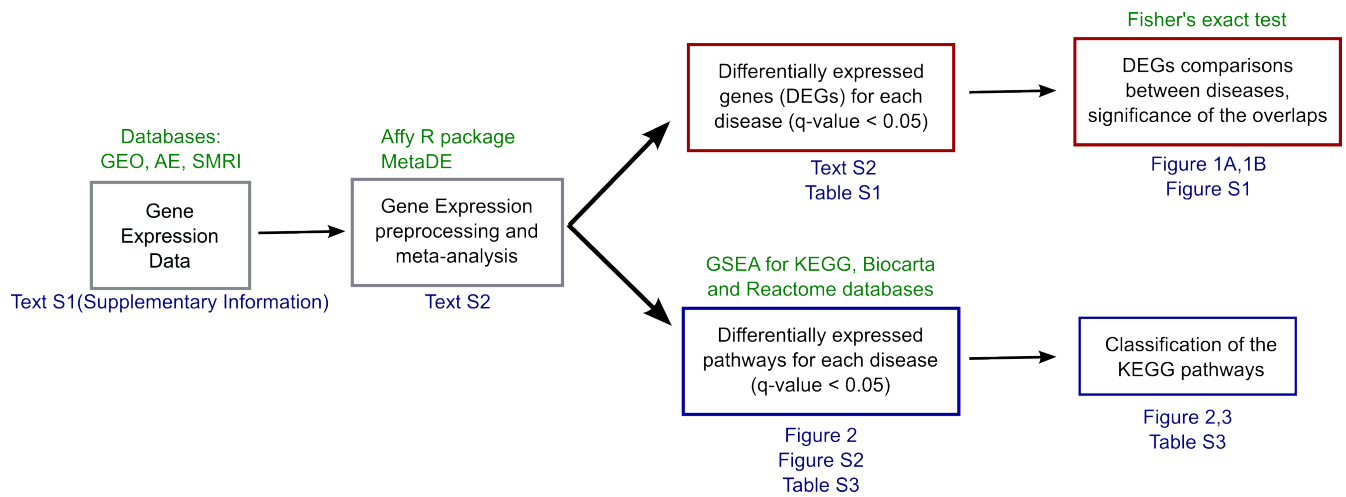


Workflow



Supplementary Information

Gene expression datasets

Alzheimer's disease

- GSE5281 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE5281>)

Entorhinal Cortex samples: 13 controls, 10 alzheimer

Hippocampus samples: 13 controls, 10 alzheimer

Medial Temporal Gyrus samples: 12 controls, 16 alzheimer

Posterior Singulate samples: 13 controls, 9 alzheimer

Primary Visual Cortex samples: 12 controls, 19 alzheimer

Superior Frontal Gyrus samples: 11 controls, 23 alzheimer

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

- GSE1297 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE1297>)

Hippocampus samples

9 controls

15 alzheimer (Severe and Moderate)

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

Parkinson's disease

- GSE7621 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE7621>)

Postmortem substantia nigra samples

9 controls

16 parkinson

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

- GSE8397 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE8397>)

Postmortem medial, lateral and frontal samples

16 controls

29 parkinson

Platform: Affymetrix Human Genome U133A Array

- GSE20292 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE20292>)

Substantia nigra samples, age- and gender-matched controls

18 controls

11 parkinson

Platform: Affymetrix Human Genome U133A Array

Schizophrenia

- GSE4036 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE4036>) 28 postmortem cerebellar tissues from schizophrenia patients and sex-, age-, and PMI-matched controls.

14 schizophrenia

14 controls

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

The following experiments were downloaded from the Stanley Medical Research Institute, Online Genomics Database (SMRI, <https://www.stanleygenomics.org>) that manage 2 collections of brain samples (the Stanley Array collection and the Stanley Consortium collection). The different studies have been conducted using overlapping subsets of these collections.

- Dobrin (https://www.stanleygenomics.org/stanley/standard/studyDetail.jsp?study_id=5)

postmortem frontal BA46 cortice samples

30 schizophrenia

25 controls

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

- Laeng (https://www.stanleygenomics.org/stanley/standard/studyDetail.jsp?study_id=17) 41 postmortem hippocampus (CA1)

20 schizophrenia

21 controls

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

- Kemether (https://www.stanleygenomics.org/stanley/standard/studyDetail.jsp?study_id=16) 26 postmortem thalamus (MD) samples

14 schizophrenia

12 controls

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

- AltarA (https://www.stanleygenomics.org/stanley/standard/studyDetail.jsp?study_id=1) 67 postmortem frontal BA46 cortice samples

33 schizophrenia

34 controls

Platform: Affymetrix Human Genome U133A Array

- AltarC (https://www.stanleygenomics.org/stanley/standard/studyDetail.jsp?study_id=2) 50 postmortem frontal BA46 cortice samples

21 schizophrenia

29 controls

Platform: Affymetrix Human Genome U133A Array

- Bahn (https://www.stanleygenomics.org/stanley/standard/studyDetail.jsp?study_id=3) 67 postmortem frontal BA46 cortice samples

34 schizophrenia

33 controls

Platform: Affymetrix Human Genome U133A Array

- Kato (https://www.stanleygenomics.org/stanley/standard/studyDetail.jsp?study_id=7) 69 postmortem frontal BA46 cortice samples

35 schizophrenia

34 controls

Platform: Affymetrix Human Genome U133A Array

Colorectal cancer

- Skrzypczak (GSE20916) (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE20916>)

Macro- and micro- dissected samples

81 cases

24 controls

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

- Sabates-Bellver (GSE8671) (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE8671>)

32 cases

32 controls

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

- Hong (GSE9348) (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE9348>)

69 cases

12 controls

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

- GSE4183 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE4183>), GSE7307 (GSM175905) (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSM175905>), GSE2109 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE2109>)

24 cases

9 control

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

Lung cancer

- GSE3526 + GSE19188 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE3526> + <http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE19188>)

68 controls

110 cases

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

- GSE7670 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE7670>)

27 controls

27 cases

Platform: Affymetrix Human Genome U133A Array

- GSE10072 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE10072>)

49 control

58 cases

Platform: Affymetrix Human Genome U133A Array

Prostate cancer

- GSE17951 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE17951>)

Gene expression analysis of prostate cancer samples using Affymetrix U133Plus2 array

13 control

109 cases

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

- E-TABM-26 (<http://www.ebi.ac.uk/arrayexpress/experiments/E-TABM-26/>)

Transcription profiling of human prostate tissues obtained from multiple Institutions

13 control

44 cases

Platform: Affymetrix Human Genome U133A Array

- GSE6956 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE6956>)

Transcription profiling of human prostate tissues

18 control

71 cases

Platform: Affymetrix Human Genome U133A 2.0 Array

HIV

- GSE16363 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE16363>)

Microarray Analysis of Lymphatic Tissue Reveals Stage-Specific, Gene-Expression Signatures in HIV- 1 Infection Tissue:

lymph node

10 control

24 HIV

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

- GSE28160 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE28160>)

Gene Expression in Brain Tissues of Patients with HIV-Associated Neurocognitive Disorders Tissue: centrum semiovale (deep white matter), postmortem

9 control

14 HIV

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

Malaria

- GSE5418 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE5418>)

Gene Expression Analysis in Malaria Infection. Tissue: peripheral blood mononuclear cells

14 control samples

22 malaria samples

Platform: Affymetrix Human Genome U133A Array

Muscular Dystrophy

- GSE6011 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE6011>)

Expression data from quadriceps muscle of young Duchenne muscular dystrophy (DMD) patients and age matched controls.

Tissue: quadriceps muscle

14 control samples

23 muscular dystrophy

Platform: Affymetrix Human Genome U133A Array

- GSE11681 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE11681>)

Tissue: quadriceps and biceps muscles

10 controls

10 limb-girdle muscular dystrophy (LGMD) type 2A samples

Platform: Affymetrix Human Genome U133A Array

Pulmonar Sarcoidosis

- GSE16538 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE16538>)

Genome-wide gene expression profile analysis in pulmonary sarcoidosis. Tissue: lung

6 control samples

6 sarcoidosis samples

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

Asthma

- GSE31773 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE31773>)

Comparison of mRNA expression in circulating T-cells from patients with severe asthma Tissue: circulating CD4+ and CD8+ T-cells

16 controls

24 asthma

Platform: Affymetrix Human Genome U133 Plus 2.0 Array

- GSE22528 (<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE22528>)

Gene expression pattern of alveolar macrophages of allergic asthmatics in comparison with control subjects Tissue: alveolar macrophage samples from bronchoalveolar lavages

5 controls

5 asthma

Platform: Affymetrix Human Genome U133A Array