

# Inquiry Activity Designs

Created by PDP participants 2001-2008

## Undergrad Audiences

1. **Stellar Populations**
2. **Galaxy Morphologies in the Hubble Ultra Deep Field**
3. **Mystery Galaxies**
4. **Galaxy Clusters: Mass vs. Visible Light**
5. **Galaxy Components**
6. **Recipe for a Galaxy**
7. **Spectroscopy Astronomy Lab**
8. **Color, Light, and Spectra**
9. **Light, Color Addition, and Color Subtraction**
10. **Lenses and Refraction**
11. **Camera Obscura and Pinholes**
12. **Light, Optics, and Telescopes**
13. **Compound Pendulums**
14. **Wavefront Correction**
15. **Understanding Adaptive Optics**
16. **Electronic Detectors**
17. **Digital Image Files**
18. **CCD Models**
19. **Spectrograph Design**
20. **Retinal Anatomy**
21. **Physiology and Optics of the Human Eye**
22. **Color Perception**
23. **Central DOGma Disease Detectives**
24. **Biological Imaging: Understanding Image Files**
25. **UCSC CSI: Understanding DNA**
26. **DNA in a Box**

## Graduate Student and Professional Audiences

27. **Fourier Optics**
28. **Adaptive Optics System Demonstrator**
29. **Human Vision and Aberrations**

## High School Audiences

30. **Variable Stars**
31. **Open and Globular Star Clusters**
32. **Planetary Nebulae**
33. **Classifying Galaxies: Color and Morphologies**
34. **Stars and Color**
35. **Tabletop Optics: Lenses and Mirrors**
36. **Spectroscopy Physical Science Lab**
37. **Lenses and Human Vision**
38. **Visual Perception**
39. **Astrobiology: Extremophiles!**
40. **Bacteria and Viruses**
41. **Ecology in the Intertidal Zone**
42. **Sea Turtle By-Catch**

Content Areas: **Astronomy**, **Physics**, **Engineering/Instrumentation**, **Vision Science**, **Biology**, **Ecology**