

id	trt	trialno	response	learning chronic 350ppm restructured
1	1	1	1	0
1	1	1	2	1
1	1	1	3	1 trt 1 = sucrose only control
1	1	1	4	1 2 = 350 ppm Hv1a/GNA
1	1	1	5	1
1	1	1	6	1 trialno = training trials of learning expt, 1-6
2	1	1	1	0
2	1	1	2	0
2	1	1	3	0 response = did bee perform proboscis extension?
2	1	1	4	0 1 = yes
2	1	1	5	1 0 = no
2	1	1	6	1
3	1	1	1	0
3	1	1	2	1
3	1	1	3	1
3	1	1	4	1
3	1	1	5	1
3	1	1	6	1
4	1	1	1	0
4	1	1	2	1
4	1	1	3	1
4	1	1	4	1
4	1	1	5	1
4	1	1	6	1
5	1	1	1	0
5	1	1	2	0
5	1	1	3	1
5	1	1	4	1
5	1	1	5	1
5	1	1	6	1
6	1	1	1	0
6	1	1	2	1
6	1	1	3	1
6	1	1	4	1
6	1	1	5	1
6	1	1	6	1
7	1	1	1	0
7	1	1	2	0
7	1	1	3	1
7	1	1	4	1
7	1	1	5	0
7	1	1	6	1
8	1	1	1	0
8	1	1	2	1
8	1	1	3	1
8	1	1	4	1
8	1	1	5	1
8	1	1	6	1
9	1	1	1	0
9	1	1	2	0
9	1	1	3	1
9	1	1	4	0
9	1	1	5	0
9	1	1	6	0
10	1	1	1	0
10	1	1	2	0
10	1	1	3	0
10	1	1	4	1
10	1	1	5	1
10	1	1	6	0
11	2	1	1	0
11	2	2	2	0
11	2	2	3	0

11	2	4	1
11	2	5	1
11	2	6	1
12	2	1	0
12	2	2	1
12	2	3	0
12	2	4	0
12	2	5	1
12	2	6	1
13	2	1	0
13	2	2	1
13	2	3	1
13	2	4	1
13	2	5	1
13	2	6	1
14	2	1	0
14	2	2	0
14	2	3	1
14	2	4	1
14	2	5	1
14	2	6	1
15	2	1	0
15	2	2	1
15	2	3	1
15	2	4	1
15	2	5	1
15	2	6	1
16	2	1	0
16	2	2	1
16	2	3	1
16	2	4	1
16	2	5	1
16	2	6	1
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17	2	3	1
17	2	4	1
17	2	5	1
17	2	6	1
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18	2	5	0
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19	1	5	1
19	1	6	1
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21	1	3	1
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21	1	5	1
21	1	6	1
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22	1	5	0
22	1	6	0
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31	2	4	1
31	2	5	1
31	2	6	1
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32	2	3	0
32	2	4	1
32	2	5	0

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33	2	3	1
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34	1	2	0
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35	1	5	1
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36	1	6	1
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39	1	6	0
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40	1	5	1
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41	2	3	0
41	2	4	1
41	2	5	1
41	2	6	1
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45	2	5	1
45	2	6	1
46	2	1	0
46	2	2	0
46	2	3	1
46	2	4	1
46	2	5	1
46	2	6	1

trt	resp	time	odour	memory chronic 350ppm restructured
1	1	2	1	
1	1	2	1	7 day feeding expt
1	1	2	1	1 trt
1	0	2	1	1 = sucrose fed control
1	1	2	1	2 = 350 ppm Hv1a/GNA
1	1	2	1	
1	1	2	1	
1	1	2	1	odour
1	1	2	1	1 = hexanol (trained odour)
1	0	2	1	2 = octanol (novel odour)
1	0	2	1	
2	1	2	1	
2	0	2	1	1 timepoint
2	1	2	1	1 1 = 6th learning trial
2	1	2	1	1 2 = 10 mins later (short term memory)
2	1	2	1	1 3 = 24h later (long term memory)
2	1	2	1	
2	1	2	1	
2	0	2	1	1 response = did bee perform proboscis extension?
1	1	2	1	1 1 = yes
1	0	2	1	1 0 = no
1	1	2	1	
1	0	2	1	
1	1	2	1	
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1	0	2	1	

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1	0	3	2
1	0	3	2
1	0	3	2
1	1	3	2
1	0	3	2
1	0	3	2
2	0	3	2

100ug acute data

trt (treatment)

1 = sucrose fed control

2 = Hv1a/GNA

3 = benidipine HCl

4 = GNA

training trials of learning expt, T1-6

binary data shows did bee perform proboscis extension in response to odour?

1 = yes

0 = no

trt	T1	T2	T3	T4	T5	T6
1	0	1	1	0	1	1
1	0	0	1	1	1	1
1	0	0	1	1	1	1
1	0	1	0	0	0	1
1	0	0	1	0	1	0
1	0	1	1	1	1	1
1	0	1	1	1	1	1
1	0	0	1	1	1	1
1	0	1	1	1	1	1
1	0	0	0	1	1	0
1	0	0	1	1	0	1
2	0	1	1	1	1	1
2	0	0	0	1	1	1
2	0	0	1	1	1	1
2	0	0	0	0	0	1
2	0	0	0	0	0	0
2	0	0	1	0	1	0
2	0	0	1	1	1	0
2	0	0	0	0	0	1
2	0	0	0	0	0	0
2	0	0	1	1	1	1
2	0	1	1	1	1	1
3	0	0	1	1	0	1
3	0	1	1	1	1	1
3	0	1	0	0	1	0
3	0	0	1	0	1	1
3	0	0	0	0	0	0
3	0	0	0	0	0	0
3	0	1	1	0	0	1
3	0	0	0	0	0	1
3	0	0	0	1	0	0
3	0	0	0	0	1	0
3	0	1	0	1	0	1
3	0	0	0	1	0	0
3	0	0	0	0	0	0
4	0	1	1	1	1	0
4	0	1	1	1	1	1
4	0	0	0	0	0	0
4	0	0	1	1	1	1
4	0	0	1	1	0	1
4	0	0	0	0	0	0
4	0	1	0	0	1	1
4	0	0	0	1	1	1
4	0	1	1	1	1	1
4	0	1	1	1	1	1
4	0	1	1	1	0	1

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2	0	1	1	1	1	1
2	0	0	1	1	1	1
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4	0	0	1	1	1	1
3	0	0	0	0	1	1
3	0	0	0	0	0	0
3	0	0	1	1	1	1
3	0	0	1	0	1	0
3	0	0	0	0	0	0
3	0	0	0	0	0	1
3	0	1	1	1	1	1
3	0	0	1	1	1	0
3	0	0	1	0	1	1
3	0	0	0	0	0	0
3	0	0	0	0	1	1

trt	Response	timepoint	odour	100ug acute memory
1	1	1	1	1 trt (treatment)
1	1	1	1	1 1 = sucrose fed control
1	1	1	1	1 2 = Hv1a/GNA
1	1	1	1	1 3 = benidipine HCl
1	0	1	1	1 4 = GNA
1	1	1	1	
1	1	1	1	1 odour
1	1	1	1	1 1 = hexanol (trained odour)
1	1	1	1	1 2 = octanol (novel odour)
1	0	1	1	
1	1	1	1	
2	1	1	1	1 timepoint
2	1	1	1	1 1 = 6th learning trial
2	1	1	1	1 2 = 10 mins later (short term memory)
2	1	1	1	1 3 = 24h later (long term memory)
2	0	1	1	
2	0	1	1	
2	0	1	1	1 response = did bee perform proboscis extension?
2	1	1	1	1 1 = yes
2	0	1	1	1 0 = no
2	1	1	1	
2	1	1	1	
3	1	1	1	

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3	1	3	1
3	0	3	1
1	0	3	2
1	0	3	2
1	0	3	2
1	0	3	2
1	1	3	2
1		3	2

4		0	3	2
4			3	2
4			3	2
3		0	3	2
3		0	3	2
3		1	3	2
3		1	3	2
3		0	3	2
3		1	3	2
3		1	3	2
3		0	3	2
3		0	3	2
3		0	3	2

100ug acute data learning and memory averages

sucrose	GNA	Benidipine	Hv1a/GNA	hex 10	octan24
1	0	0	0 con	0.6667	0.1667
2	0.4444	0.375	0.2941 GNA	0.6875	0.25
3	0.8333	0.75	0.5294 ben	0.3529	0.0588
4	0.7222	0.75	0.4706 Hv1a	0.619	0.381
5	0.8333	0.875	0.5882 0.8095	hex 24	octan24
6	0.8333	0.875	0.6471 0.8571 con	0.625	0.3125
			GNA	0.4	0.2
			benid	0.6667	0.3333
			FP5	0.6842	0.4211

chronic assay learning and memory 350 ppm averages

trial	control	hv1a/GNA		hex10	octan10
1	0	0	STM con	0.6154	0.1538
2	0.4231	0.5	STM Hv1a	0.75	0.2
3	0.6538	0.7	LTM con	0.5	0.2917
4	0.6923	0.8	LTM Hv1a	0.6111	0.2222
5	0.7692	0.85		hex24	octan24
6	0.7692	0.9	LTM control	0.5	0.2917
			LTM Hv1a	0.6111	0.2222

For all assays below: 1= event; 0=censor

Hv1a/GNA time	Hv1a/GNA stat	Acet time	Acet status
48	1	4	1
48	1	4	1
48	1	4	1
48	1	4	1
48	1	4	1
48	0	4	1

Hv1a/GNA time Hv1a/GNA stat1 acet 14 time acet 14 status

Injection	ctrl time	ctrl status	gna time	gna status
	48	0	4	1
	48	0	24	1

Hv1a/GNA time Hv1a/GNA status