Observations Required for Vetting Candidate Planets

- **Seeing-limited imaging**
  - Identify wide stellar companions

- **High-contrast imaging**
  - Identify close stellar companions

- **Speckle imaging**
  - Identify close stellar companions

- **Reconnaissance spectroscopy**
  - Stellar characterization
  - Identification of eclipsing binaries
Desired Exoplanet Observations

• **Photometry**
  • Transits
  • Secondary eclipses
  • Phase curves

• **High-resolution optical & near-infrared spectroscopy**
  • Radial velocity mass measurement
  • Orbital alignment (Rossiter-McLaughlin effect)
  • Combined high-contrast imaging + high-resolution spectroscopy
  • Atmospheric characterization
    • During transits & eclipses
    • In out-of-transit data
Timing of Observations is Important

• **Transit observations**
  - Capture ingress, egress, and out-of-transit baseline

• **Radial velocity observations**
  - Cover full phase curve
  - Untangle between stellar & planetary signals
  - Distinguish between eccentric orbits & additional planets
  - Accurately determine window for secondary eclipses

Queue/cadence scheduling is efficient & advantageous
Interrupts & Targets of Opportunity

- **Rapid confirmation** of potential candidates
- Catch “unusual” **objects** like evaporating planets
- Observe **simultaneous transits** of multiple planets