

# Alzheimer's Disease Advances: Leveraging the San Diego Environment

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# Strong Scientific Environment



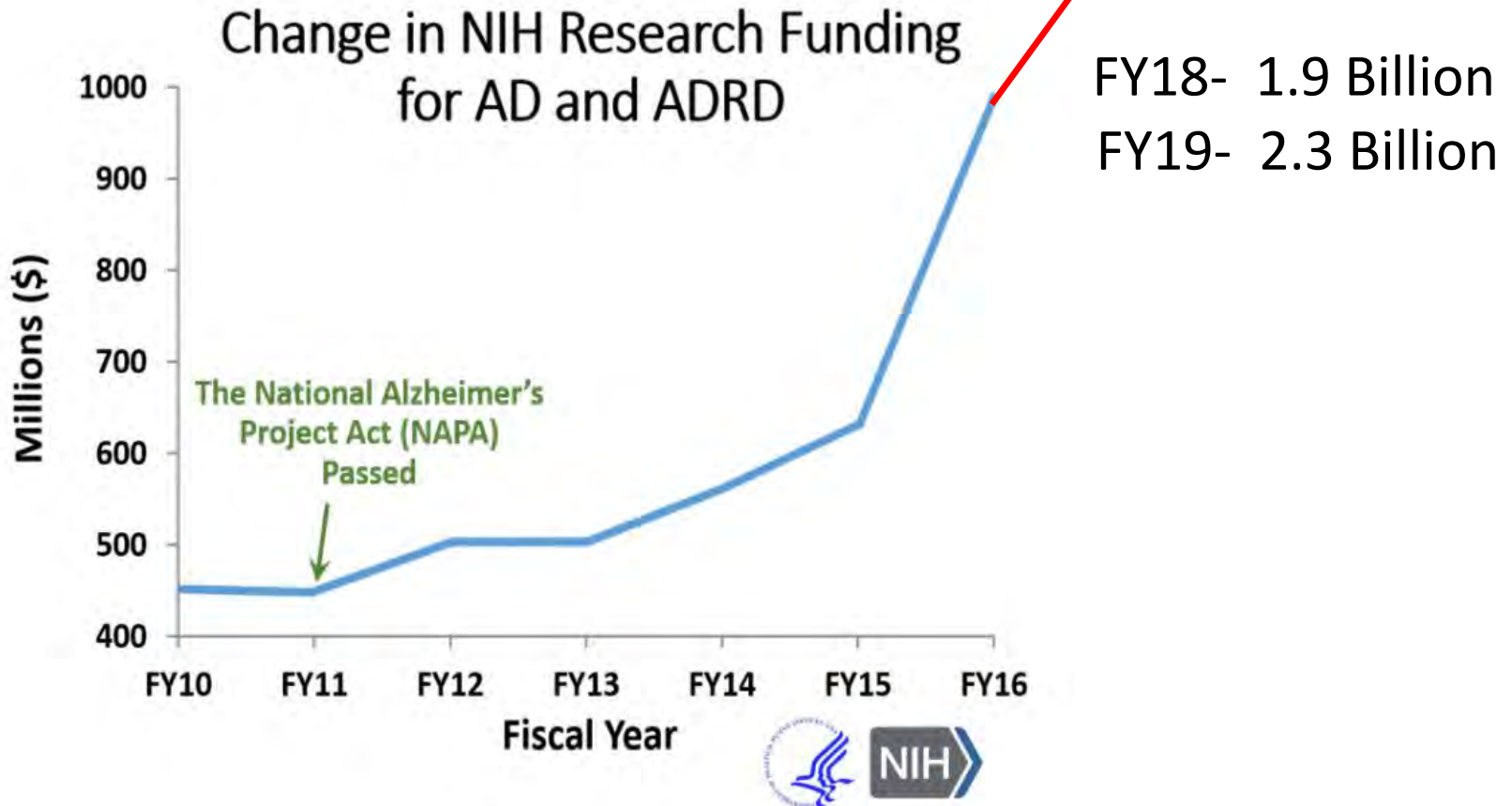


# ADRC Team

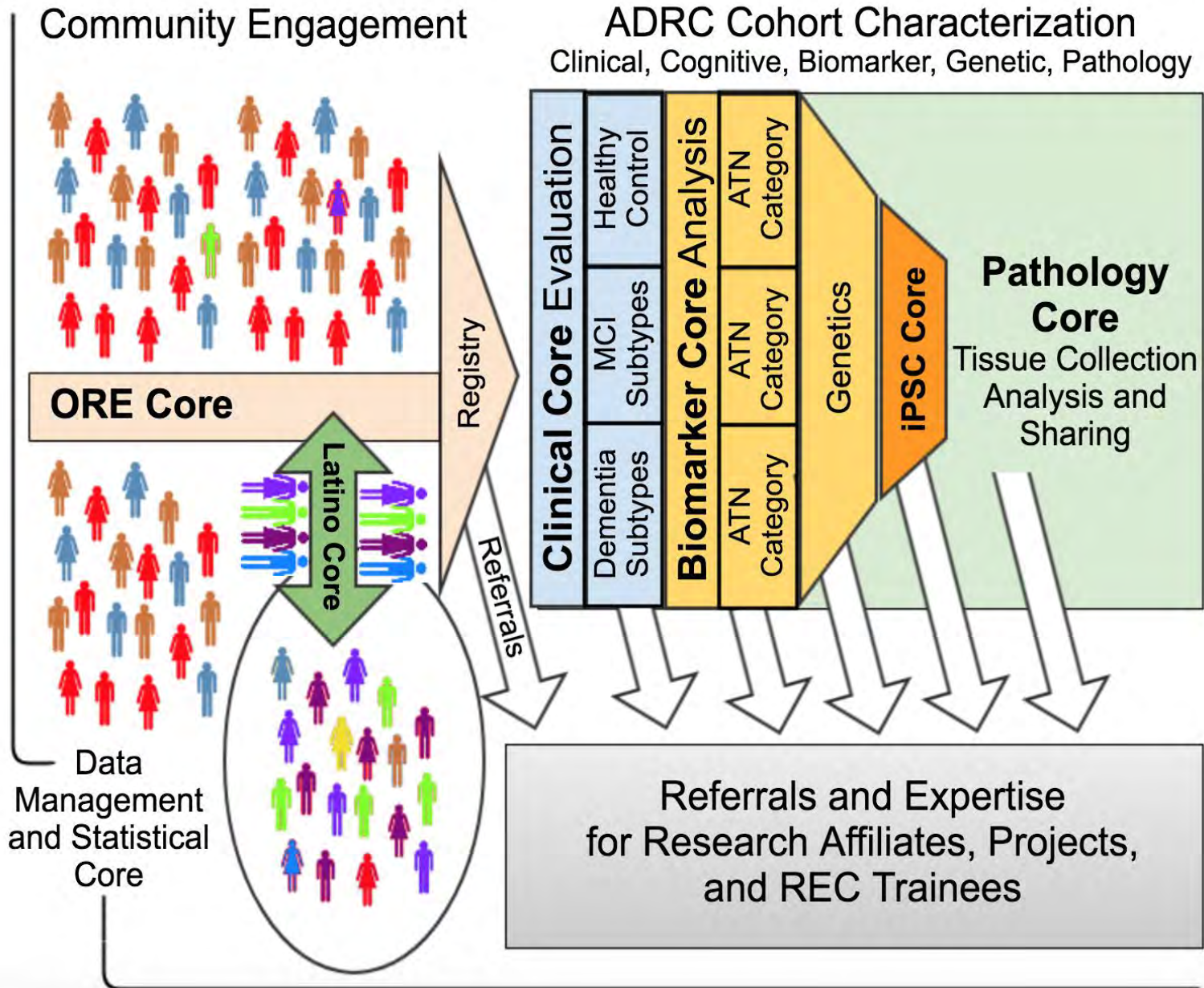


# NAPA

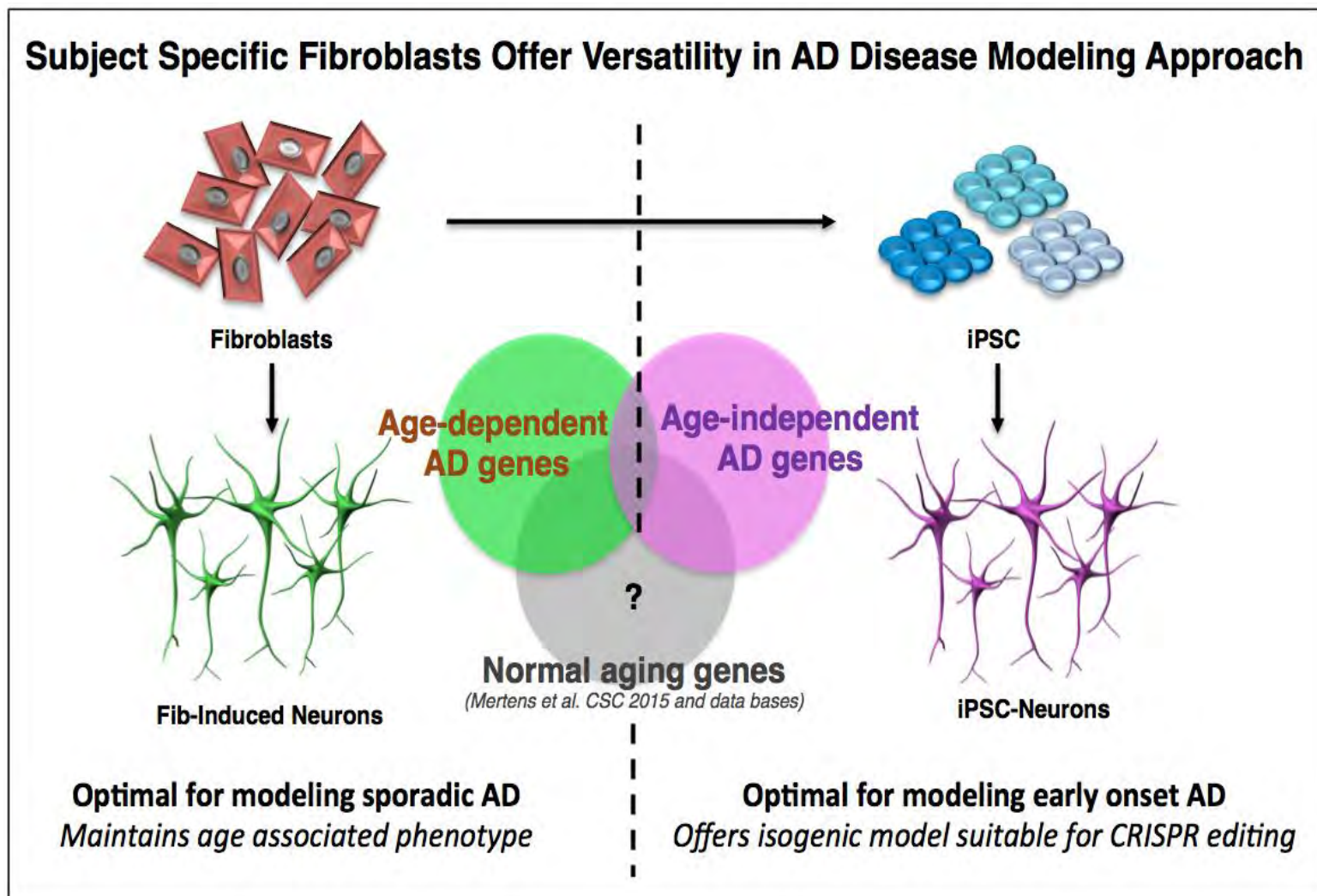
**SECOND ALZHEIMER'S PROFESSIONAL JUDGMENT BUDGET REFLECTS URGENT NEED TO FIND A CURE OR TREATMENT**  
*NIH Recommends \$414 Million Increase in Fiscal Year 2018 Research Funding For Our Nation's Most Expensive Disease*



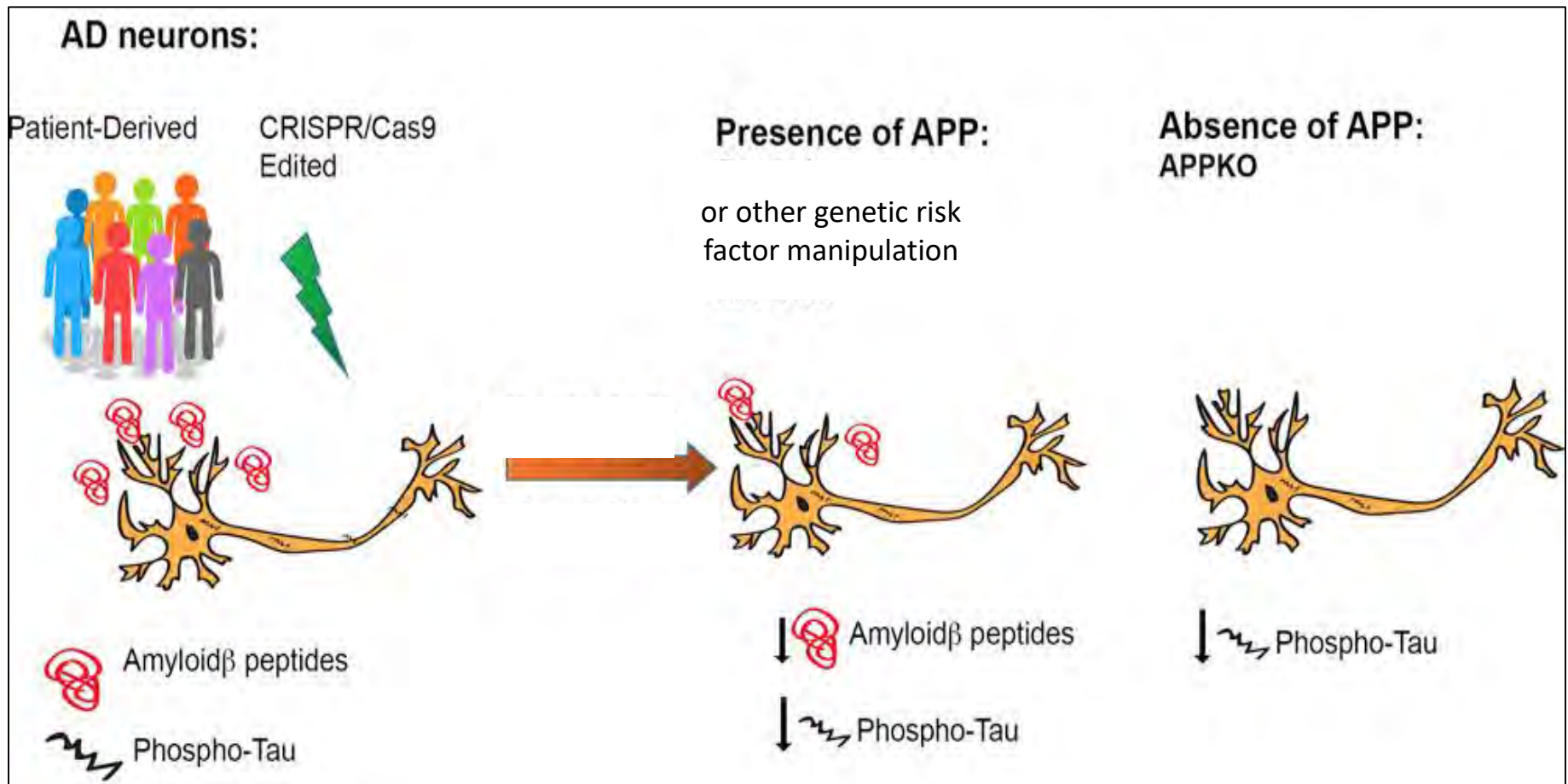
# Fostering ADRD Science



# Induced Pluripotent Stem Cells “Disease in a Dish”



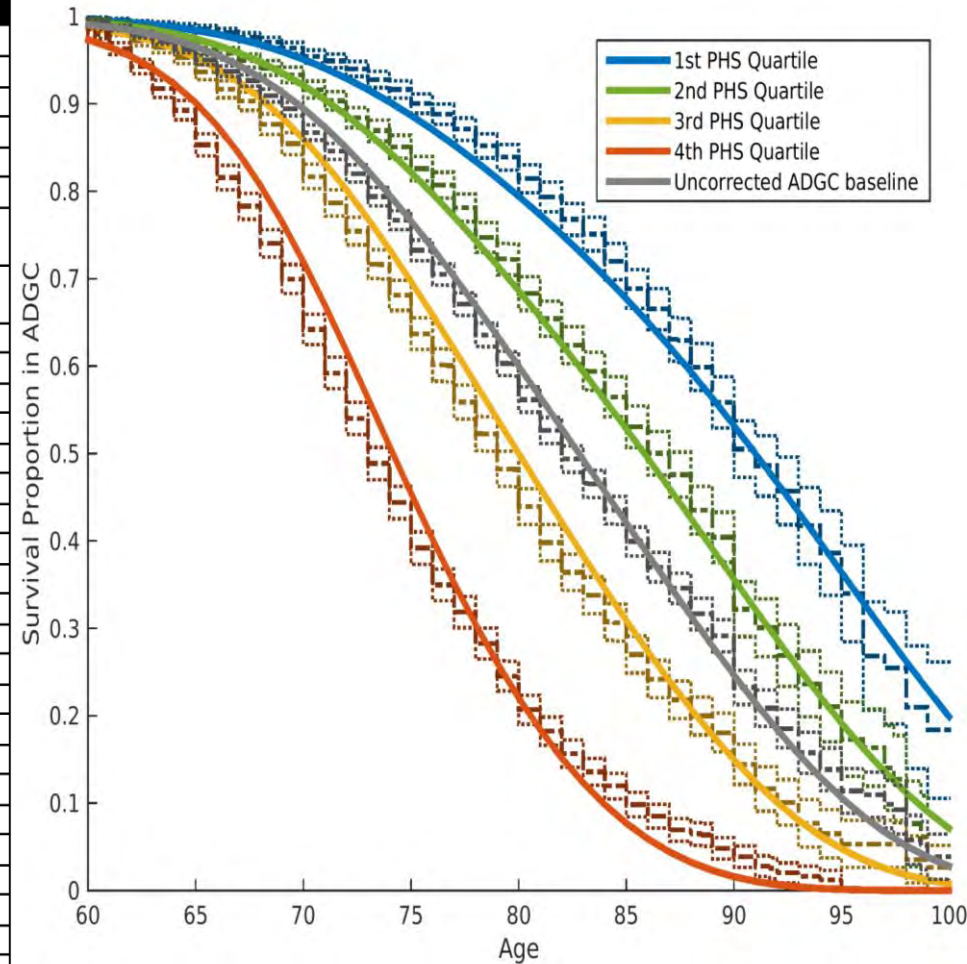
# Induced Pluripotent Stem Cells “Disease in a Dish”





# Combination of Genes with Greatest Effect on 'Sporadic' AD Age of Onset

	Chr	Position	Gene	IGAP marginal p in $-\log_{10}$	$\beta$ (95% CI)	Conditional p in $-\log_{10}$
$\epsilon 2$ allele	19		<i>APOE</i>		-0.45 (-0.55,-0.35)	> 17
$\epsilon 4$ allele	19		<i>APOE</i>		0.98 (0.94,1.01)	> 17
rs61822977	1	207796065	<i>CRI</i>	7.1	-0.12 (-0.16,-0.09)	10.5
rs6733839	2	127892810	<i>BINI</i>	43.2	-0.16 (-0.20,-0.12)	16.1
rs73048831	5	14721590	<i>ANKH</i>	5.5	-0.12 (-0.19,-0.05)	3.4
rs2282802	5	139712239	<i>HBEGF</i>	5.2	-0.07 (-0.10,-0.03)	3.4
rs11645714	6	32578632	<i>HLA-DRB1</i>	7.1	0.09 (0.05, 0.13)	4.2
rs14528102	6	32674252	<i>HLA-DQA2</i>	6.4	-0.10 (-0.16,-0.05)	3.4
rs9394766	6	41159801	<i>TREML2</i>	5.9	0.08 (0.04, 0.12)	3.9
rs9296567	6	47553402	<i>CD2AP</i>	9.5	-0.08 (-0.12,-0.04)	4.2
rs6957573	7	37611912	<i>BC043356</i>	5.7	-0.07 (-0.10,-0.03)	3.5
rs1859788	7	99971834	<i>PILRA</i>	9.2	0.11 (0.07, 0.15)	7.3
rs78571833	7	143122924	<i>EPHA1-AS1</i>	6.4	0.15 (0.09, 0.22)	5.3
rs17057043	8	27220310	<i>PTK2B</i>	11	-0.08 (-0.12,-0.04)	4.3
rs2741342	8	27330096	<i>CHRNA2</i>	7.4	0.08 (0.03, 0.12)	3.1
rs1532277	8	27466181	<i>CLU</i>	22.9	0.08 (0.04, 0.12)	4.6
rs12358692	10	11721102	<i>LOC105376412</i>	5.3	0.06 (0.02, 0.10)	2.8
rs3740688	11	47380340	<i>SPII</i>	7.8	0.07 (0.04, 0.11)	4.3
rs1286170	11	59831930	<i>MS4A3</i>	5.9	-0.07 (-0.12,-0.03)	2.7
rs611418	11	60011013	<i>MS4A4E</i>	12.3	0.12 (0.08, 0.17)	6.7
rs471470	11	85831541	<i>PICALM</i>	23.5	0.09 (0.05, 0.13)	5.6
rs1952090	14	53342992	<i>FERMT2</i>	6.3	-0.10 (-0.16,-0.05)	3.6
rs12590273	14	92934120	<i>SLC24A4</i>	7.2	0.12 (0.07, 0.17)	6
rs7145100	14	107160690	<i>abParts</i>	6.1	0.10 (0.05, 0.15)	3.7
rs2526378	17	56404349	<i>BZRAP1-AS1</i>	6.1	0.08 (0.04, 0.11)	4.6
rs3795065	19	1039444	<i>ABCA7</i>	8.8	-0.06 (-0.10,-0.02)	2.3
rs4147916	19	1057137	<i>ABCA7</i>	5.1	0.26 (0.15, 0.36)	6
rs2074442	19	1074000	<i>HMHA1</i>	8.7	-0.07 (-0.11,-0.03)	3
rs6024870	20	54997568	<i>CASS4</i>	7.1	0.12 (0.05, 0.18)	3.3
rs2092563	22	41592677	<i>EP300-AS1</i>	5.1	-0.06 (-0.10,-0.02)	2.5



ADGC – 28 SNPs from Cox forward regression model