

**Table 27-4 Collecting good images**

1. Set up the microscope properly
2. Prepare the sample carefully; remove fluorescent media
3. Eliminate any movement or focus drift
4. Minimise photo-bleaching and use antifade reagents
5. Select the correct objective for the job
6. Select the right mounting medium
7. Choose fluorophores that give good SNR with your filtersets
8. Pay attention to 'bleed-through' or cross-talk
9. Avoid spherical and chromatic aberrations
10. Collect within the dynamic range of the detector
11. Set the minimum exposure and field of view of the specimen
12. Fulfill the Nyquist sampling limit; consider deconvolution
13. Monitor your cells after the experiment for healthy appearance and behaviour