Mental disorders affect thinking, feeling, mood, and behavior. As scientists study the molecular machinery behind brain processes and mental illnesses, they design drugs that bind to key proteins in the neuronal signaling pathways to alter their innate function. This in turn regulates the neuronal signal strength. Although these drugs don’t cure mental disorders, they help patients lead more productive and fulfilling lives.

The 2021 Challenge

In this edition of the challenge you will be focusing on a mental health topic and create a story that explains how neuronal signals are communicated within our bodies and how pharmacological drugs modulate that signal in a given pathway to treat the symptoms of the illness.

Choose one of the topics below:

1. **Treating anxiety disorders**: drugs targeting GABAA receptor to reduce neuronal stimulation
2. **Treating schizophrenia**: pharmacological antagonists targeting the dopamine receptor
3. **Treating depression**: drugs targeting SERT transporters to modulate the reuptake of serotonin
4. **Treating Alzheimer’s disease**: drugs targeting acetylcholinesterase to delay the destruction of the acetylcholine

In addition, your story should incorporate some social and public health aspects relating to the topic, addressing how the mental illness affects an individual and how that could be improved with increased awareness. You might also convey the importance of screening for the disorder.

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.

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