## To procedures

## Banking Serum

The value of banking serum is immense – enabling retrospective disease investigations, applied research, and testing to facilitate animal movements. The following are a few basic tips in setting up a serum bank:

- If -20 freezers are used, make sure they don't have an automatic defrost cycle.
- If -70 freezers are used, make sure there is a plan posted on the freezer for how to respond to an alarm
- Have back-up generators or a CO2 tank back up for -70 freezers if possible.
- Have an alternate plan if the freezer and backups fail.
- Make sure nothing goes in the freezer that has not been properly logged.
- Make sure a copy of the logbook always stays with the freezer.
- Make sure cryovial labels are permanent, legible, and standardized.
- Use the same sized vials in grid boxes and racks for efficient space use and to facilitate retrieval and backfilling of spaces that become empty through use.
- If infrastructure problems (like frequent power outages) are a concern, consider spots of blood on Whatman FTA cards as your archive backup, if not your primary archive.

The following information should be included in the serum logbook:

- Date sample collected
- Elephant name
- ID #
- Sex Age
- Owner
- Volume of serum
- Quality of serum (clear, hemolyzed, slightly hemolyzed, very hemolyzed)
- Grid #
- Date out
- Recipient
- Purpose
- Comments