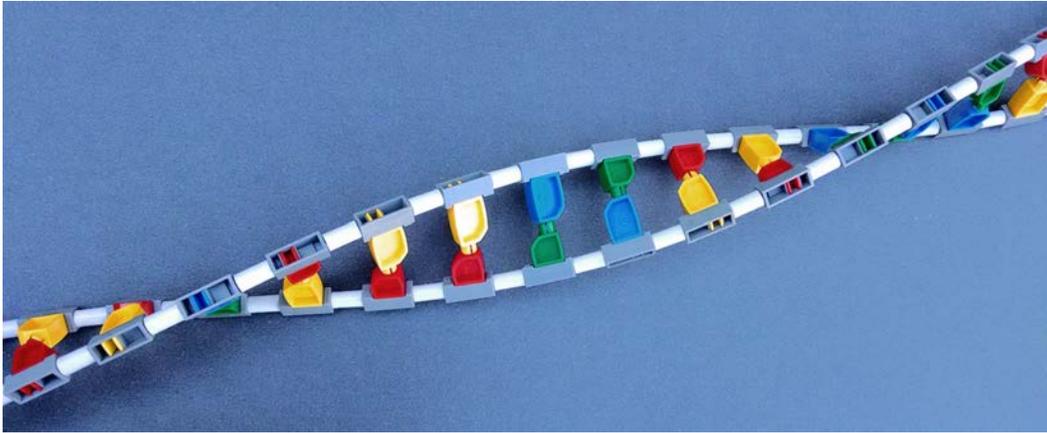


Additional Media for Instruction with DNA, Protein, and tRNA models

Molecular Biology and Genetics Workshop



1. Video demonstrating the active learning process with the models

This video captures a teacher professional development workshop & a HS biotech class; 4 min. long

<https://www.youtube.com/watch?v=Mv0ldAHQRAI&>

2. Videos for viewing the steps in protein synthesis with the models:

Transcription video: No sound; about 3 min. long

<https://www.youtube.com/watch?v=scMWCrMOTuo>

Translation video: No sound; about 5 min. long

<https://www.youtube.com/watch?v=zZ1f4zkl58s>

Additionally, a teacher may wish to show how to correctly fold a helix with the protein chain. This is the last step in the video.

3. Video story- proteins in food become proteins in your body with models

Video introduction to protein production by instructor: Narration; about 2 min. long

<https://www.youtube.com/watch?v=YVse15pdsrA>

4. Animations of enzymatic details of how DNA makes proteins with DNai

DNai is a website from Cold Spring Harbor. <http://www.dnai.org/a/index.html>

To access some super animations with narration, select the following buttons on the page:

- 1) "Copying the Code" + ("Putting it together" from the top bar) then click on the image for either Transcription or Replication.
- 2) "Reading the Code" + ("Putting it together" from the top bar) then click on the image for Translation.

5. Review of the molecular basis of Cystic Fibrosis (CF) Workshop participants built a channel protein that can be used as a model for explaining CF. For a review of the molecular basis of CF, select the first two sections on this page:

1) What is it?

2) What causes it?

<http://www.ygyh.org/cf/whatisit.htm>

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