

## Resource List and Links:

### **Classical Biotechnology (Breeding and Selection)**

Plant Breeding Activity Wheat

<http://passel.unl.edu/animation/JNRLSEWheatBreedingActivityWithNotebook/WheatBreedingActivity2.swf>

Plant Breeding Activity Soybean

<http://passel.unl.edu/pages/animation.php?a=eLibraryPlantBreedingActivity/PlantBreeding.html&b=1130281934>

Flower Parts

<http://passel.unl.edu/pages/animation.php?a=486601flowerparts3-8-12.swf&b=1057774853>

Flower Structure and Crossing activity

<http://passel.unl.edu/pages/animation.php?a=flowerbreeding.swf&b=1067618494>

Corn Crossing

<http://passel.unl.edu/pages/animation.php?a=CornCrossingActive.swf&b=1130281885>

Backcross Breeding

<http://passel.unl.edu/pages/animation.php?a=BXbreed.swf&b=990818773>

Breeding Timeline

<http://passel.unl.edu/pages/animation.php?a=timeline.swf&b=1102449928>

### **Genetic Engineering**

Overview of GE

[http://passel.unl.edu/pages/animation.php?a=overview\\_genetic\\_engineering.swf&b=990818777](http://passel.unl.edu/pages/animation.php?a=overview_genetic_engineering.swf&b=990818777)

Who Wants to Be a Genetic Engineer Game

[http://passel.unl.edu/pages/animation.php?a=who\\_wants\\_to\\_be\\_ge.swf&b=1023486473](http://passel.unl.edu/pages/animation.php?a=who_wants_to_be_ge.swf&b=1023486473)

Overview of Gene Expression

[http://passel.unl.edu/pages/animation.php?a=protein\\_synthesis.swf&b=990818764](http://passel.unl.edu/pages/animation.php?a=protein_synthesis.swf&b=990818764)

Transcription

<http://passel.unl.edu/pages/animation.php?a=transcription.swf&b=990818765>

Translation

<http://passel.unl.edu/pages/animation.php?a=translation.swf&b=990818766>

Gene Regions

<http://passel.unl.edu/pages/animation.php?a=GeneRegions.swf&b=1011727433>

Gene cloning

<http://passel.unl.edu/pages/animation.php?a=genecloning.swf&b=990819293>

Gene modifications

<http://passel.unl.edu/pages/animation.php?a=GeneModification.swf&b=1011727604>

Making Recombinant DNA

[http://passel.unl.edu/pages/animation.php?a=making\\_a\\_recombinant\\_plasmid.swf&b=1003514583](http://passel.unl.edu/pages/animation.php?a=making_a_recombinant_plasmid.swf&b=1003514583)

Transgene Design

<http://passel.unl.edu/pages/animation.php?a=transgene.swf&b=1079385086>

Gene Gun

<http://passel.unl.edu/pages/animation.php?a=GeneGun.swf&b=990818781>

Antisense

<http://passel.unl.edu/pages/animation.php?a=Antisense.swf&b=1022275593>

Refuge

<http://passel.unl.edu/pages/animation.php?a=FieldRefuges.swf&b=1048113302>

## **Diagnostics**

DNA and DNA extraction

<http://passel.unl.edu/pages/animation.php?a=DNA.swf&b=990818768>

DNA extraction method, plants

<http://passel.unl.edu/pages/animation.php?a=DNAExtraction.swf&b=1130281890>

PCR

<http://passel.unl.edu/pages/animation.php?a=PCR.swf&b=1020458324>

Gel Electrophoresis

[http://passel.unl.edu/pages/animation.php?a=Gel\\_electrophoresis.swf&b=1065818492](http://passel.unl.edu/pages/animation.php?a=Gel_electrophoresis.swf&b=1065818492)

Gel Scoring

[http://passel.unl.edu/pages/animation.php?a=gelscoring\\_anim.swf&b=1092849845](http://passel.unl.edu/pages/animation.php?a=gelscoring_anim.swf&b=1092849845)

Marker Assisted Selection

<http://passel.unl.edu/pages/animation.php?a=MASBreeding.swf&b=1130281891>

Protein Detection

<http://passel.unl.edu/pages/animation.php?a=latflow07d2.swf&b=1083008208>