

## Appendix

### ***Tips for the Bone Marrow Aspiration Technique for the Iliac Crest***

- Use a beveled aspiration needle: 7 inches (177.8 mm), 8 gauge with trocar.
- Use a 10-mL syringe.
- Rinse the needle with sodium heparin and preload the syringe with 1 mL of sodium heparin (1,000 IU/mL).
- Use a small aspiration volume (1 to 2 mL) for each site.
- Advance and disperse aspiration sites 0.5 to 1 cm from each other at a given cortical entry point to obtain different aspirates.