TABLE 1 Demographics in the two PACAP Blood study samples

Initial PACAP Blood Sample				
	PTSD	**No PTSD**	**x^2**	**Sig.**
Sex			.82	.37
Female	45.8% (n=11)	57.5% (n=23)		
Male	54.2% (n=13)	42.5% (n=17)		
Race/Ethnicity				
African American	95.8% (n=23)	100% (n=40)	1.69	.20
White/Biracial/Latino/Asian	4.2% (n=1)	0% (n=0)		
Employment				
Unemployed	83.3% (n=20)	87.5% (n=35)	.215	.64
Employed	16.7% (n=4)	12.5% (n=5)		
Total Household Monthly Income				
<$1000	82.6% (n=19)	83.8% (n=31)	.01	.91
≥ $1000	17.4% (n=4)	16.2% (n=6)		
Current Substance Abuse				
No	83.3% (n=20)	97.5% (n=39)	4.18	.04
Yes	16.7% (n=4)	2.5% (n=1)		
Lifetime Suicide Attempt				
No	69.6% (n=16)	87.5% (n=35)	3.05	.08
Yes	30.4% (n=7)	12.5% (n=5)		
Replication PACAP Blood Sample				
Sex				
Female	100% (n=30)	100% (n=45)		
Male	0% (n=0)	0% (n=0)		
Race/Ethnicity				
African American	96.7% (n=29)	93.3% (n=42)	3.96	.52
White/Biracial/Latino/Asian	3.3% (n=1)	6.7% (n=3)		
Employment				
Unemployed	73.3% (n=22)	66.7% (n=30)	.376	.54
Employed	26.7% (n=8)	33.3% (n=15)		
Total Household Monthly Income				
<$1000	65.5% (n=19)	69.8% (n=30)	.14	.70
≥ $1000	34.5% (n=10)	30.2% (n=13)		
Current Substance Abuse				
No	96.7% (n=29)	100% (n=45)	1.52	.22
Yes	3.3% (n=1)	0% (n=0)		
Lifetime Suicide Attempt				
No	62.1% (n=18)	74.4% (n=32)	1.25	.27
Yes	37.9% (n=11)	25.6% (n=11)		

Note that totals for each column are not always equal due to occasional subjects with missing data.

TABLE 2 Demographics in the two Genetics study samples

Initial Genetics Sample				
	PTSD	No PTSD	x^2	Sig.
Sex				
Female	64.7% (n=165)	62.2% (n=338)	.45	.50
Male	35.3% (n=90)	37.8% (n=205)		
Race/Ethnicity				
African American	92.5% (n=235)	92.2% (n=498)	.02	.88
White/Bi-racial/Latino/Asian	7.5% (n=19)	7.8% (n=42)		
Employment				
Unemployed	77.6% (n=198)	72.4% (n=391)	2.47	.12
Employed	22.4% (n=57)	27.6% (n=149)		
Total Household Monthly Income				
<$1000	73.6% (n=184)	69.5% (n=365)	1.36	.24
≥ $1000	26.4% (n=66)	30.5% (n=160)		
Current Substance Abuse				
Yes	87.7% (n=222)	96.8% (n=515)	24.5	<.001
No	12.3% (n=31)	3.2% (n=17)		
Lifetime Suicide Attempt				
No	69.8% (n=171)	88.9% (n=466)	42.9	<.001
Yes	30.2% (n=74)	11.1% (n=58)		
Replication Genetics Sample				
Sex				
Female	60.8% (n=87)	58.4% (n=173)	.23	.63
Male	39.2% (n=56)	41.6%(n=123)		
Race/Ethnicity				
African American	93.7% (n=134)	91.8% (n=270)	.48	.49
White/Bi- racial/Latino/Asian	6.3% (n=9)	8.2% (n=24)		
Employment				
Unemployed	72.0% (n=103)	61.6% (n=181)	4.63	.03
Employed	28.0% (n=40)	38.4% (n=113)		
Total Household Monthly Income				
<$1000	67.9% (n=91)	60.4% (n=172)	2.23	.14
≥ $1000	32.1% (n=43)	39.6% (n=113)		
Current Substance Abuse				
No	95.0% (n=132)	96.9% (n=278)	.94	.33
Yes	5.0% (n=7)	3.1% (n=9)		
Lifetime Suicide Attempt				
No	78.7% (n=111)	88.6% (n=257)	7.45	.01
Yes	21.3% (n=30)	11.4% (n=33)		

Note that totals for each column are not always equal due to occasional subjects with missing data

TABLE 3 Demographics in the 4 study samples

Variable	PTSD status	N	Mean	F	Sig.
Initial PACAP Blood Sample					
Age	No PTSD	40	41.52	1.68	.20
	PTSD	24	45.79		
BDI	No PTSD	39	7.72	56.9	<.001
	PTSD	24	26.4		
CTQ	No PTSD	39	39.35	6.87	.011
	PTSD	24	50.94		
TEI	No PTSD	40	2.39	9.99	.002
	PTSD	23	4.05		
PSS	No PTSD	40	4.3	145.57	<.001
	PTSD	24	29.25		
Replication PACAP Blood Sample					
Age	No PTSD	45	30.44	3.33	.07
	PTSD	30	34.97		
BDI	No PTSD	45	12.93	38.57	<.001
	PTSD	29	28.37		
CTQ	No PTSD	45	42.72	7.09	.01
	PTSD	30	56.25		
TEI	No PTSD	45	2.55	1.48	.23
	PTSD	30	3.16		
PSS	No PTSD	45	7.65	116.84	<.001
	PTSD	30	29.24		
Initial Gene Sample					
Age	No PTSD	538	39.71	5.26	.02
	PTSD	254	41.98		
BDI[1]	No PTSD	524	10.33	293.12	<.001
	PTSD	243	24.10		
CTQ[2]	No PTSD	533	38.53	72.12	<.001
	PTSD	246	49.51		
TEI[3]	No PTSD	537	2.33	60.24	<.001
	PTSD	247	3.45		
PSS[4]	No PTSD	545	6.16	1308.9	<.001
	PTSD	256	26.87		
Replication Genetics Sample					
Age	No PTSD	294	38.09	.024	.877
	PTSD	143	38.29		
BDI	No PTSD	275	9.45	159.20	<.001
	PTSD	127	23.29		
CTQ	No PTSD	295	37.50	42.34	<.001
	PTSD	143	48.15		
TEI	No PTSD	292	2.14	48.28	<.001
	PTSD	141	3.43		
PSS	No PTSD	296	6.23	582.77	<.001
	PTSD	143	26.77		

Note that totals for each column are not always equal due to occasional subjects with missing data

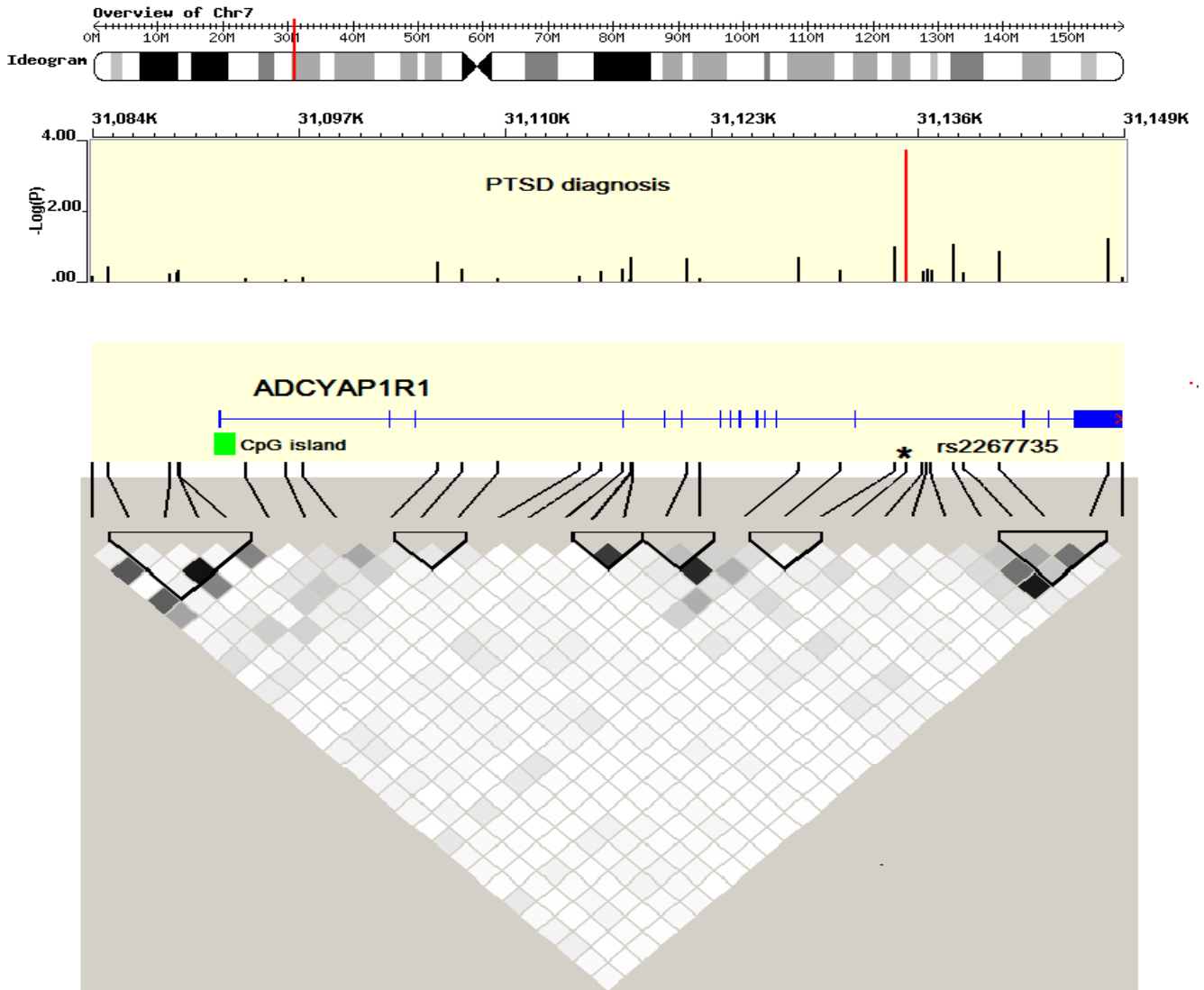[1] BDI = Beck Depression Inventory, [2] CTQ = Childhood Trauma Questionnaire Total Score, [3] TEI = Total types of non-childhood abuse trauma, [4] PSS=PTSD symptoms

Supplemental Table 4:
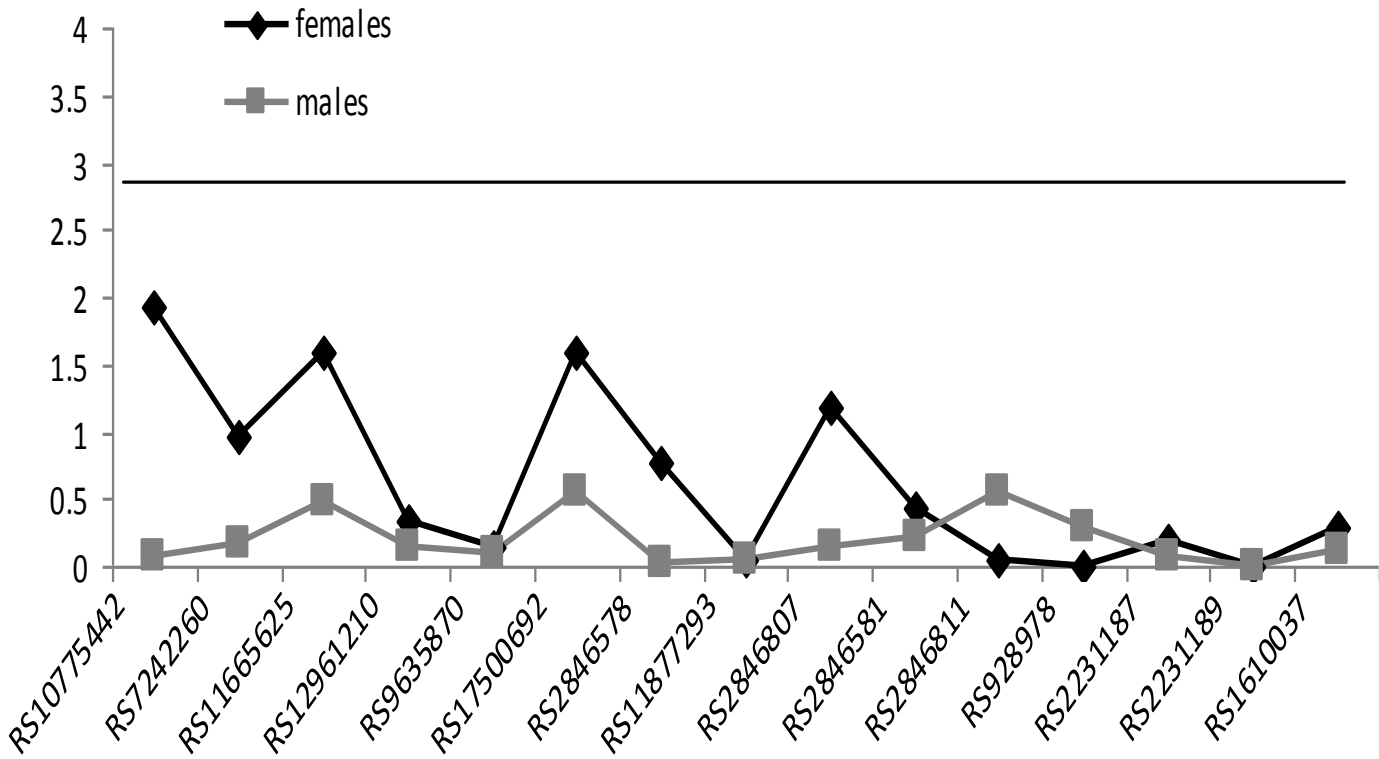## Location of potential *EREs* within the *ADCYAP1R1* gene

	Start pos.	Strand	Matrix sim.	Core sim.	Sequence	SNP
1	31084308	-	0.818	0.809	ctgggacagggcCACCCac	no SNP
2	31085588	+	0.914	1	ctatcacAAGGacagaaaa	no SNP
3	31085910	-	0.93	1	gtttgtcAAGGccacagga	rs78430287
4	31086075	-	0.813	1	tacaGTCAaagtgagccag	no SNP
5	31086111	-	0.883	1	atggGTCAgagtctcctgc	no SNP
6	31088143	-	0.936	1	gccctagaaGGTcaagtgc	no SNP
7	31088391	-	0.872	1	tgggGTCAgatggccagag	no SNP
8	31089400	+	0.974	1	ggcttacaaGGTcagagct	no SNP
9	31089695	-	0.935	1	ctagcccAAGGacacacag	no SNP
10	31090164	-	0.992	1	gaagatcaAGGTcatctat	no SNP
11	31090794	+	0.837	0.779	cctggacaaggtGGCCata	no SNP
11	31090794	-	0.818	0.794	tatggccaccttGTCCagg	no SNP
12	31091057	-	0.85	0.806	acagGTAAaggtggcctag	no SNP
12	31091057	+	0.846	0.779	ctaggccaccttTACCtgt	no SNP
13	31092118	+	0.852	1	cagggacacacgGACCccg	no SNP
14	31093439	+	0.873	0.781	ggagGGCAacttgccctgg	no SNP
14	31093439	-	0.884	0.781	ccagGGCAagttgccctcc	no SNP
15	31093485	+	0.952	1	catcctgaAGGTcaagcta	no SNP
16	31093678	-	0.983	1	cctccccaAGGTcagtgag	no SNP
17	31094278	-	0.877	1	ccagccccAGGTcaatgaa	no SNP
18	31094433	+	0.831	0.774	ggagGTGAcaatgagtttc	no SNP
19	31095813	+	0.983	1	ggagggcaaGGTcataaag	no SNP
20	31095819	+	0.87	1	caagGTCAtaaagggcggg	no SNP
21	31095878	-	0.882	1	atcctccAAGGccaactca	no SNP
22	31096906	+	0.887	0.778	actcctcCAGGtcaggaga	no SNP
23	31096978	-	0.904	1	caagGTCAtgctgcagagt	no SNP
24	31096984	-	0.986	1	cttccccaAGGTcatgctg	no SNP
25	31098160	-	0.983	1	actttccaAGGTcacacaa	no SNP
26	31101000	+	0.875	1	ccagtgctAGGTcacgcca	no SNP
27	31101407	+	0.827	1	gagggacacaaaGACCcct	no SNP
28	31102744	-	0.838	0.809	cggggcaagacCACCtcc	no SNP
29	31103256	-	0.853	0.791	gcagGGCAttgtgggctgg	no SNP
30	31103402	+	0.843	0.794	gtgggtgaggctGTCCtca	no SNP
30	31103402	-	0.843	0.809	tgaggacagcctCACCcac	no SNP
31	31104740	-	0.837	1	gtgaggcatccaGACCaca	no SNP
32	31106735	+	0.914	1	ggagGTCAgggtgtgaagg	no SNP
33	31108105	+	0.93	1	agggtgaaaGGTcatacag	no SNP
34	31108438	-	0.974	1	tgacagcaaGGTcaatgct	no SNP
35	31108993	+	0.94	1	ctggccaaAGGTcagctga	no SNP
36	31109007	-	0.928	1	gtgtttcAAGGacatcagc	no SNP
37	31111801	+	0.859	0.767	atagGCCAgtgtgatcagc	no SNP
38	31114138	-	0.913	1	cgagGTCAcagggccactt	no SNP
39	31114144	-	0.877	1	cactgccgAGGTcacaggg	RS57410846
40	31114269	+	0.888	1	cacgGTCAacatgggctgc	no SNP
41	31114313	+	0.933	1	ctctttcAAGGacatgatg	no SNP
42	31114319	-	0.83	0.794	ctgtgacatcatGTCCttg	no SNP
43	31115668	-	0.821	0.809	gctggacaccccCACCttg	no SNP
44	31115903	-	0.985	1	tctcaccaAGGTcaccagc	no SNP
45	31117734	+	0.882	0.772	ttagGCCAcgctggcctag	no SNP
46	31117734	-	0.884	0.772	ctagGCCAgcgtggcctaa	no SNP
47	31117779	+	0.914	1	aagcaccAAGGacagggag	no SNP
48	31119037	-	0.908	1	ccagGTCAcatggccacac	no SNP
49	31119043	-	0.875	1	ctaaggccAGGTcacatgg	no SNP
50	31120724	+	0.826	1	gcatgtcagctgGACCttg	no SNP
51	31121902	+	0.837	1	agtaggcacaatGACCgcg	no SNP
52	31121902	-	0.901	1	cgcgGTCAttgtgcctact	no SNP
53	31122642	-	0.905	1	tgtggccAAGGccacctcc	no SNP
54	31125315	+	0.941	1	gaagaggaAGGTcaggtgg	no SNP
55	31126976	+	0.845	0.774	actgGTGAtactgactttt	no SNP
56	31127311	-	0.93	1	tcatcccAAGGacactcac	no SNP
57	31131686	+	0.857	1	tcctGTCAttgtgccttgt	no SNP
58	31132443	-	0.872	1	ctgatgctAGGTcacccta	no SNP
59	31132860	+	0.811	0.779	tcggggcagctcTACCtct	no SNP
60	31133995	-	0.894	1	cagacacAAGGgcagtgtc	no SNP
61	31134660	-	0.857	1	caggtctccttGACCctg	no SNP
61	31134660	+	0.915	1	caggGTCAaggagaccctg	no SNP
62	31135494	-	0.877	1	tcagGTCAgagaggacgag	rs2267735
63	31135669	+	0.876	1	gtagGTCAgggttaactgg	no SNP
64	31135884	-	0.874	1	tggggccaaggaGACCcca	no SNP
65	31136983	-	0.869	1	agatGTCAgaatgtcttaa	no SNP
66	31139247	-	0.891	1	gaagGTCAacttgggtgtc	no SNP
67	31139253	-	0.952	1	ggctgtgaAGGTcaacttg	no SNP
68	31140809	-	0.886	1	acagtccAAGGgcaacacc	no SNP
69	31142030	-	0.839	1	ctaggacacctgGACCatg	no SNP
70	31143664	-	0.942	1	ggtggagaAGGTcaagtca	no SNP
71	31143686	+	0.888	1	ttaatccAAGGccatttaa	no SNP
72	31143723	-	0.828	0.809	catagtcagtctCACCaga	no SNP
73	31144368	+	0.88	1	ccccatccAGGTcatggtg	no SNP
74	31144374	+	0.914	1	ccagGTCAtggtgtatttc	no SNP
75	31147441	-	0.917	1	caagtcAAGGgcataaaa	no SNP
76	31147447	-	0.994	1	gtgagtcaAGGTcaagggc	no SNP
77	31147886	-	0.933	1	actggccAAGGacacagag	no SNP

Supplemental Figure 1:
ADCYAP1R1 Tag SNP location and LD Plot

ADCYAP1 (PACAP Peptide) TagSNP

Supplemental Figure 3:
rs2267735 and Depression and Substance Abuse

A p>.5

BDI Total — CC (310), CG (355), GG (101)

B P>.2, control trauma, age, race

BDI Total — CC (294), CG, GG (427)

C p>.2

Lifetime Drug Abuse — CC (351), CG (400), GG (119)

D P>.2, control trauma, age, race

Lifetime Drug Abuse — CC (327), CG, GG (482)

E

- no Depression
- Depression

low Methylation, Hi Methylation