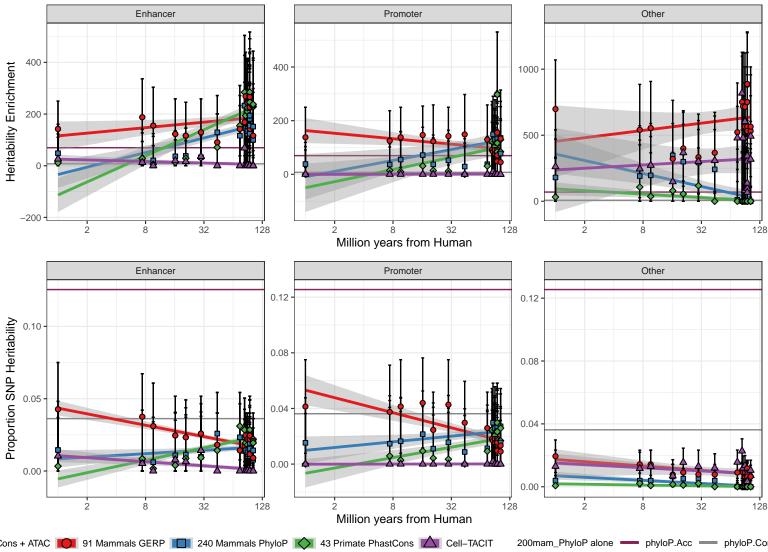
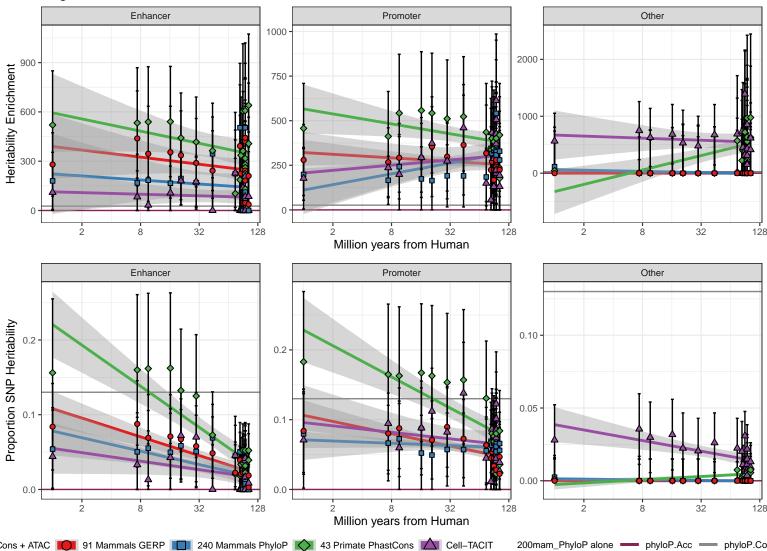
Oligo, AD\_E



## Oligo, AD-ADBP\_E Enhancer Promoter Other Heritability Enrichment Million years from Human Enhancer Promoter Other Proportion SNP Heritability 0.075 0.075 0.050 0.050 -0.025 0.025 0.000 Million years from Human Cons + ATAC 🚺 91 Mammals GERP 📘 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT 200mam\_PhyloP alone phyloP.Acc phyloP.Co

Oligo, ALS\_E



Oligo, AMD\_E Enhancer Promoter Other 1000 150 300 Heritability Enrichment 750 100 200 500 50 -100 -250 32 128 32 128 32 128 2 8 8 Million years from Human Enhancer Promoter Other 0.05 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 32 128 32 128 128 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

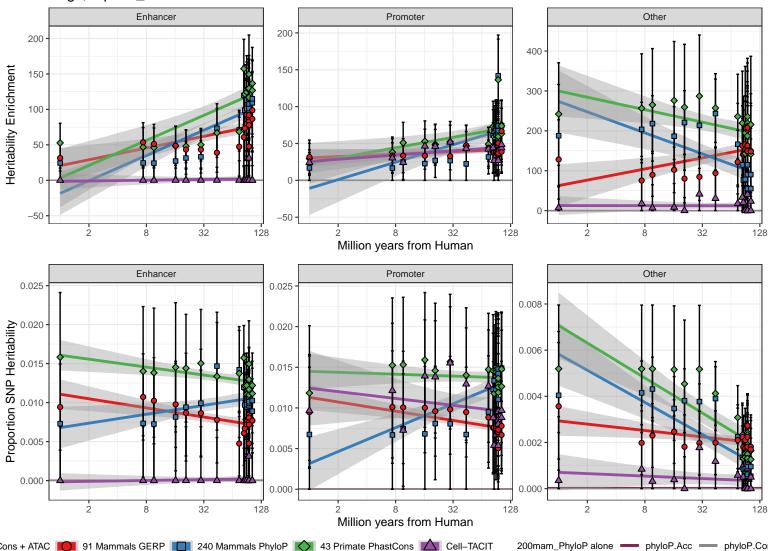
## Oligo, PD-PDBP\_E Enhancer Promoter Other 200 800 -Heritability Enrichment 150 200 600 100 -400 100 -50 -200 32 32 128 32 8 2 128 128 8 Million years from Human Enhancer Promoter Other Proportion SNP Heritability 0.03 -0.04 0.02 -0.02 0.01 -0.00 0.00 0.00 32 32 128 32 128 2 8 2 8 128 Million years from Human cons + ATAC 🚺 91 Mammals GERP 🔲 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT 200mam\_PhyloP alone phyloP.Acc phyloP.Co

Oligo, Cross-Psych\_E Enhancer Promoter Other 800 200 150 Heritability Enrichment 600 150 100 100 400 50 50 200 128 32 32 128 32 2 8 128 2 Million years from Human Other Enhancer Promoter 0.03 0.03 0.03 Proportion SNP Heritability 0.02 0.02 0.01 0.01 0.00 0.00 32 32 128 32 128 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

Oligo, ADHD\_E Enhancer Promoter Other 300 900 -200 Heritability Enrichment 200 600 100 100 -300 0 0 -32 32 128 32 2 8 128 8 128 Million years from Human Enhancer Promoter Other Proportion SNP Heritability 0.04 0.04 -0.02 0.02 -0.00 0.00 0.00 32 128 8 32 32 128 128 2 8 2 Million years from Human cons + ATAC 🚺 91 Mammals GERP 🔲 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT 200mam\_PhyloP alone phyloP.Acc phyloP.Co

Oligo, Anorexia\_E Enhancer Promoter Other 1000 300 300 Heritability Enrichment 750 200 200 500 100 250 100 32 128 32 128 32 8 128 8 Million years from Human Promoter Enhancer Other 0.03 0.06 0.04 Proportion SNP Heritability 0.02 -0.04 0.01 0.02 -0.00 0.00 0.00 32 32 128 32 128 128 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

# Oligo, Bipolar\_E



Oligo, Depression\_E Enhancer Promoter Other 300 750 -Heritability Enrichment 200 200 500 100 100 -250 32 128 32 128 32 2 8 128 8 Million years from Human Enhancer Promoter Other 0.03 0.04 Proportion SNP Heritability
0.03 0.03 -0.02 0.02 0.02 -0.01 0.01 0.00 0.00 0.00 32 128 8 32 128 32 128 8 2 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

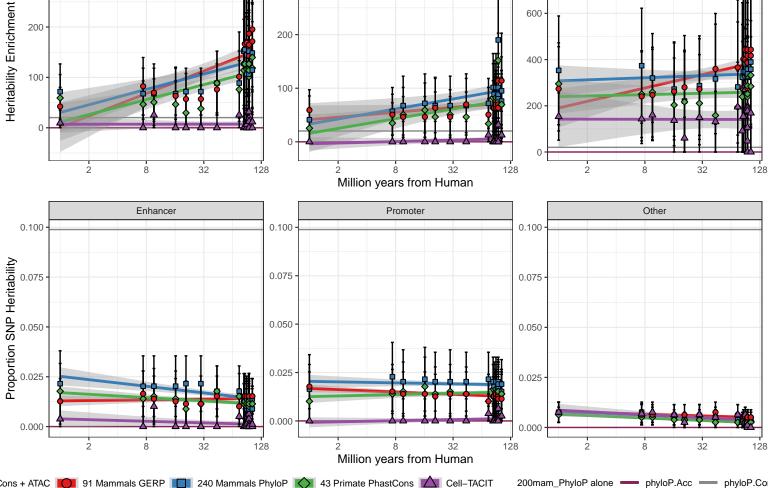
Oligo, MDD\_E

Enhancer

300

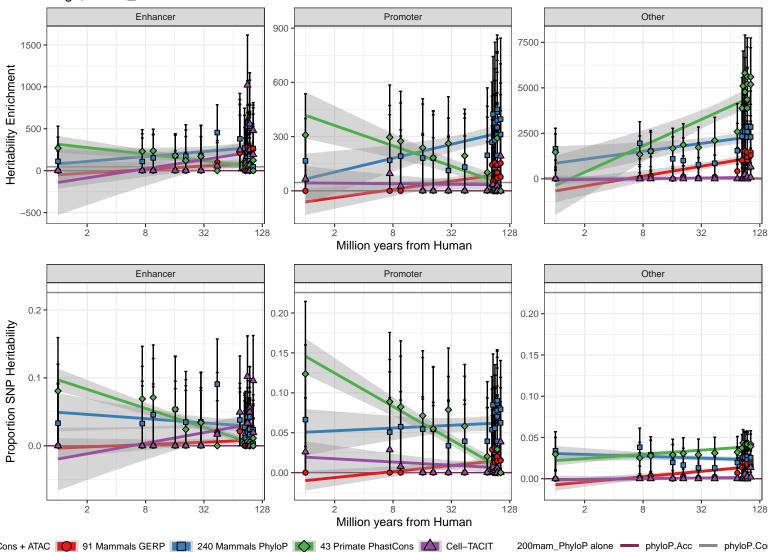
Other

400



Oligo, OCD\_E Enhancer Promoter Other 1500 600 600 Heritability Enrichment 400 1000 400 200 500 200 -32 32 32 128 128 2 8 128 8 2 Million years from Human Other Enhancer Promoter 0.04 0.08 Proportion SNP Heritability 0.075 -0.03 0.050 0.02 0.01 0.025 0.02 0.00 0.00 32 32 32 8 128 8 128 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

## Oligo, PTSD\_A



Oligo, PTSD\_E Enhancer Promoter Other 300 1200 300 Heritability Enrichment 200 800 200 -100 -400 100 32 32 32 2 2 128 128 8 128 Million years from Human Enhancer Promoter Other Proportion SNP Heritability 0.025 0.025 0.075 0.075 0.050 0.050 0.025 0.025 0.000 2 32 128 8 32 128 2 32 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

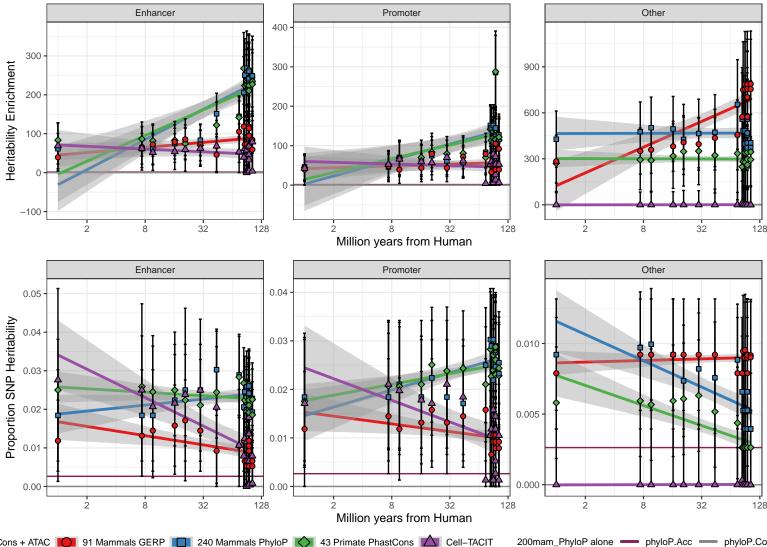
## Oligo, Schizophrenia\_E Enhancer Promoter Other 200 600 150 Heritability Enrichment 150 400 100 100 200 50 50 32 128 32 128 32 128 Million years from Human Enhancer Promoter Other 0.03 -0.03 0.009 Proportion SNP Heritability 0.02 -0.006 0.01 -0.003 0.000 0.00 32 128 32 128 32 128 8 8 Million years from Human 91 Mammals GERP 240 Mammals PhyloP 43 Primate PhastCons Cell-TACIT Cons + ATAC 200mam\_PhyloP alone phyloP.Acc phyloP.Co

Oligo, AUDIT-C\_E Enhancer Promoter Other 1000 300 300 Heritability Enrichment 750 -200 200 500 100 100 -250 32 128 32 128 32 2 8 128 8 Million years from Human Other Enhancer Promoter 0.05 0.015 0.04 -Proportion SNP Heritability 0.03 0.010 0.02 -0.005 0.01 0.00 0.00 32 32 128 32 128 8 8 128 Million years from Human 91 Mammals GERP 1 240 Mammals PhyloP 🔷 43 Primate PhastCons 🔼 Cell-TACIT 200mam\_PhyloP alone phyloP.Acc phyloP.Co

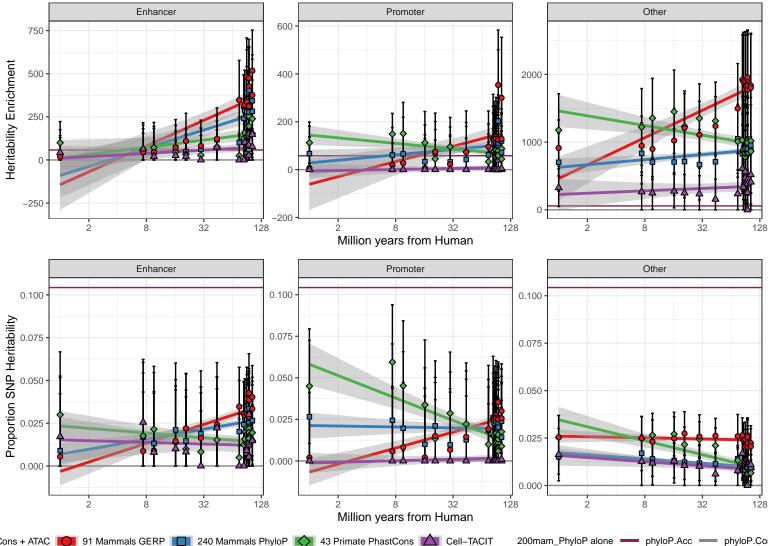
Cons + ATAC

Oligo, DrinksPerWeek\_E Enhancer Promoter Other 250 750 200 Heritability Enrichment 200 150 500 100 100 250 50 32 32 128 32 128 128 2 8 8 Million years from Human Enhancer Promoter Other 0.04 0.04 Proportion SNP Heritability
0.03 0.03 0.03 0.02 0.02 0.01 0.01 0.00 0.00 0.00 128 32 32 32 128 2 8 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

# Oligo, CannabisUse\_E Enhancer Promoter Other



# Oligo, CoffeePerDay\_E



Oligo, SmokAgeOfInit\_E Enhancer Promoter Other 300 300 Heritability Enrichment 400 200 200 200 -100 100 32 32 128 32 2 128 8 128 8 Million years from Human Other Enhancer Promoter 0.04 Proportion SNP Heritability
0.03
0.01 0.04 0.03 0.02 -0.02 0.01 -0.00 32 128 32 128 32 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

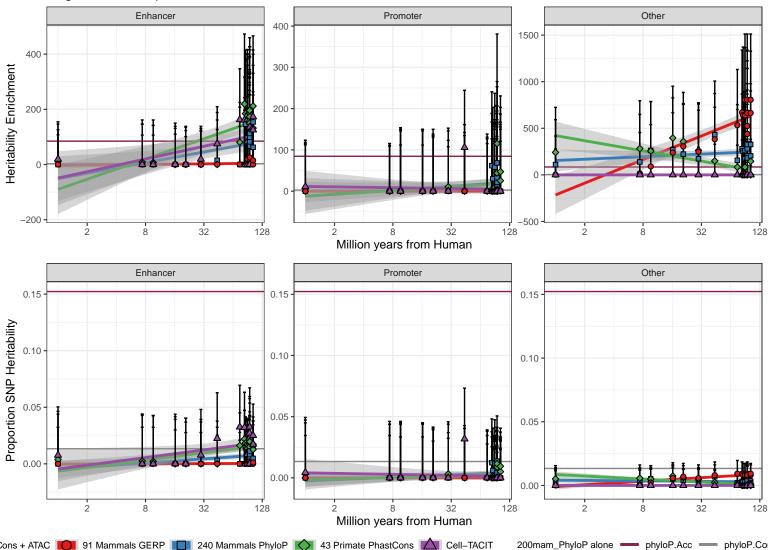
## Oligo, SmokCessation\_E Enhancer Promoter Other 250 1000 200 200 Heritability Enrichment 750 150 150 100 -500 50 50 250 -50 32 32 128 32 128 128 8 Million years from Human Enhancer Promoter Other 0.04 -0.03 Proportion SNP Heritability 0.03 -0.02 -0.02 0.01 0.01 0.00 0.00 0.00 32 128 32 128 32 128 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

Oligo, SmokCigPerDay\_E Enhancer Promoter Other 600 150 150 Heritability Enrichment 400 -100 100 200 -50 50 -50 -50 128 32 32 32 128 8 128 2 Million years from Human Enhancer Promoter Other Proportion SNP Heritability 0.04 0.04 -0.02 -0.02 -0.02 -0.00 0.00 0.00 32 128 32 128 8 32 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

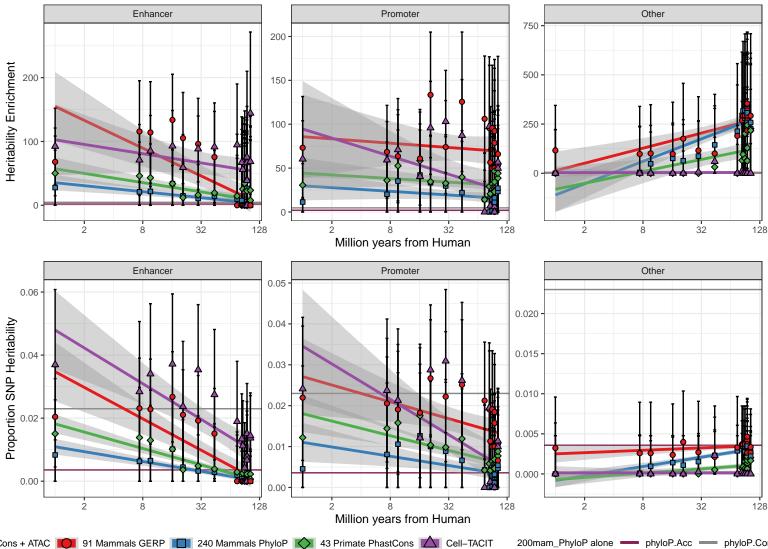
### Oligo, SmokInitiation\_E Enhancer Promoter Other 150 120 400 Heritability Enrichment 300 -100 80 200 50 -40 -100 0 32 128 32 32 128 128 2 8 2 8 Million years from Human Enhancer Promoter Other 0.03 Proportion SNP Heritability 0.03 -0.02 0.02 -0.01 0.01 0.00 0.00 0.00 32 128 32 128 32 2 8 8 8 128 Million years from Human cons + ATAC 🚺 91 Mammals GERP 🔲 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT 200mam\_PhyloP alone phyloP.Acc phyloP.Co

Oligo, OpioidUse\_E Enhancer Promoter Other 10000 20000 8000 Heritability Enrichment 15000 5000 10000 4000 -5000 0 -32 128 32 128 32 128 2 8 8 Million years from Human Enhancer Promoter Other 1.2 -0.6 2.0 Proportion SNP Heritability 0.8 0.4 1.5 1.0 -0.2 0.4 0.5 0.0 0.0 32 32 128 32 128 2 8 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

## Oligo, AlcoholDep\_E



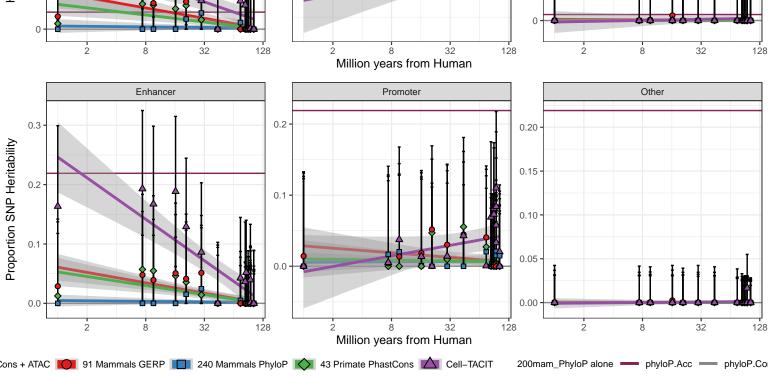
# Oligo, AUDIT-P\_E



## Oligo, AUDIT-Tot\_E Enhancer Promoter Other 800 300 Heritability Enrichment 200 600 -200 -400 100 -200 32 128 32 128 32 128 2 8 8 Million years from Human Enhancer Promoter Other 0.04 -0.015 Proportion SNP Heritability 0.03 -0.010 0.02 -0.005 0.01 0.00 0.000 0.00 32 32 128 32 128 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

## Oligo, CannabisUD\_A Enhancer Promoter Other 3000 Heritability Enrichment 800 1000 2000 400 -500 1000 32 32 32 128 128 8 128 2 8 Million years from Human Enhancer Other Promoter 0.2 0.3 0.20 0.15 0.2 -0.1 0.10



Oligo, CannabisUD\_E Enhancer Promoter Other 1200 200 150 Heritability Enrichment 800 150 100 100 -400 50 50 32 32 128 32 2 8 128 128 8 Million years from Human Enhancer Promoter Other 0.04 0.04 0.012 Proportion SNP Heritability 0.03 0.008 0.02 0.004 0.01 0.00 0.000 0.00 32 32 128 32 128 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

## Oligo, CocaineDep\_E Enhancer Promoter Other 300 300 2000 Heritability Enrichment 1500 200 -200 1000 500 100 32 32 128 32 8 128 128 2 2 8 Million years from Human Enhancer Promoter Other Proportion SNP Heritability 0.2 -0.2 0.2 -0.1 0.1 -0.0 32 32 8 128 32 128 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

#### Oligo, OpioidDep\_E Enhancer Promoter Other 1500 6000 1500 -Heritability Enrichment 1000 1000 4000 -500 500 -2000 -500 32 32 128 2 8 32 128 8 128 2 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 -0.2 -0.0 0.0 0.0 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

Oligo, OpioidDep-vs-Exp\_A Enhancer Promoter Other 12000 2000 2000 Heritability Enrichment 8000 1000 1000 4000 32 32 128 32 8 128 2 128 2 8 Million years from Human Other Enhancer Promoter 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 32 32 8 128 32 128 2 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

## Oligo, EduAttain\_E Enhancer Promoter Other 500 200 400 150 Heritability Enrichment 150 300 100 100 200 50 50 100 32 32 128 32 128 128 Million years from Human Enhancer Promoter Other 0.03 -0.008 Proportion SNP Heritability 0.02 -0.006 0.02 0.004 0.01 0.002 0.000 0.00 32 128 32 128 32 128 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

Oligo, Income\_E Enhancer Promoter Other 250 200 750 Heritability Enrichment 200 150 500 100 100 250 50 32 32 128 128 32 2 128 8 Million years from Human Enhancer Promoter Other 0.03 0.03 -Proportion SNP Heritability 0.010 0.02 -0.005 0.01 0.00 0.00 0.000 32 32 128 32 128 128 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

Oligo, BMI\_E Enhancer Promoter Other 250 200 900 Heritability Enrichment 200 150 600 100 100 300 50 32 128 32 128 32 128 2 8 Million years from Human Enhancer Promoter Other 0.025 0.03 0.03 Proportion SNP Heritability 0.020 0.02 0.015 0.010 0.01 -0.005 0.00 0.00 0.000 32 128 32 128 32 8 8 128 Million years from Human 91 Mammals GERP 1 240 Mammals PhyloP 🔷 43 Primate PhastCons 🔼 Cell-TACIT 200mam\_PhyloP alone phyloP.Acc phyloP.Co

Cons + ATAC

## Oligo, BrainVol\_E Enhancer Promoter Other 600 600 1200 Heritability Enrichment 400 400 800 200 200 400 32 32 128 32 128 8 128 Million years from Human Promoter Other Enhancer 0.08 0.06 Proportion SNP Heritability 0.06 0.04 0.04 -0.02 0.02 0.00 0.00 32 32 8 128 32 128 128 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

# Oligo, Neuroticsim\_E Enhancer Promoter Other 300 800 Heritability Enrichment 600 -200 200 400 100 200 32 32 128 32 128 2 128 8 Million years from Human Other Enhancer Promoter 0.04 -0.04 Proportion SNP Heritability 0.03 0.01 0.03 -0.03 0.02 -0.02 0.01 0.01 0.00 32 128 32 8 32 128 128 8 Million years from Human 91 Mammals GERP 240 Mammals PhyloP 43 Primate PhastCons Cell-TACIT Cons + ATAC 200mam\_PhyloP alone phyloP.Acc phyloP.Co

Oligo, Intelligence\_E Enhancer Promoter Other 800 200 Heritability Enrichment 600 200 400 100 -200 32 128 32 128 32 2 128 Million years from Human Other Enhancer Promoter Proportion SNP Heritability
10.03 0.03 0.010 0.02 0.005 0.01 0.00 32 128 32 128 32 128 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

200 Heritability Enrichment 150 -400 100 -100 -50 -200 2 32 128 32 8 128 128 Million years from Human Enhancer Promoter Other 0.025 0.025 0.025 Proportion SNP Heritability 0.020 0.020 0.015 0.015 0.010 0.010

Promoter

200 -

0.005

128

32

8

Other

32

128

600

0.005

2

8

128

Oligo, RiskyBehavior\_E

0.000

2

Enhancer

cons + ATAC 🚺 91 Mammals GERP 📘 240 Mammals PhyloP ᠺ 43 Primate PhastCons 🛕 Cell–TACIT 200mam\_PhyloP alone phyloP.Acc phyloP.Co

8

Million years from Human

32

Oligo, Worry\_E Enhancer Promoter Other 300 300 600 Heritability Enrichment 200 200 400 100 -200 128 32 32 128 32 2 8 128 8 Million years from Human Other Enhancer Promoter 0.04 0.04 0.03 -Proportion SNP Heritability 0.03 0.02 0.02 0.01 0.01 0.00 0.00 32 128 8 32 128 32 128 8 2 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

#### Oligo, ChronicPain\_E Enhancer Promoter Other 1500 600 Heritability Enrichment 400 1000 400 500 200 -200 0 32 32 128 32 128 128 2 2 8 8 Million years from Human Enhancer Promoter Other 0.100 Proportion SNP Heritability 0.050 0.025 0.075 0.075 0.050 0.050 0.025 0.025 0.000 0.000 0.000 32 32 128 32 128 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

Oligo, Headache\_E Enhancer Promoter Other 300 750 Heritability Enrichment 200 200 500 -100 100 250 32 32 128 32 8 128 2 128 8 Million years from Human Other Enhancer Promoter 0.04 0.04 -0.04 Proportion SNP Heritability 0.03 0.03 -0.02 0.02 -0.02 -0.01 -0.01 0.00 0.00 32 32 2 128 8 32 128 8 8 128 Million years from Human 🚺 91 Mammals GERP 📘 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT 200mam\_PhyloP alone phyloP.Acc phyloP.Co

Cons + ATAC

Oligo, DaySleepiness\_E Enhancer Promoter Other 250 1000 Heritability Enrichment 200 200 750 150 500 100 -100 250 50 32 32 32 128 2 8 128 128 8 Million years from Human Enhancer Promoter Other 0.0125 0.03 0.03 -Proportion SNP Heritability 0.0100 0.0075 0.02 0.0050 0.01 0.0025 0.00 0.00 32 32 128 8 32 128 2 8 128 8 Million years from Human

200mam\_PhyloP alone phyloP.Acc phyloP.Co

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

Cons + ATAC

Enhancer Promoter Other 600 600 Heritability Enrichment 400 400 2000 200 200 1000 -200 32 128 32 128 32 8 128 2 Million years from Human Enhancer Promoter Other 0.08 -0.08 -0.06 Proportion SNP Heritability 0.06 0.06 0.04 0.04 0.04 0.02 -0.02 0.02

Oligo, Dozing\_E

0.00

Cons + ATAC 🚺 91 Mammals GERP 🔲 240 Mammals PhyloP 🚫 43 Primate PhastCons 🛕 Cell-TACIT 200mam\_PhyloP alone 💳 phyloP.Acc — phyloP.Co

Million years from Human

32

0.00

32

128

8

128

0.00

128

32

8

2

Oligo, Gettingup\_E Enhancer Promoter Other 250 600 200 200 Heritability Enrichment 400 -150 100 100 200 -50 32 32 128 32 128 8 128 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 32 128 32 128 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

#### Oligo, Insomnia\_E Enhancer Promoter Other 400 600 -300 300 Heritability Enrichment 400 -200 200 100 200 100 --100 32 128 32 128 32 128 8 8 Million years from Human Enhancer Promoter Other 0.03 0.04 -0.04 Proportion SNP Heritability 0.03 0.03 0.02 -0.02 0.02 0.01 0.01 0.00 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

Oligo, Morningness\_E Enhancer Promoter Other 200 150 Heritability Enrichment 150 400 -100 100 200 50 50 32 32 128 32 128 8 128 2 8 2 Million years from Human Promoter Other Enhancer 0.03 0.03 0.03 Proportion SNP Heritability 0.02 0.02 0.02 0.01 0.01 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

Oligo, Napping\_E Enhancer Promoter Other 150 600 150 Heritability Enrichment 100 100 400 50 50 · 200 0 -50 32 32 128 32 8 2 128 128 8 2 Million years from Human Enhancer Promoter Other Proportion SNP Heritability 0.06 0.06 0.04 0.04 0.02 0.02 -0.00 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

Oligo, SleepDurLong\_E Enhancer Promoter Other 500 200 150 400 Heritability Enrichment 100 -300 100 200 50 100 32 32 128 32 2 8 128 8 128 Million years from Human Enhancer Promoter Other 0.03 0.03 -0.009 Proportion SNP Heritability 0.02 -0.006 0.01 0.003 0.00 0.000 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

# Oligo, SleepDurShort\_E Enhancer Promoter Other 300 300 Heritability Enrichment 800 200 200 400 100 32 128 32 128 32 2 8 128 8 Million years from Human Other Enhancer Promoter 0.05 -0.012 -0.04 Proportion SNP Heritability 0.04 -0.008 0.03 0.004 0.02 -0.01 0.000 0.00 32 128 32 128 32 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

Oligo, SleepDurTot\_E Enhancer Promoter Other 300 750 Heritability Enrichment 200 200 500 100 100 250 32 32 128 32 2 8 128 8 128 Million years from Human Enhancer Promoter Other 0.0100 -Proportion SNP Heritability 0.03 0.0075 0.0050 0.02 0.0025 0.01 -0.0000 0.00 32 32 32 2 8 128 128 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

## Oligo, Snoring\_E Enhancer Promoter Other 200 200 750 Heritability Enrichment 150 100 500 100 -50 250 -100 32 32 128 32 128 8 128 2 Million years from Human Enhancer Promoter Other 0.06 0.06 0.06 Proportion SNP Heritability 0.04 0.04 -0.04 -0.02 -0.02 0.02 0.00 0.00 0.00 32 128 32 2 8 32 128 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

# 150 Heritability Enrichment 200 -100 100 50 100 --100 -50 32 32 128 32 128 128 2 8 8 Million years from Human Other Enhancer Promoter 0.06 0.06 0.06 Proportion SNP Heritability 0.04 0.04 -0.04 0.02 0.02 -0.02 -0.00 0.00 -

Promoter

Other

32

128

8

300

0.00

128

Oligo, BloodUrea\_E

200

Enhancer

32

8

2

128

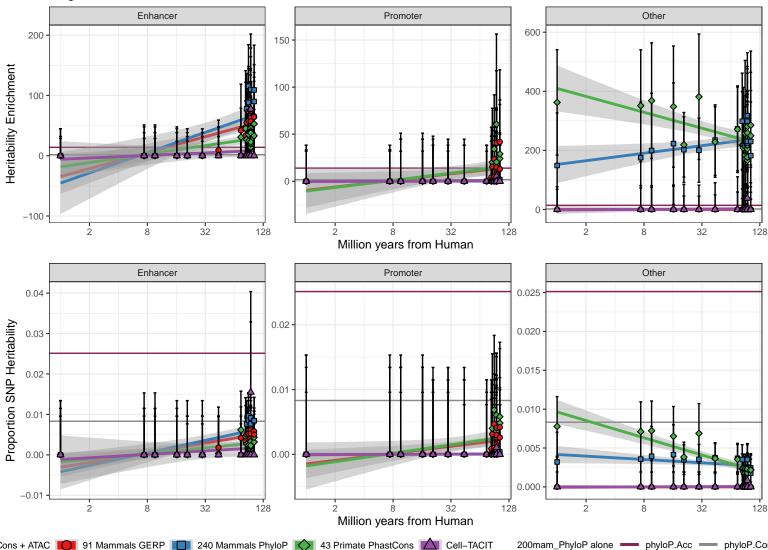
Cons + ATAC 🚺 91 Mammals GERP 🔲 240 Mammals PhyloP 🚺 43 Primate PhastCons 🛕 Cell-TACIT 200mam\_PhyloP alone 💳 phyloP.Acc 🥌 phyloP.Co

Million years from Human

32

Oligo, HDL\_E Enhancer Promoter Other 300 400 300 Heritability Enrichment 300 200 200 200 100 100 100 32 32 8 128 32 8 128 2 128 2 Million years from Human Promoter Enhancer Other 0.05 0.0075 Proportion SNP Heritability 0.04 0.03 -0.0050 0.02 0.0025 0.01 0.00 0.00 32 32 2 8 128 8 128 2 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

Oligo, LDL\_E Enhancer Promoter Other 400 2000 Heritability Enrichment 1500 300 400 1000 200 200 500 100 32 128 32 128 32 128 8 2 2 8 Million years from Human Other Enhancer Promoter Proportion SNP Heritability 0.09 0.08 0.06 0.04 0.03 0.00 -0.00 0.00 32 128 32 128 32 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 Oligo, T2Diabetes\_E



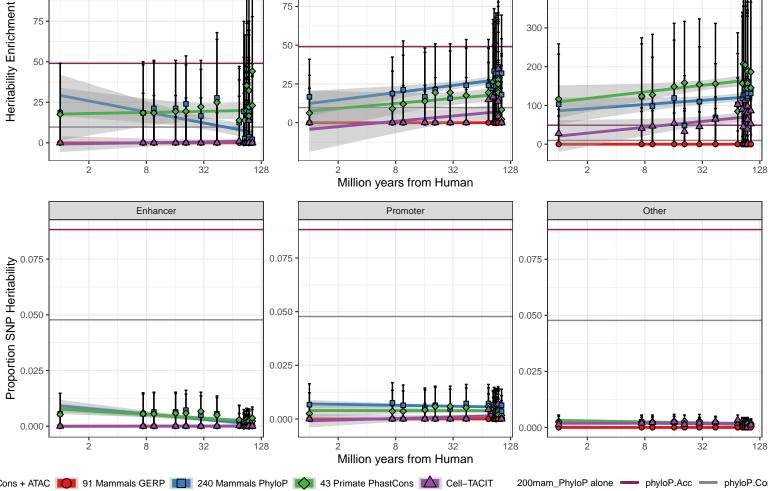
## Oligo, TotCholesterol\_E Enhancer Promoter Other 500 Heritability Enrichment 400 1000 400 300 500 200 -200 100 32 32 128 32 2 8 128 128 2 8 Million years from Human Enhancer Promoter Other 0.12 -0.12 -0.075 Proportion SNP Heritability 0.08 0.050 0.04 -0.025 0.00 0.000 0.00 32 32 128 32 2 8 128 8 128 Million years from Human Cons + ATAC 🚺 91 Mammals GERP 📘 240 Mammals PhyloP 🔷 43 Primate PhastCons 🛕 Cell-TACIT 200mam\_PhyloP alone phyloP.Acc phyloP.Co

## Oligo, Triglycerides\_E Enhancer Promoter Other 200 300 -600 -Heritability Enrichment 150 200 -400 100 100 50 200 -50 32 32 32 128 128 2 8 128 8 Million years from Human Enhancer Promoter Other 0.04 0.03 0.04 Proportion SNP Heritability 0.03 0.02 0.02 -0.01 0.01 0.00 0.00 32 128 32 32 2 8 8 128 8 128 Million years from Human

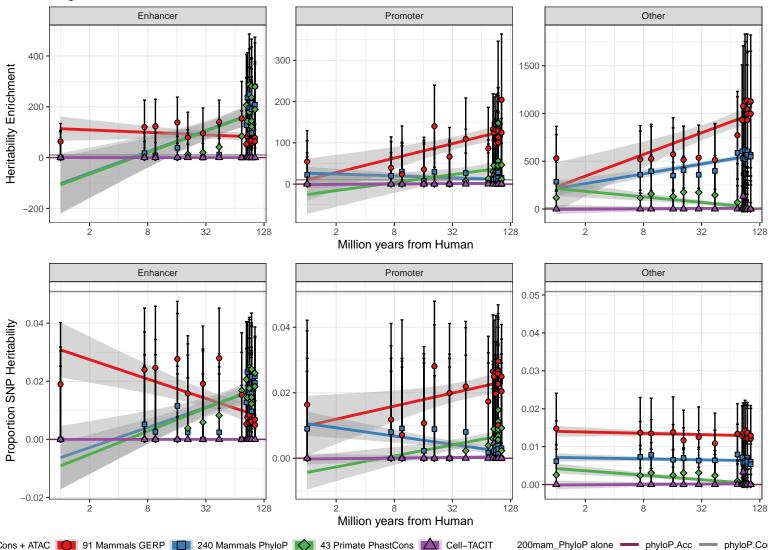
200mam\_PhyloP alone phyloP.Acc phyloP.Co

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

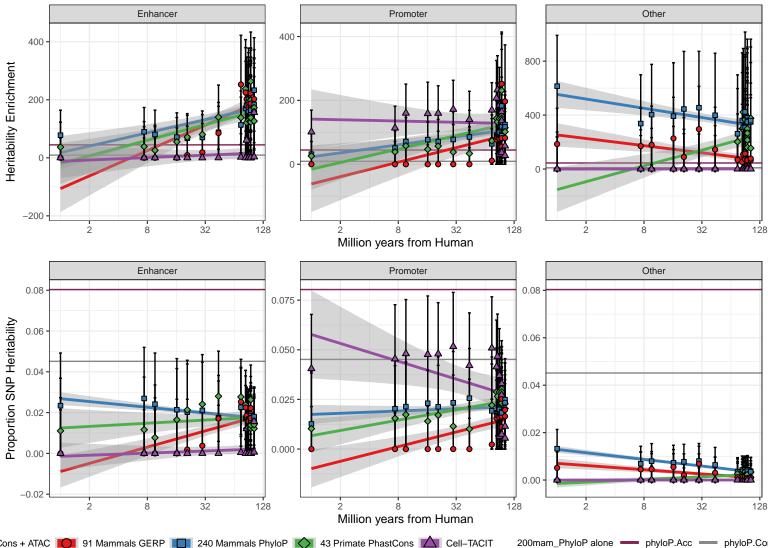
# Oligo, BMD\_E Enhancer 100 - Promoter 100 - 40



Oligo, CAD\_E

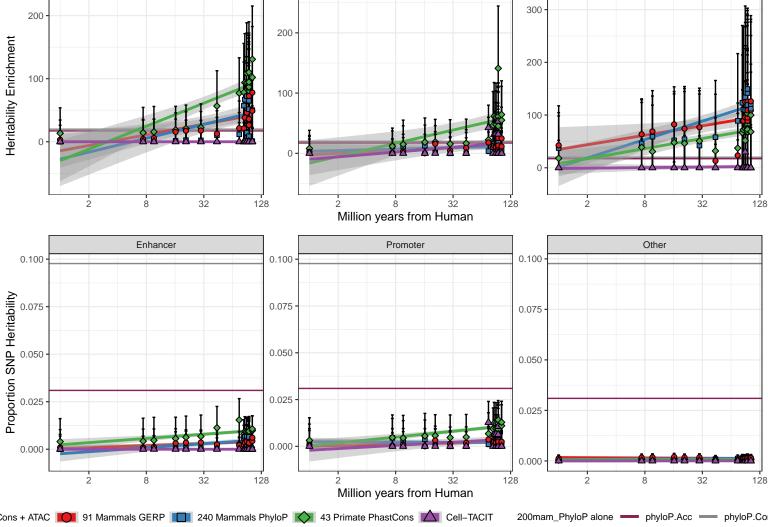


Oligo, Height\_E Enhancer Promoter Other 250 500 200 200 400 Heritability Enrichment 150 150 300 100 100 -200 50 50 100 32 128 32 128 32 2 128 8 Million years from Human Enhancer Other Promoter 0.04 0.04 0.04 Proportion SNP Heritability 0.03 -0.03 0.02 -0.02 0.01 -0.01 0.00 -0.00 0.00 32 128 32 128 32 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 Oligo, LBM\_E



Oligo, Longevity\_E Enhancer Promoter Other 600 80 100 Heritability Enrichment 60 400 -50 40 200 -20 · 32 128 32 32 128 128 2 8 8 Million years from Human Enhancer Promoter Other 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

# Oligo, WHRadjBMI\_E Enhancer Promoter



Other