**Isolation of Serum**

**Equipment:**
- Benchtop centrifuge (Allegra X-15R, Beckman Coulter)
- Pipette Gun (Drummond)

**Materials:**
- 5mL or 8mL Red topped serum tube (Fisher, #0268798 or #367988)
- 2mL sterile, serological pipette (Fisher, #356507)
- Red microfuge tubes (E&K Scientific, Cat# 280060-R)

**Procedure:**
1. Centrifuge the serum tube (red top, gold top, or SST) at 1026 x g for 10 minutes.
2. Label tubes with appropriate de-identified cryogenic labels.
3. Aliquot the serum into aliquots (refer to Appendix A for aliquot quantities and volumes) in the red microfuge tubes.
4. Freeze at -80°C.
### Appendix A – HIMC Aliquot Guidelines

<table>
<thead>
<tr>
<th>Serum**</th>
<th>Whole Blood Volume</th>
<th>Standard Volume/Aliquot</th>
<th>Required # of vials</th>
<th>Minimum Volume per aliquot</th>
<th>Maximum Volume per aliquot</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>up to 3ccs</td>
<td>120uL</td>
<td>4</td>
<td>120uL</td>
<td>200uL</td>
</tr>
<tr>
<td></td>
<td>3-5ccs</td>
<td>200uL</td>
<td>4</td>
<td>120uL</td>
<td>500uL</td>
</tr>
<tr>
<td></td>
<td>&gt; 5ccs</td>
<td>350uL</td>
<td>4</td>
<td>200uL</td>
<td>500uL</td>
</tr>
</tbody>
</table>

**4 aliquots of serum are required for HIMC. Volume size can be more or less (while staying within ranges above) depending on total serum volume harvested from whole blood.

**Flu Studies: Additional aliquots of serum may be required for other collaborators. Refer to Flu Distribution chart for those details and volume requirements.