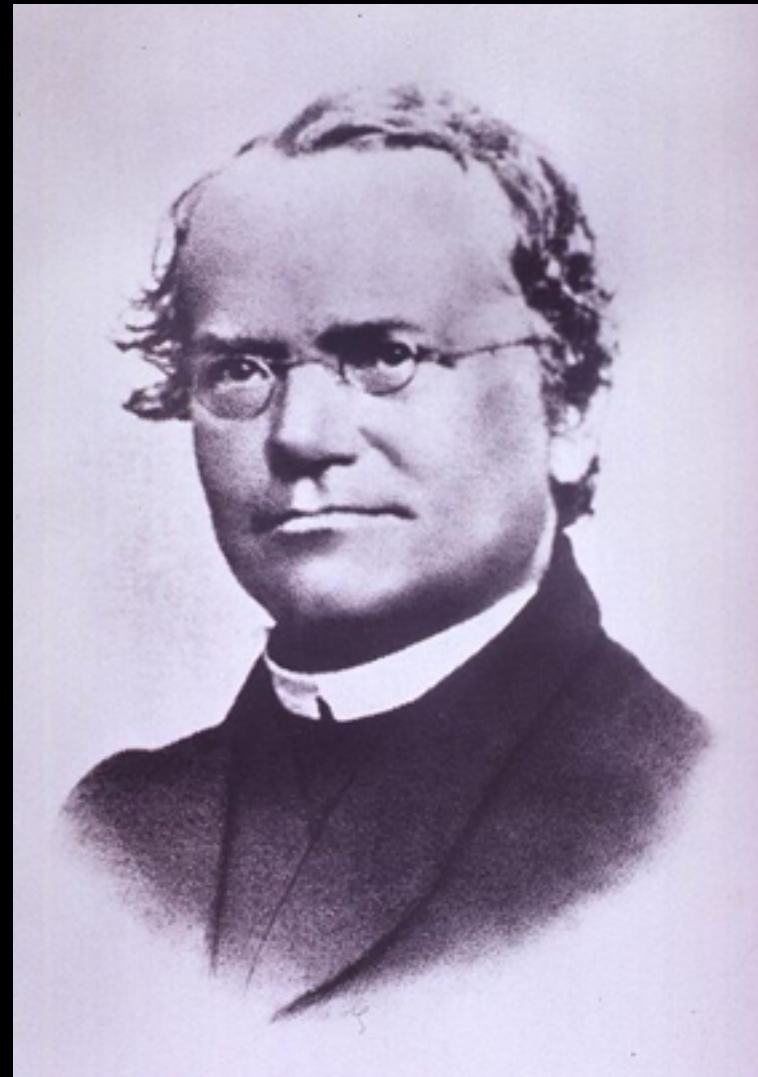


Mendelian Genetics

Biology Essentials - 029



Gregor Mendel



Linked Genes

Genetics

Probability

Mendel

Problems

Disorders

Genes

Huntington's
disease

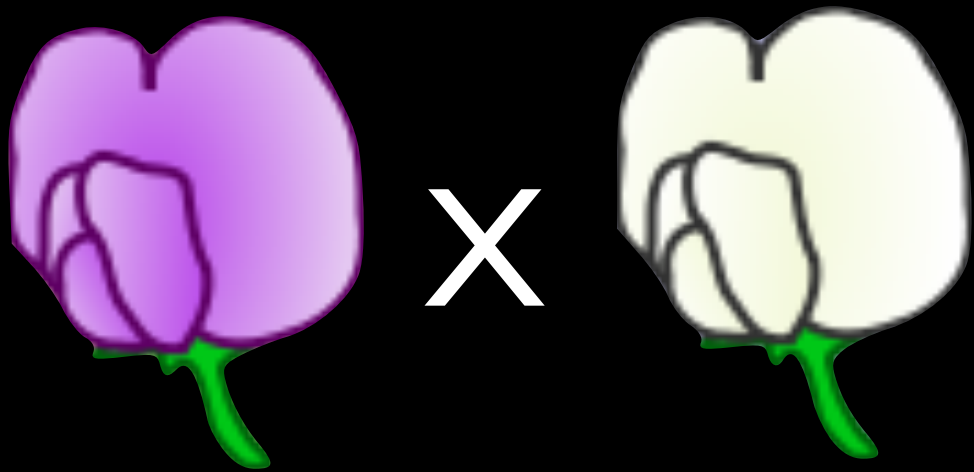
Ethics

Segregation

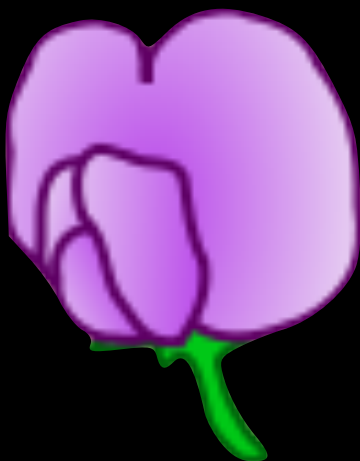
Independent
assortment

Privacy

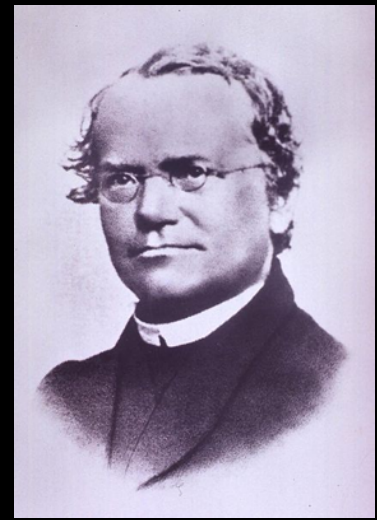
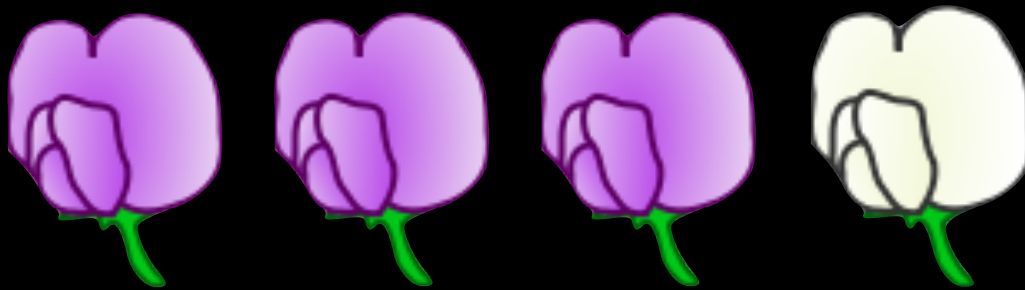
P



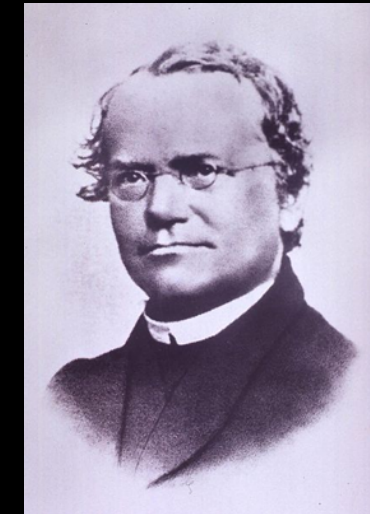
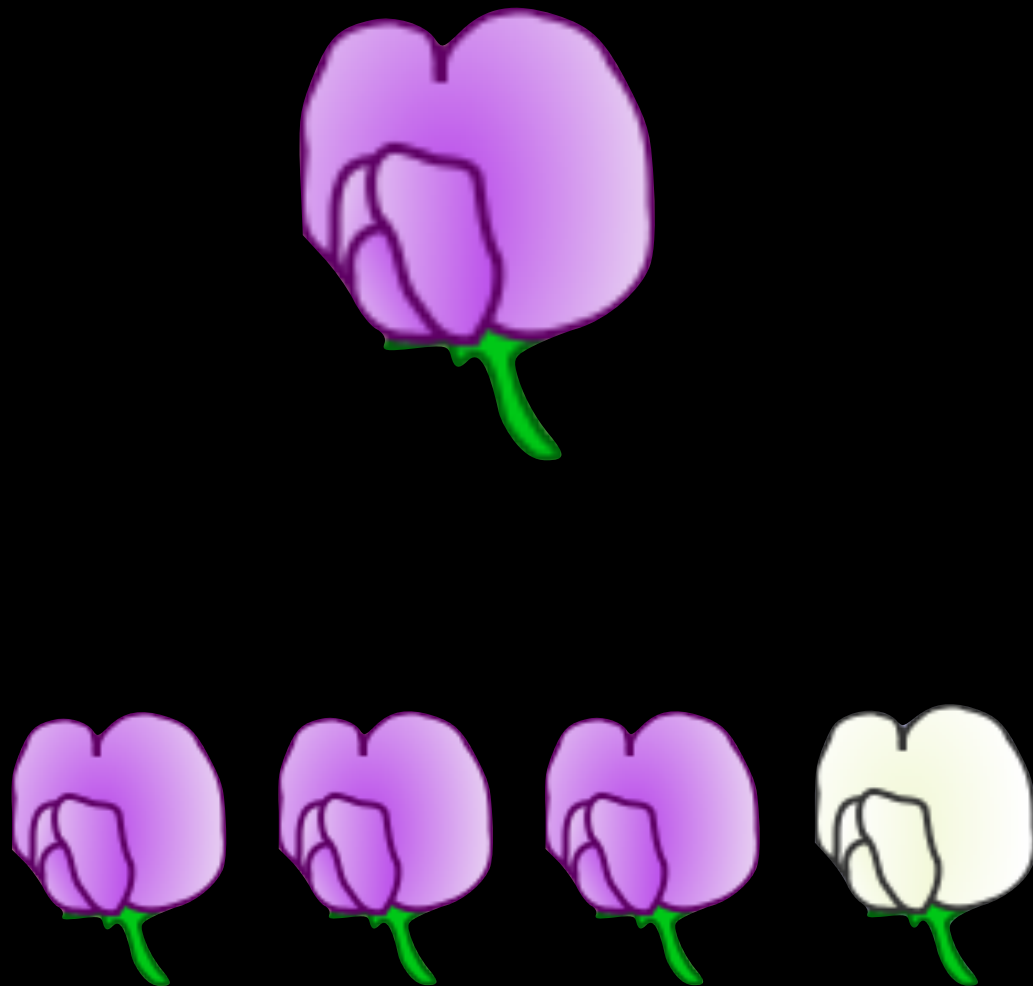
F1









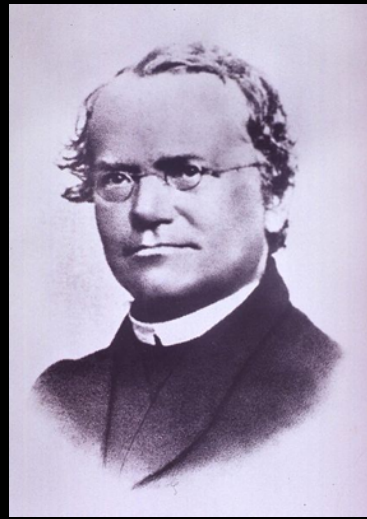
F2



Genotype vs. Phenotype

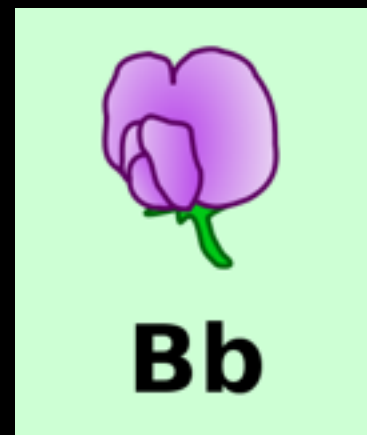


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Mendel's Laws

1 Segregation



2 Independent Assortment



Sample Problems

1. A coin is flipped four times and comes up heads each time. What is the probability that the next coin flip will come up heads?

Round (R) is dominant to wrinkled (r). Yellow (Y) is dominant to green (y)

2. Classify the following as heterozygous or homozygous: RR, Rr, yy, YyRR

3. What is the phenotype of the following: Yy, Rr, yy, YyRr

4. What is the probability of Rr x Rr producing wrinkled seeds?

5. What is the probability of Yy x yy producing green seeds?

6. What is the probability that RrYy x RRYy would produce RrYy

Sample Problems

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4. What is the probability of $Rr \times Rr$ producing wrinkled seeds?

Sample Problems

Round (R) is dominant to wrinkled (r). Yellow (Y) is dominant to green (y)

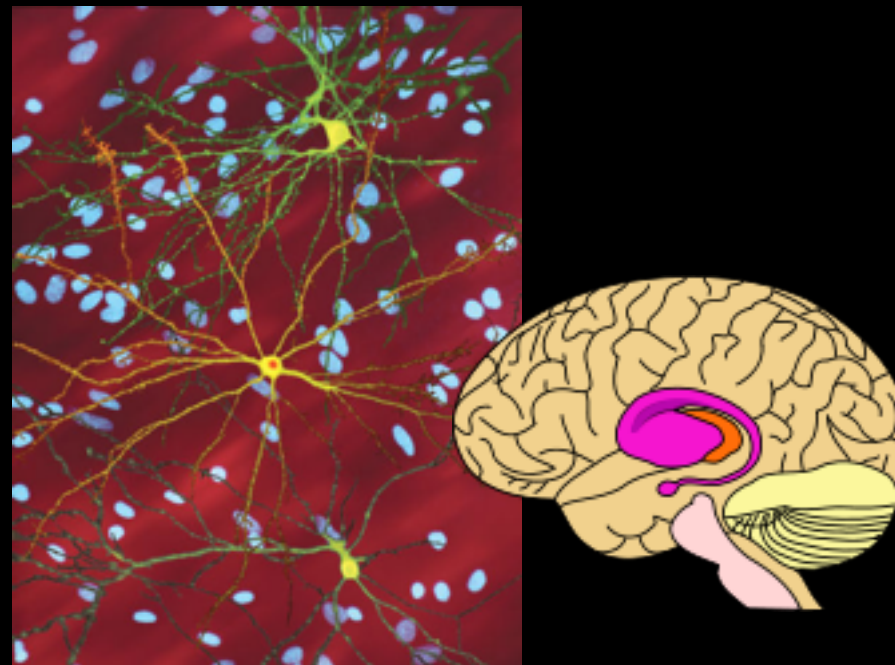
5. What is the probability of $Yy \times yy$ producing green seeds?

Sample Problems

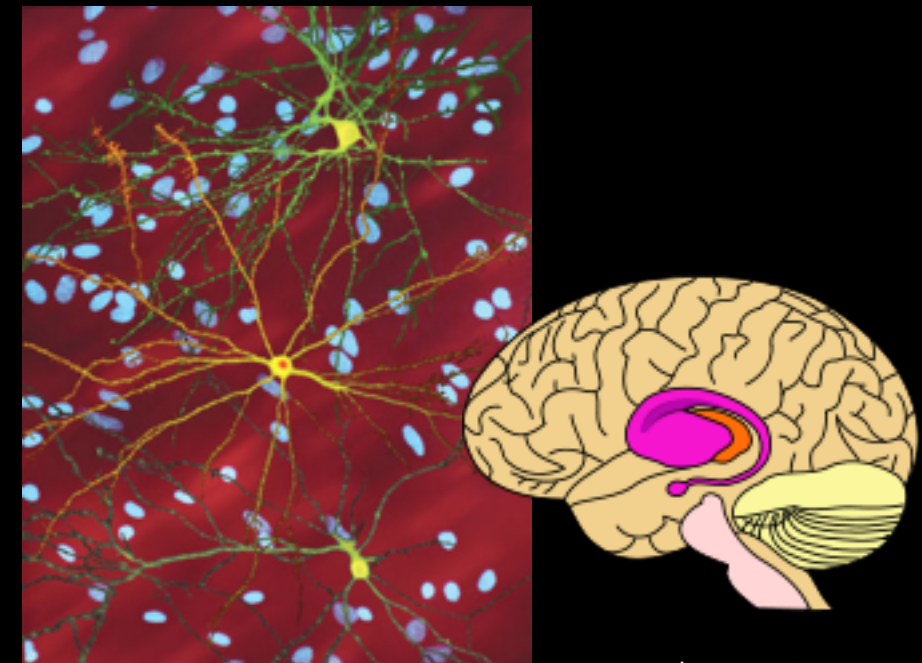
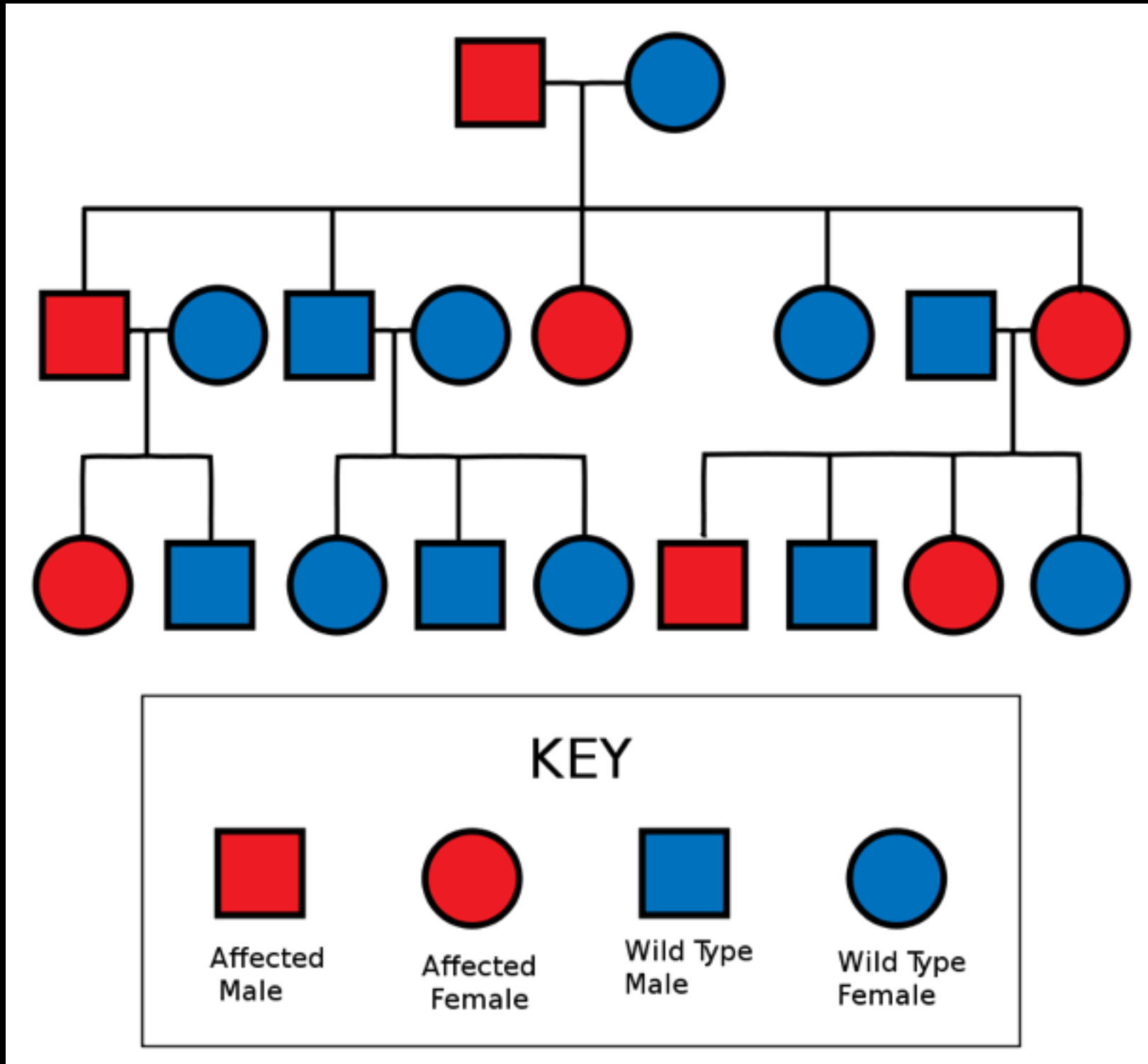
Round (R) is dominant to wrinkled (r). Yellow (Y) is dominant to green (y)

6. What is the probability that $RrYy \times RRYy$ would produce $RrYy$

Huntington's Disease



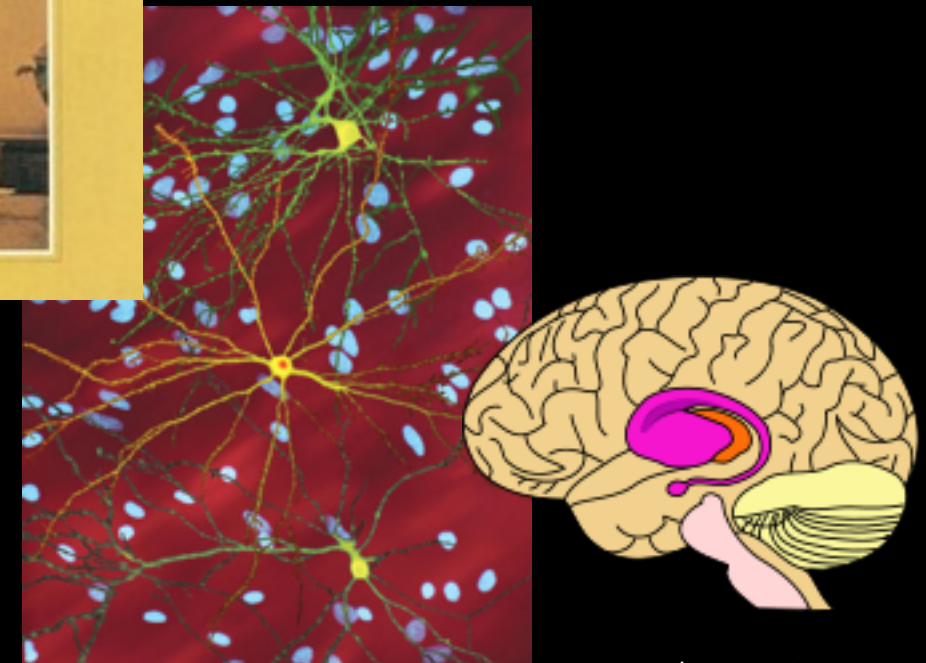
Huntington's Disease



Huntington's Disease

Ethics

Privacy



Acknowledgements

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