DeltaFosB in the nucleus accumbens is critical for reinforcing effects of sexual reward

Kyle K. Pitchers[1], Karla S. Frohmader[1], Vincent Vialou[3], Ezekiell Mouzon[3], Eric J. Nestler[3]
Michael N. Lehman[1], and Lique M. Coolen[1,2]

Departments of Anatomy & Cell Biology[1] and Physiology & Pharmacology[2], Schulich School of Medicine and Dentistry, University of Western Ontario, London, Ontario, Canada, N6A 5C1; Fishberg Department of Neuroscience[3], Mount Sinai School of Medicine, New York, NY, USA.

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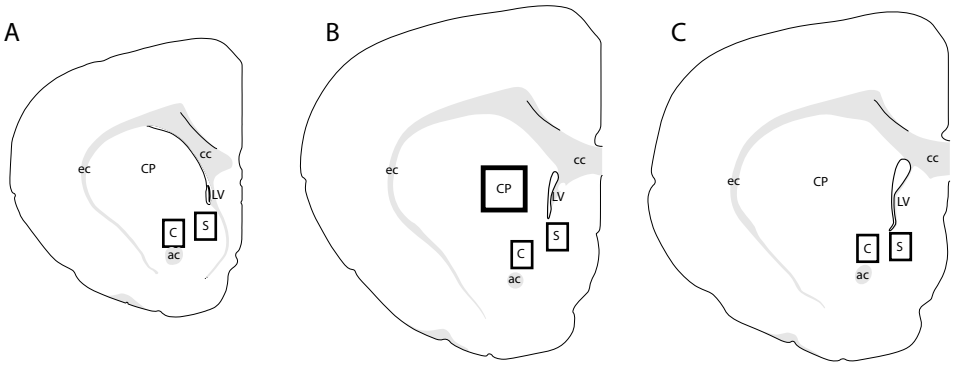
Supplementary Table 1. Behavioral paradigm used in experiment 1 to test the effects of sexual experience, and consequential ΔFosB induction, on the induction of the immediate-early gene c-fos by sexual behavior. Animals were intracardially perfused either 1 hour (NS, ES) or 18-24 hours after final mating session (NNS, ENS).

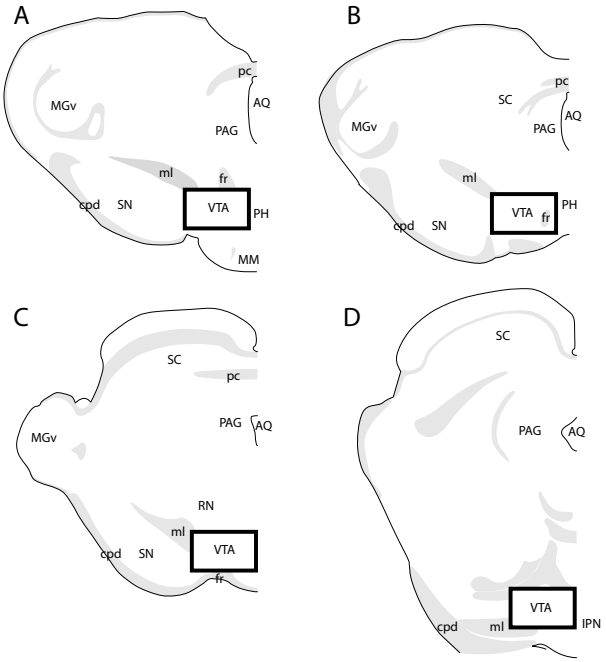
Group	Day 1	Day 2	Day 3	Day 4	Day 5	Final Day
Naïve No Sex	-	-	-	-	-	perfusion
Naïve sex (NS)	-	-	-	-	sex; perfusion	
Experienced no sex (ENS)	sex	sex	sex	sex	sex	perfusion
Experienced sex (ES)	sex	sex	sex	sex	sex; perfusion	

Supplementary Table 2. Sexual behavior data for animals in experiment 1 (mean +/- sem). Animals were sacrificed either 1 hour (NS, ES) or 18-24 hours (ENS) after first (NS) or fifth (ENS, ES) mating session (n=6/group). *indicates significant difference from first mating session. No significant differences were detected between groups for any behavioral measures within the appropriate mating session. Sexual behavior measures: ML, mount latency; IL, intromission latency; EL, ejaculation latency; M, number of mounts; IM, number of intromissions.

Group	Sexual Behavior Measure	Mating Session 1	Mating Session 2	Mating Session 3	Mating Session 4	Mating Session 5
Experienced No Sex	**ML**	207 +/-11	70 +/- 27*	108 +/- 41	23 +/- 9*	19 +/- 8*
	IL	207 +/- 11	82 +/- 32*	118 +/- 43	23 +/- 9*	19 +/- 8*
	EL	1105 +/- 356	369 +/- 62*	789 +/- 399	355 +/- 74*	298 +/- 117*
	M	9 +/- 5	7 +/- 3	13 +/- 4	3 +/- 2	2 +/- 1
	IM	16 +/- 3	16 +/- 3	25 +/- 9	19 +/- 1	10 +/- 1
Experienced Sex	**ML**	389 +/- 119	84 +/- 35*	162 +/- 126	43 +/- 17*	73 +/- 33*
	IL	392 +/- 117	118 +/- 56*	165 +/- 129	50 +/- 18*	101 +/- 46*
	EL	1008 +/- 242	769 +/- 348*	746 +/- 336	442 +/- 151*	303 +/- 71*
	M	8 +/- 3	18 +/- 9	16 +/- 8	9 +/- 3	4 +/- 2
	IM	13 +/- 1	16 +/- 3	18 +/- 4	18 +/- 7	9 +/- 2
Naïve Sex	**ML**	329 +/- 182	-	-	-	-
	IL	373 +/- 175	-	-	-	-
	EL	792 +/- 217	-	-	-	-
	M	6 +/- 2	-	-	-	-
	IM	11 +/- 2	-	-	-	-

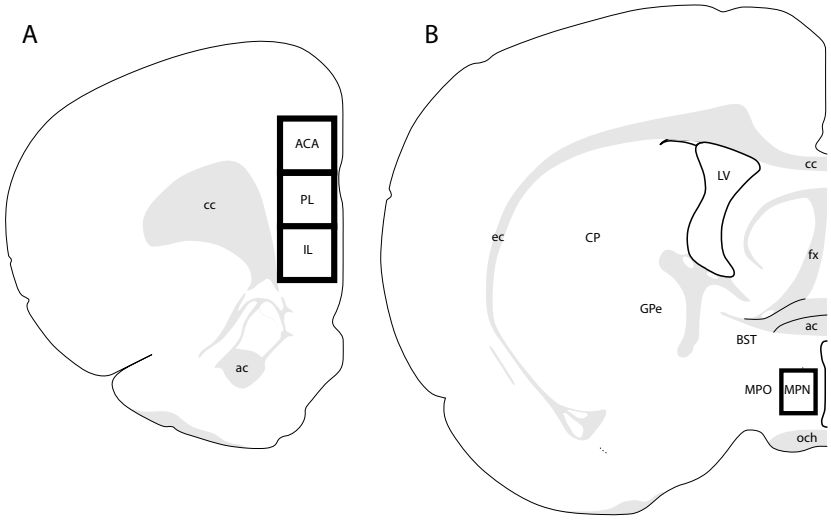


Supplementary Figure 1. Schematic drawings illustrating the area of analysis (indicated by the boxes) of ΔFosB-IR in the caudate putamen (CP; B), and nucleus accumbens core and shell at rostral (A), middle (B) and caudal (C) levels. Abbreviations: C, NAc core; S, NAc shell; ac, anterior commissure; LV, lateral ventricle; cc, corpus callosum.

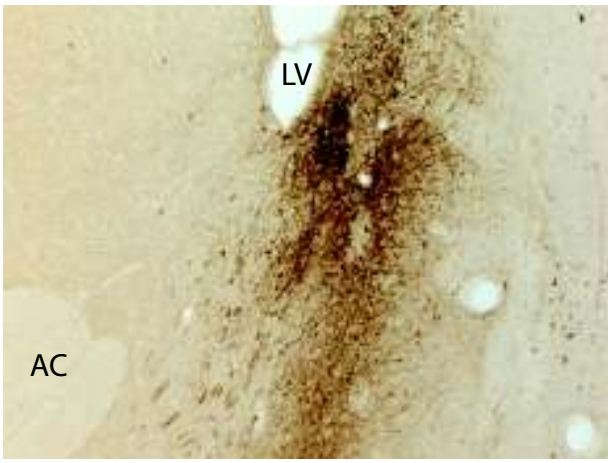


Supplementary Figure 2. Schematic drawings illustrating the area of analysis (indicated by the boxes) of ΔFosB-IR in the ventral tegmental area at rostral (A), middle (B), caudal (C) and tail levels (D). Abbreviations: ML, medial lemniscus; FR, fasciculus retroflexus; pc, posterior commissure; AQ, cerebral aqueduct; SC, superior colliculus; PAG, periaqueductal grey; PH,

posterior hypothalamus; MGv, medial geniculate ventral part; cpd, cerebral peduncle; RN, red nucleus; IPN, interpeduncular nucleus; MM, medial mammary nucleus.



Supplementary Figure 3. Schematic drawings illustrating the areas of analysis (indicated by the boxes) of ΔFosB-IR in the medial prefrontal cortex (A) and medial preoptic nucleus (B). Abbreviations: cc, corpus callosum ac, anterior commissure; ACA, anterior cingulate area; PF, prelimbic area; IL, infralimbic; MPN, medial preoptic nucleus; MPO, medial preoptic area; LV, lateral ventricle; AQ, cerebral aqueduct; CP, caudate putamen; fx, fornix; BST, bed nucleus of the stria terminalis; GPe, globus pallidus external segment; och, optic chiasm; ec, external capsule.



Supplementary Figure 4. Representative NAc section showing DAB-GFP staining for injection site verification. Abbreviations: AC, anterior commissure; LV, lateral ventricle.