**DNA Sequencing Service**

**Primer Selection Guidelines**

1. 18-28 nucleotides in length.  
2. 50% G/C content.  
3. G & C “clamps” on the 3’ and 5’ ends (at least a single G or C residue)  
4. Primer should be at least 20-30 bases long at 5’ of region to be sequenced.  
5. Avoid multiple Thymidine residues on 3’ and 5’ ends.  
6. Avoid primers with long runs (more than 3 or 4) of a single base.  
7. Avoid primers with tendency to form strong intramolecular base pairs or primer primer dimers.  
8. Melting temperature 55-65??.  
9. Check primers for specificity in annealing to template. If possible use a computer program to design primers.  
10. PRIMERS SHOULD BE 4μM in CONCENTRATION (For average 20 mer, 4μM corresponds to approximately 27 ng/μl) and at least 15μl.