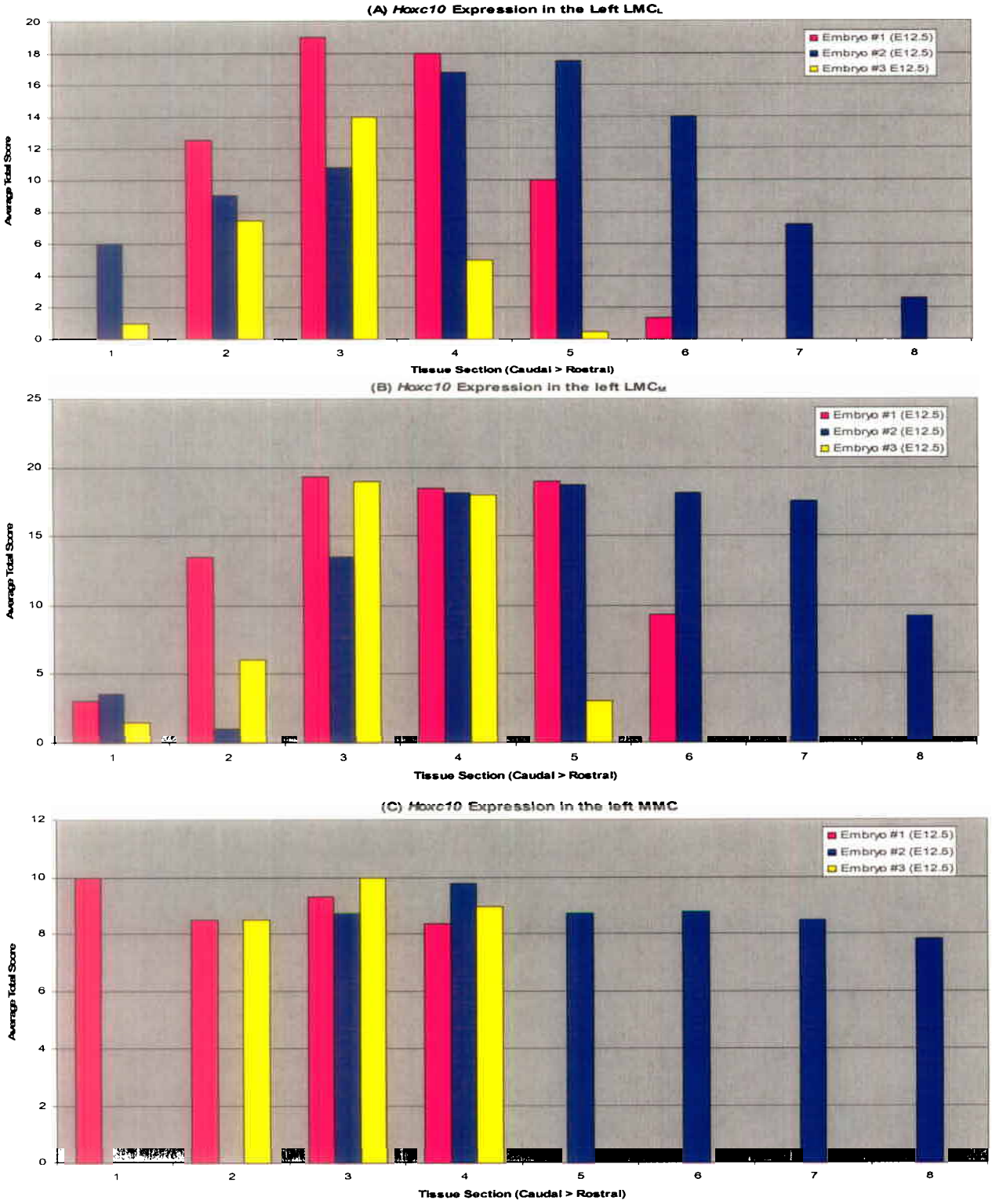

Fig. 4. Graphs representing *Hoxc10* expression in specific cell types of the left half (A – C) of lumbar spinal cord tissue sections. Lengths of respective lumbar spinal cords are indicated by the number of corresponding tissue sections produced from each mouse embryo.

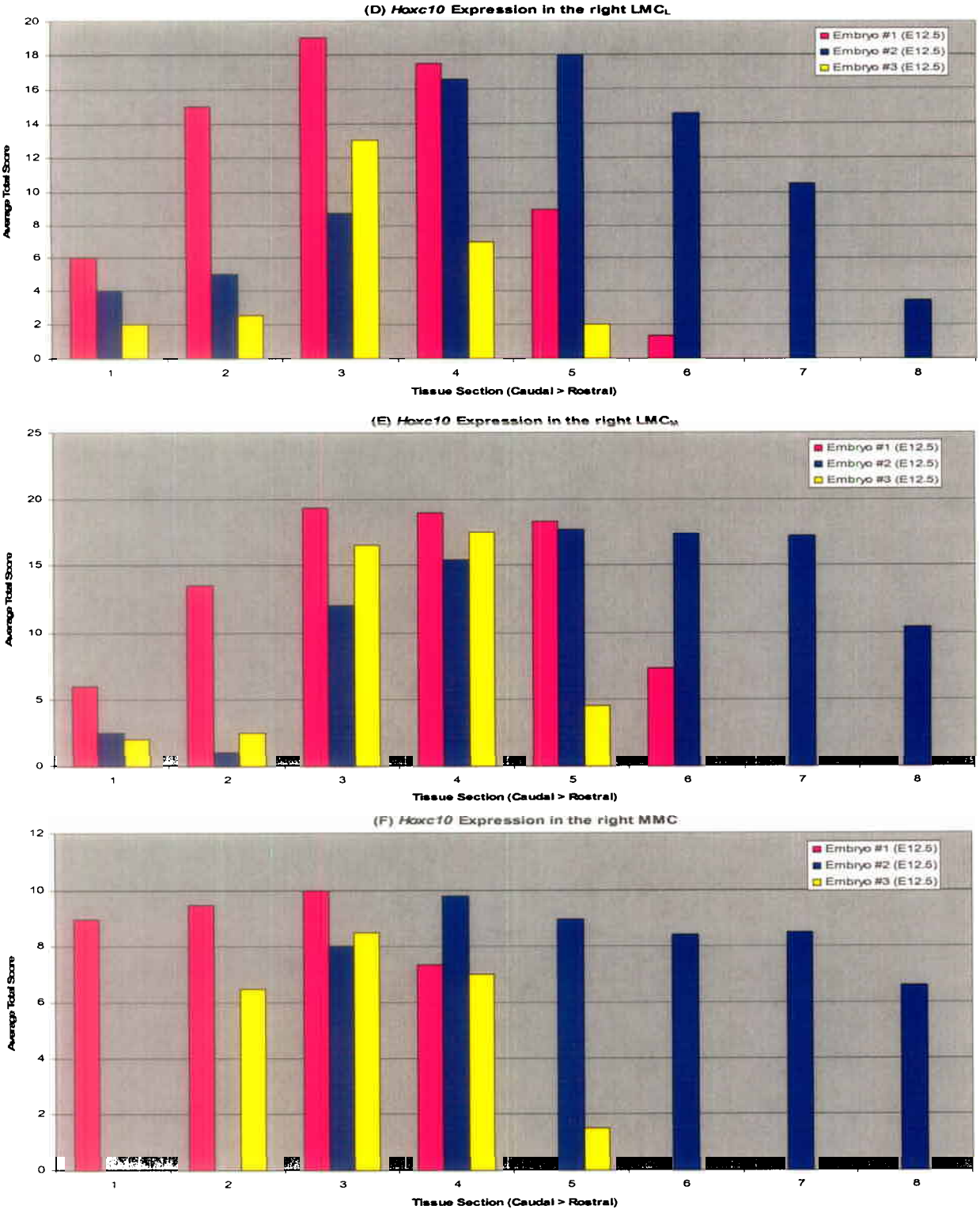

Fig. 4 cont. Graphs representing *Hoxc10* expression in specific cell types of the right half (D – F) of lumbar spinal cord tissue sections. Lengths of respective lumbar spinal cords are indicated by the number of corresponding tissue sections produced from each mouse embryo.