Annual Society for Neuroscience Poster Award

This year's winner of Poster of the Year goes to Arshad Khan of USC for his poster: *Stimulus-, circuit- and intracellular-level determinants of MAP kinase and CREB activation in parvicellular hypothalamic paraventricular neurons.* AM Khan, KL Rapp, TA Ponzio, G Sanchez-Watts, AG Watts. Dr. Khan's work will be featured on the cover of the next issue of *Targeting Trends*.

Dr. Khan's poster continues the researchers' work on catecholaminergic neurons and feeding. The featured experiments involved downstream effects on signal transduction when something is missing, in this case, catecholaminergic neurons. The study followed on their work published in 2007 (*J. Neurosci.* 27:7344-7360) which asked if there were a causal relationship of noradrenergic neurons in the system. Anti-DBH-SAP (Cat. #IT-03) allowed this to be determined.

There were many great abstracts using ATS products, and this was a very difficult year for deciding the winner. Runners-up (and who knows how these selections are made!) included these fine posters.



Doug Lappi presents Arshad Khan with this year's ATS Neuroscience Poster Award



Dale Sengelaub presented his latest work also looking at the effects of something missing: *Protection from dendritic atrophy with testosterone following partial motoneuron depletion: Timing and duration of treatment, functional correlates in motor activation.* KD Coons, DR Sengelaub. Partial loss, due to CTB-SAP (Cat. #IT-14), results in dendritic atrophy of survivor motorneurons, and this work shows administration of testosterone has a

neuroprotective effect. A beautiful poster.

The poster presented by Thiago Moreira and Ana Takakura (equal contributors) continues the

work from this Brazilian pair with the Guyenet laboratory. concerning the control of central chemoreflex from the retrotrapezoid nucleus: *Selective lesion of retrotrapezoid Phox2b-expressing neurons attenuates the central chemoreflex in rats.* TS Moreira, AC Takakura, RL Stornetta, PG Guyenet. SSP-SAP (Cat. #IT-11) was used to specifically delete a small number of cells, but reaching a threshold to show a behavioral effect. Ann Schreihofer was a Poster of the Year winner in 1999 when she was in the Guyenet lab.





And last, but not least, Mark Baxter of the University of Oxford, Department of Experimental Psychology, used ME20.4-SAP (Cat. #IT-15) to eliminate cholinergic neurons in the dorsolateral prefrontal cortex, resulting in difficulty of memory maintenance in feeding tasks: *Cholinergic depletion of prefrontal cortex impairs acquisition of the delayed response task in rhesus monkeys.* MG Baxter, DA Kyriazis, PL Croxson. Dr. Baxter's molecular surgery, requiring numerous injections, was a technical *tour de force*.