Mouse O-Y Mitochondrial Dysfunction
Rat_ M-Y Mitochondrial Dysfunction

Gene mutations associated with mitochondrial dysfunction:
- Complex I (NADH dehydrogenase)
  - NDUFS1, NDUFS2, NDUFS3, NDUFS4, NDUFS5, NDUFS6, NDUFS7, NDUFS8, NDUFS9, NDUFS10, NDUFS11, NDUFS12
- Complex II (Succinate dehydrogenase)
  - SDHA, SDHB, SDHC, SDHD
- Complex III (Cytochrome b/c1)
  - UQRC2, C1078
- Complex IV (Cytochrome c oxidase)
  - COX3
- Other genes
  - APP, amyloid, PINK1, LRRK2

Other proteins
- Mutations in PINK1 and Parkin lead to mitochondrial dysfunction.
Rat O-M Mitochondrial Dysfunction

Gene mutations associated with mitochondrial dysfunction:
- Complex I (NADH dehydrogenase): ND4, ND4L, ND6, ND5, ND2, ND3, ND1, ND1, ND3, ND2, ND3
- Complex II (Succinate dehydrogenase): SDH4, SDH6, SDH3, SDH2
- Complex III (Cytochrome bc1): UQCRB, CYTB
- Complex IV (Cytochrome c oxidase): COX

Other genes:
- ATP synthase, PINK1, LRRK2
- presenilin-1, ephrinB1, Parkin, S3-1

The diagram illustrates various aspects of mitochondrial dysfunction, including oxidative stress, mitochondrial membrane potential, and the involvement of death receptors and mitochondrial proteins such as Bcl-2 and Bax.
Rhesus M-Y Mitochondrial Dysfunction
Human_ O-M Mitochondrial Dysfunction