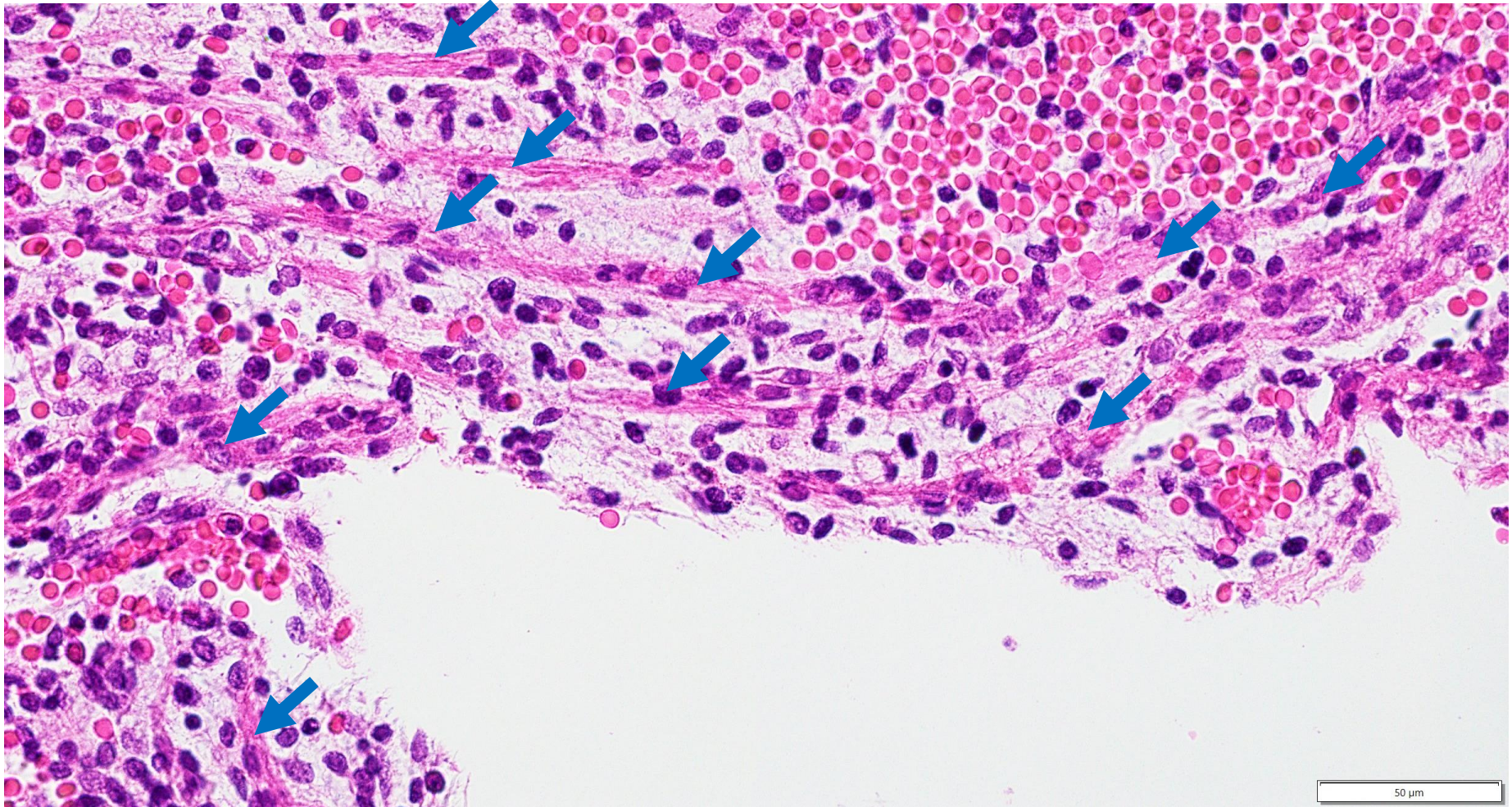
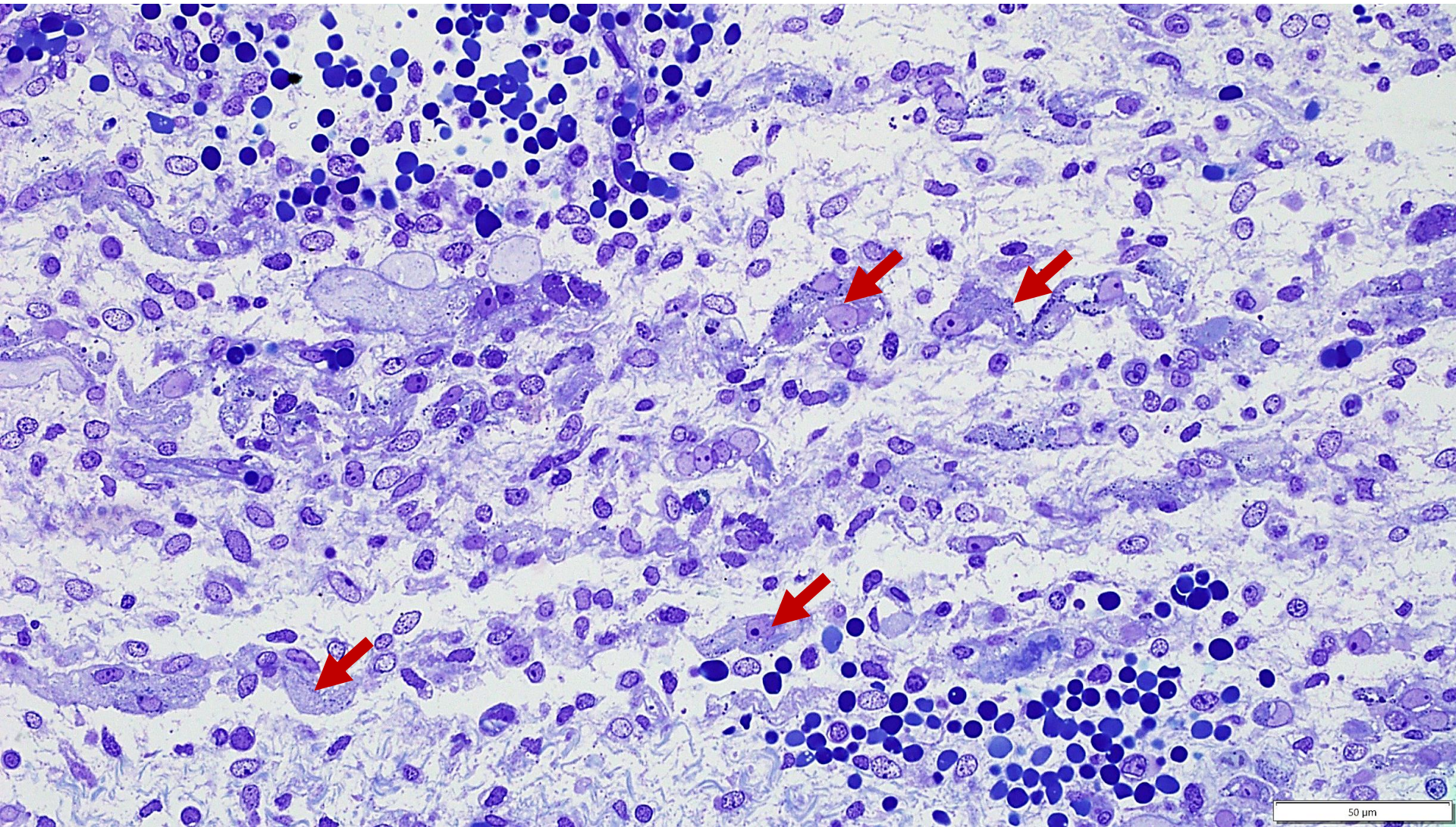


Finding nemaline rods in a
muscle biopsy of 15
week fetus requires targeted
electron microscopic examination.

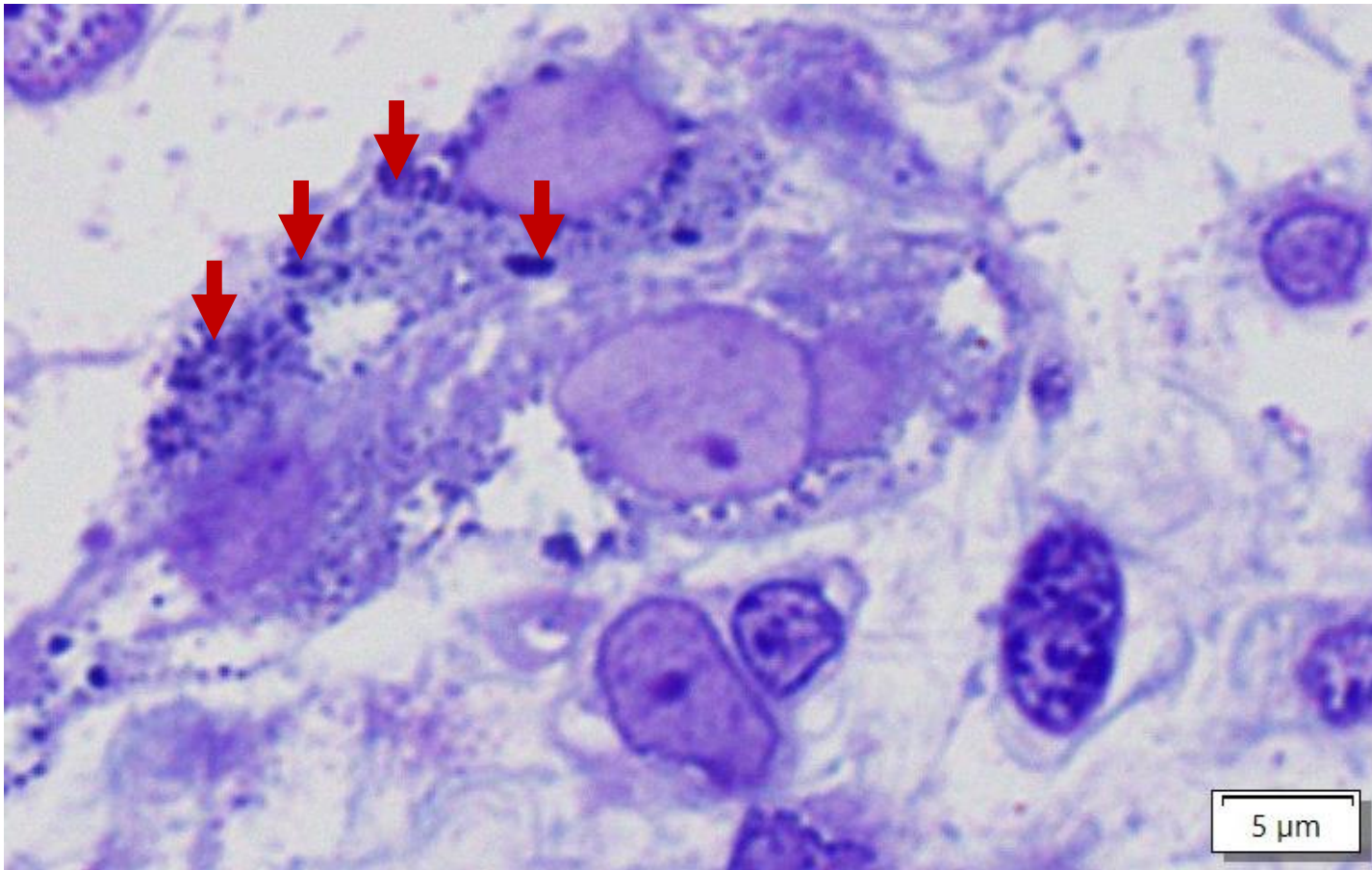
Dr Amanda Charlton
LabPlus, Auckland.



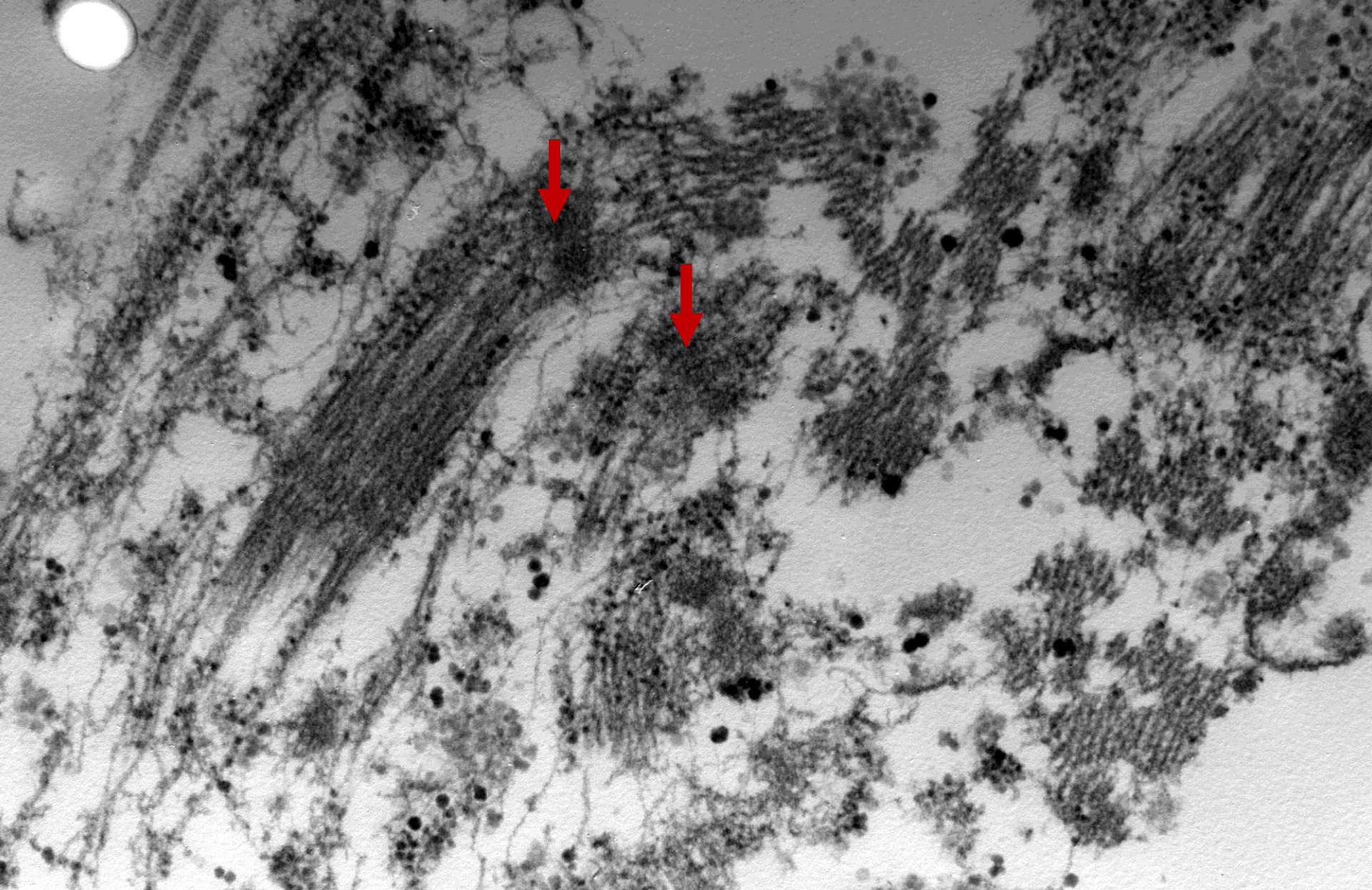
Fetal skeletal muscle cells (blue arrows) with internal myofibrils, separated by loose mesenchyme. Myocytes have central and peripheral nuclei. Formalin fixed paraffin embedded tissue.



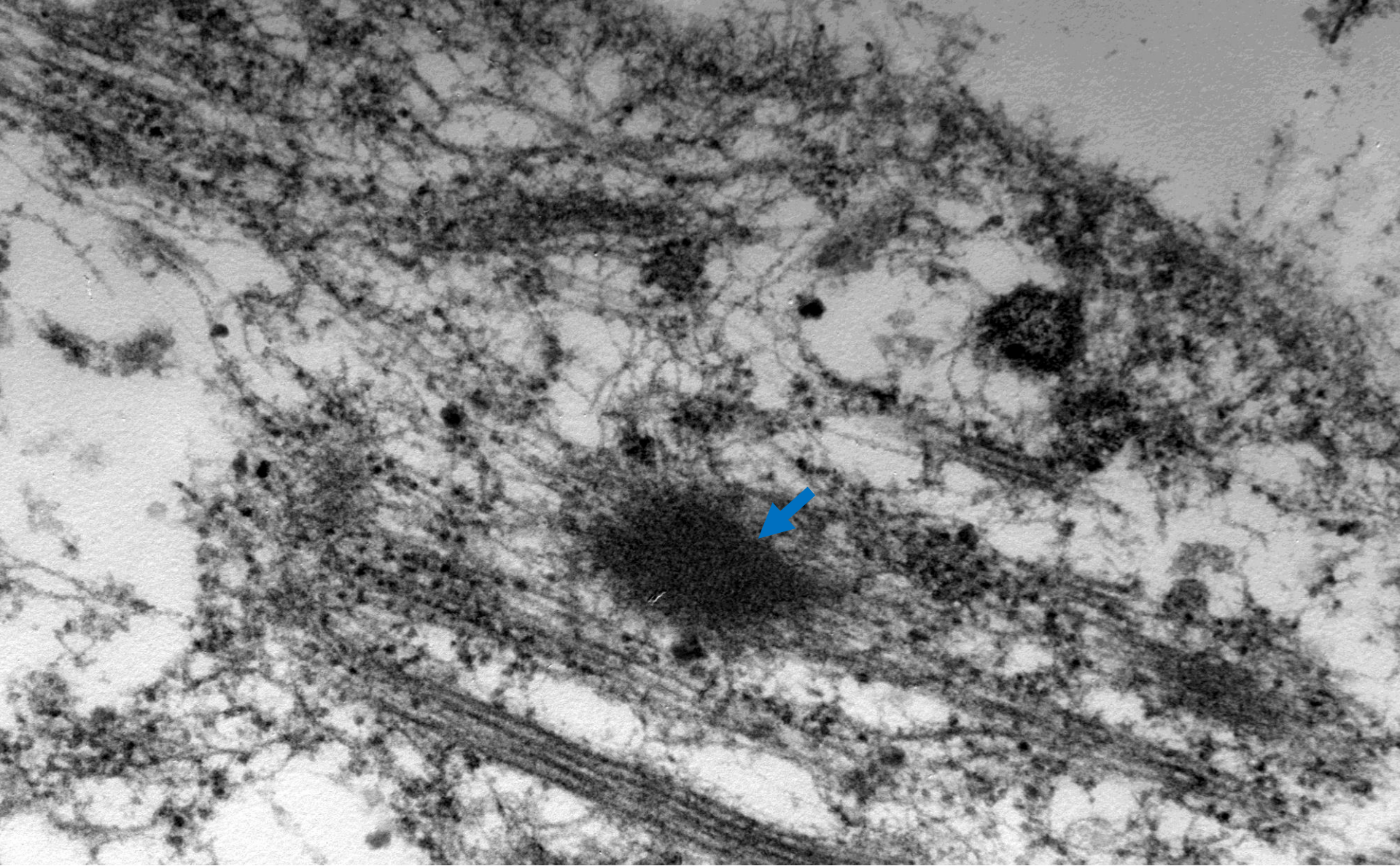
Fetal skeletal muscle cells (red arrows) separated by loose mesenchyme. Myocytes have central and peripheral nuclei. Reprocessed paraffin embedded tissue. Toluidine blue stained resin section.



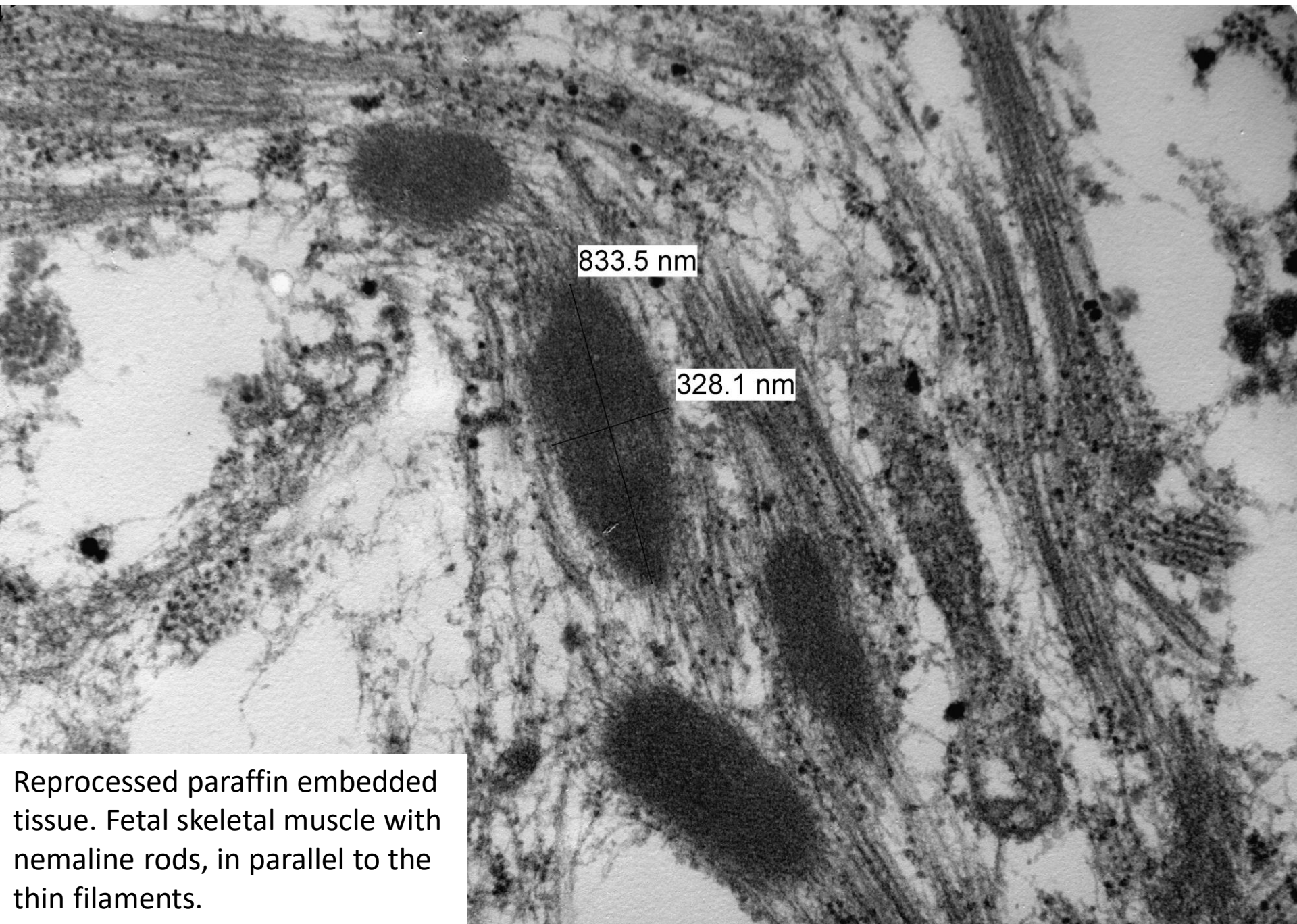
Fetal skeletal muscle cell. Examination under oil shows abundant dark staining oval and spherical bodies in the cytoplasm of myocytes. Reprocessed paraffin embedded tissue. Toluidine blue stained resin section. 100x objective oil lens plus digital zoom.



Reprocessed paraffin embedded tissue. Fetal skeletal muscle with thick and thin filaments and z bands (arrow) forming primitive sarcomeres.



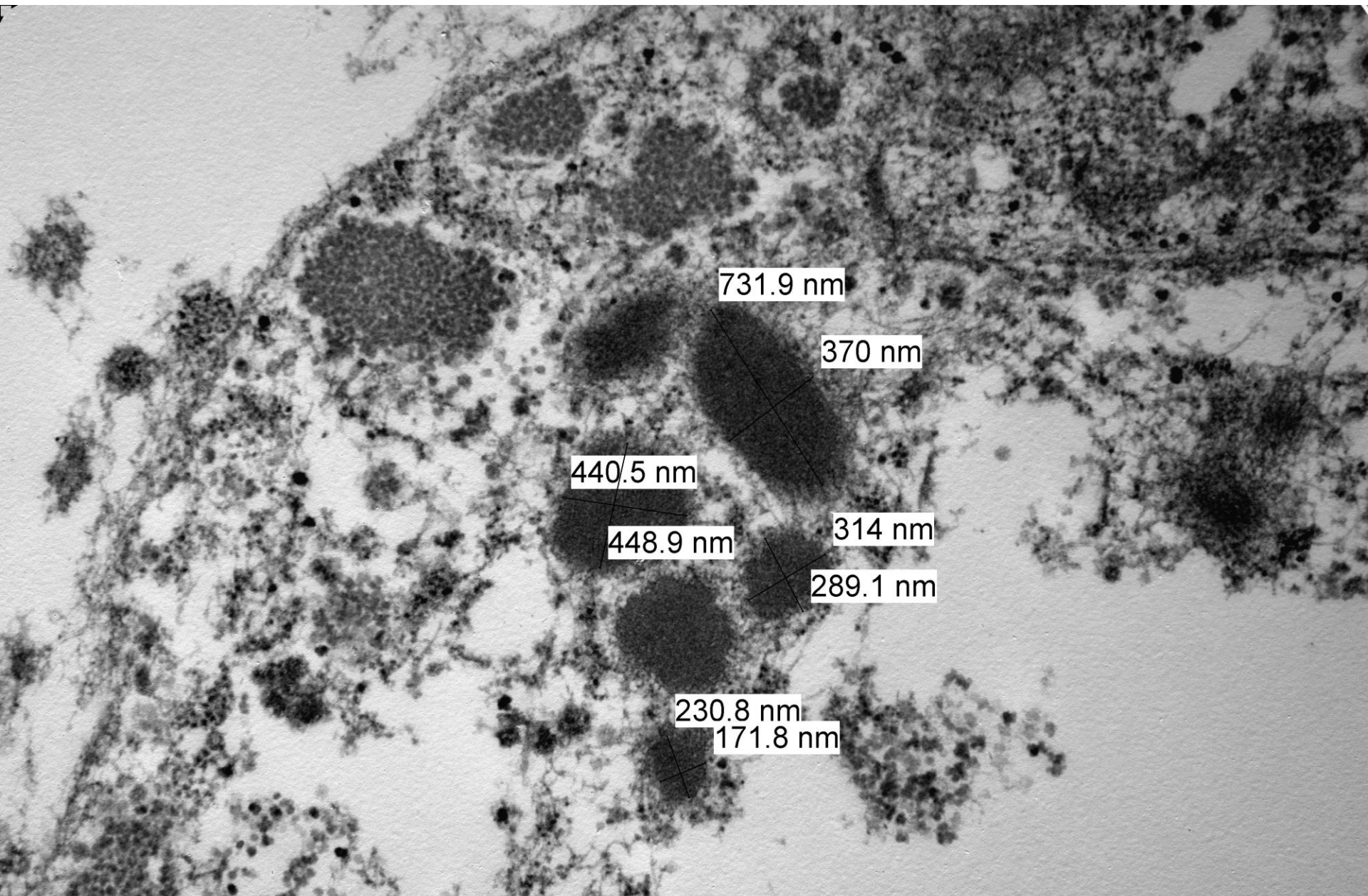
Electron micrograph of fetal skeletal muscle tissue. Fetal skeletal muscle with thick and thin filaments and accumulation of Z band material as a nemaline body. This is in structural continuity with the thin filaments, with periodic lines perpendicular and parallel to the long axis, resulting in a square net similar to the Z disc lattice.



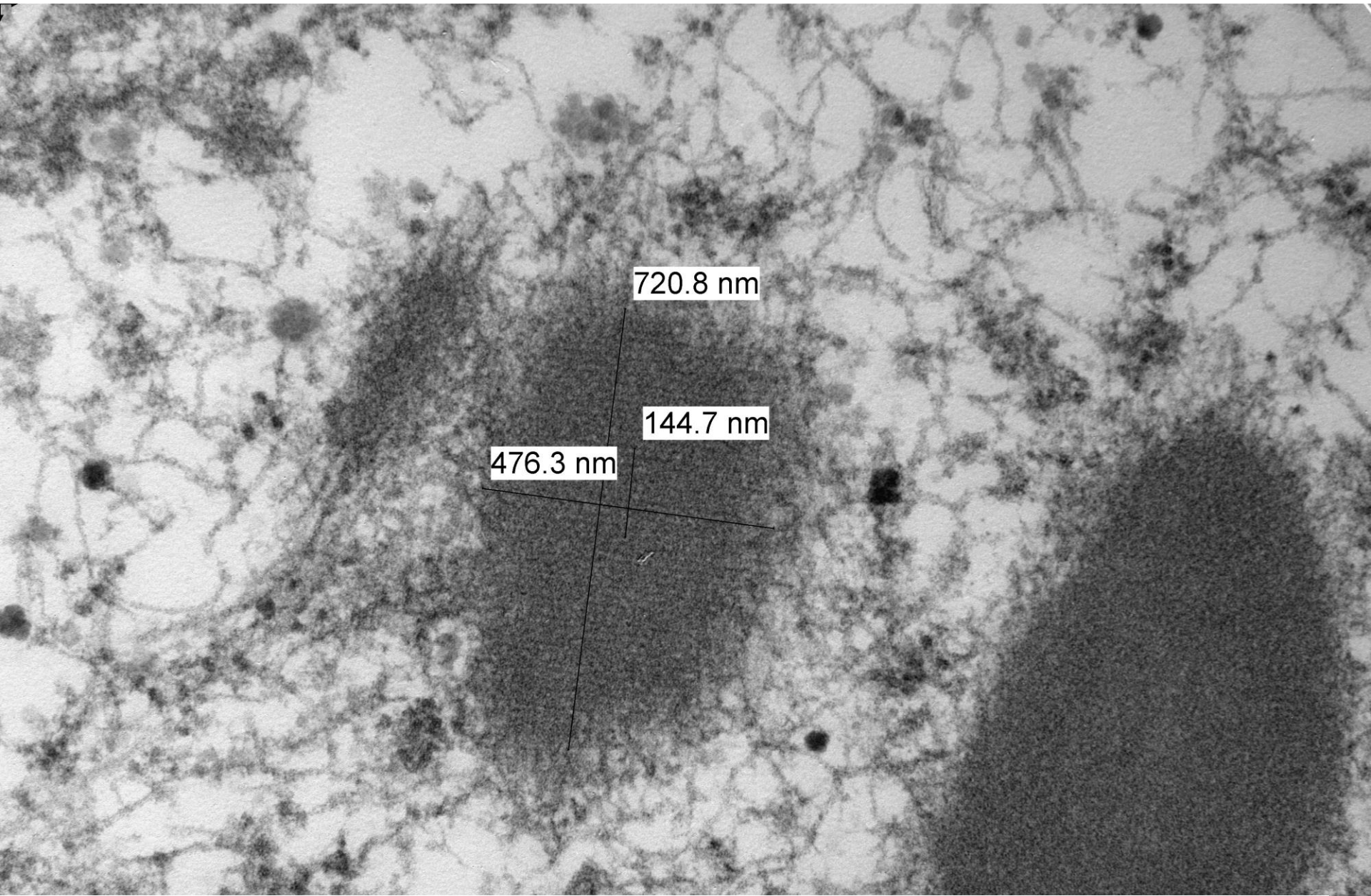
833.5 nm

328.1 nm

Reprocessed paraffin embedded tissue. Fetal skeletal muscle with nemaline rods, in parallel to the thin filaments.



Reprocessed paraffin embedded tissue. Fetal skeletal muscle with nemaline rods and nemaline bodies of different sizes and shapes.



Reprocessed paraffin embedded tissue. Nemaline rods showing periodic lines perpendicular and parallel to the long axis of the rods resulting in a square net similar to the Z disc lattice.