Fix for Life embalming and preservation procedures

Storage in tanks

1. Start F4L embalming procedure after rigor mortis has passed!
2. Spray whole body including skinfolds using a solvent resistant spray bottle filled with F4L-AMS*.
3. Bend and stretch limbs several times to enhance flexibility of the joints.
4. Prepare F4L embalming fluid by mixing following components:
   F4L-A: 80 ml per kg body
   F4L-B: 80 ml per kg body
   Formaldehyde 37%: 6-8 ml per kg body depending on desired suppleness.
   Always add formaldehyde 37% last. Mix well!
5. Make incision to locate carotid or femoral artery and place cannula(s). DO NOT open any veins to drain the blood. The blood in the body plays an essential role to maintain the lifelike colour of the tissue.
6. Connect perfusion vessel/pump and start perfusion. Slow (low-pressure) perfusion by gravity is recommended (water pressure: 50-100 cm).
7. After complete perfusion, leave body on the table for 24 hours at room temperature (min. binding time of formaldehyde). During this period, bend and stretch limbs several times to maintain flexibility.
8. Store body face down in tank filled with F4L immersion fluid**. Make sure the body is completely submerged. Immersion fluid volume should be at least 150% of body volume.

After 1-2 months immersion, the bodies can be used for surgical training and dissection courses. To revive and maintain blood color (blood color will slowly fade after exposure to air), it is recommended to place the bodies/prosections as soon as possible back in the immersion tank when not in use.

Storage in cold room

1. Start F4L embalming procedure after rigor mortis has passed!
2. Spray whole body including skinfolds using a solvent resistant spray bottle filled with F4L-AMS*.
3. Bend and stretch limbs several times to enhance flexibility of the joints.
4. Prepare F4L embalming fluid by mixing following components:
5. F4L-A: 40ml per kg body
   F4L-B: 40ml per kg body
   F4L-C: 80ml per kg body
   Formaldehyde 37%: 6-8 ml per kg body depending on desired suppleness.
   Always add components in the order listed by gentle stirring!
6. Make incision to locate carotid or femoral artery and place cannula(s). DO NOT open any veins to drain the blood. The blood in the body plays an essential role to maintain the lifelike colour of the tissue.
7. Connect perfusion vessel/pump and start perfusion. Slow (low-pressure) perfusion by gravity is recommended (water pressure: 50-100 cm).
8. After complete perfusion, leave body on the table for 24 hours at room temperature (min. binding time of formaldehyde). During this period, bend and stretch limbs several times to maintain flexibility.
9. Place in cold room. Use plastic sheet or body-bag to prevent desiccation.

Storage in freezer

1. Start F4L embalming procedure after rigor mortis has passed!
2. Spray whole body including skinfolds using a solvent resistant spray bottle filled with F4L-AMS*.
3. Bend and stretch limbs several times to enhance flexibility of the joints.
4. Prepare F4L embalming fluid by mixing following components:
   F4L-A: 40ml per kg body
   F4L-B: 40ml per kg body
   F4L-C: 80ml per kg body
   Always add components in the order listed by gentle stirring!
5. Make incision to locate carotid or femoral artery and place cannula(s). DO NOT open any veins to drain the blood. The blood in the body plays an essential role to maintain the lifelike colour of the tissue.
6. Connect perfusion vessel/pump and start perfusion. Slow (low-pressure) perfusion by gravity is recommended (water pressure: 50-100 cm).
7. After complete perfusion, place in freezer. Use plastic sheet or body-bag to prevent desiccation by freeze-drying

After thawing, the bodies can be used for a max. period of 14 days for surgical training courses.

Maintenance routine for immersion tanks (to maintain antimicrobial strength)**:**
Add monthly per 100 litres tank fluid:
250 ml F4L-ImmA
50 ml F4L-ImmB/CFC
Mix by circulating tank fluid with a barrel/container pump for a few minutes.
It is recommended to replace the tank fluid after being one year in use.

***Recipe F4L-AMS (ca. 1 liter)**
1 litre ethanol 50% or isopropanol 50%
30 ml F4L-ImmB/CFC
Mix and pour into solvent-resistant spray bottle.

****Recipe tank fluid (ca. 100 liters):**
90 litres of water
10 litres F4L-ImmA
1 litre F4L-ImmB/CFC
Mix well by stirrer motor or barrel/container pump.

Important!

When the bodies are in use for several days during a dissection or surgical course, it is recommended to locally spray the bodies with F4L-AMS to inhibit microbial growth.

To prevent desiccation overnight, the bodies should be covered with a cotton sheet/towel soaked in a bucket with F4L-AMS. Over this cover a plastic sheet is placed. In case of courses that last longer than one week, it is recommended to re-immerse the sheets once a week.