9 cell types included

Ex1

Ex3

Ex4

Ex5

In6

Astrocytes

Endothelial

Microglia

Oligodendrocytes

# of significant* fQTLs produced from the pre-normalized cell fractions matrix: 508

    -- This corresponds to 443 *distinct* SNVs

No variant matches between fQTLs and significant cis-eQTLs

Under a null model of no associations:

Prob [No Matches] ≈ [G – e / G] ^ f ≈ 0.998

G = Genome length (3 billion)

e = # distinct SNVs in cis eQTL set (16607)

f = # distinct SNVs in fQTL set (443)

Next steps (when Farnam becomes available again) – re-calculate fQTLs, with the following changes:

- From a cell fractions matrix of 24 cell types, extract 8 cell types (previously: took 9 from a matrix of 23)
- Identify fQTLs at varying thresholds of significance (also useful for JW)
- Search for matches with trans-eQTLs
- Do we have alternative builds of the cis-eQTLs dataset (used capstone4_eQTL_significant.txt here)
- Search within windows for SNVs (linkage disequilibrium)
- Search for matches with other QTLs (iso-QTLs, cQTLs)?

* Significant if Bonferroni-corrected p-value < 0.05

Science. 2013 Jan 25. Reconstitution of the vital functions of Munc18 and Munc13 in neurotransmitter release. Ma C, et al

    Abstr: 144

    Intro: 350

    Sect. 1: 640

    Sect. 2: 1052

    Sect. 3: 544

    Disc: 245

    Tot: 2975

Science. 2013 Mar 29. Multiple instances of ancient balancing selection shared between humans and chimpanzees. Leffler EM, et al

    Abstr: 131

    Intro: 503

    Sect. 1: 832

    Sect. 2: 694

    Sect. 3: 781

    Sect. 4: 767

    Disc: 0

    Tot: 3708

Science. 2017 Sep 8 mTOR regulates metabolic adaptation of APCs in the lung and controls the outcome of allergic inflammation. Sinclair C1, et al

    Abstr: 135

    Intro: 233

    Sect. 1: 924

    Sect. 2: 343

    Sect. 3: 329

    Sect. 4: 705

    Sect. 5: 917

    Disc: 457

    Tot: 4043