Forwarding Feedback between Spinal Cord and Brain

We have recently reinvestigated actions of spinal interneurons on ascending tract neurons and found that the internal feed-back information is provided primarily by inhibitory interneurons and primarily to spino-cerebellar neurons. I will summarize the evidence that such information is forwarded by premotor interneurons and that it may serve to adjust the descending command signals sent by reticulo-spinal neurons (which themselves relay commands for voluntary movements as well as centrally initiated locomotion or postural adjustments).