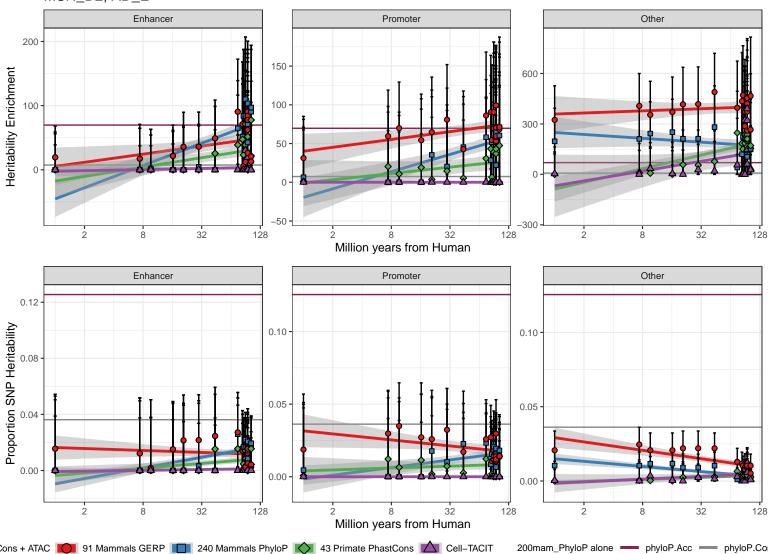
MSN_D2, AD_E



200 1000 -Heritability Enrichment 200 100 500 100 0 -100 32 128 32 32 2 128 128 8 2 8 Million years from Human Enhancer Promoter Other 0.075 Proportion SNP Heritability 0.075 0.08 0.050 0.050 0.04 0.025 0.025 0.000 0.00 0.000 -0.02532 128 32 32 2 8 8 128 2 8 128 Million years from Human

Promoter

300

cons + ATAC 🚺 91 Mammals GERP 📘 240 Mammals PhyloP ᠺ 43 Primate PhastCons 🛕 Cell–TACIT

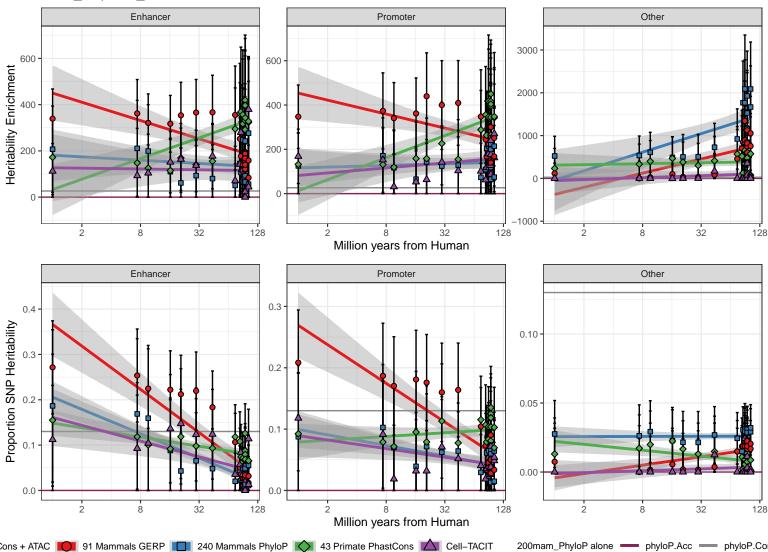
Other

200mam_PhyloP alone phyloP.Acc phyloP.Co

MSN_D2, AD-ADBP_E

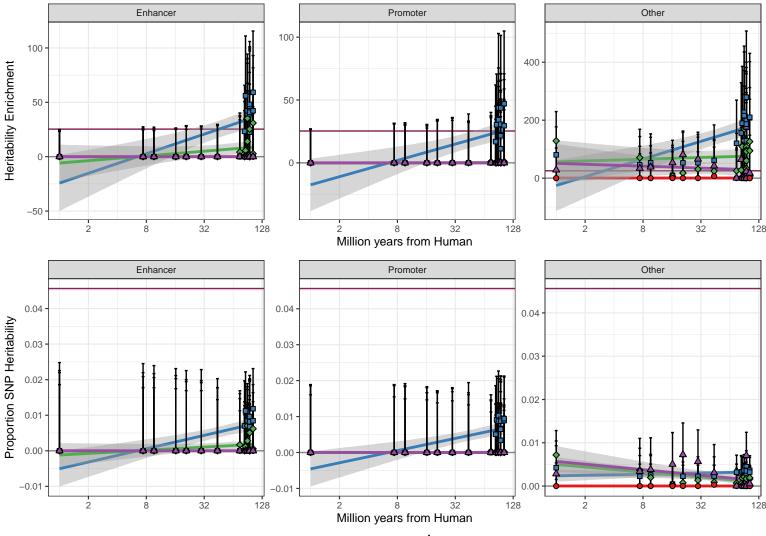
Enhancer

MSN_D2, ALS_E



MSN_D2, AMD_E

Enhancer Promoter Other



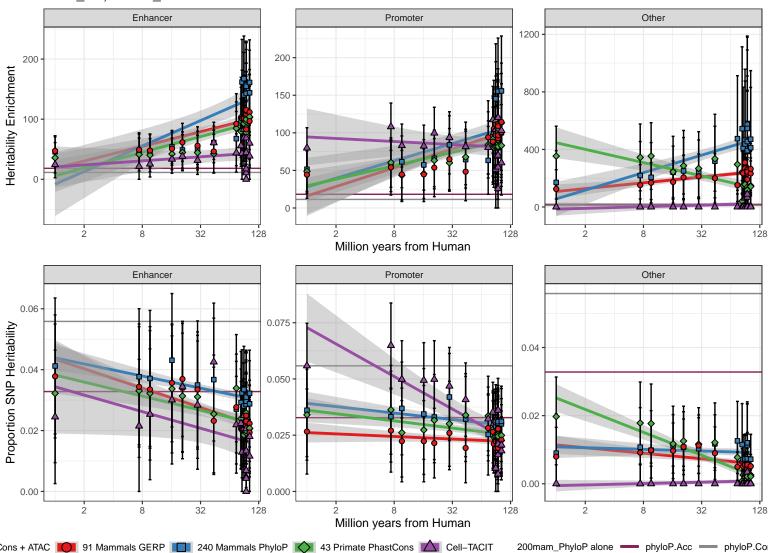
Cons + ATAC 🚺 91 Mammals GERP 🔲 240 Mammals PhyloP 🚺 43 Primate PhastCons 🛕 Cell-TACIT 200mam_PhyloP alone 💳 phyloP.Acc 🥌 phyloP.Co

Enhancer Promoter Other 200 200 750 -Heritability Enrichment 100 500 -100 -250 -100 32 32 32 2 8 128 128 128 2 Million years from Human Enhancer Promoter Other 0.075 0.075 Proportion SNP Heritability 0.03 -0.050 0.050 0.02 -0.025 0.025 0.01 -0.000 0.000 -0.00 -0.02532 32 128 32 2 8 128 2 8 128 Million years from Human cons + ATAC 🚺 91 Mammals GERP 📘 240 Mammals PhyloP ᠺ 43 Primate PhastCons 🛕 Cell–TACIT 200mam_PhyloP alone phyloP.Acc phyloP.Co

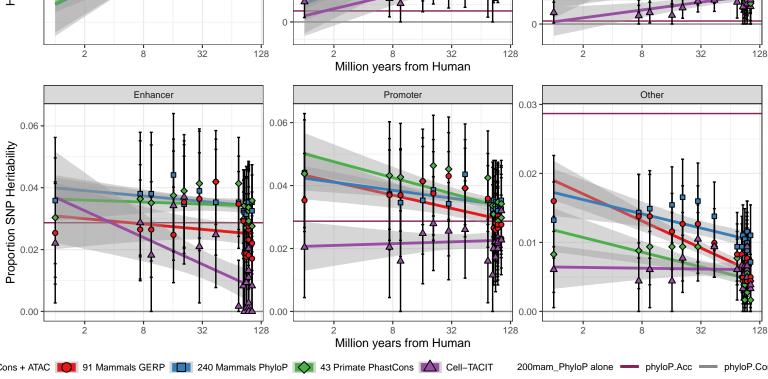
MSN_D2, PD-PDBP_E

MSN_D2, Cross-Psych_E Enhancer Promoter Other 400 Heritability Enrichment 300 200 200 200 100 -100 100 -100 32 128 128 32 128 Million years from Human Promoter Other Enhancer 0.12 0.15 -0.03 Proportion SNP Heritability 0.09 0.02 0.06 0.01 0.03 0.00 0.00 0.00 32 32 128 32 128 128 8 Million years from Human cons + ATAC 🚺 91 Mammals GERP 📘 240 Mammals PhyloP ᠺ 43 Primate PhastCons 🛕 Cell–TACIT 200mam_PhyloP alone phyloP.Acc phyloP.Co

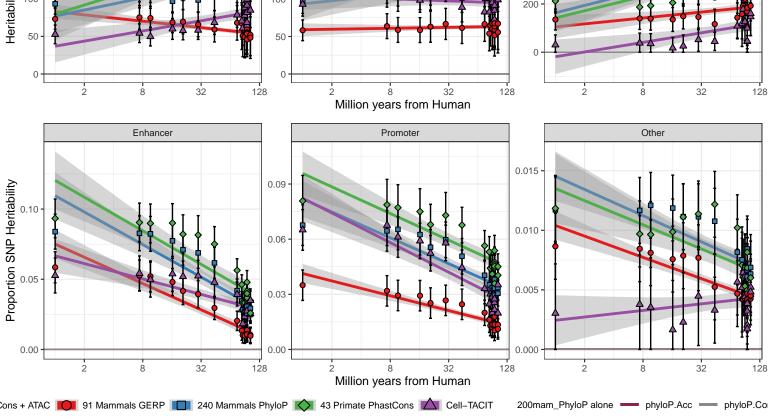
MSN_D2, ADHD_E



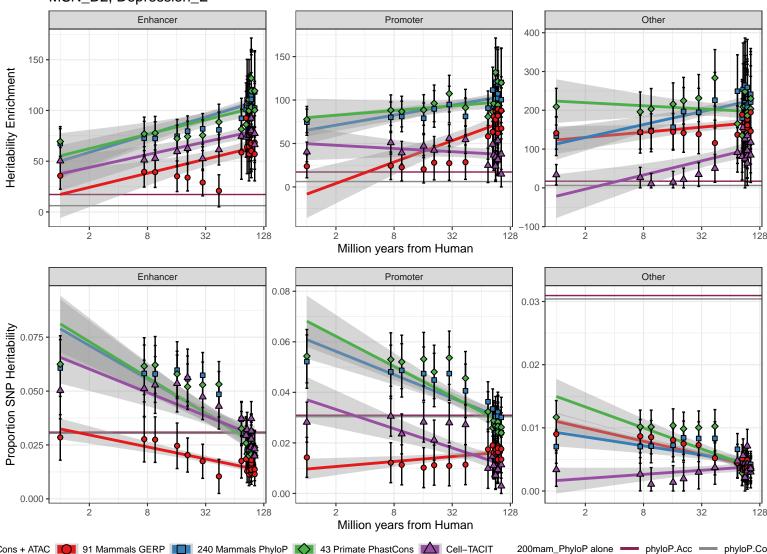
MSN_D2, Anorexia_E Enhancer Promoter Other 250 200 200 750 Heritability Enrichment 150 500 100 100 -250 50 -32 128 32 32 2 128 8 128 8 Million years from Human Enhancer Promoter Other 0.03 0.06 0.06 0.02 0.04 0.01 -



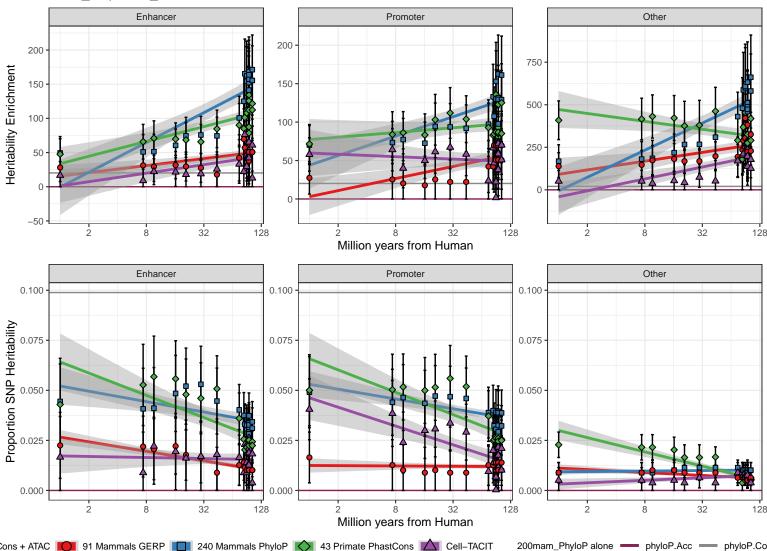
MSN_D2, Bipolar_E Enhancer Promoter Other Heritability Enrichment Million years from Human Enhancer Promoter Other 0.015 0.09 0.010 0.06



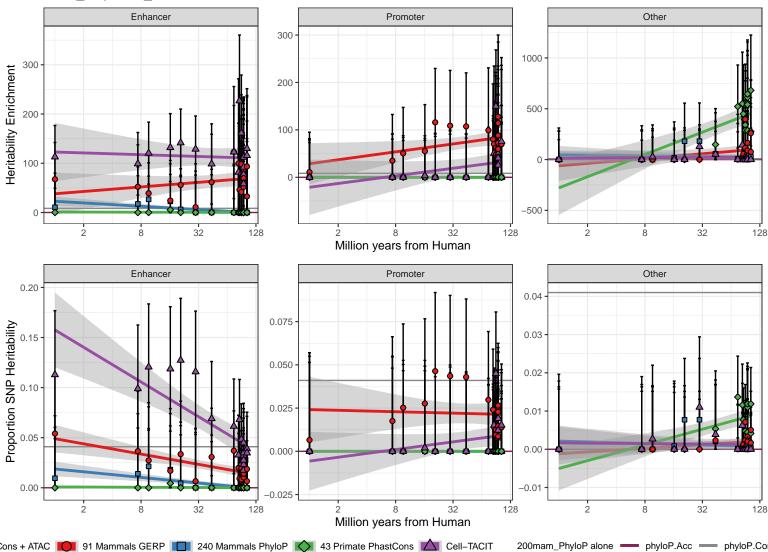
MSN_D2, Depression_E



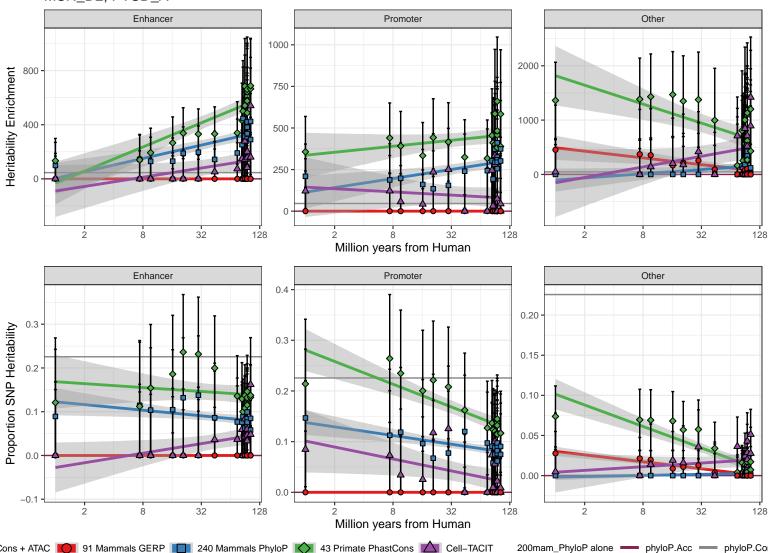
MSN_D2, MDD_E



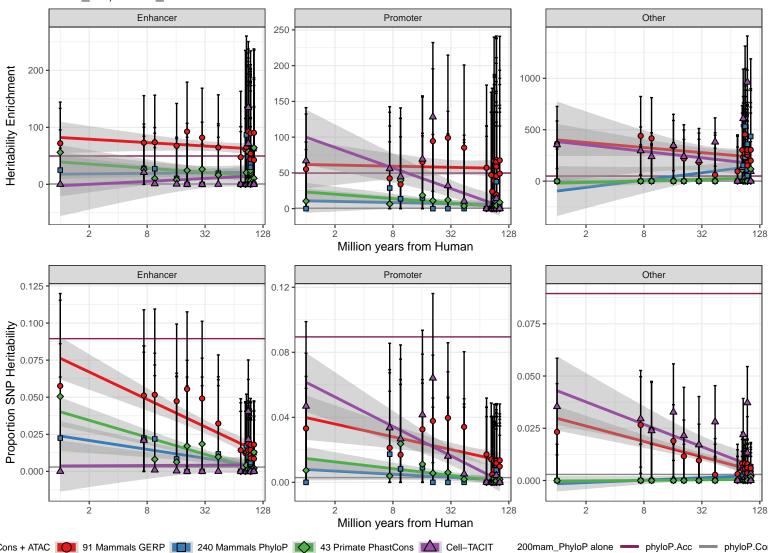
MSN_D2, OCD_E



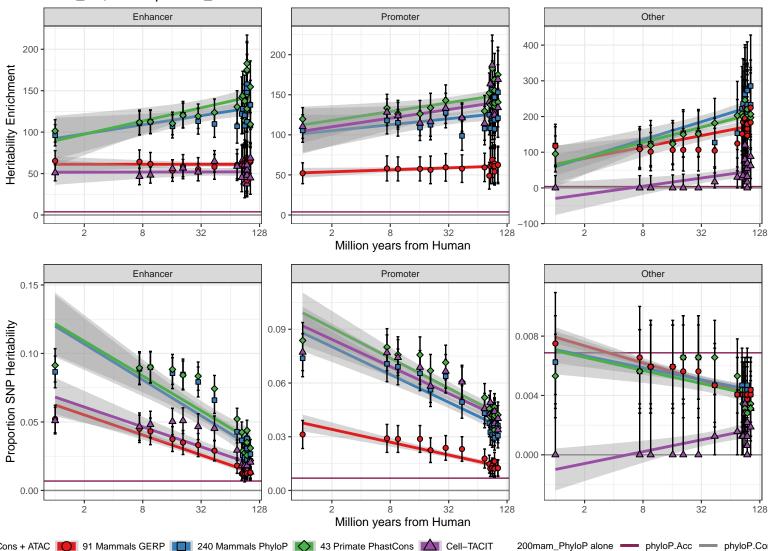
MSN_D2, PTSD_A



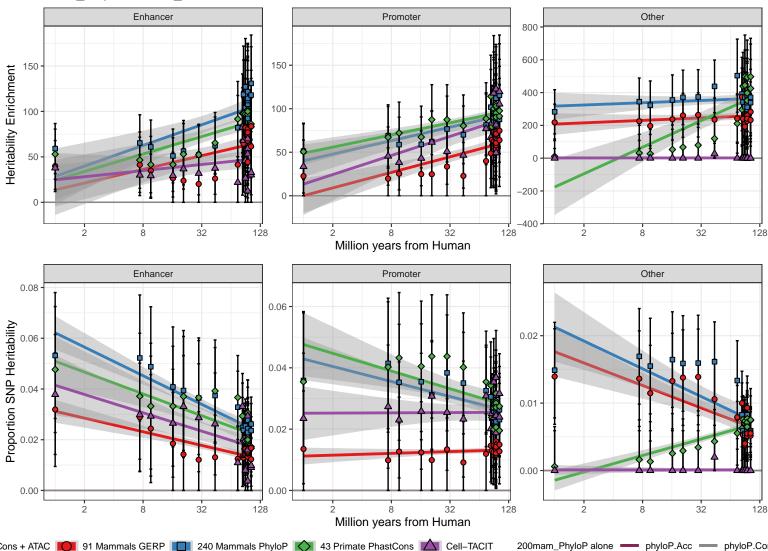
MSN_D2, PTSD_E



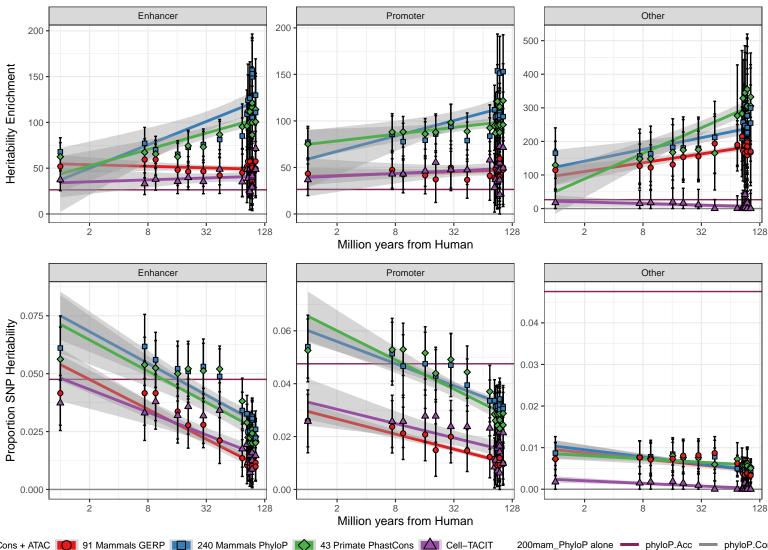
MSN_D2, Schizophrenia_E



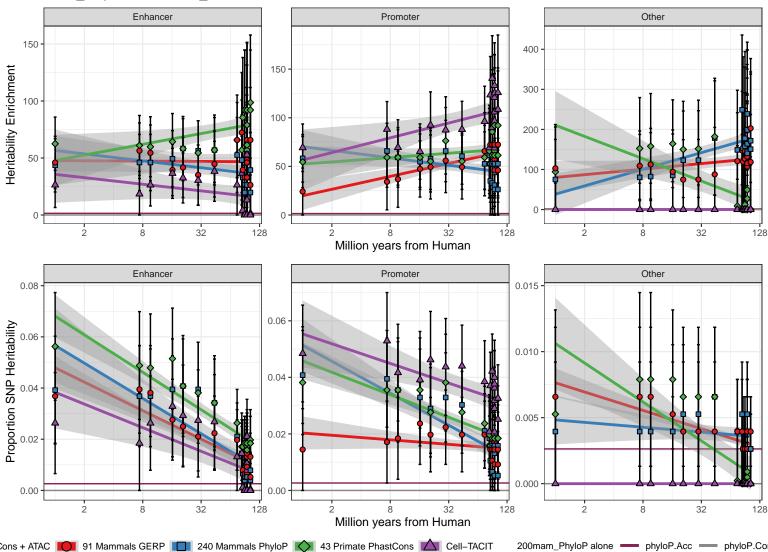
MSN_D2, AUDIT-C_E



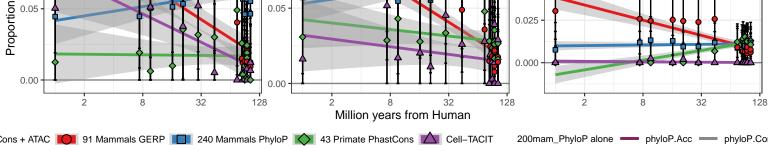
MSN_D2, DrinksPerWeek_E



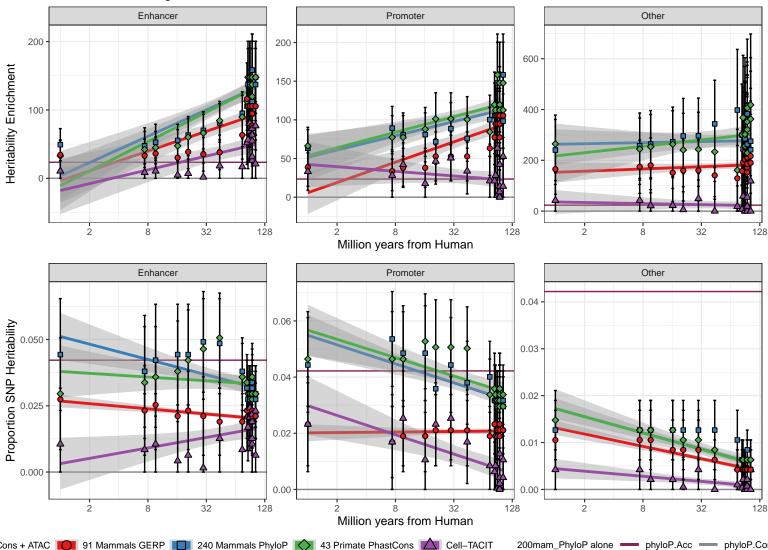
MSN_D2, CannabisUse_E



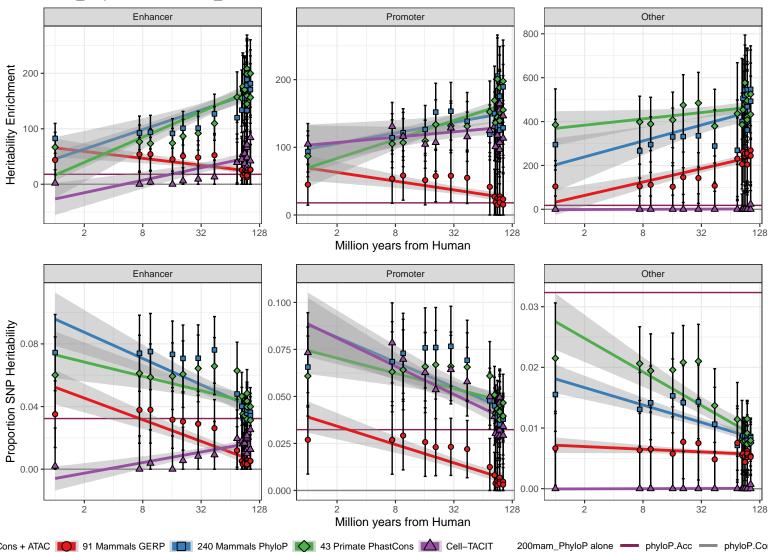
MSN_D2, CoffeePerDay_E Enhancer Promoter Other 1500 500 400 1000 Heritability Enrichment 400 300 500 200 200 -100 -500 32 32 128 32 2 128 128 8 8 Million years from Human Enhancer Promoter Other 0.100 Proportion SNP Heritability 0.10 0.075 0.050 0.05 -0.05 0.025



MSN_D2, SmokAgeOfInit_E



MSN_D2, SmokCessation_E



MSN_D2, SmokCigPerDay_E Enhancer Promoter Other 150 Heritability Enrichment 400 -100 100 200 -50 32 128 32 32 2 128 128 8 8 Million years from Human Other Enhancer Promoter 0.08 -Proportion SNP Heritability 0.04 -0.06 0.04 0.02 -0.02 0.00 32 128 32 128 32 128 2 8 8 Million years from Human Cons + ATAC 🚺 91 Mammals GERP 📘 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT 200mam_PhyloP alone phyloP.Acc phyloP.Co

Heritability Enrichment 100 400 -100 50 -200 50 -32 128 32 32 128 128 2 8 Million years from Human Enhancer Promoter Other 0.06

Promoter

150

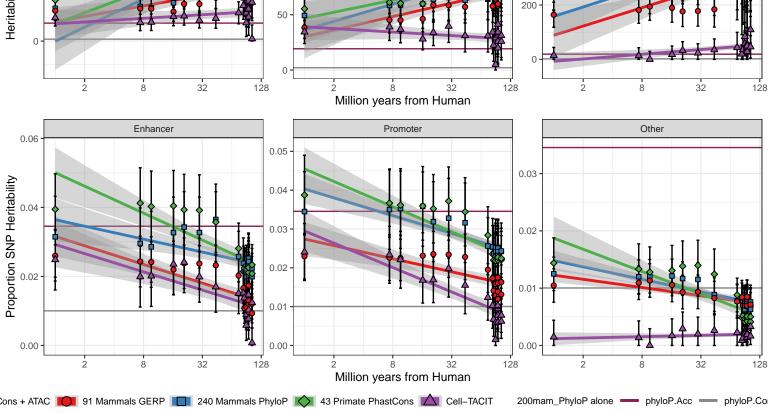
Other

600

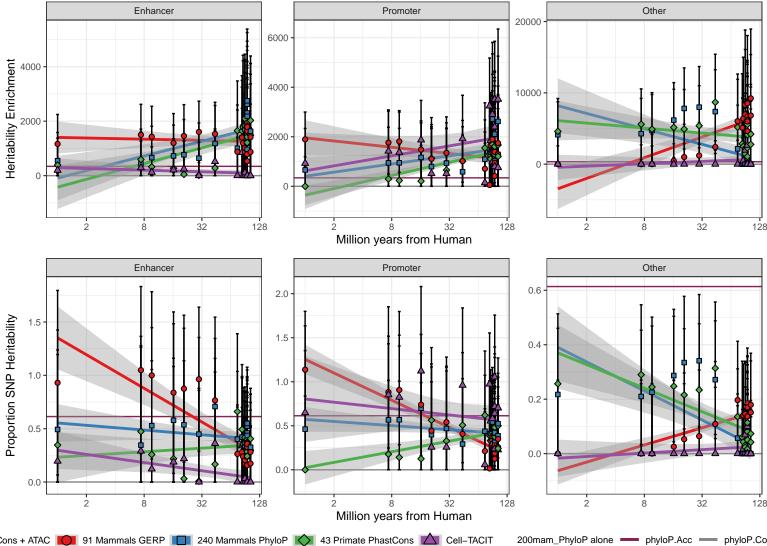
MSN_D2, SmokInitiation_E

150

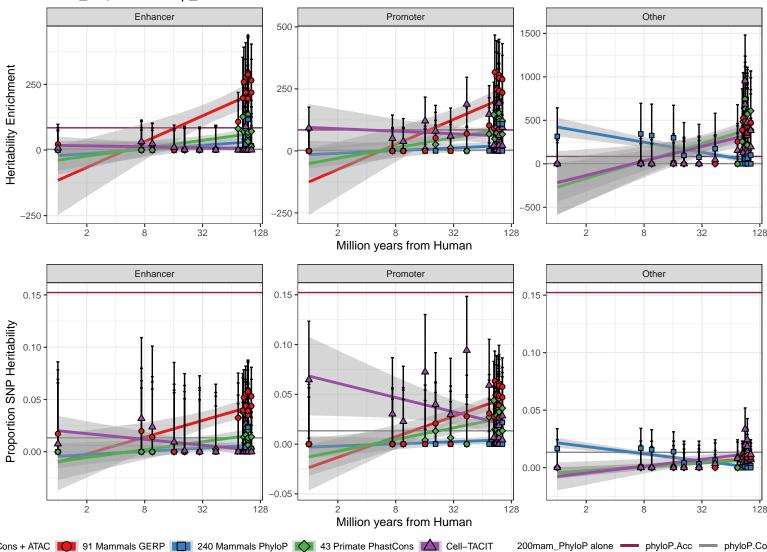
Enhancer



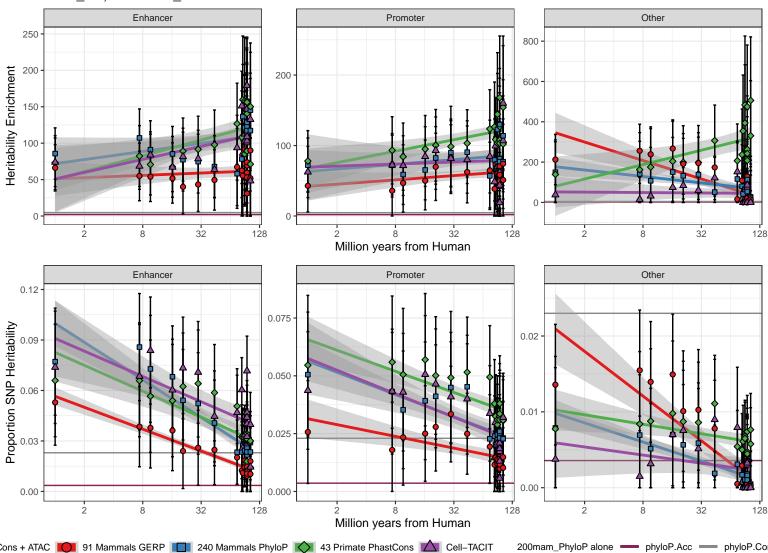
MSN_D2, OpioidUse_E Enhancer Promoter Other



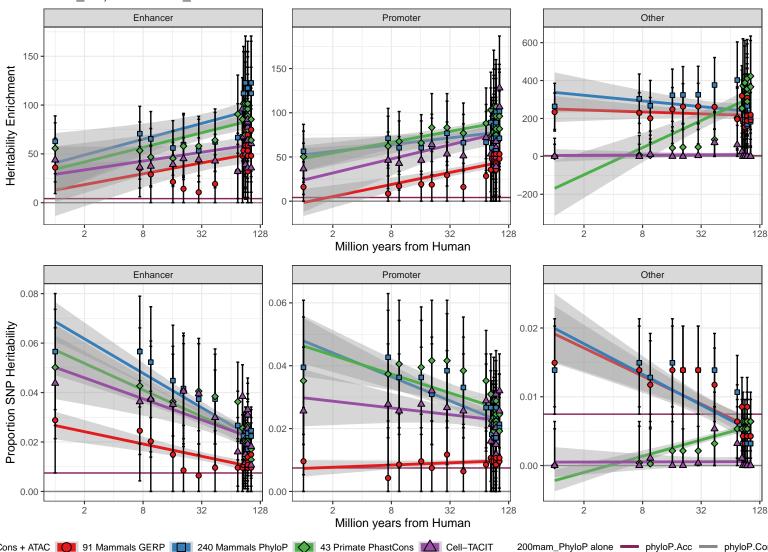
MSN_D2, AlcoholDep_E



MSN_D2, AUDIT-P_E

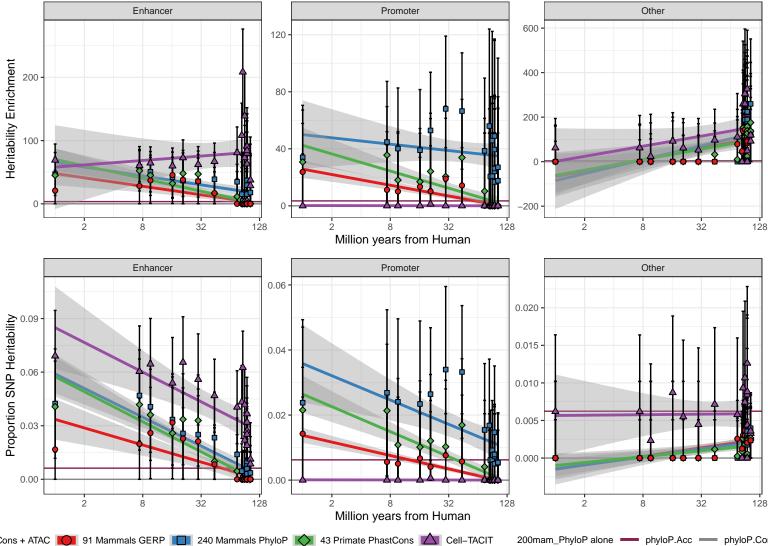


MSN_D2, AUDIT-Tot_E



MSN_D2, CannabisUD_A Enhancer Promoter Other 600 4000 Heritability Enrichment 600 400 2000 300 -200 -300 -2000 32 32 128 32 128 128 2 8 2 8 Million years from Human Enhancer Promoter Other 0.20 Proportion SNP Heritability 0.2 -0.2 -0.15 0.10 0.1 0.1 -0.05 0.00 0.0 32 32 128 128 32 2 8 2 8 128 Million years from Human cons + ATAC 🚺 91 Mammals GERP 🔲 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT 200mam_PhyloP alone phyloP.Acc phyloP.Co

MSN_D2, CannabisUD_E



800 200 200 100 -400 -100 -

Promoter

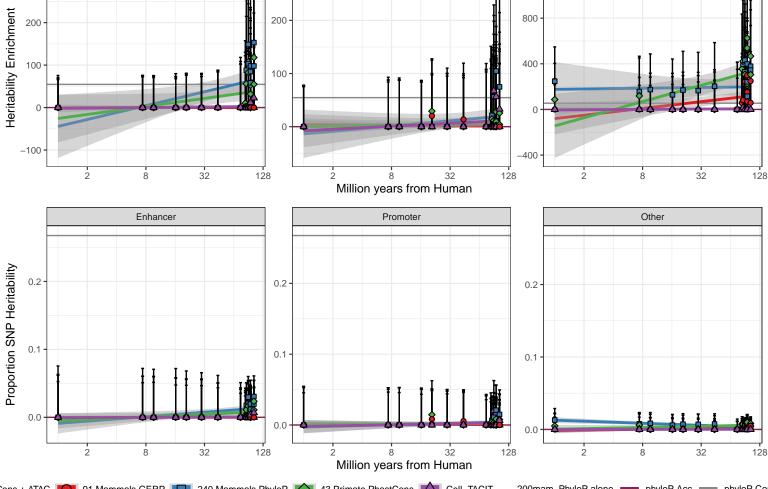
Other

1200

MSN_D2, CocaineDep_E

300

Enhancer



Cons + ATAC 🚺 91 Mammals GERP 📘 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT 200mam_PhyloP alone phyloP.Acc phyloP.Co

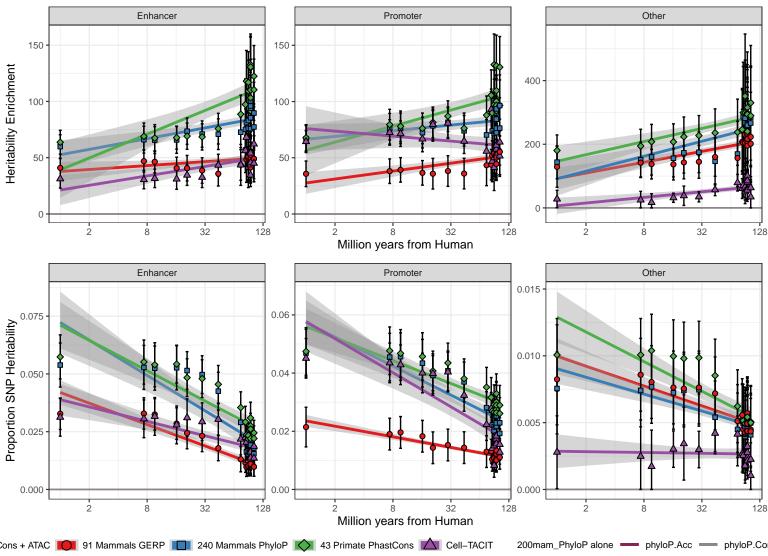
MSN_D2, OpioidDep_E Enhancer Promoter Other 1500 Heritability Enrichment 500 -1000 500 32 32 32 128 2 8 128 128 2 8 Million years from Human Enhancer Promoter Other Proportion SNP Heritability 0.6 0.6 0.6 0.4 -0.4 -0.4 0.2 -0.2 0.0 0.0 0.0 32 32 128 128 32 8 8 128 Million years from Human

200mam_PhyloP alone phyloP.Acc phyloP.Co

Cons + ATAC 🚺 91 Mammals GERP 📘 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT

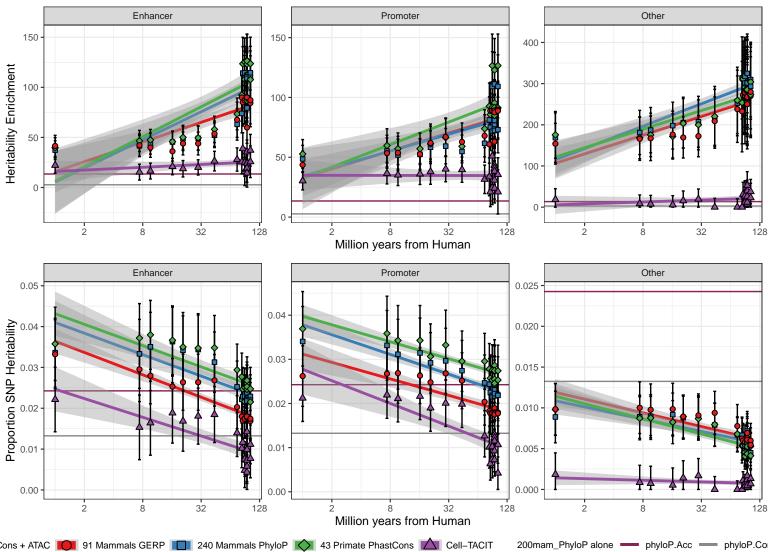
MSN_D2, OpioidDep-vs-Exp_A Enhancer Promoter Other 1500 Heritability Enrichment 4000 1000 1000 500 2000 -500 32 128 32 2 8 32 128 128 2 8 Million years from Human Enhancer Promoter Other 2.5 2.5 2.5 Proportion SNP Heritability 2.0 2.0 -2.0 1.5 1.5 -1.5 -1.0 1.0 -1.0 0.5 0.5 -0.5 0.0 32 128 32 128 32 2 8 8 128 Million years from Human Cons + ATAC 🚺 91 Mammals GERP 📘 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT 200mam_PhyloP alone phyloP.Acc phyloP.Co

MSN_D2, EduAttain_E



MSN_D2, Income_E Enhancer Promoter Other 200 200 600 Heritability Enrichment 150 150 400 100 100 50 200 50 32 32 128 32 2 128 128 8 Million years from Human Other Enhancer Promoter 0.06 0.015 Proportion SNP Heritability 0.04 0.010 0.02 0.005 0.00 32 128 32 128 32 128 8 Million years from Human Cons + ATAC 🚺 91 Mammals GERP 📘 240 Mammals PhyloP 🔷 43 Primate PhastCons 🔼 Cell-TACIT 200mam_PhyloP alone phyloP.Acc phyloP.Co

MSN_D2, BMI_E



MSN_D2, BrainVol_E Enhancer Promoter Other 750 200 200 Heritability Enrichment 500 -100 100 250 --100 32 32 32 8 128 128 128 2 2 8 Million years from Human Enhancer Promoter Other 0.06 0.050 Proportion SNP Heritability 0.050 0.04 0.025 0.025 0.02 -0.000 0.000 -0.02532 32 32 2 8 128 128 8 128 Million years from Human cons + ATAC 🚺 91 Mammals GERP 📘 240 Mammals PhyloP ᠺ 43 Primate PhastCons 🛕 Cell–TACIT 200mam_PhyloP alone phyloP.Acc phyloP.Co

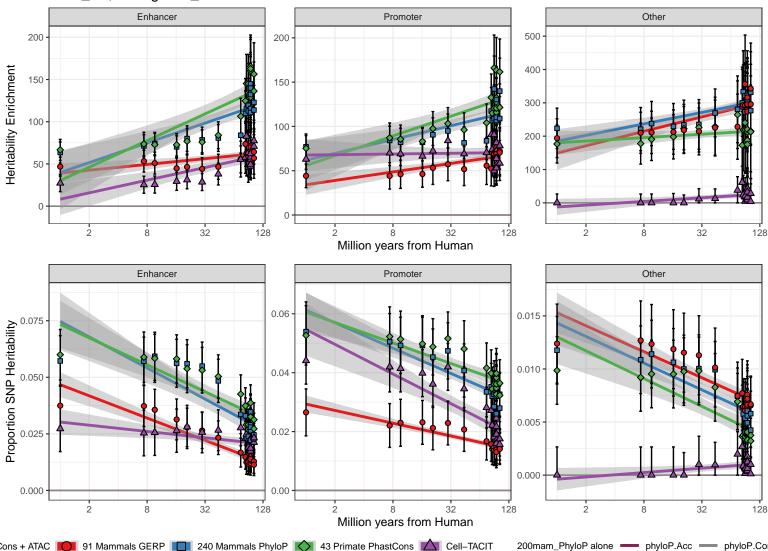
MSN_D2, Neuroticsim_E Enhancer Promoter Other 200 200 500 Heritability Enrichment 400 150 150 300 -100 100 200 50 50 · 100 32 128 32 32 128 8 128 8 Million years from Human Other Enhancer Promoter 0.08 0.06 Proportion SNP Heritability 0.03 -0.04 0.02 -0.02 0.01 0.00 0.00 32 128 32 128 32 8 128 Million years from Human

200mam_PhyloP alone phyloP.Acc phyloP.Co

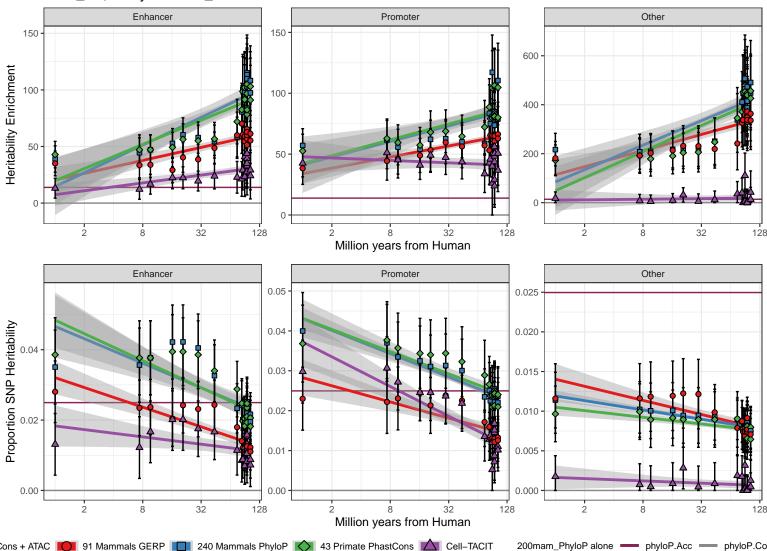
91 Mammals GERP 🔲 240 Mammals PhyloP 🔷 43 Primate PhastCons 🔼 Cell-TACIT

Cons + ATAC

MSN_D2, Intelligence_E



MSN_D2, RiskyBehavior_E

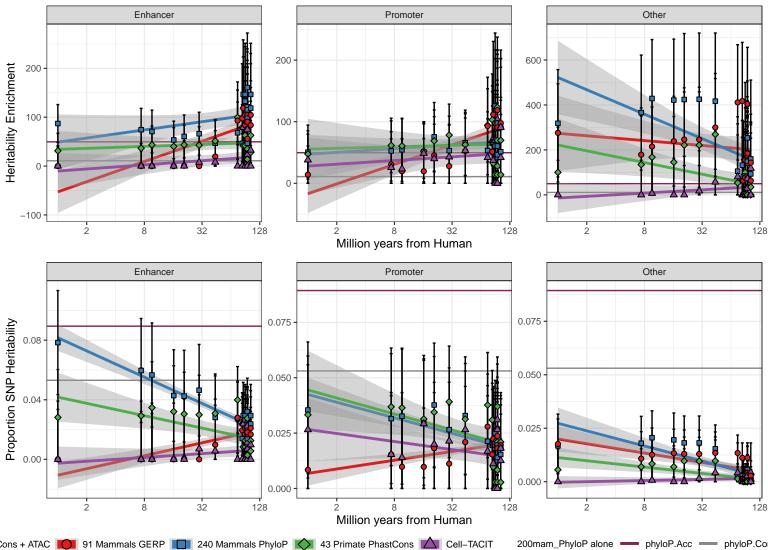


MSN_D2, Worry_E Enhancer Promoter Other 200 200 400 Heritability Enrichment 150 150 300 100 100 -200 -50 50 -100 -32 128 32 32 128 8 128 Million years from Human Other Enhancer Promoter 0.08 0.03 -0.06 Proportion SNP Heritability 0.02 0.04 0.01 0.02 0.00 32 128 32 128 32 2 8 128

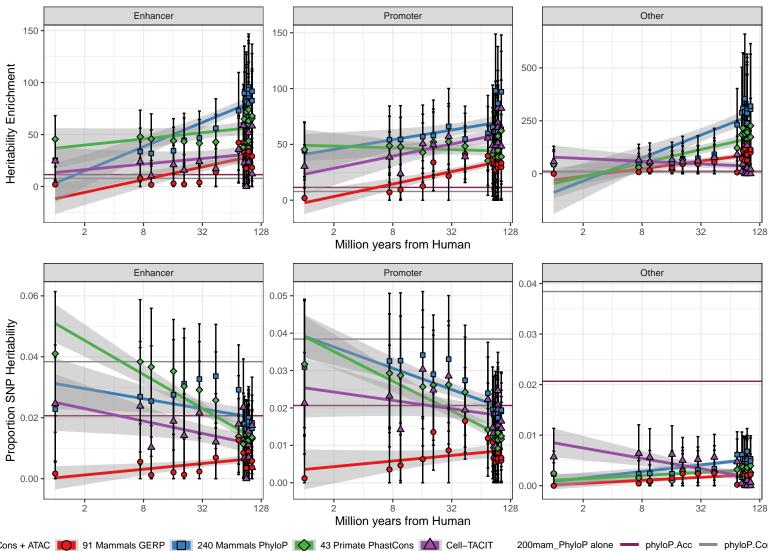
Cons + ATAC 🚺 91 Mammals GERP 🔲 240 Mammals PhyloP 🚺 43 Primate PhastCons 🛕 Cell-TACIT 200mam_PhyloP alone 💳 phyloP.Acc 🥌 phyloP.Co

Million years from Human

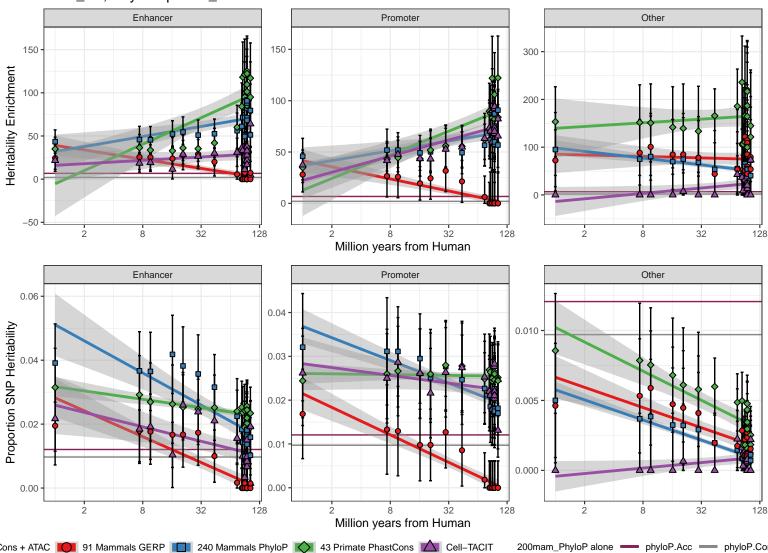
MSN_D2, ChronicPain_E



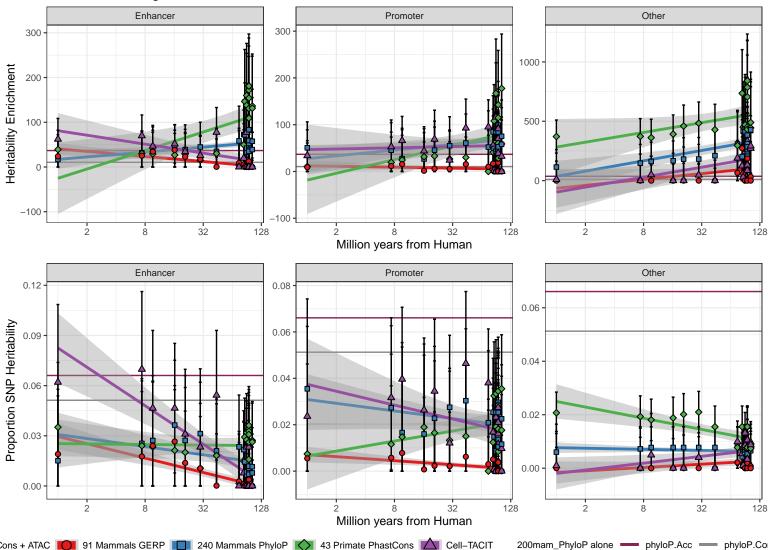
MSN_D2, Headache_E



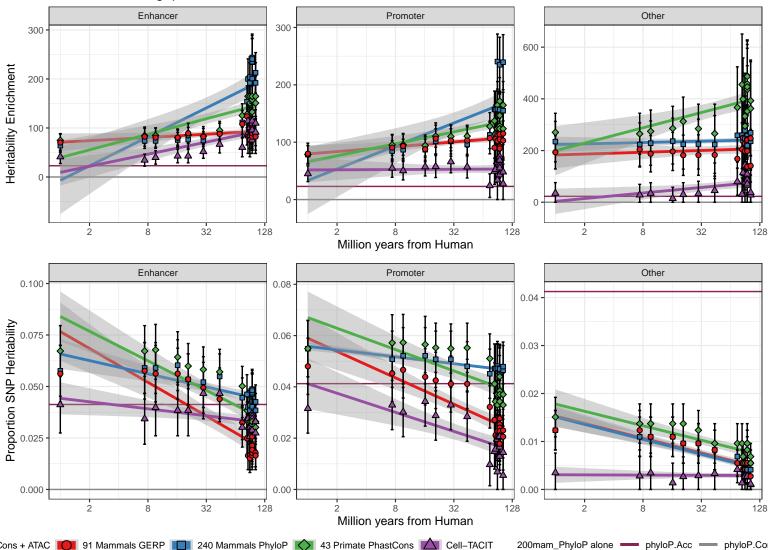
MSN_D2, DaySleepiness_E



MSN_D2, Dozing_E

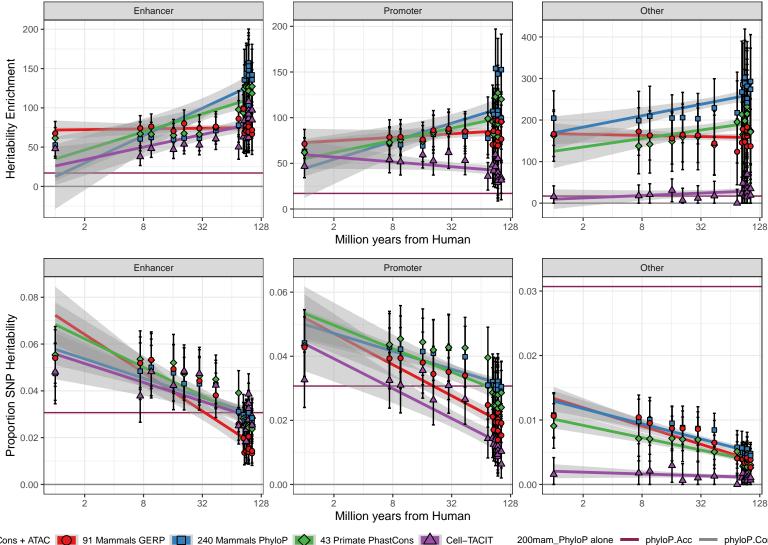


MSN_D2, Gettingup_E

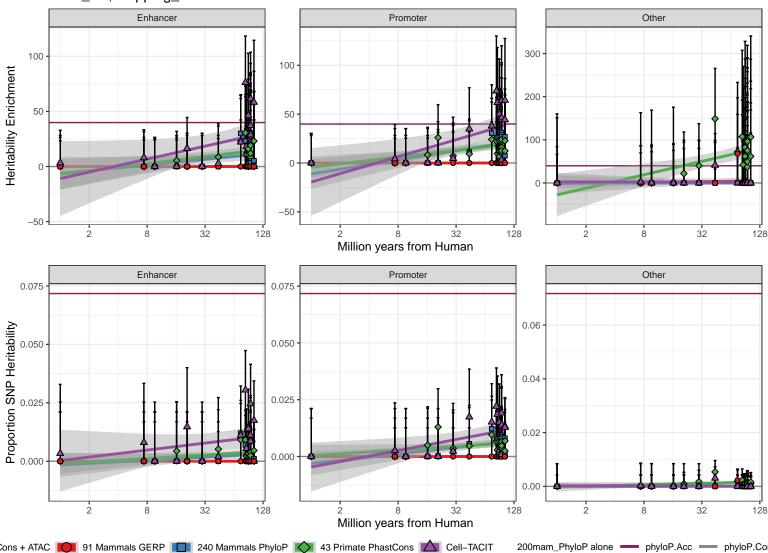


MSN_D2, Insomnia_E Enhancer Promoter Other 150 400 -Heritability Enrichment 100 100 300 200 50 50 -100 0 32 128 32 32 128 8 128 8 Million years from Human Other Enhancer Promoter 0.05 0.03 -Proportion SNP Heritability 0.04 0.04 0.02 -0.03 0.02 0.02 0.01 0.01 0.00 0.00 32 128 32 128 32 2 8 8 8 128 Million years from Human Cons + ATAC 🚺 91 Mammals GERP 📘 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT 200mam_PhyloP alone phyloP.Acc phyloP.Co

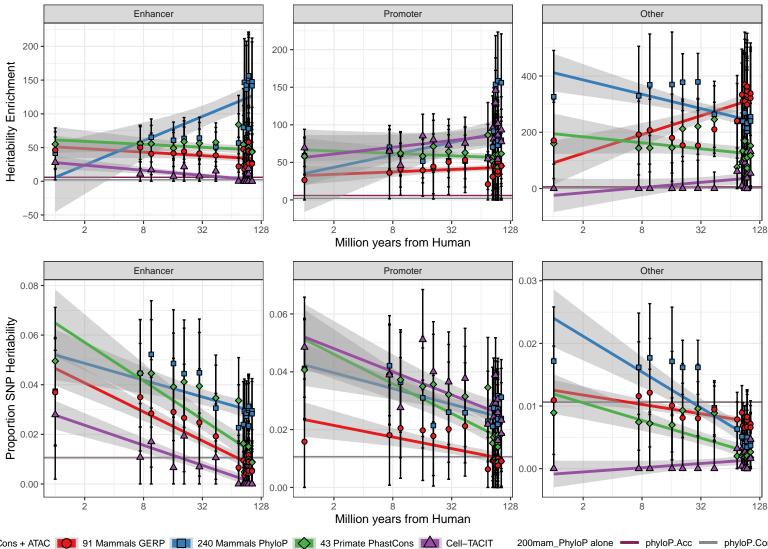
MSN_D2, Morningness_E Enhancer Promoter Other



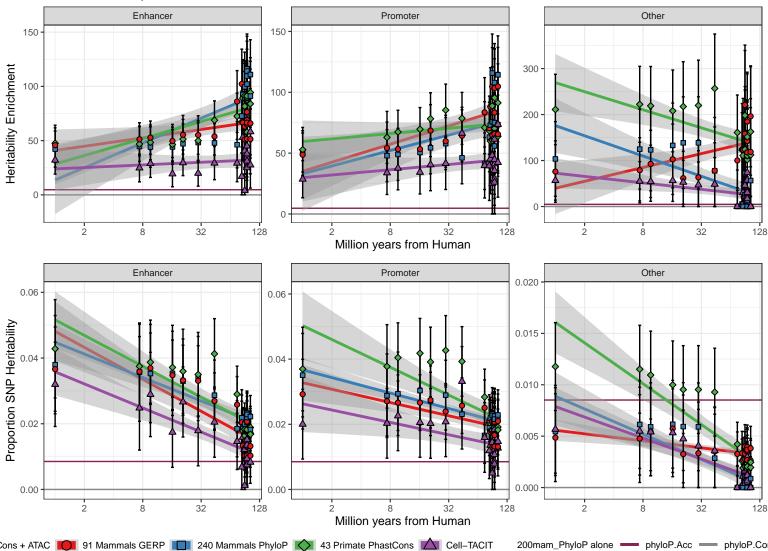
MSN_D2, Napping_E



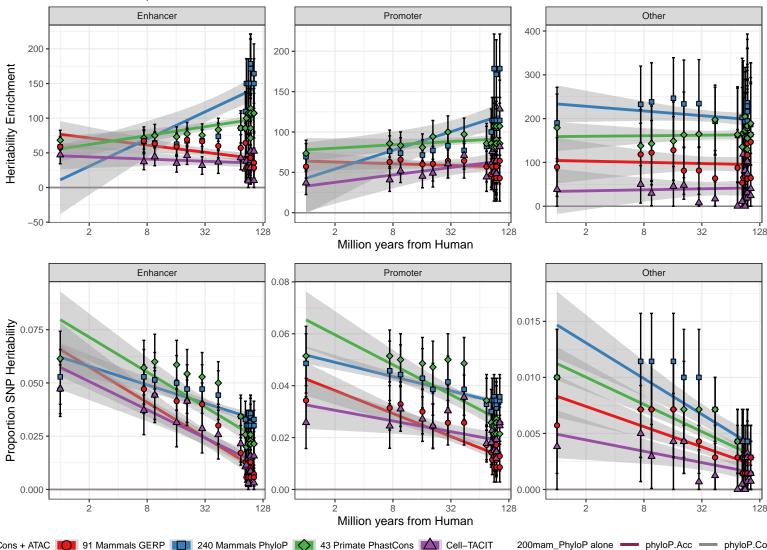
MSN_D2, SleepDurLong_E



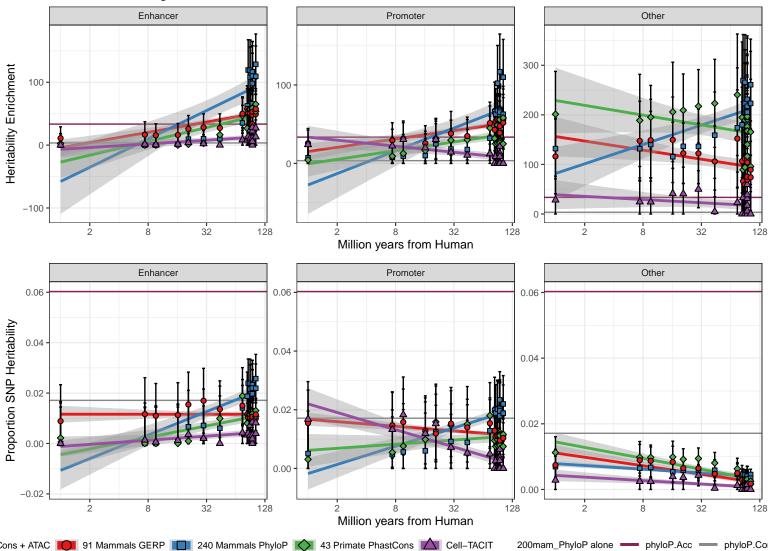
MSN_D2, SleepDurShort_E



MSN_D2, SleepDurTot_E



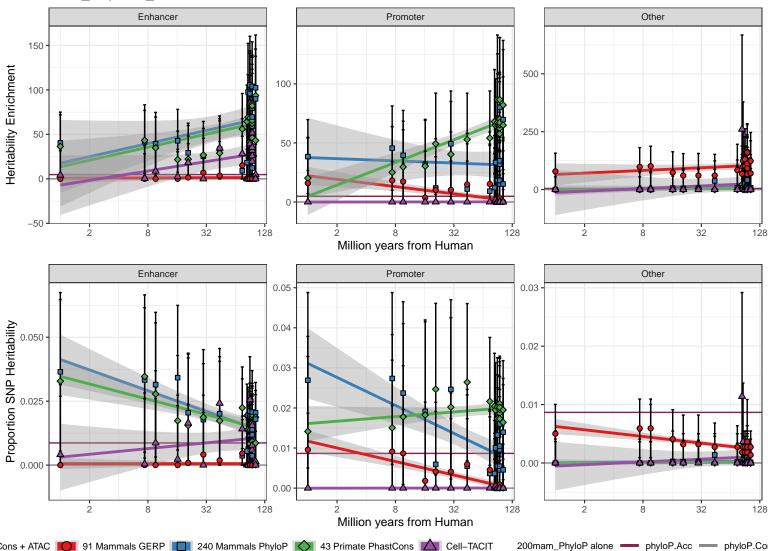
MSN_D2, Snoring_E



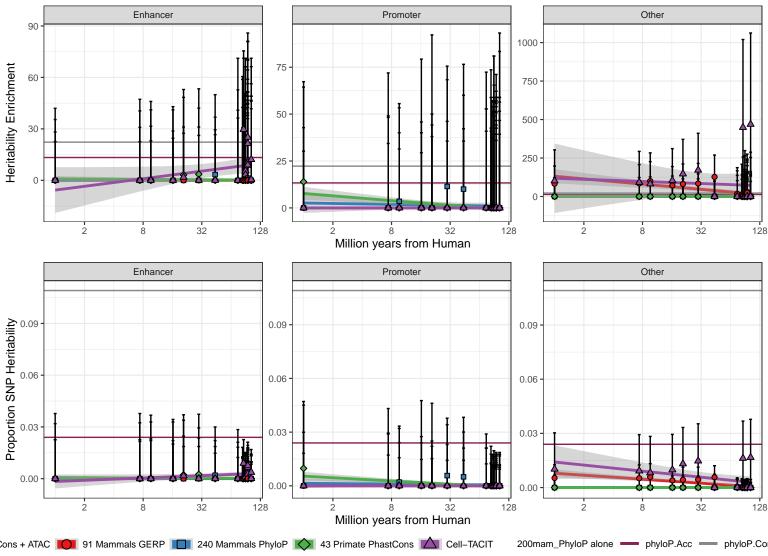
MSN_D2, BloodUrea_E Enhancer Promoter Other 150 Heritability Enrichment 600 100 100 300 -50 32 32 128 32 128 2 8 128 2 8 Million years from Human Enhancer Promoter Other 0.06 0.06 -0.06 Proportion SNP Heritability 0.04 -0.04 0.02 0.02 0.00 0.00 32 128 32 128 32 2 8 8 128 Million years from Human

Cons + ATAC 🚺 91 Mammals GERP 🔲 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT 200mam_PhyloP alone — phyloP.Acc — phyloP.Co

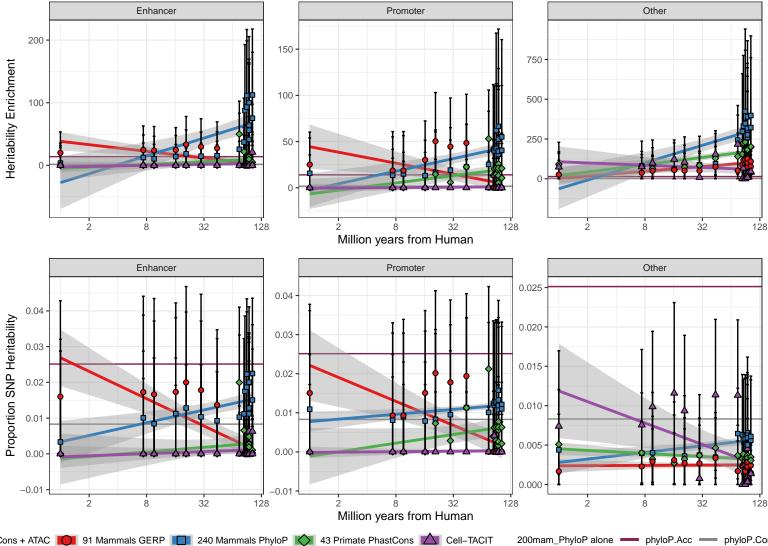
MSN_D2, HDL_E



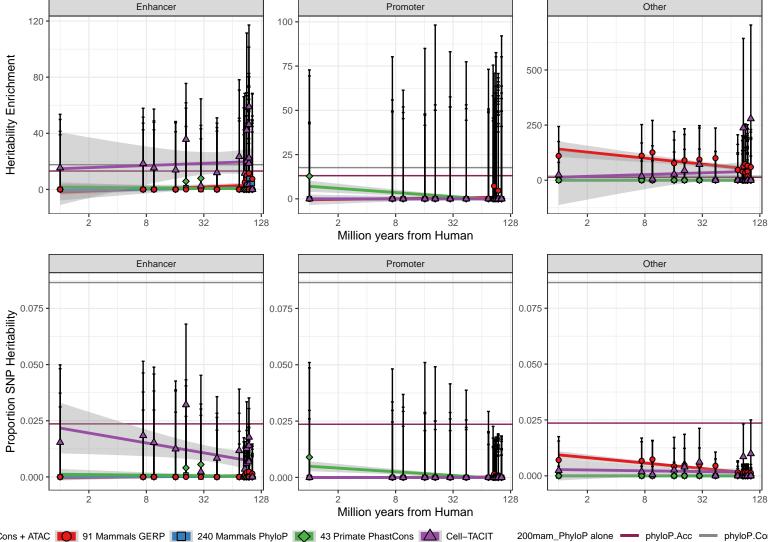
MSN_D2, LDL_E



MSN_D2, T2Diabetes_E

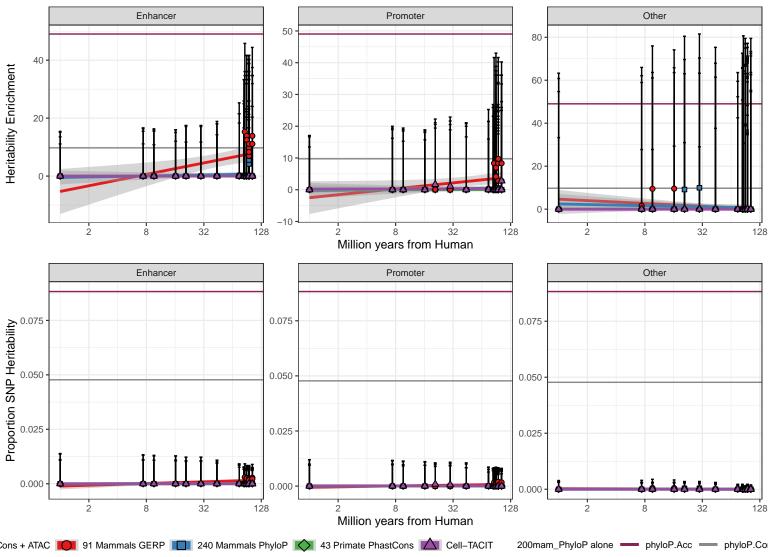


MSN_D2, TotCholesterol_E Enhancer Promoter

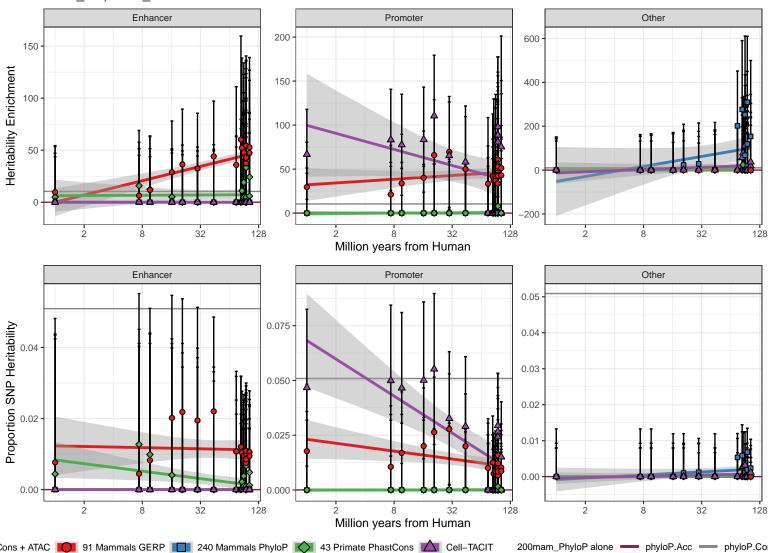


MSN_D2, Triglycerides_E Enhancer Promoter Other 150 150 800 -Heritability Enrichment 100 100 400 50 -50 --50 32 128 128 32 32 128 8 Million years from Human Enhancer Promoter Other 0.04 Proportion SNP Heritability 0.04 -0.03 0.02 0.02 -0.01 0.00 0.00 32 32 32 128 2 8 128 8 128 Million years from Human cons + ATAC 🚺 91 Mammals GERP 🔲 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT 200mam_PhyloP alone phyloP.Acc phyloP.Co

MSN_D2, BMD_E

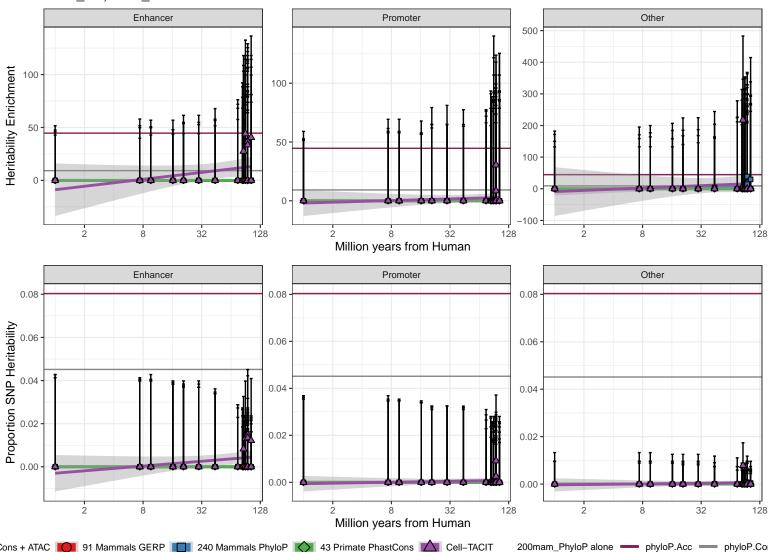


MSN_D2, CAD_E



MSN_D2, Height_E Enhancer Promoter Other 300 30 Heritability Enrichment 100 200 -20 50 -100 -10 0 -32 128 32 32 2 128 8 128 8 2 Million years from Human Enhancer Promoter Other 0.04 0.04 0.04 Proportion SNP Heritability 0.03 0.03 -0.02 0.02 -0.01 -0.01 0.00 0.00 0.00 32 128 32 128 8 32 2 8 2 128 Million years from Human cons + ATAC 🚺 91 Mammals GERP 🔲 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT 200mam_PhyloP alone phyloP.Acc phyloP.Co

MSN_D2, LBM_E



MSN_D2, Longevity_E Enhancer Promoter Other 125 300 100 100 Heritability Enrichment 200 75 -50 -100 -50 25 0 -100 32 128 32 128 32 2 8 2 128 8 Million years from Human Other Enhancer Promoter 0.06 Proportion SNP Heritability 0.04 -0.04 -0.02 -0.02 0.00 0.00 0.00 32 32 128 8 128 32 128 2 8 8 Million years from Human

200mam_PhyloP alone phyloP.Acc phyloP.Co

Cons + ATAC 🚺 91 Mammals GERP 📘 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT

MSN_D2, WHRadjBMI_E Enhancer 40 Promoter Other

