Opioid drugs include the illegal drug heroin as well as prescription pain relievers such as morphine. These drugs mimic the endorphins, enkephalins and dynorphins produced in our bodies. They bind to the opioid receptors present on the neuronal cells and alter the molecular pathways for communicating pain.

The 2020 Challenge
Misuse of opioids has led to a spike in opioid addiction that is currently plaguing the nation. In this challenge, we ask you to tell a 2 minute long, coherent story that incorporates two components:

1. Molecular aspects of opioids action: explain to viewers how the fusion of an opioid with the opioid receptor triggers changes in pain signaling pathways. In addition, introduce the mechanism by which the drug naloxone can save a life in overdose.

   Use visualizations of relevant PDB structures to help convey your story.

2. Public health component: Make viewers aware of the extent of the current opioid crisis and how it can be addressed.

The complete list of requirements for video entries along with learning materials can be found at pdb101.rcsb.org.

Awards
Qualifying entries will be eligible to win one or more awards:

Judge’s Award
A panel of expert judges select the top three entries using the following criteria:

- 20% Story Telling
- 30% Quality of Science Communication
- 10% Quality of Public Health Message
- 20% Originality and Creativity
- 10% Quality of Production
- 10% Proper Accreditation

Viewer’s Choice Award
As voted online.

The winning entries will be recognized on rcsb.org, and in the RCSB PDB Newsletter.

News and Updates
To sign up for the monthly newsletter, email info@rcsb.org with the subject Video Challenge News.