Introduction
The Atlas contains features that are needed to facilitate and improve the safety of performing cell transplantation and in electrode positioning for neuromodulation of the spinal cord.

Methods
The atlas is based upon study of 20 adult spinal cords. Under a Methodist Hospital IRB approved protocol, the spinal cord was removed in adult autopsies and placed in 4% paraformaldehyde for 48 hours. The cord was then cut into blocks approximately 10mm in length, corresponding to the midpoint of the exit of the lumbar and sacral ventral roots of each cord segment. The blocks were placed in sucrose solutions. The caudal surface of each segment was marked with red dye over the right dorsal horn for orientation during sectioning and mounting on slides. Frozen sections were cut at 50 microns. Sections were stained for myelin, neurons and for immunohistology for choline acetyltransferase, calbindin, parvalbumin and gephyrin to identify excitatory and inhibitory neurons.

Results
The cytoarchitecture and stereotactic coordinates are illustrated with 18 Nissl stained cross-sections from cord segments L1-S4. The illustrative sections were cut from one cord, sectioning each cord segment from caudal to rostral. The sections in the atlas are approximately 5mm apart. The stereotactic coordinate system is based upon the anatomical features of the cord visible to the surgeon at operation. The zero point for depth coordinates is the dorsum of the cord at the midline raphe. The zero point for right and left laterality is the midline raphe. The positions of the ventral spinal artery and the dorsal and ventral roots are also shown.

Learning Objectives
To improve knowledge of the structure of the lumbar-sacral spinal cord.

Conclusions
A Stereotactic Atlas of the spinal cord will provide an impetus to the development of spinal cord medicine similar to that provided for treatment of diseases of the brain by publication of the stereotactic atlases of the brain by Schaltenbrand and by Talairach.