# Fix for Life embalming and preservation procedures

- 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; e.g. body weight 60 kg = 4.8 litres
  - F4L-B: 80 ml per kg body; e.g. body weight 60 kg = 4.8 litres
  - Formaldehyde 37%: 5-8 ml per kg body; e.g. body weight 60 kg = 300-480 ml formaldehyde 37%. For maximum suppleness and flexibility use 5 ml/kg; for more firmness 8 ml/kg. 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.

#### \*Recipe F4L-AMS spray (ca. 1 liter):

1 litre Ethanol 70% 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.

#### Maintenance routine for immersion tanks (to maintain antimicrobial strength):

Add monthly: 0.25 vol% F4L-ImmA (250 ml per 100 litres tank fluid) + 0.05 vol% F4L-ImmB/CFC (50 ml per 100 liter tank fluid). Mix by circulating tank fluid with a barrel/container pump.

It is recommended to replace the tank fluid after being one year in use.

## Preparations for transport/storage in F4L body bag (made of laminated PE/PA):

- 1. Seal one end of the F4L body bag with a 40 inch impulse heat sealer which can be purchased at: https://www.allpax.de/product\_info.php/info/p62218\_Tischschwei-geraet-1000-mm.html
- 2. Check if seal is tight. In case of doubt, double seal. Create a double-folded 6-inch collar at the other (open) end of the bag to keep the sealing area dry and clean.
- 3. Pull the bag around the F4L embalmed body and make sure that the inside of the collar stays dry and clean. The use of a motorized pulley to partially elevate the body will ergonomically enhance the procedure.
- 4. Slightly elevate the tray table (ca. 4 inch) at the side of the open bag end to put the body in a slope position.
- 5. Fill the bag through the open end with 5 litre of F4L-AMS\*.
- 6. After filling, unfold the collar and seal the end of the bag with a 40-inch impulse heat sealer. Check if seal is tight. In case of doubt, make a double seal. Put the tray table back in the original horizontal position.

### 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 soaked in a bucket with a mixture of 30 ml F4L-ImmB/CFC per litre Ethanol 50%. 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.
- 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. Alternatively, the bodies can be stored in F4L body bags.

