

FIG. 1

a

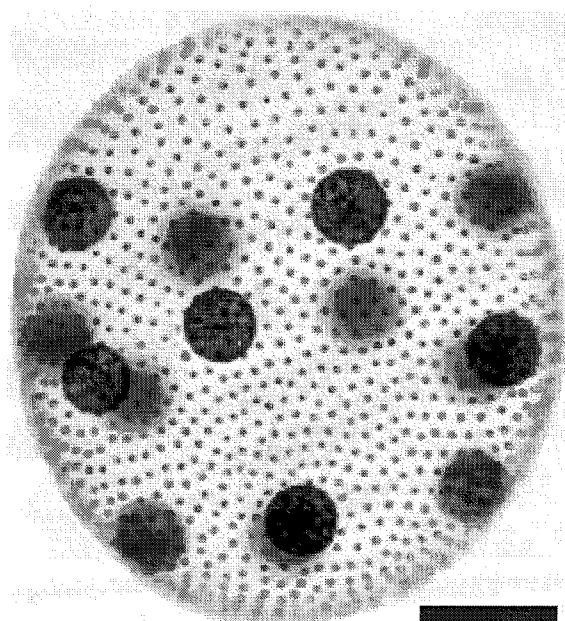
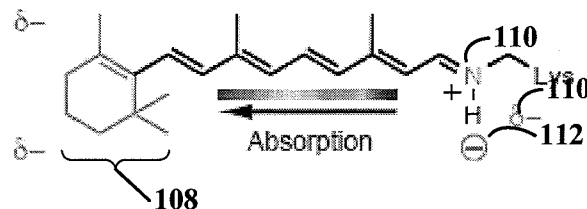
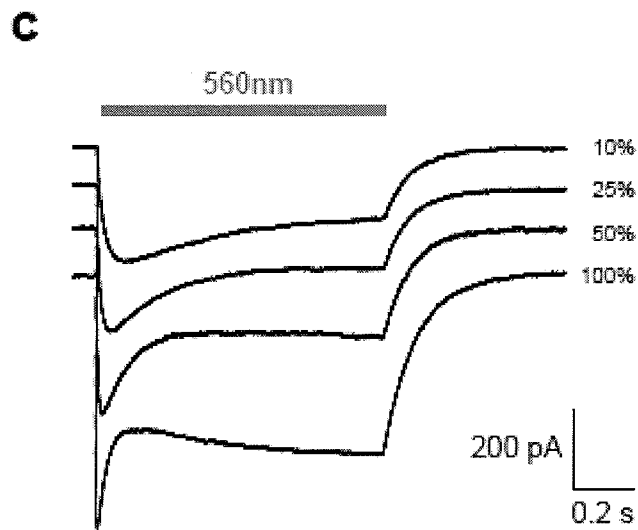
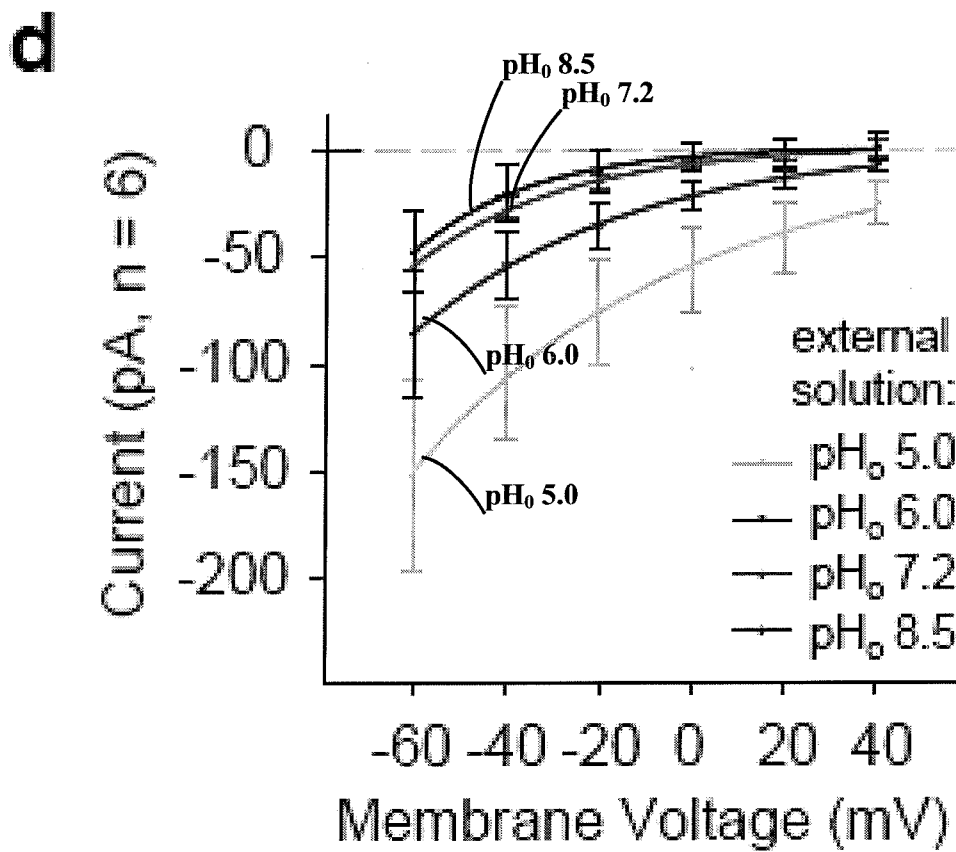


FIG. 1B



Chr2	M.....	DYGG	ALSAVG....		REL	14
Chr1	MSRRPWLLAL	ALAVALAAGS	AGASTGSDAT	VPVATQDGPD	YVFHRAHERM	50
VChr1	M.....	DY..			PVARs	8
Chr2	LFVTNPVVVN	.GSVLVP..E	DQCYCAGWIE	SRGTNGAQTa	SNVLQWLAAG	61
Chr1	LFQTSYTLEN	NGSVICIPNN	GQCFCLAWLK	SNGTNAEKLA	ANILQWITFA	100
VChr1	LIVRYPTDLG	NGTVCMP..R	GQCYCEGWLR	SRGTSIEKTI	AITLQWVFA	56
				TM1		
Chr2	FSILLMFYA	YQTKSTCGW	EEIYVCAIEM	VKVILEFFFE	FKNPMSMLYLA	111
Chr1	LSALCLMFYG	YQTKSTCGW	EEIYVATIEM	IKFIIEYFHE	FDEPAVIYSS	150
VChr1	LSVACLGWYA	YQAWRATCGW	EEVYVALIEM	MKSIIIEAFHE	FDSPATLWLS	106
				TM2		
		102 104 104				
Chr2	TGHRVQWLRY	AEWLLTCPVI	LIHLSNLTGL	SNDISRRTMG	LLVSDIGTIV	161
Chr1	NGNKTVWLRY	AEWLLTCRVI	LIHLSNLTGL	ANDYNKRTMG	LLVSDIGTIV	200
VChr1	SGNGVVMRY	GEWLLTCPVL	LIHLSNLTGL	KDDYSKRTMG	LLVSDVGCIV	156
				TM3		
			106		TM4	
Chr2	WGATSAMATG	YVKVIFFCLG	LCYGANTFFH	AAKAYIEGYH	TVPKGRCRQV	211
Chr1	WGTAAALSKG	YVRVIFFLMG	LCYGIYTFN	AAKVYIEAYH	TVPKGICRDL	250
VChr1	WGATSAMCTG	WTKILFFLIS	LSYGYMYTFH	AAKVYIEAFH	TVPKGICREL	206
				TM5		
			102	102	104 106	
Chr2	VTGMAWLFFV	SWGMPILFI	LGPEGFGVLS	VYGSTVGHTI	IDLMSKNCWG	261
Chr1	VRYLAWLYFC	SWAMFPVLFL	LGPEGFGHIN	QFNBAIAHAI	LDLASKNAWS	300
VChr1	VRVMAWTFV	AWGMPVLFL	LGTEGFGHIS	PYGSAIGHSI	LDLIAKNMWG	256
				TM6		
					TM7	
Chr2	LLGHYLRVLI	HEHILIHGDI	RKTTKLNIGG	TEIEVETLVE	DEAE	311
Chr1	MMGHFLRVKI	HEHILLYGDI	RKKQKQNVAG	QEMEVEVTVH	EEDD	350
VChr1	VLGNYLRVKI	HEHILLYGDI	RKKQKITIAG	QEMEVEVTLVA	EEDD	306

**FIG. 1**

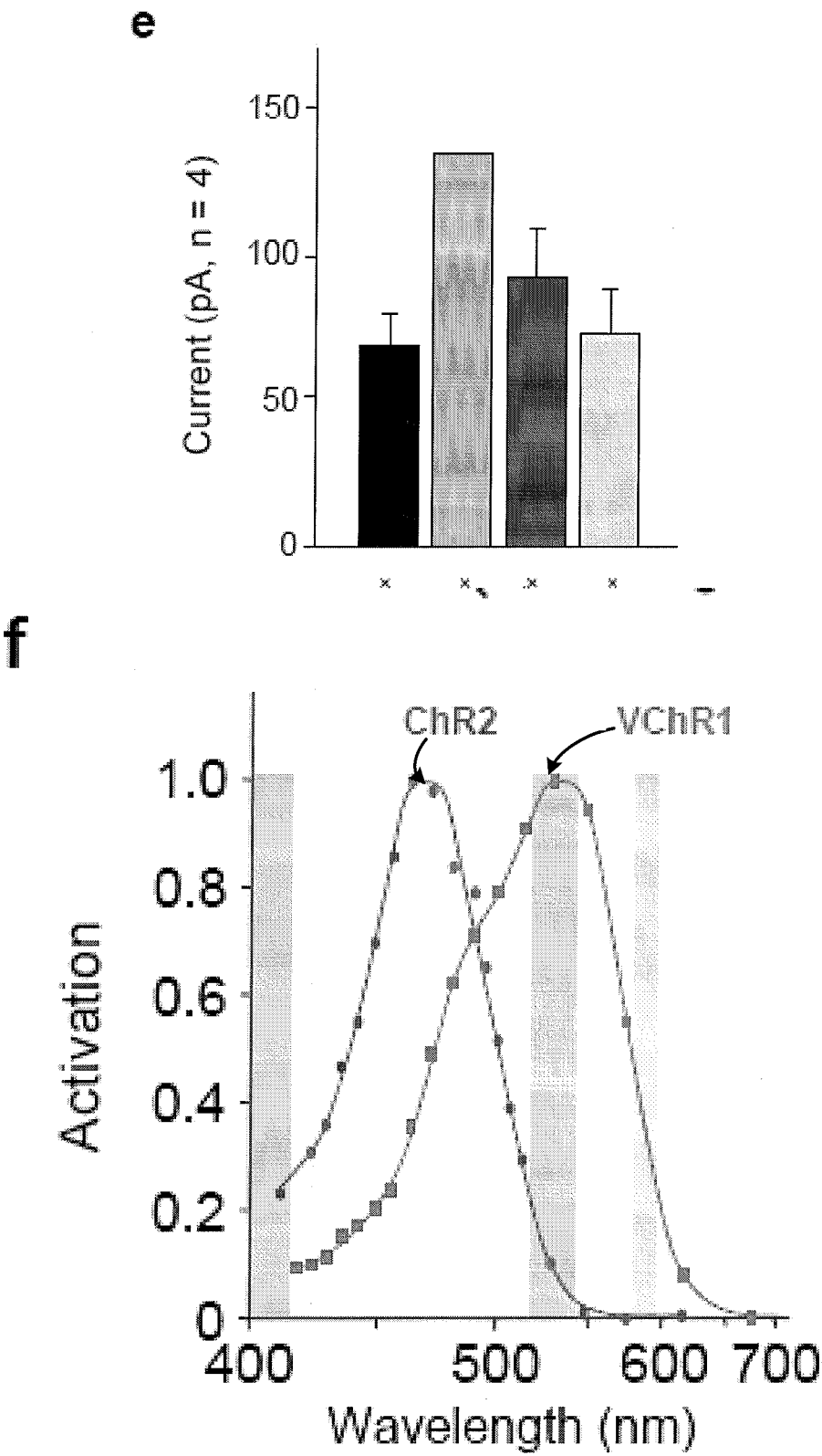


FIG. 1

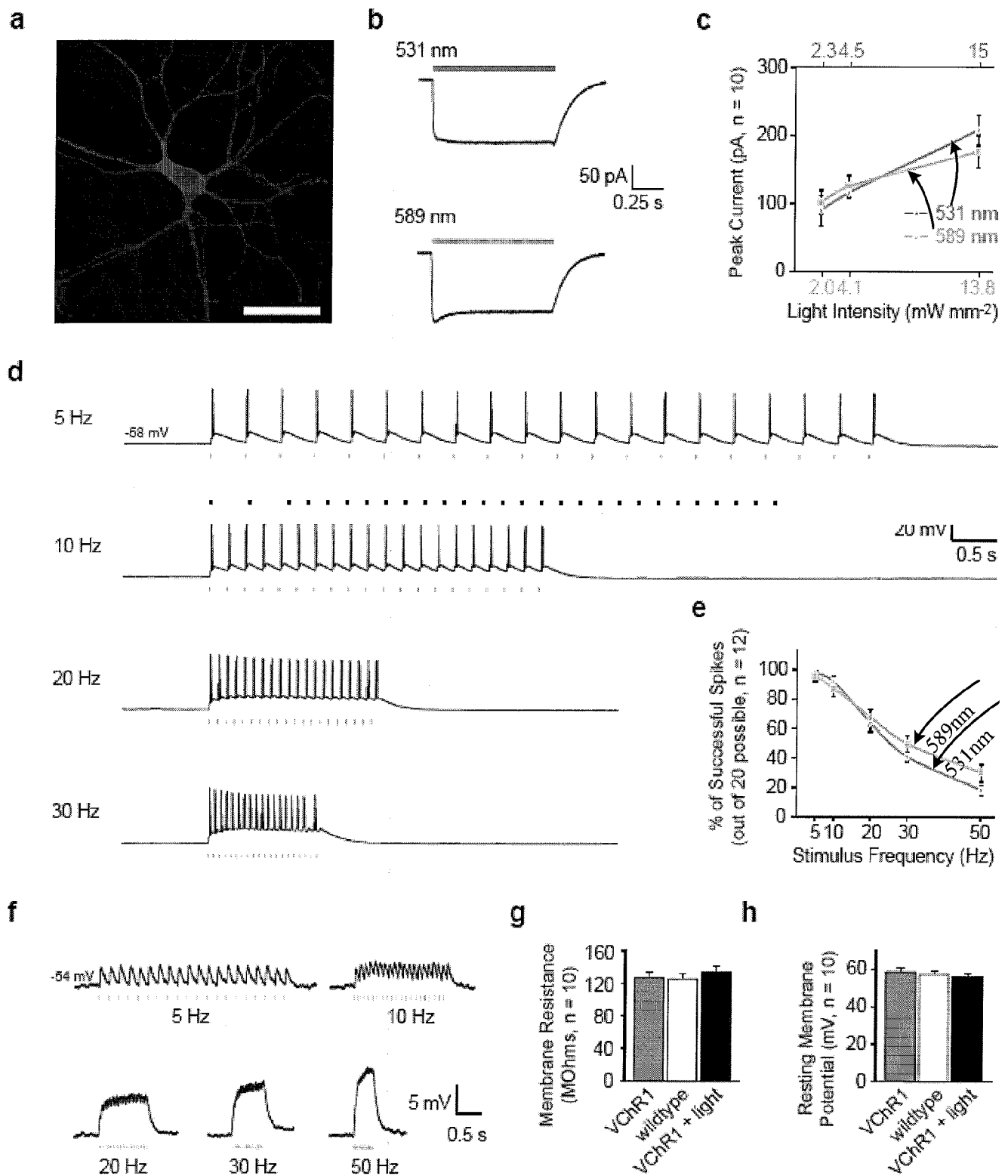
**FIG. 2**

FIG. 3

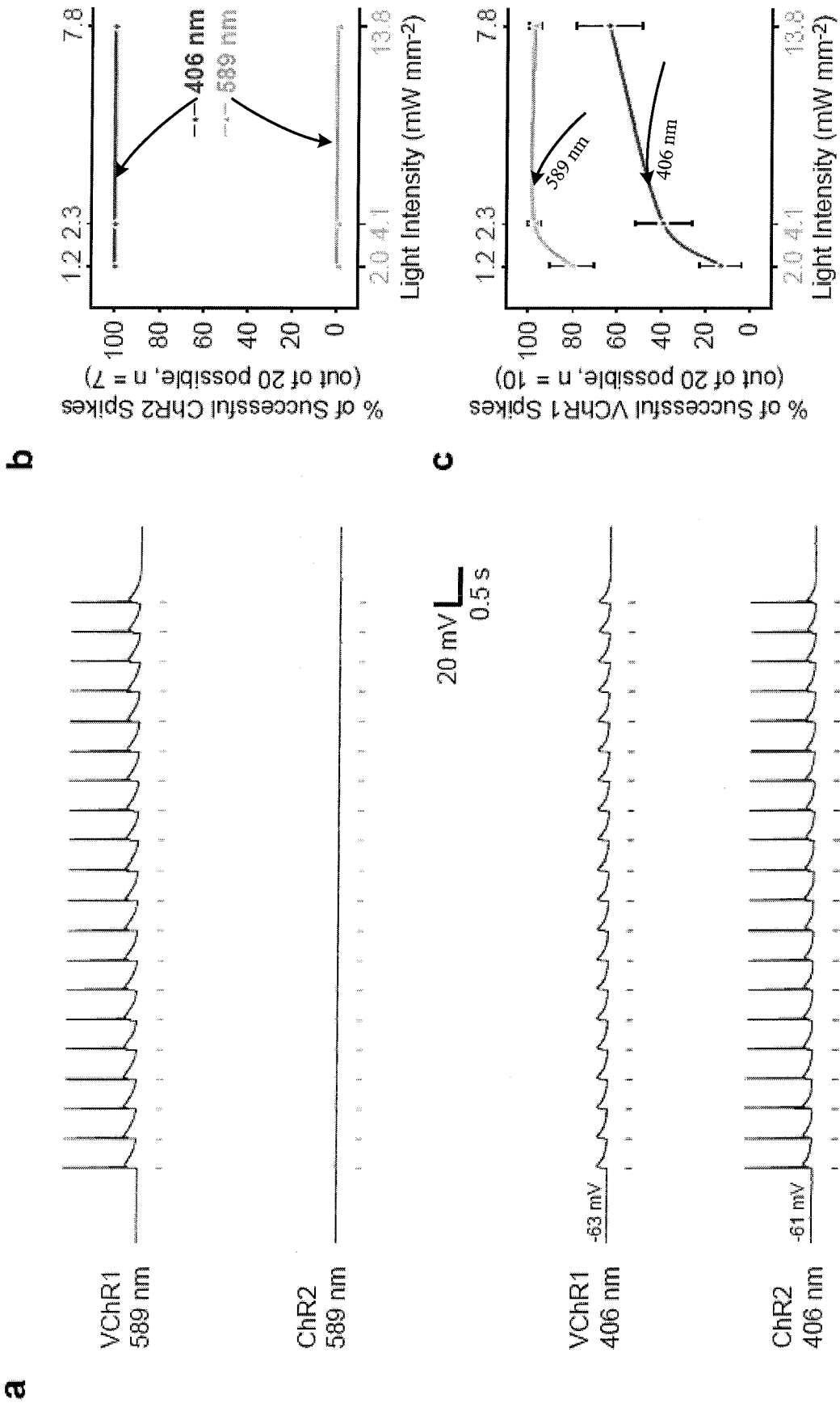


Figure 4

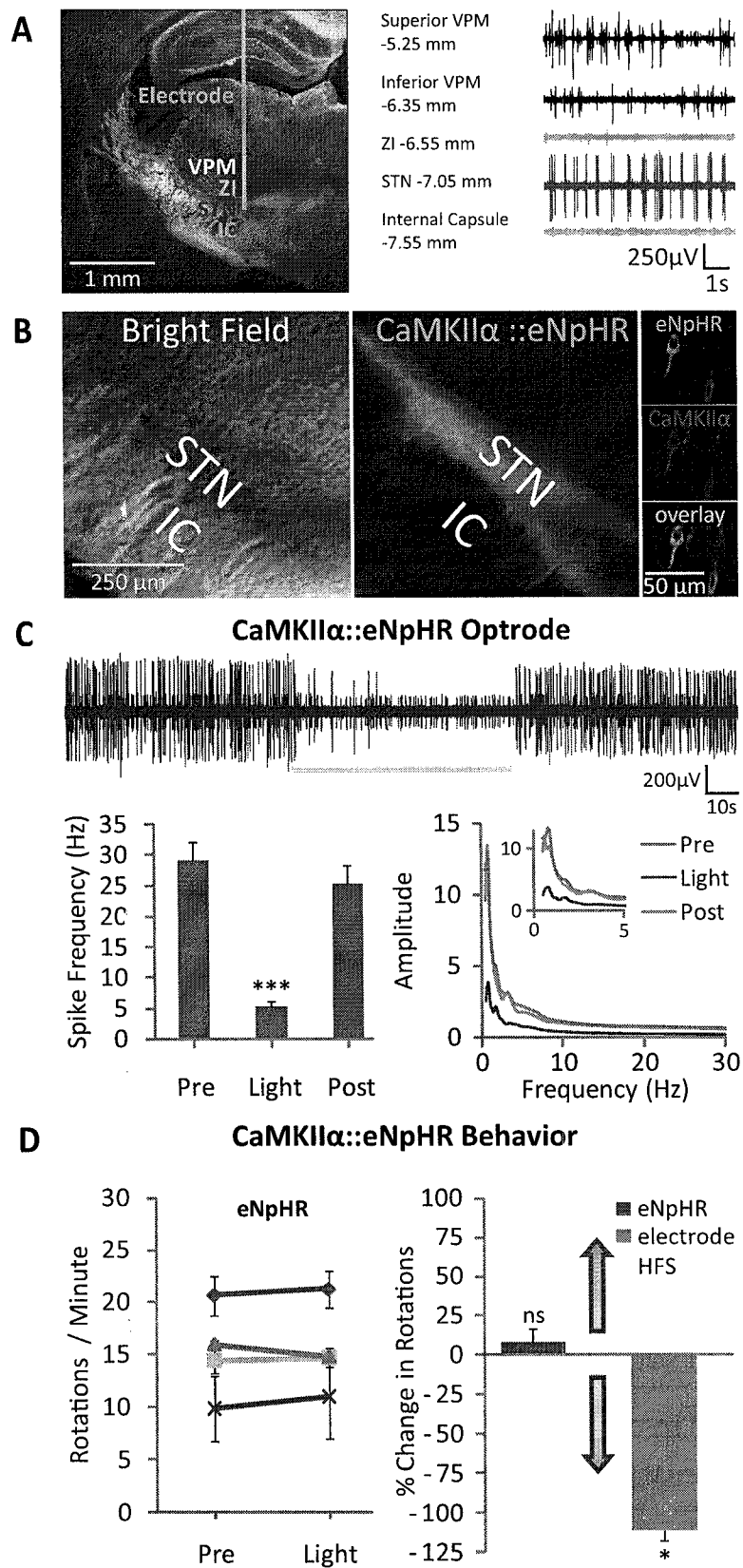


Figure 5

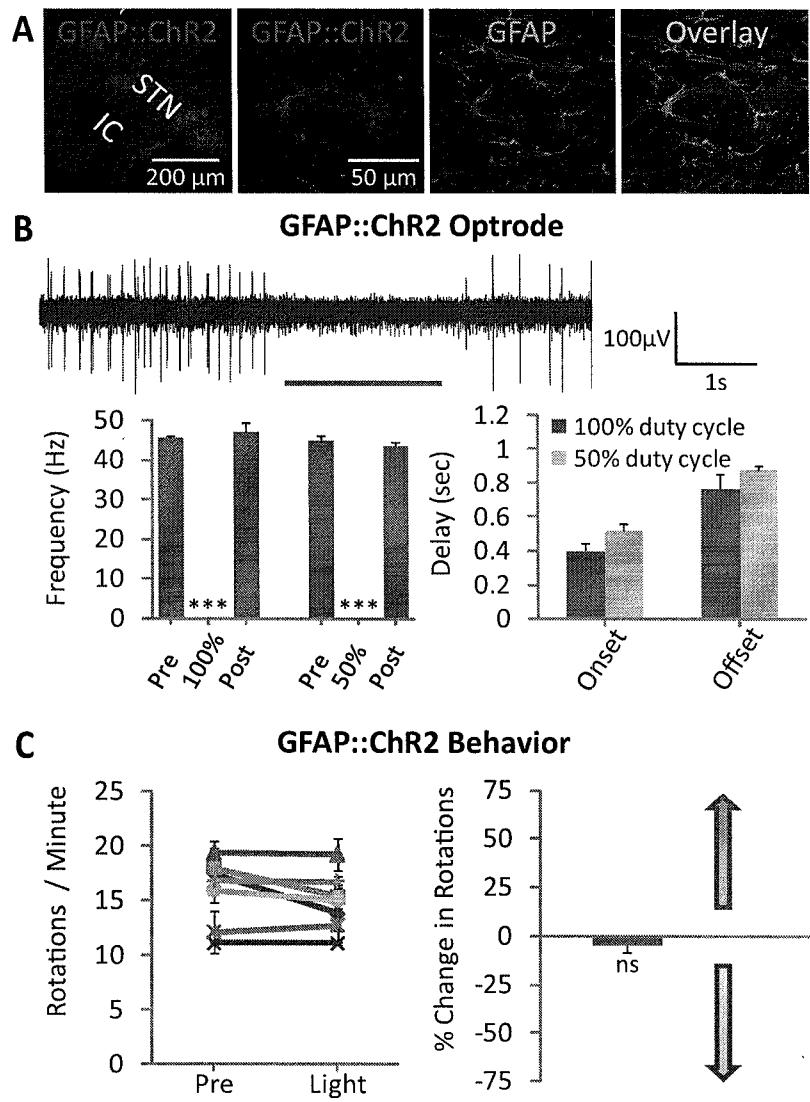


Figure 6

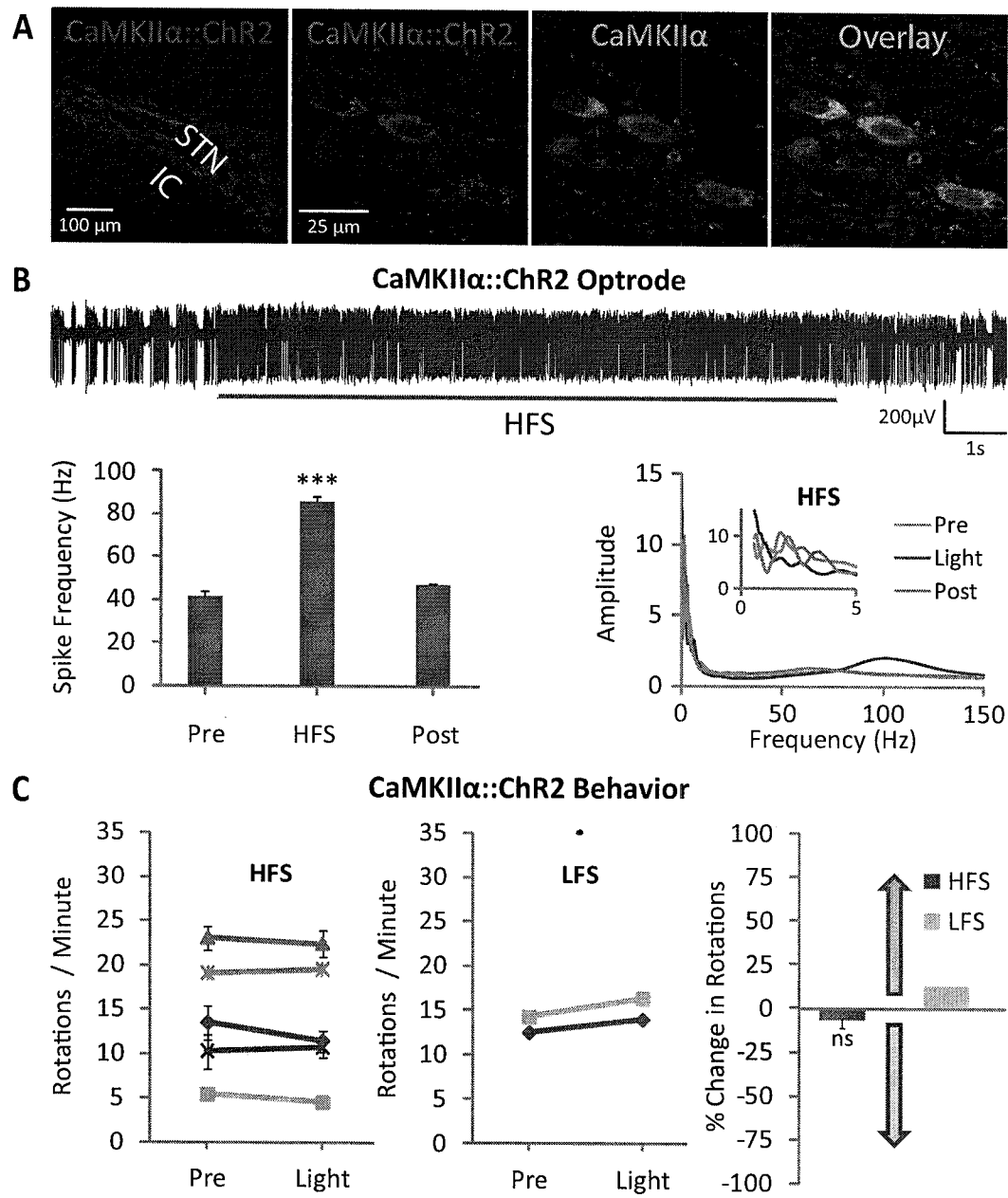


Figure 7

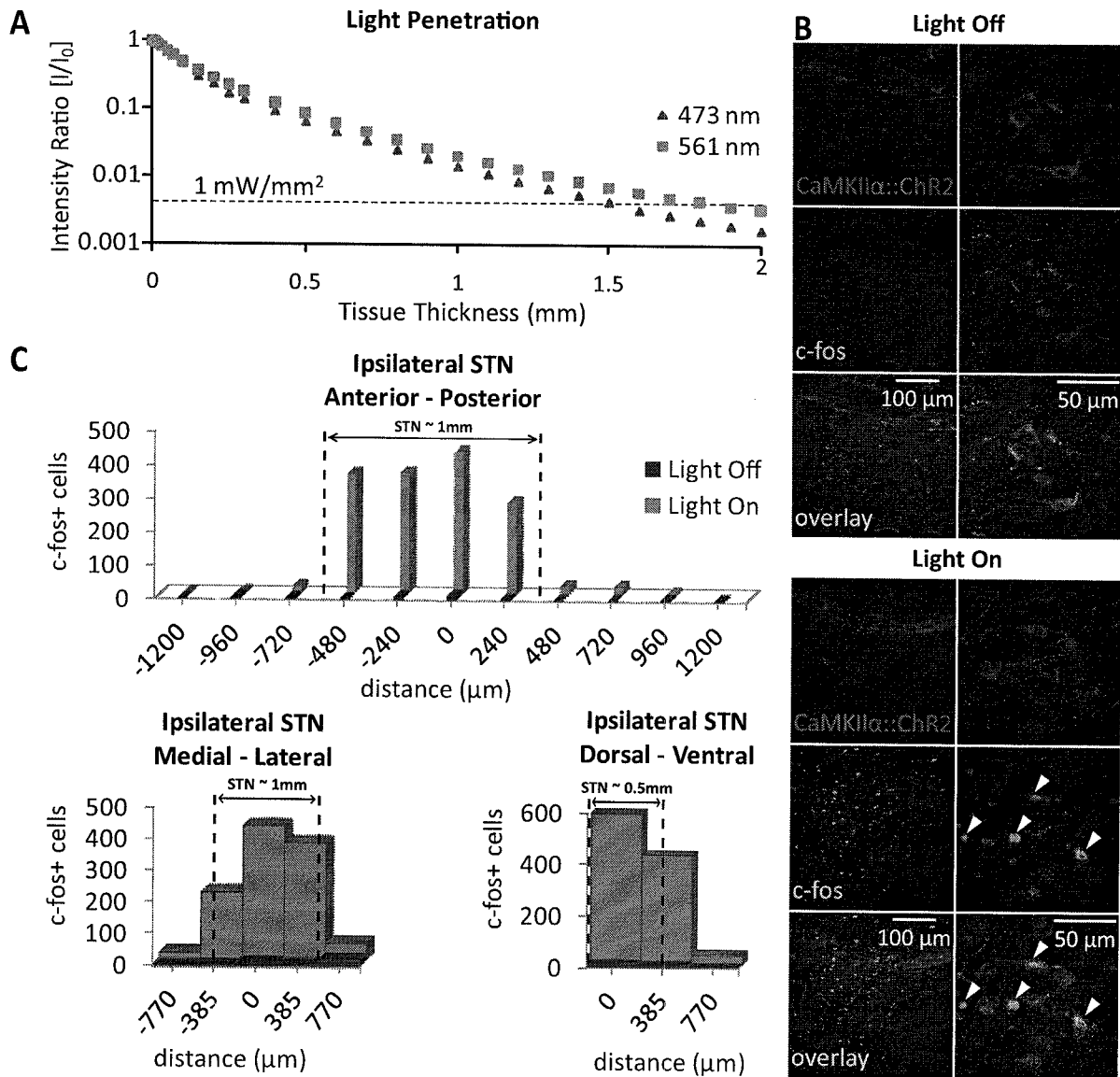


Figure 8

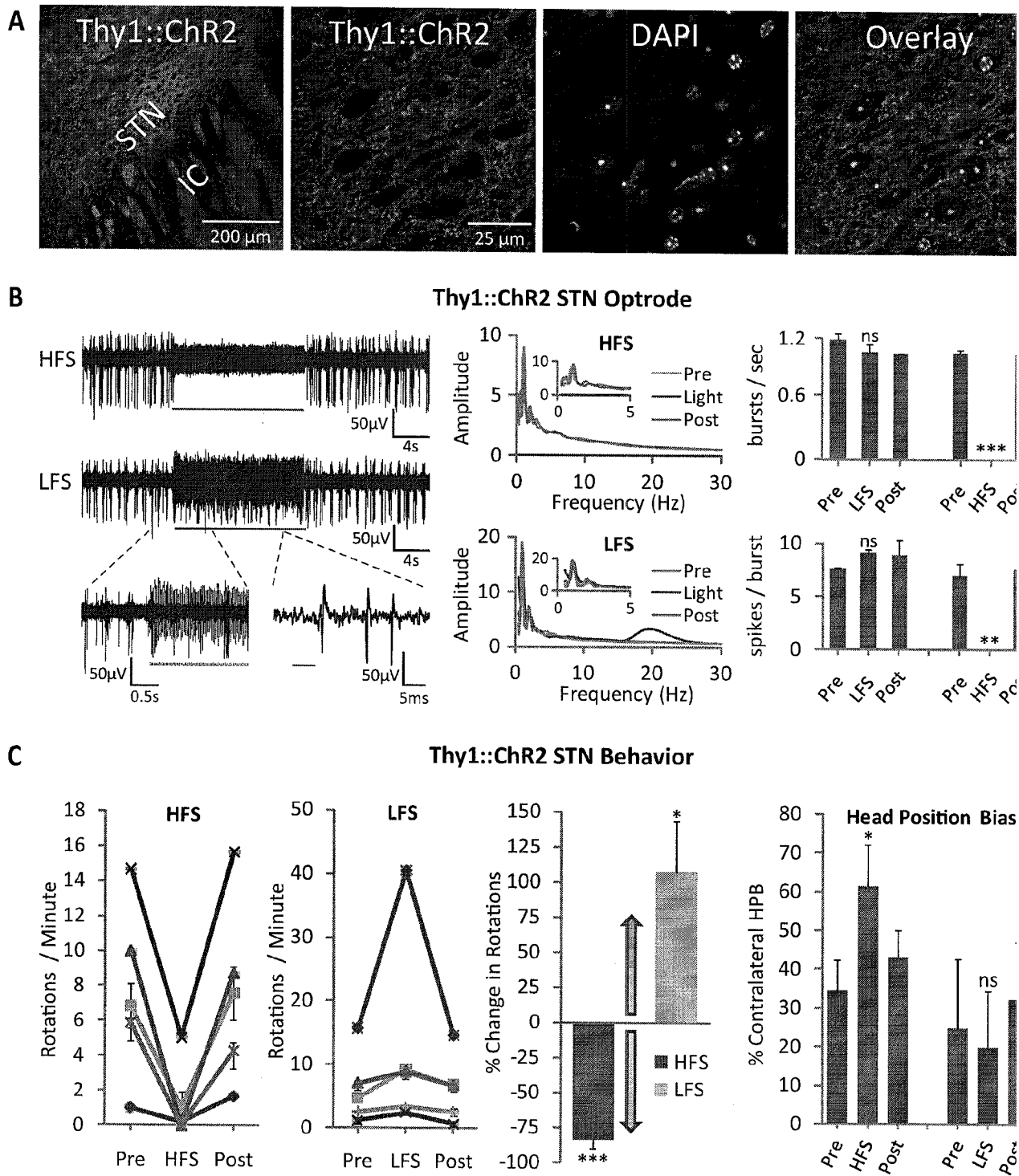


Figure 9

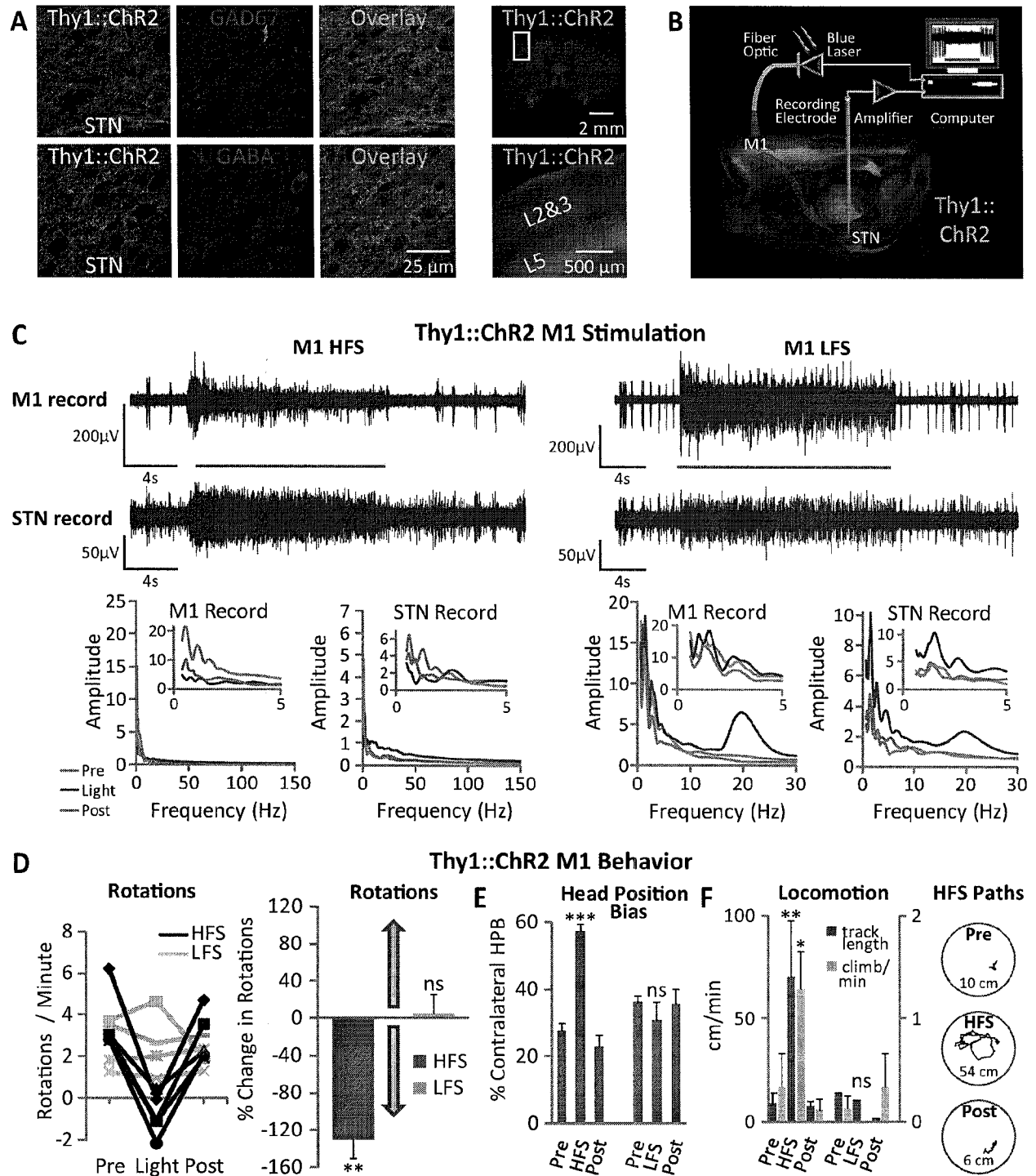


Figure 10

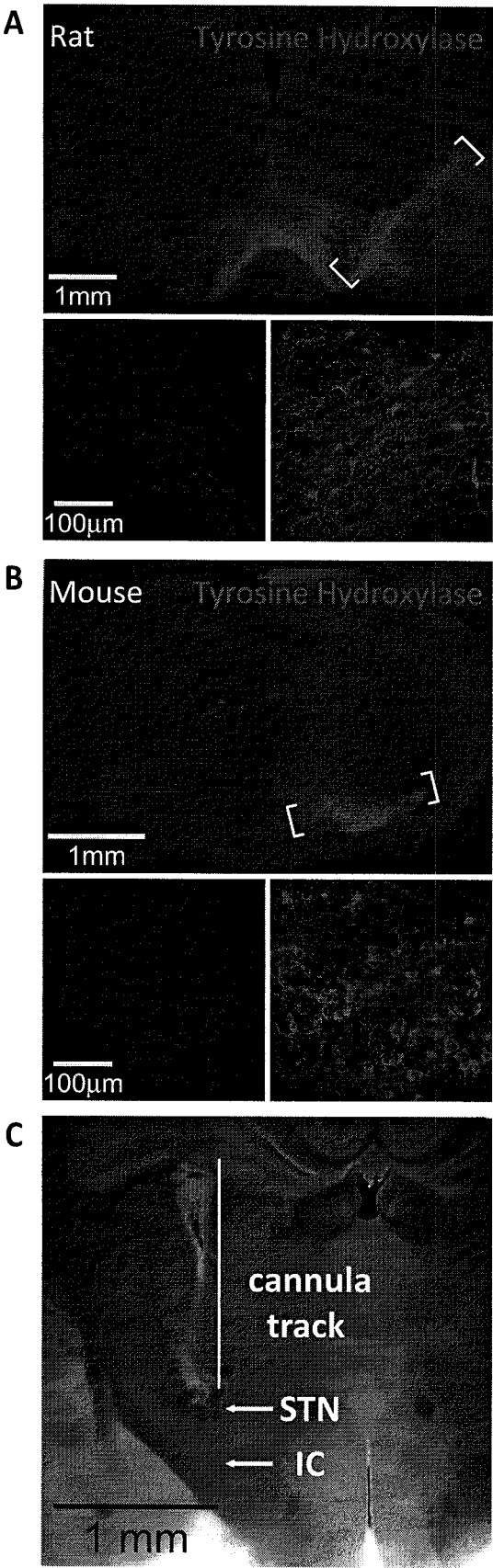


Figure 11

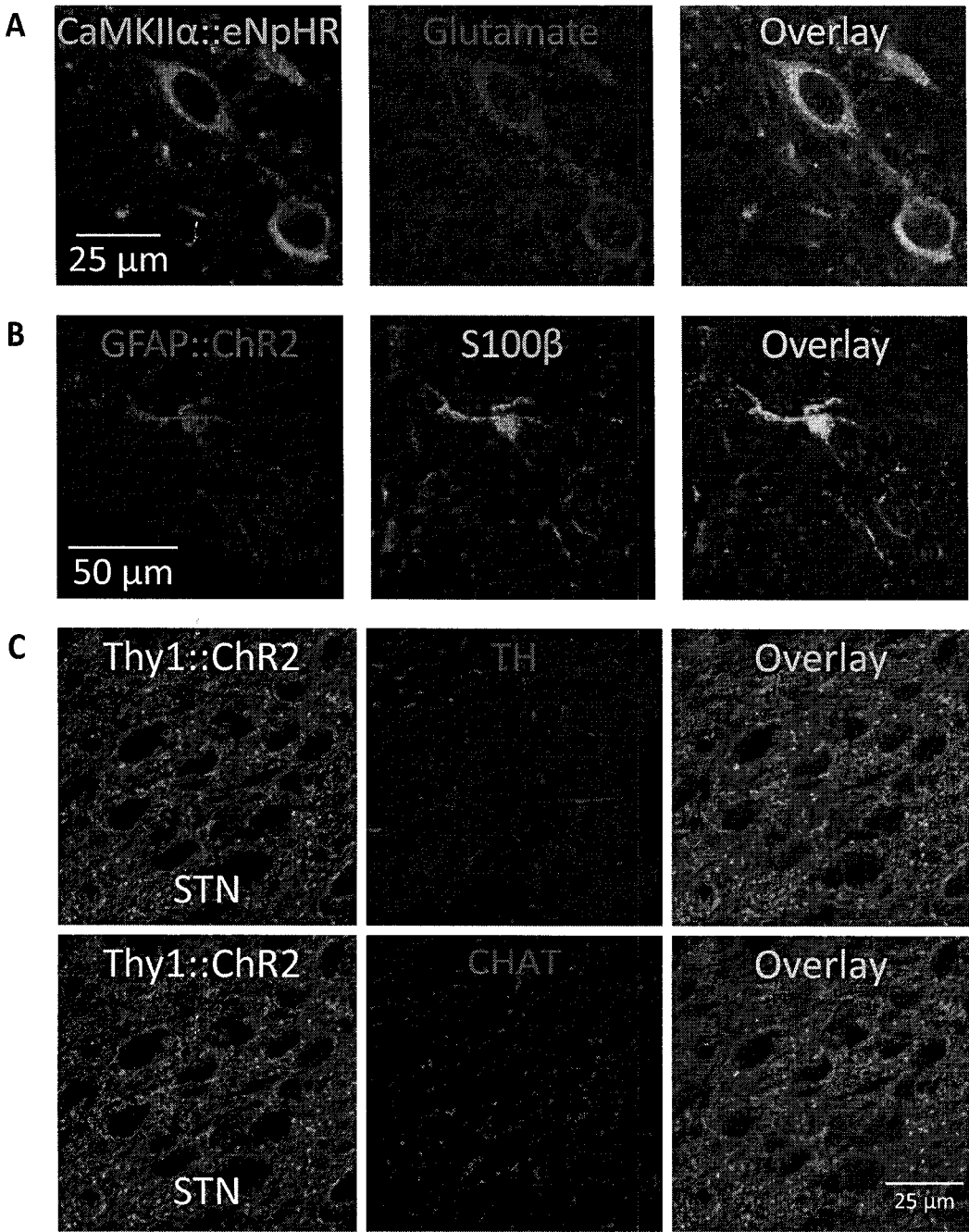


Figure 12

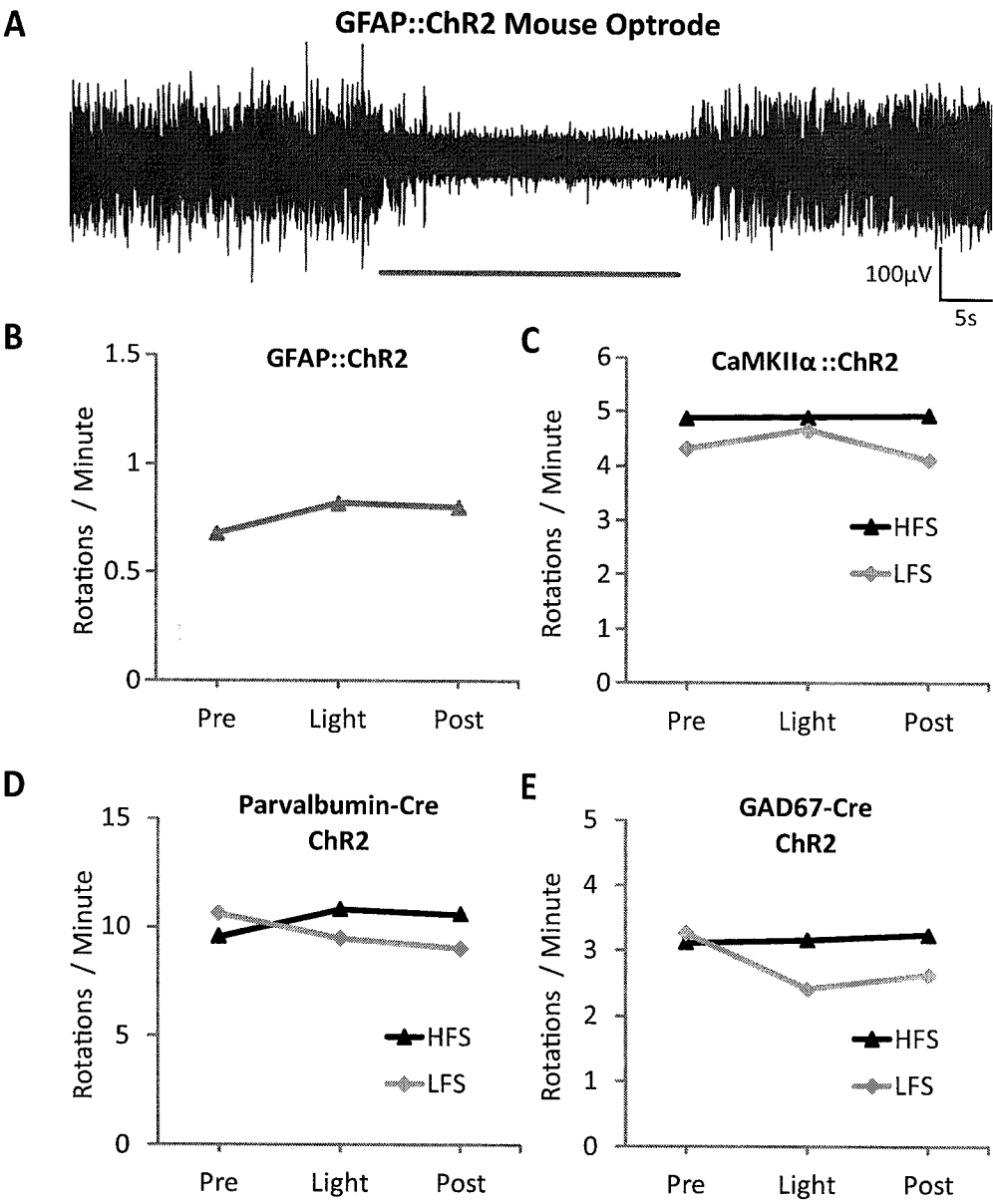


Figure 13

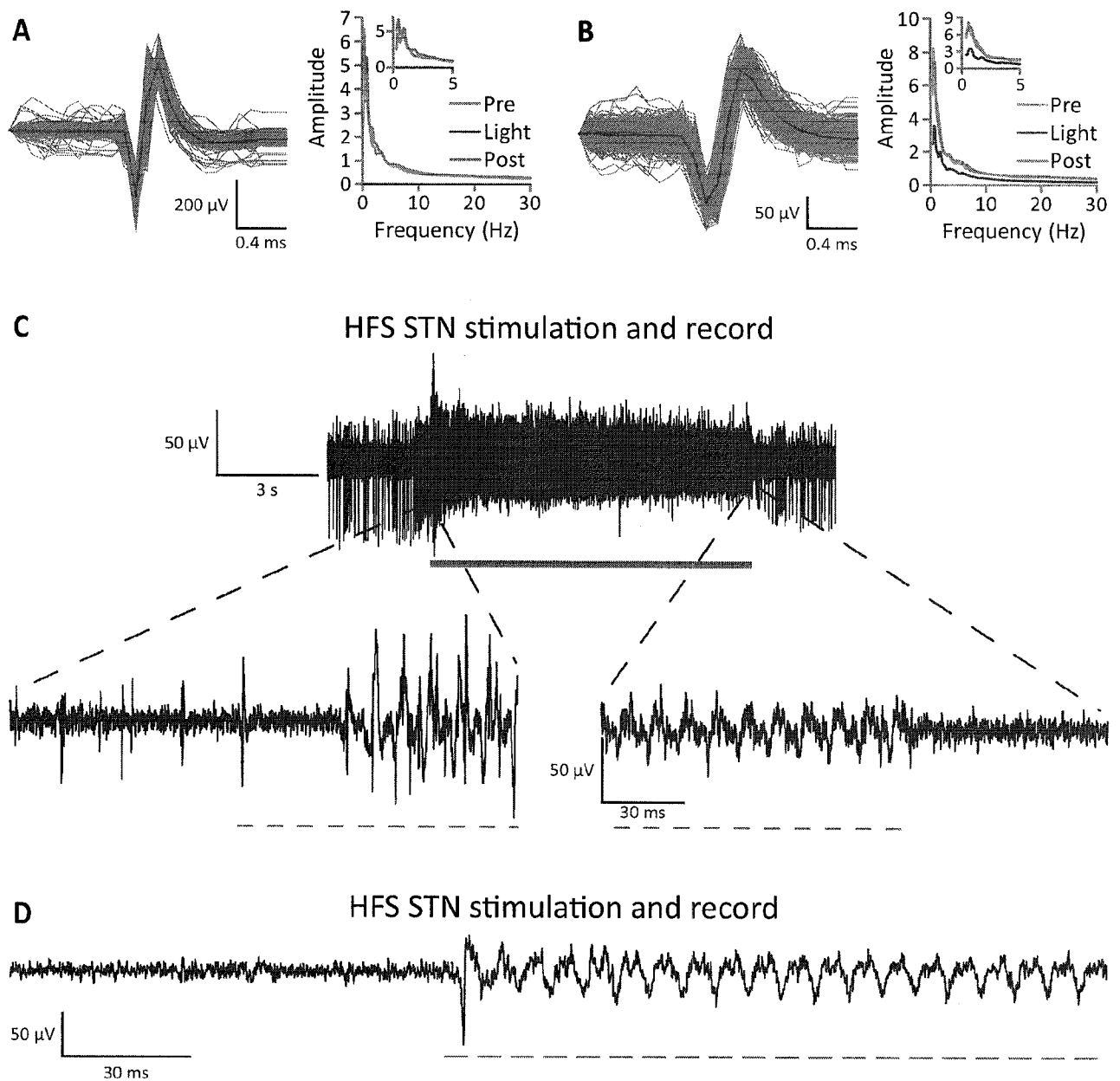


Figure 14

High-Temporal Resolution Traces

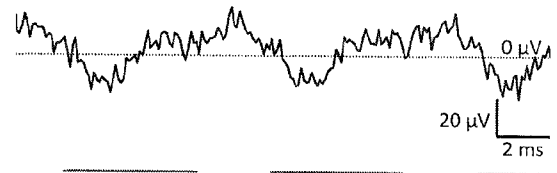
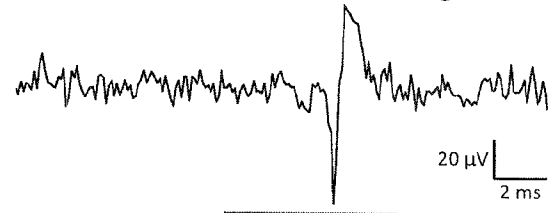
A eNpHR Stimulation in STN (Fig 1C)**C** Thy1 HFS Stimulation in STN (Fig 5B)**B** ChR2 HFS Stimulation in STN (Fig 3B)**D** Thy1 LFS Stimulation in STN (Fig 5B)

Figure 15

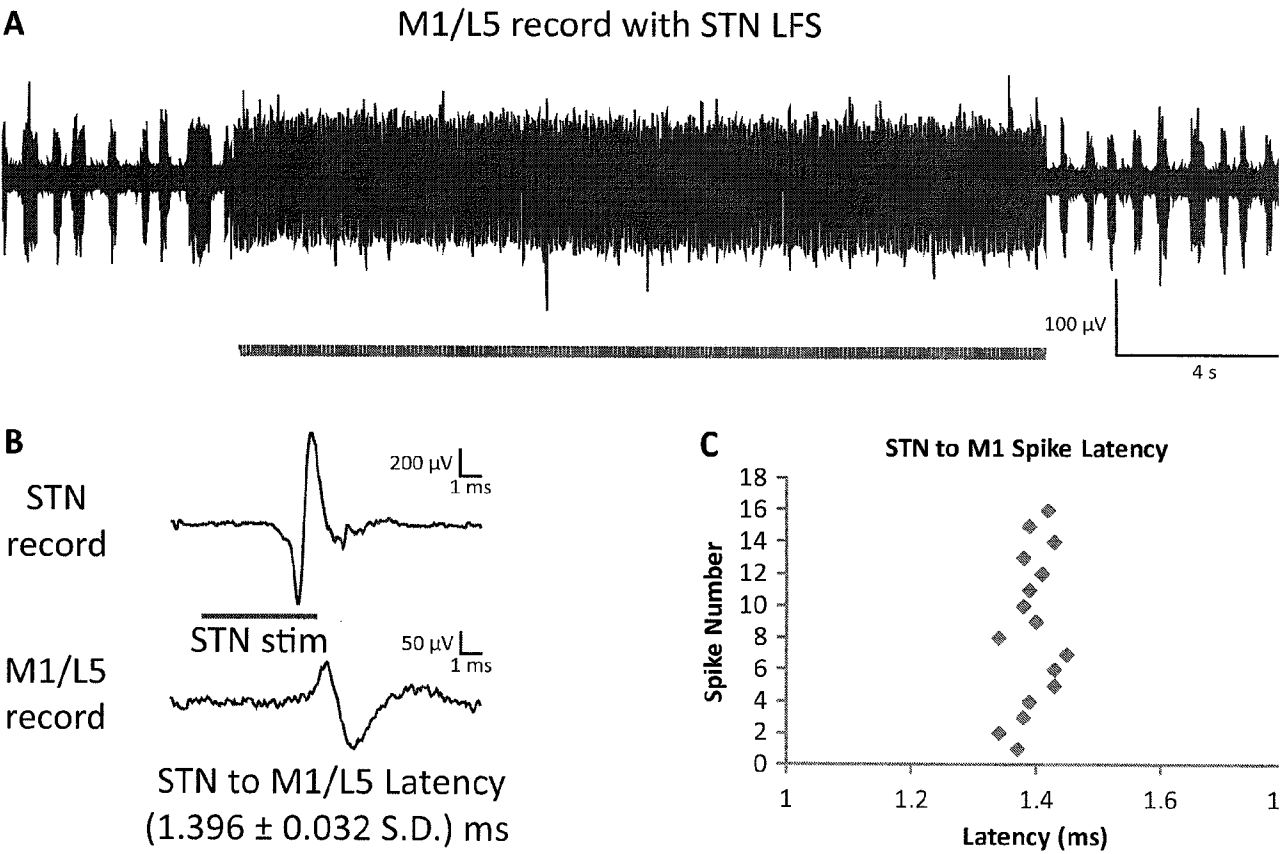


Figure 16

