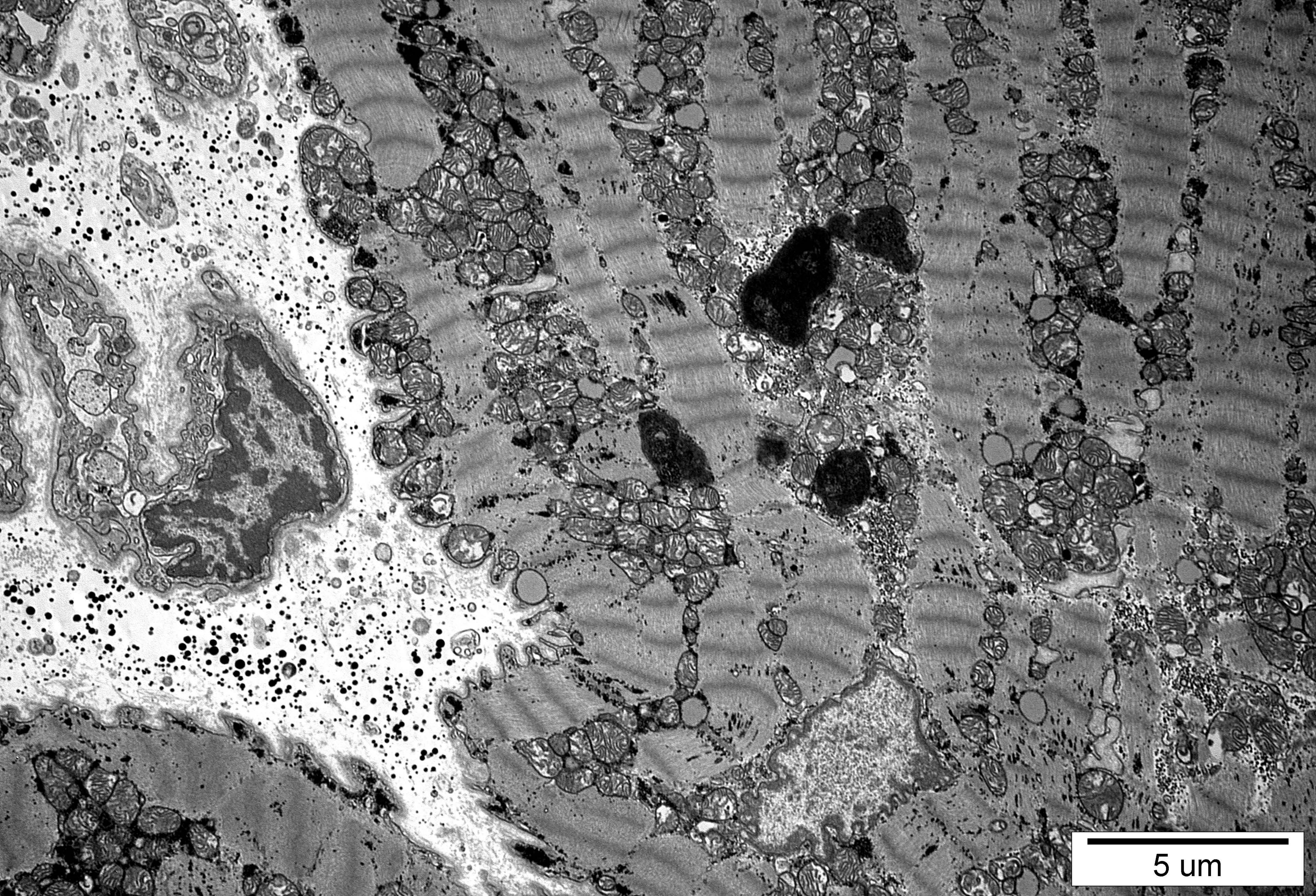
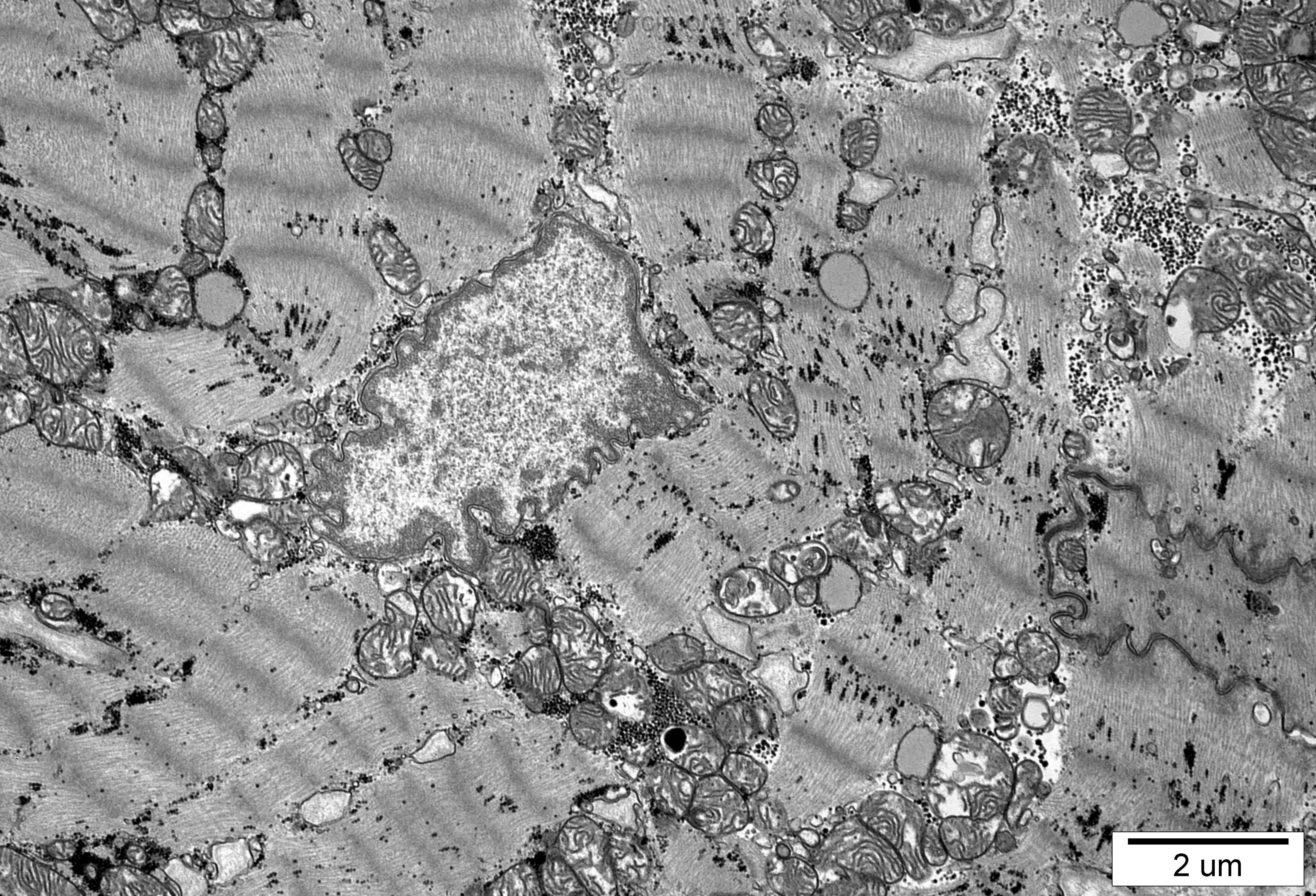


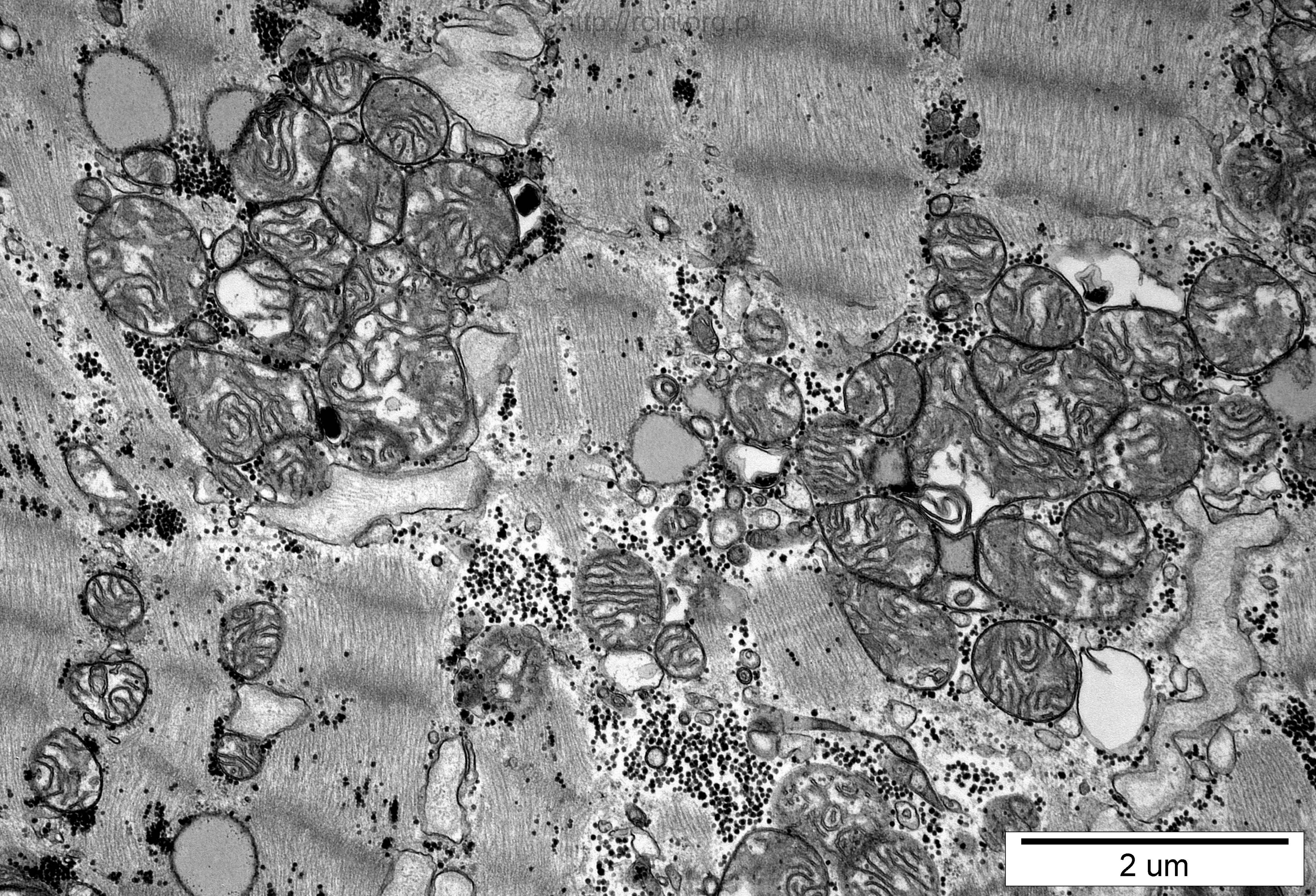
10 um



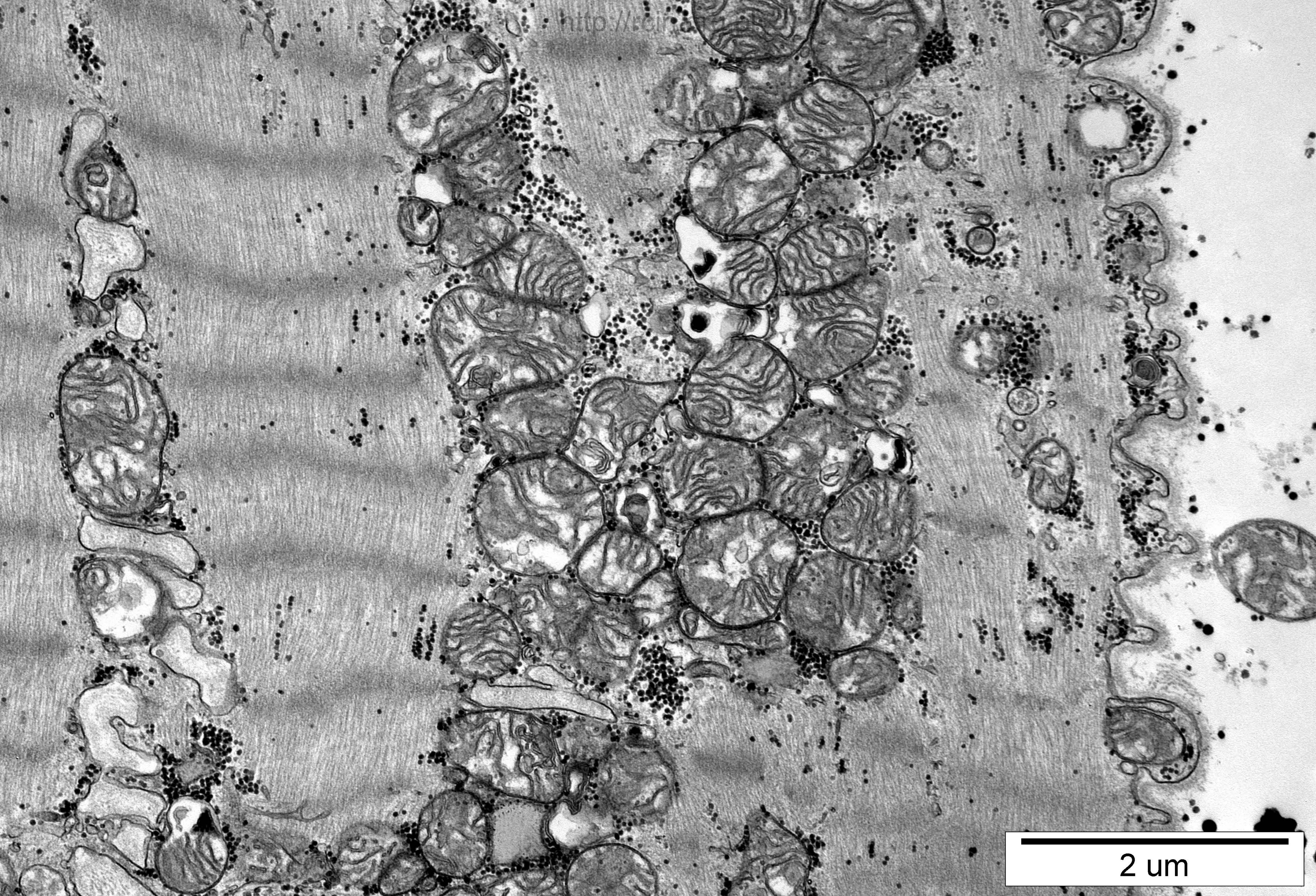
5 um



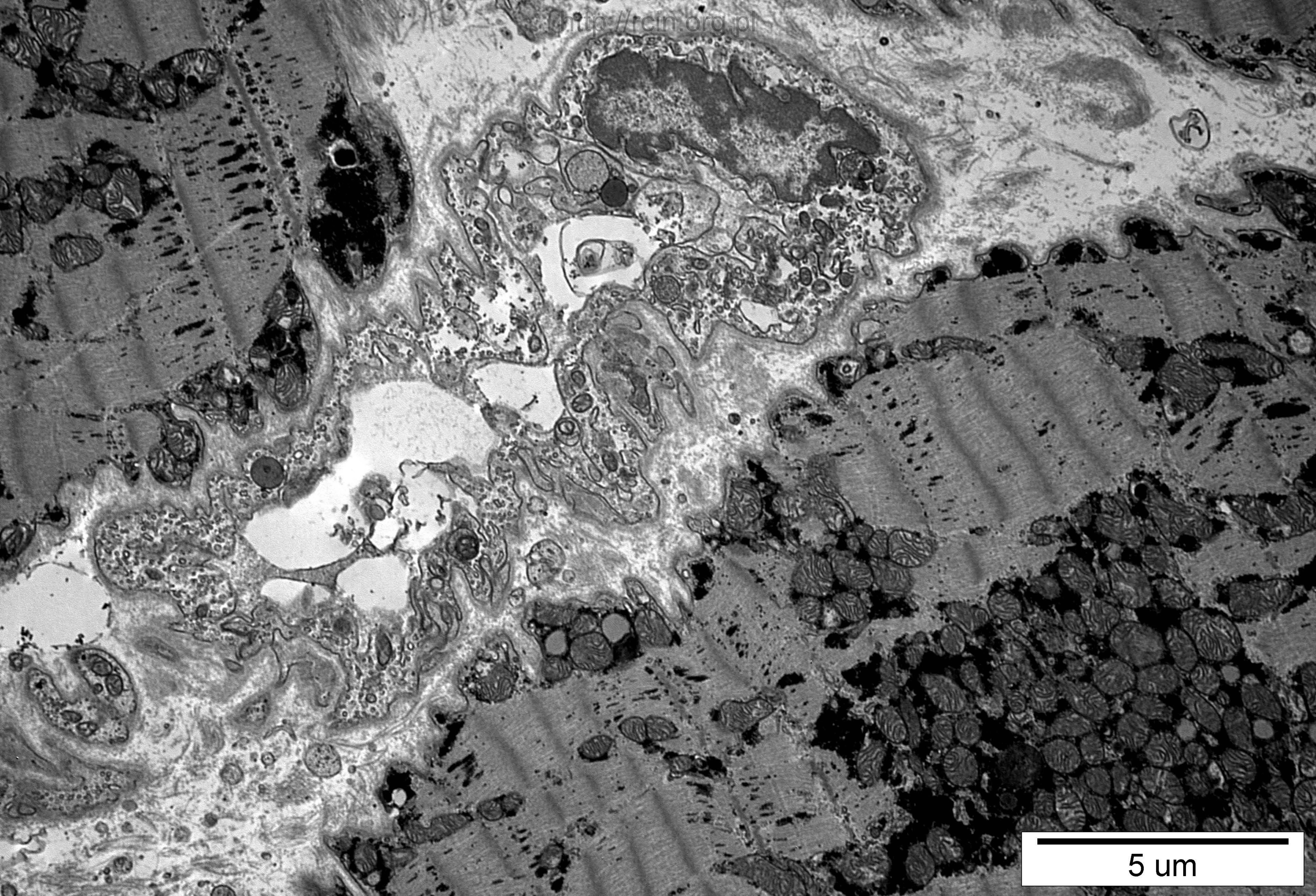
2 μm



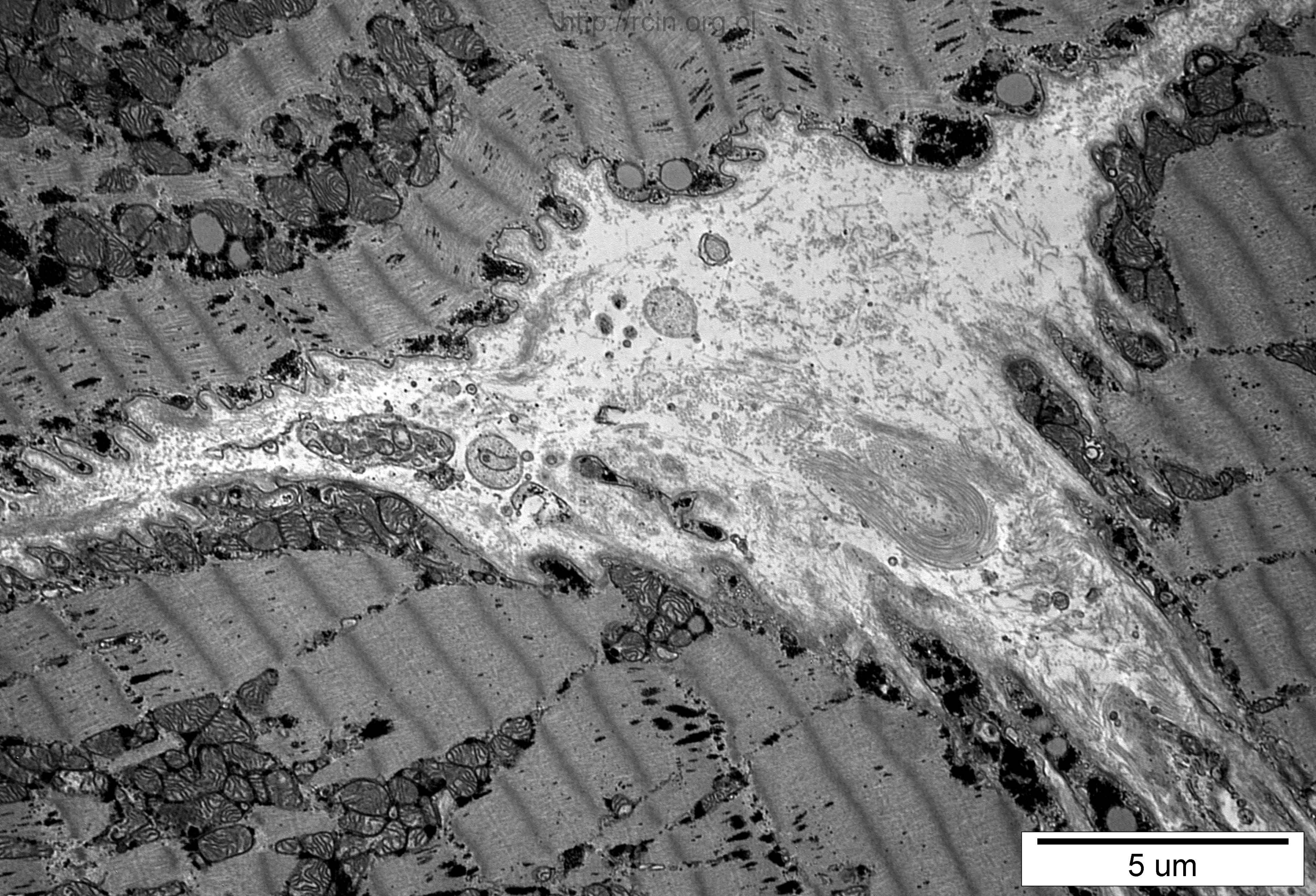
2 um



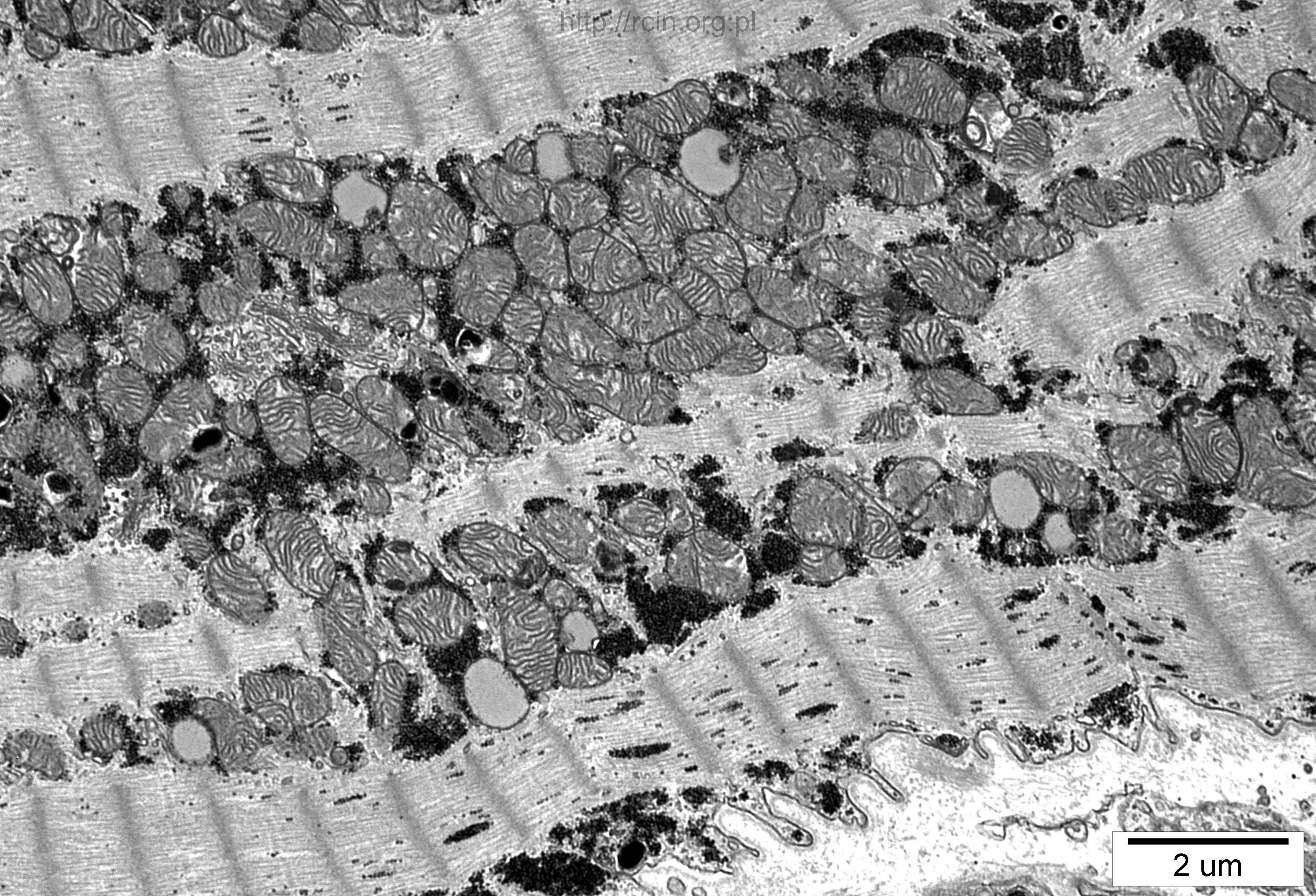
2 um



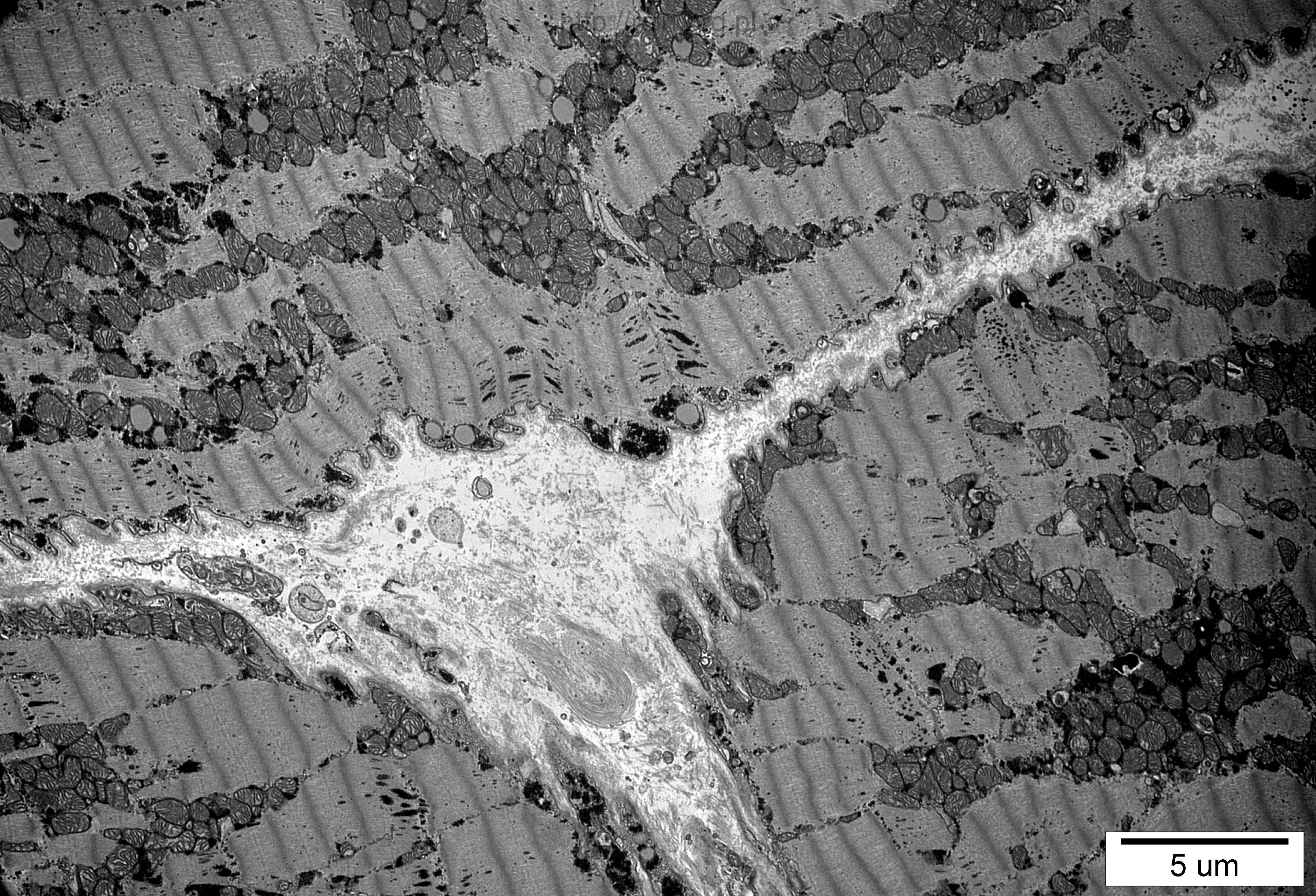
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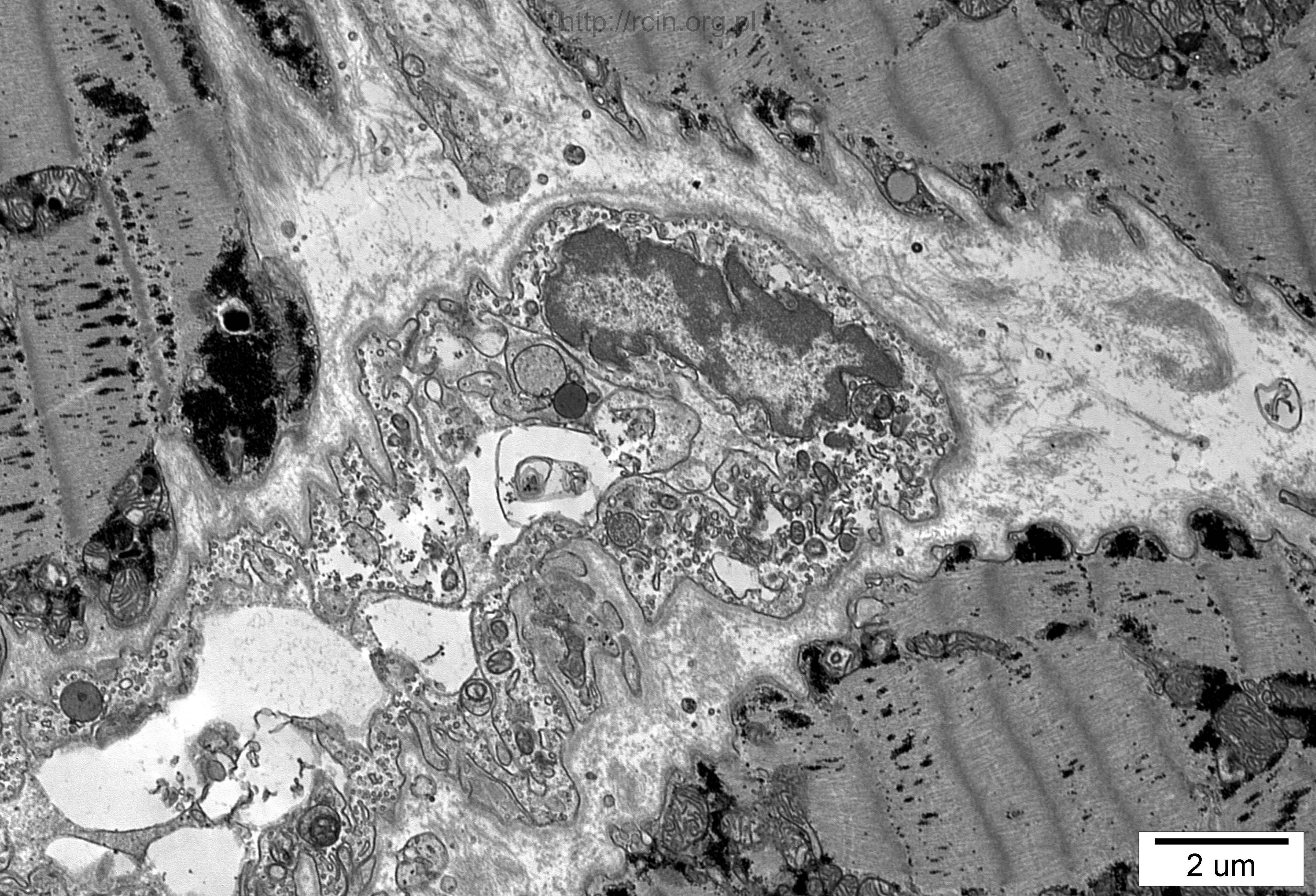
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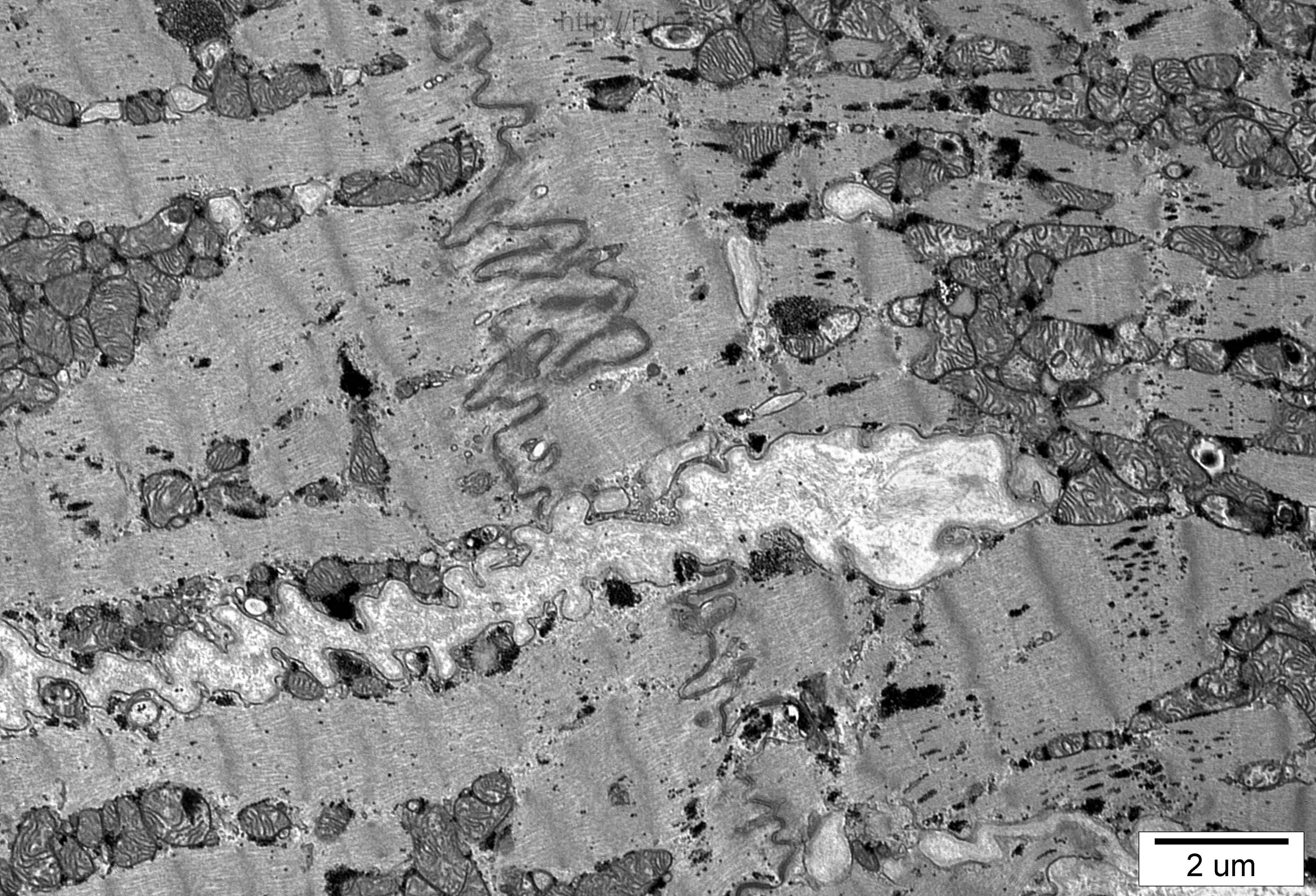
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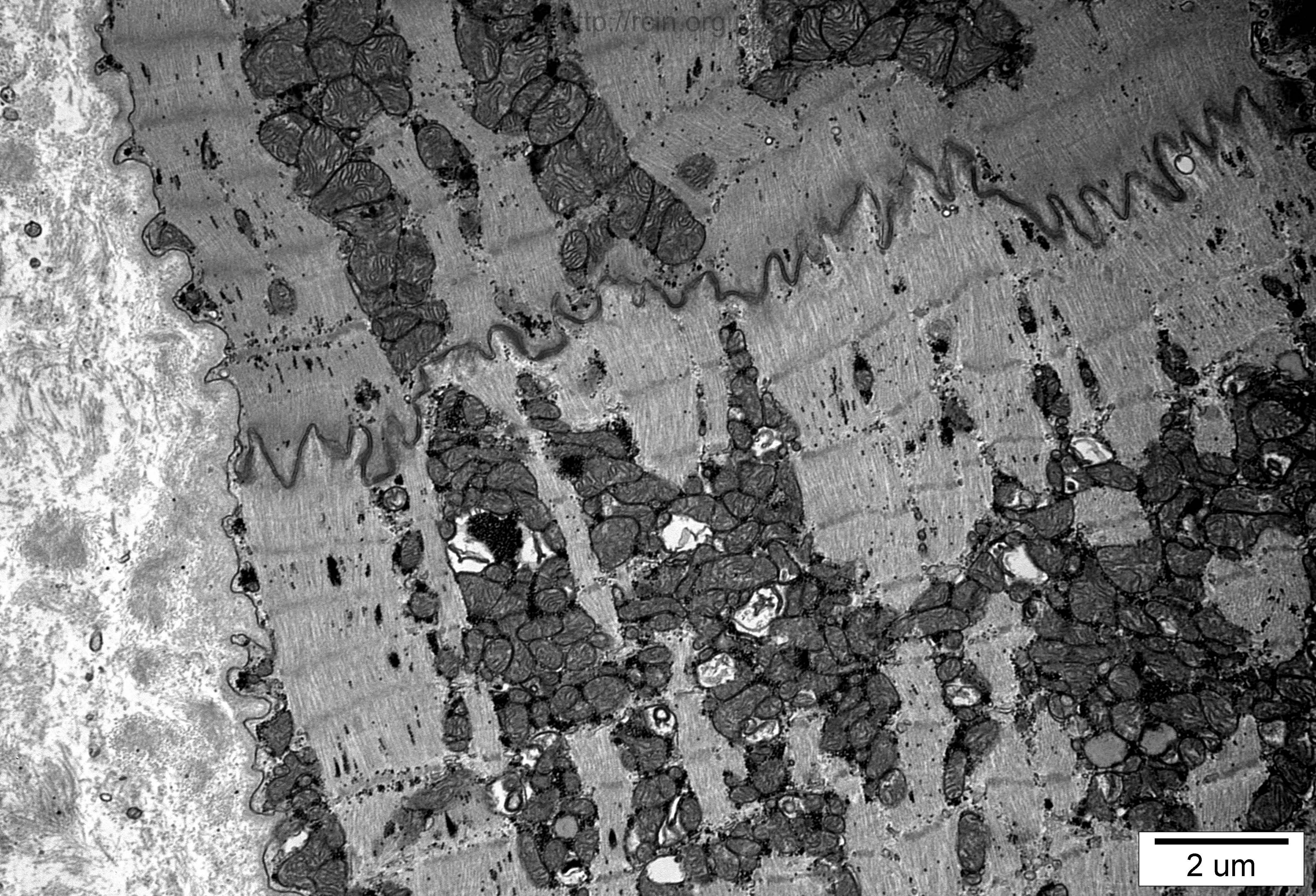
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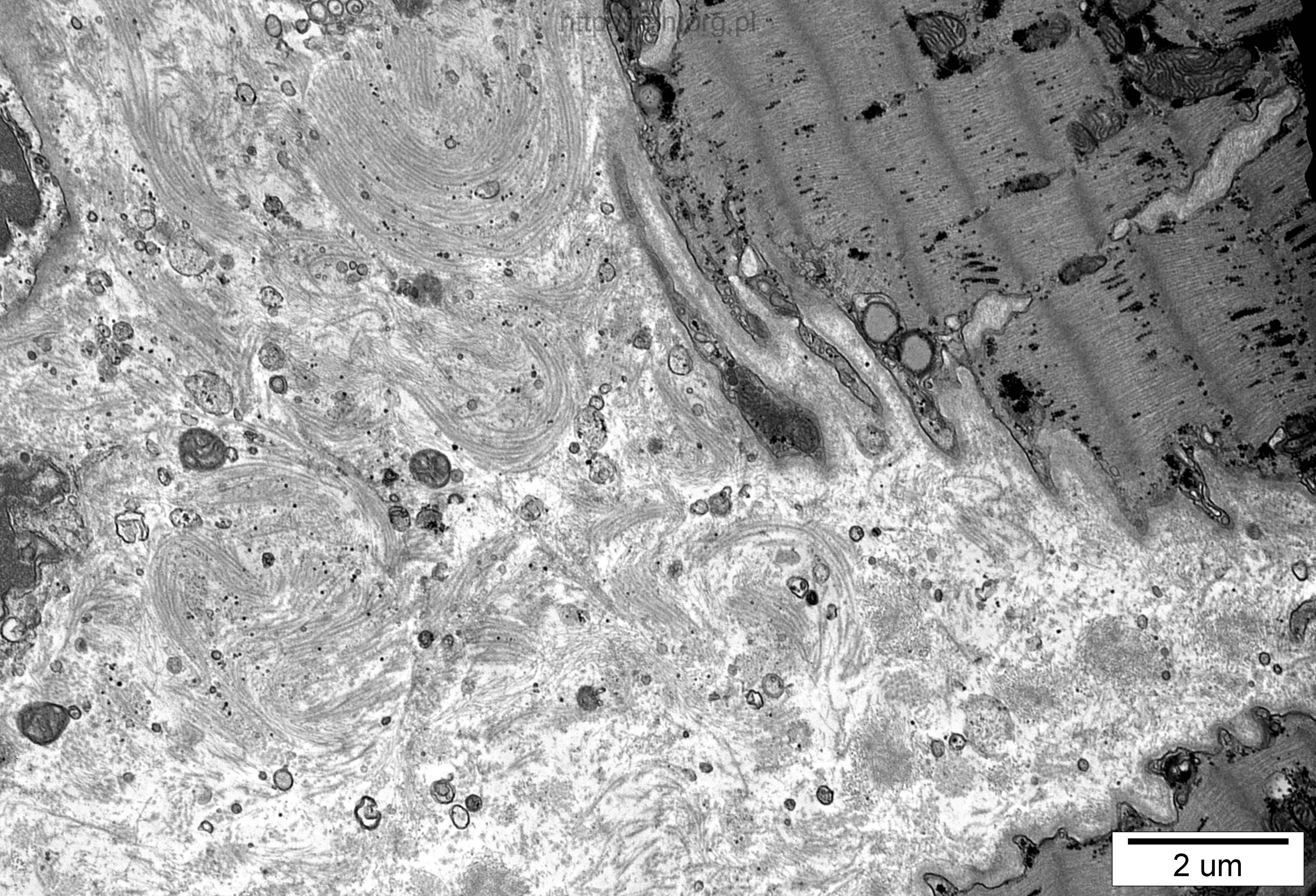
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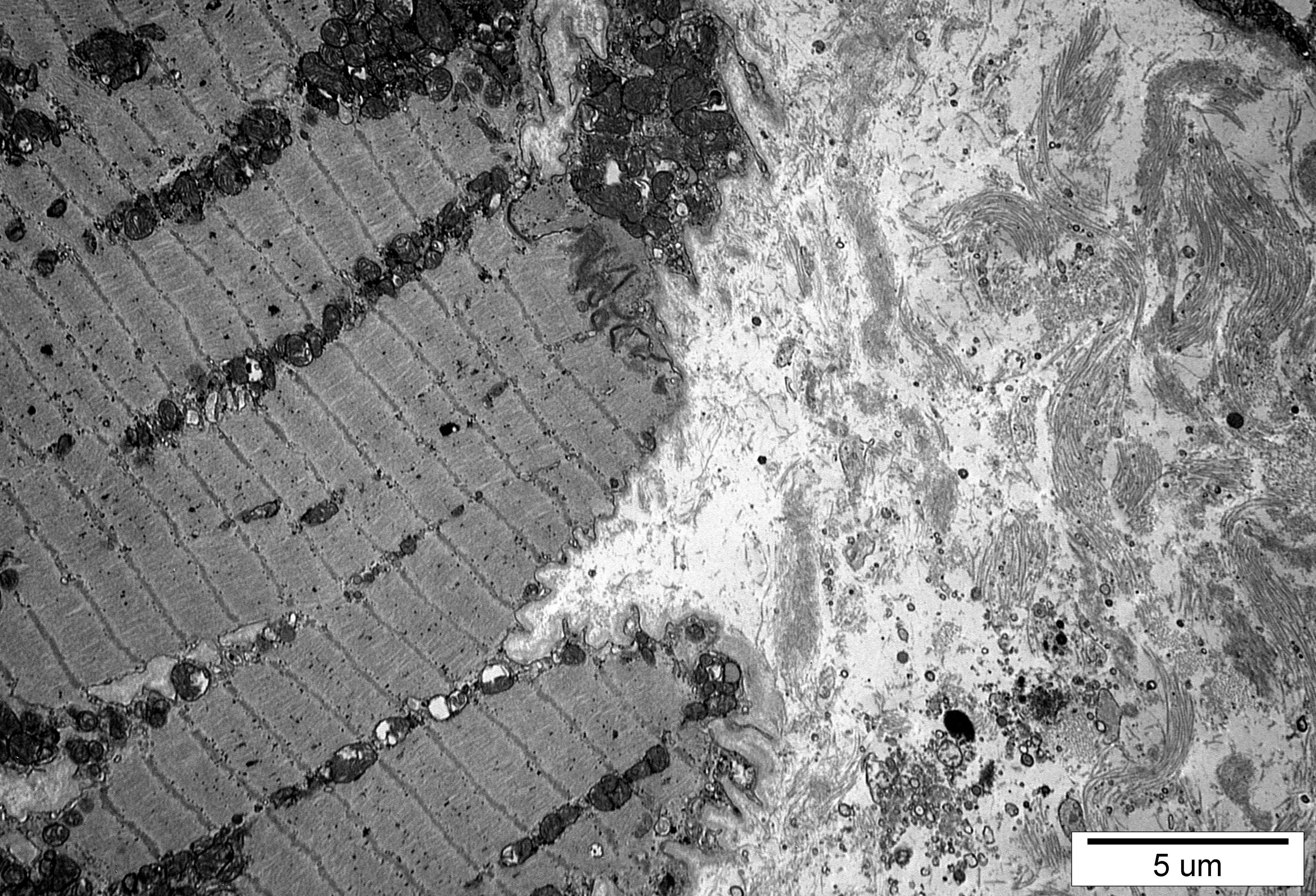
2 um



2 μm

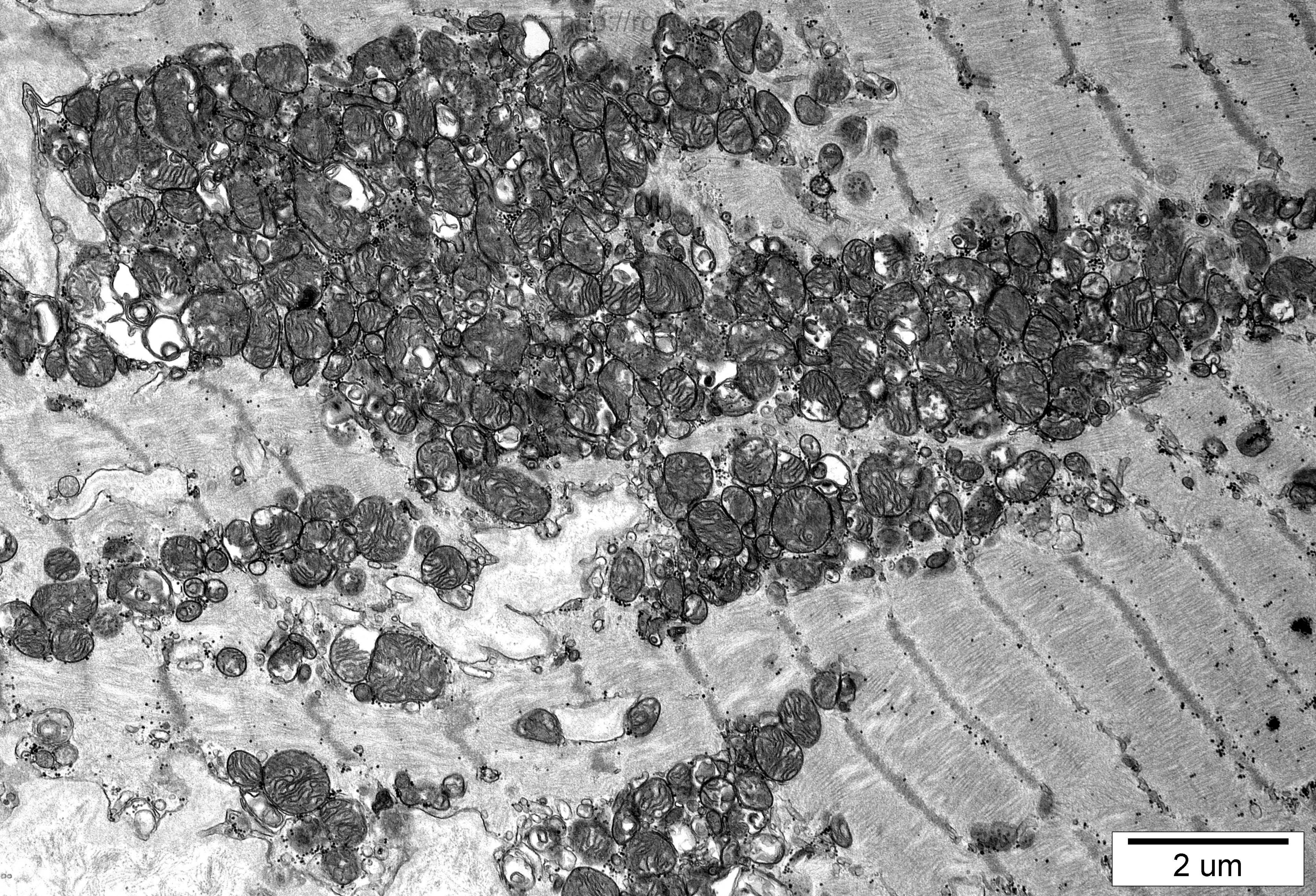


2 μm

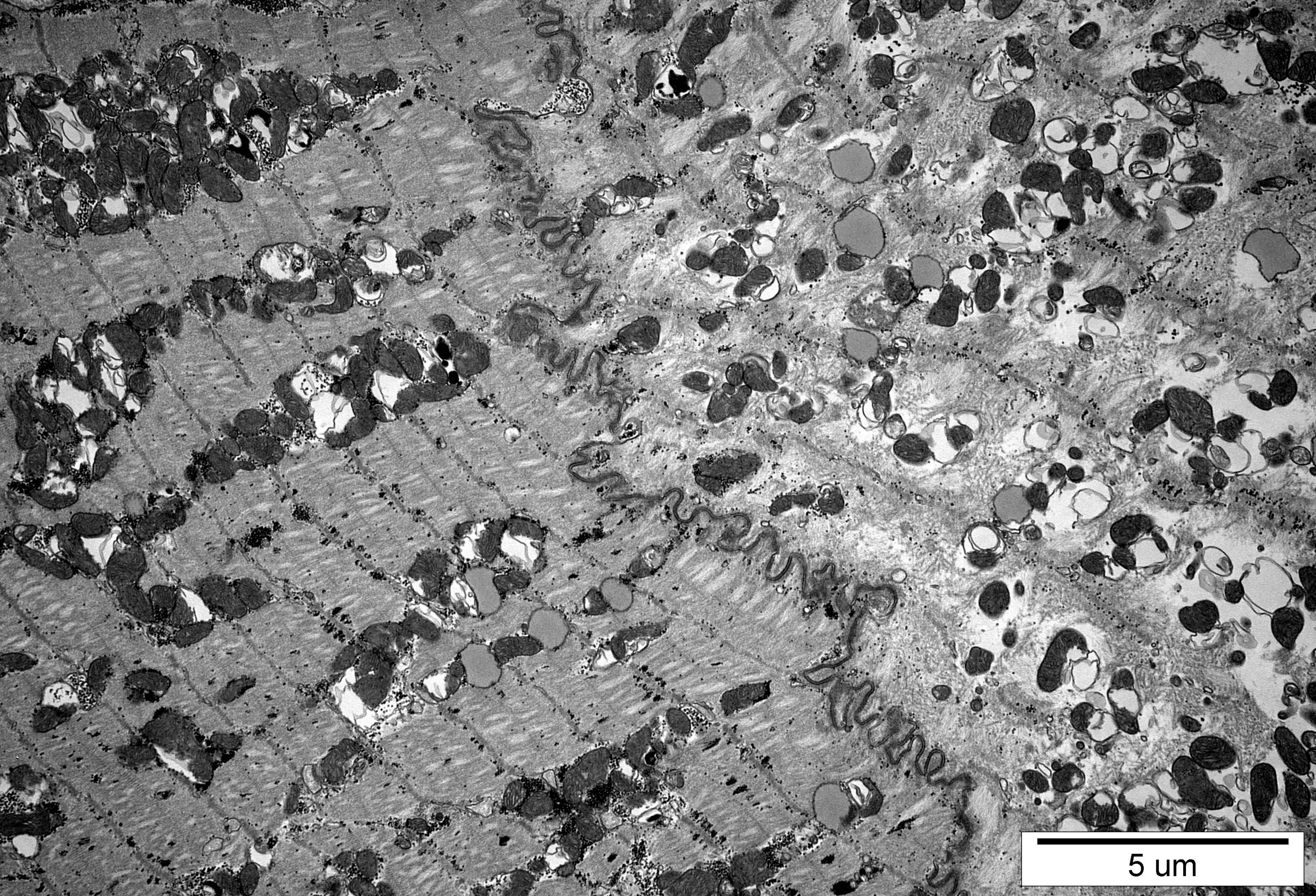


<http://www.biorxiv.org>

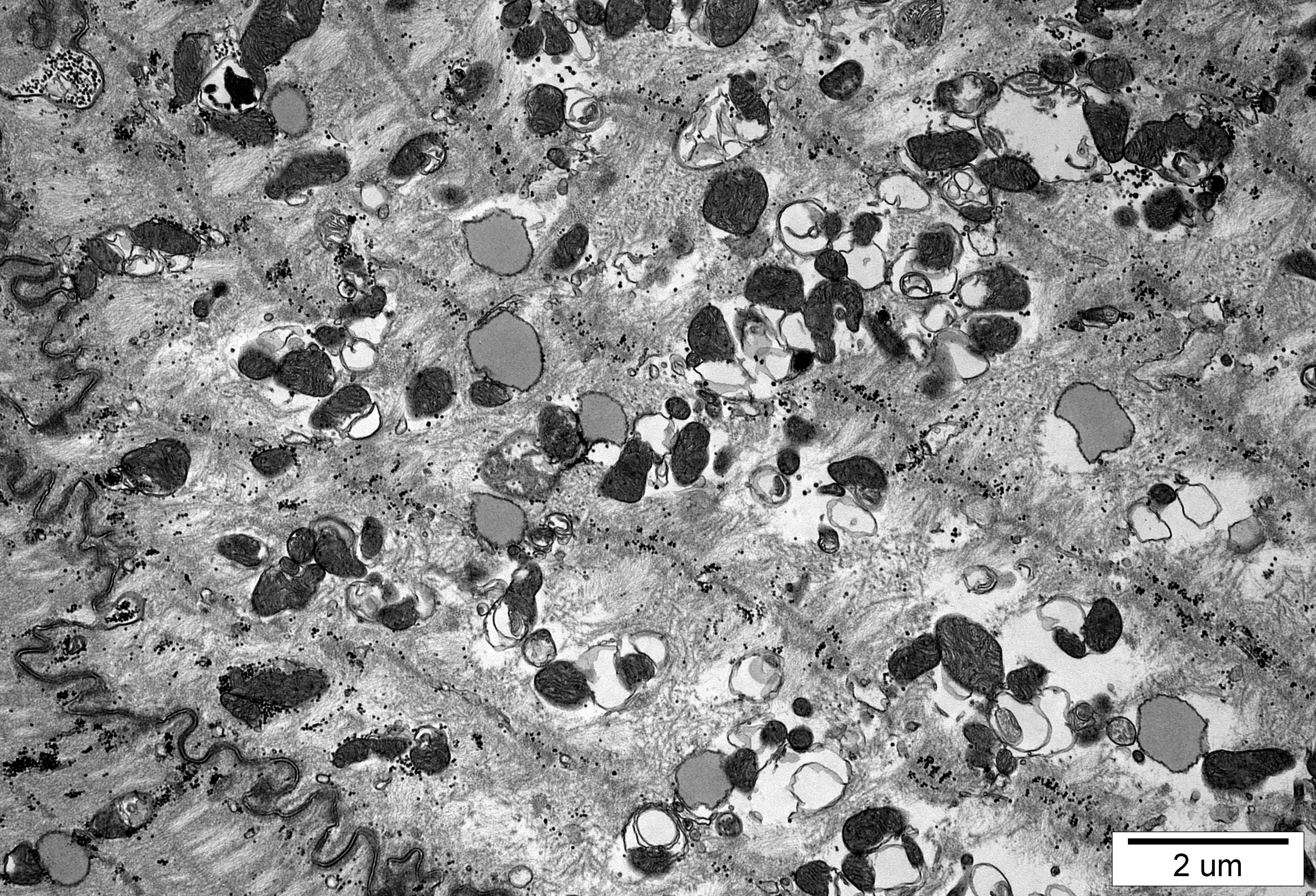
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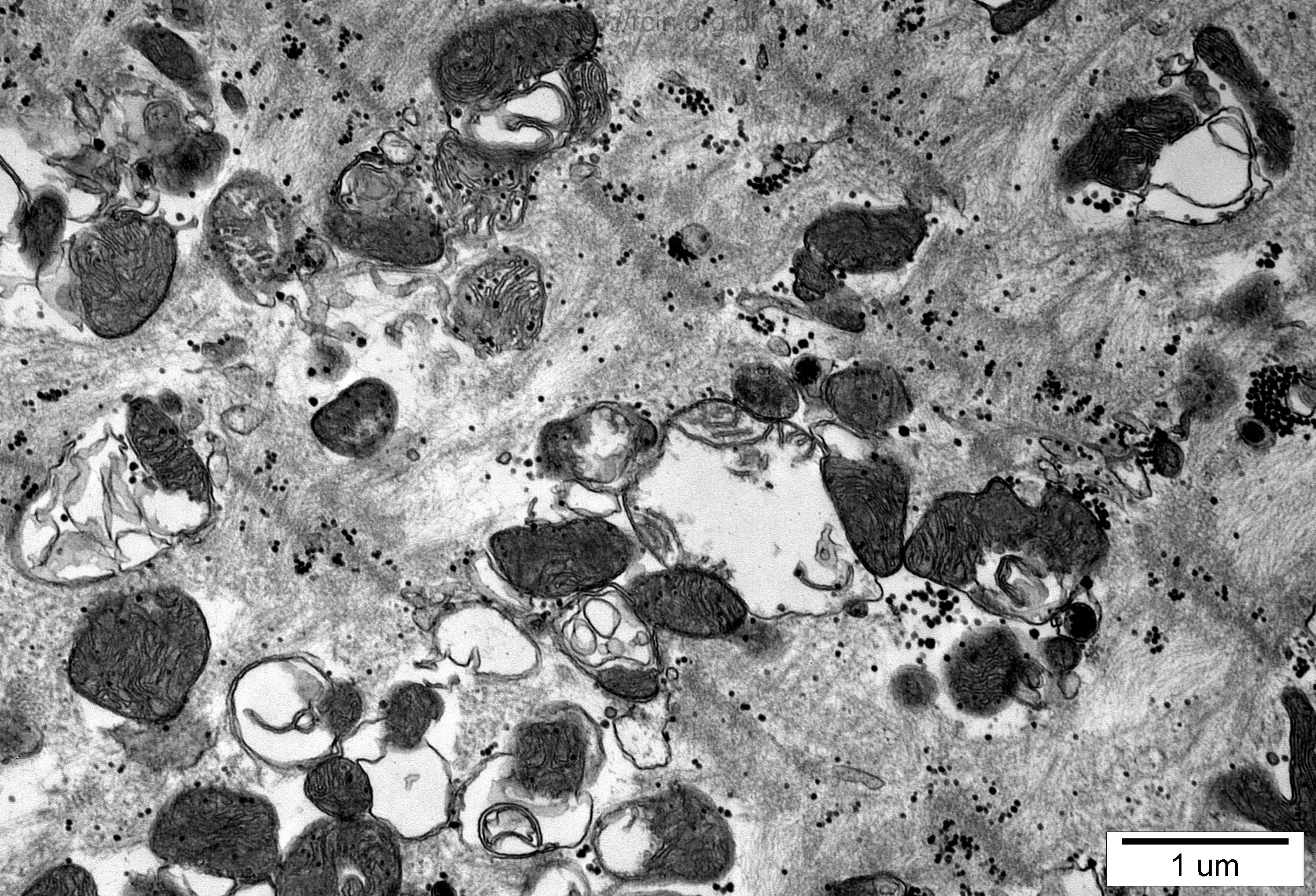
2 um



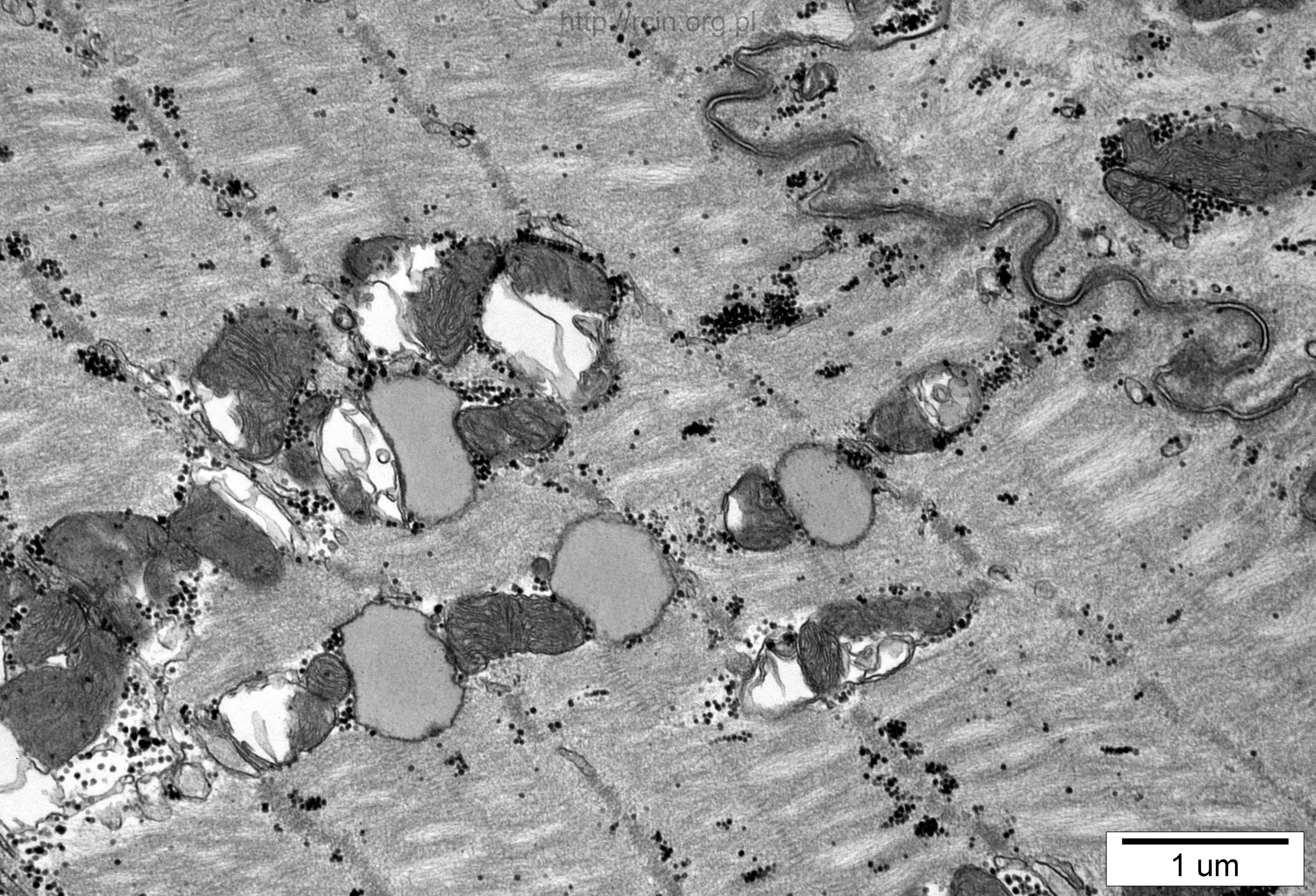
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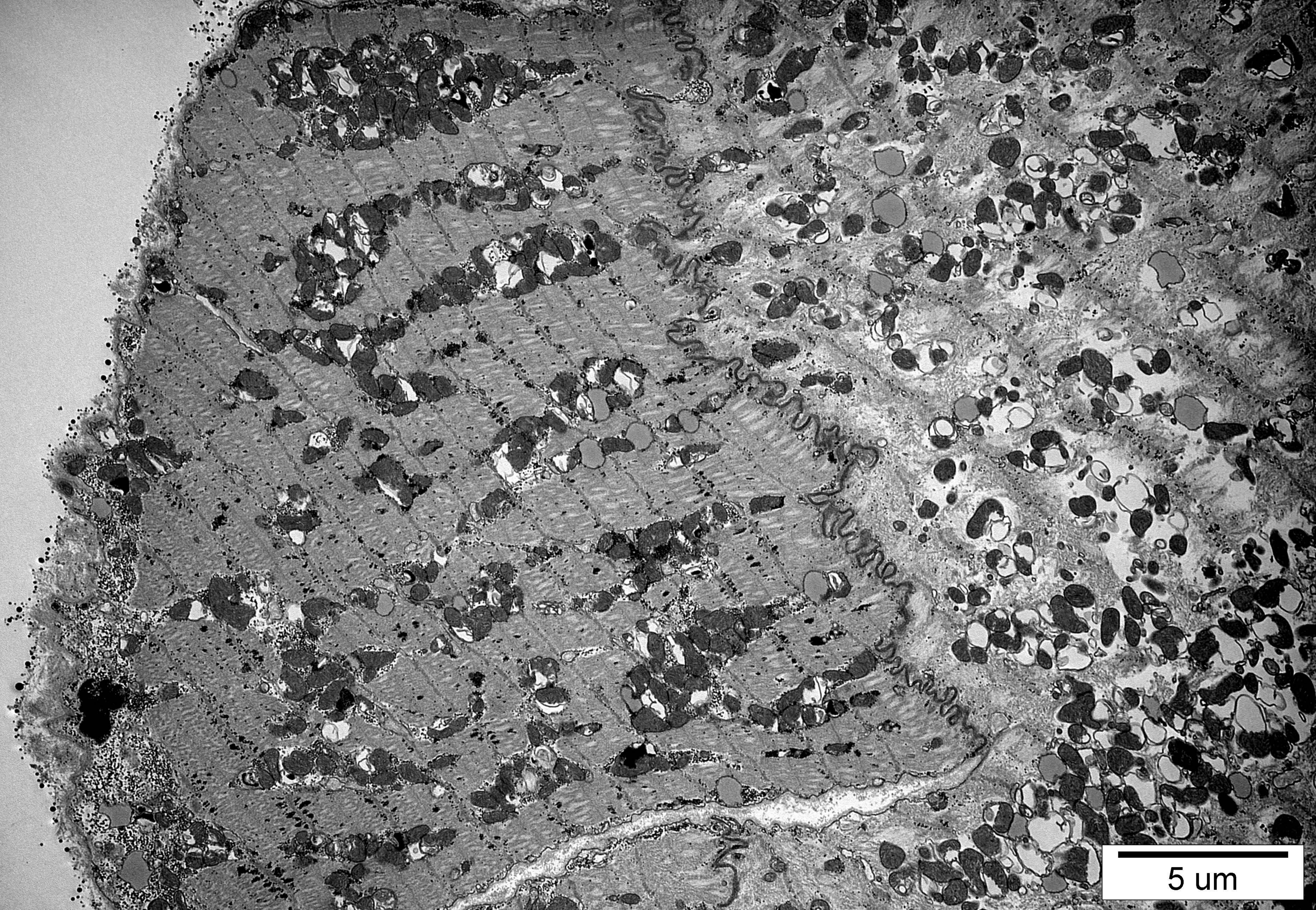
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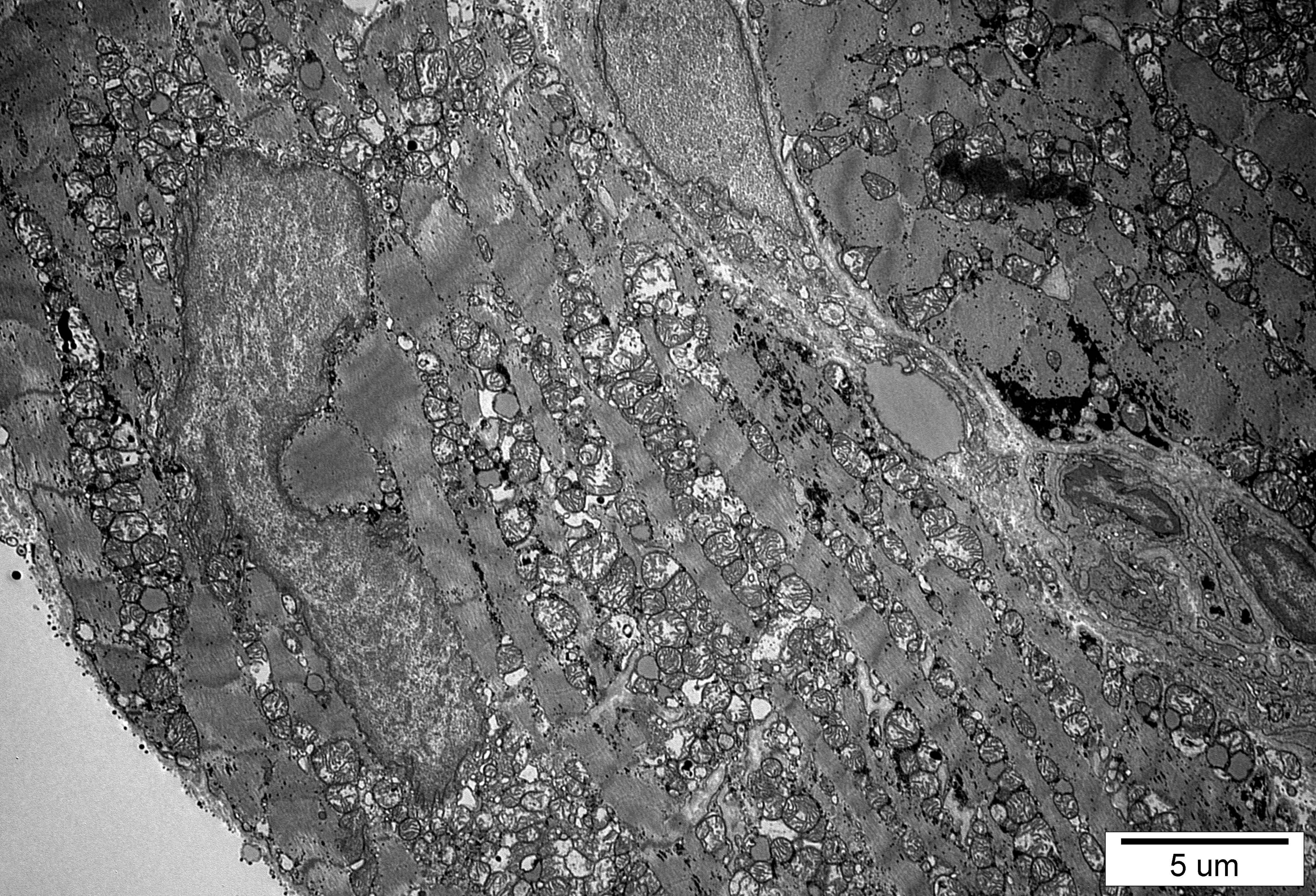
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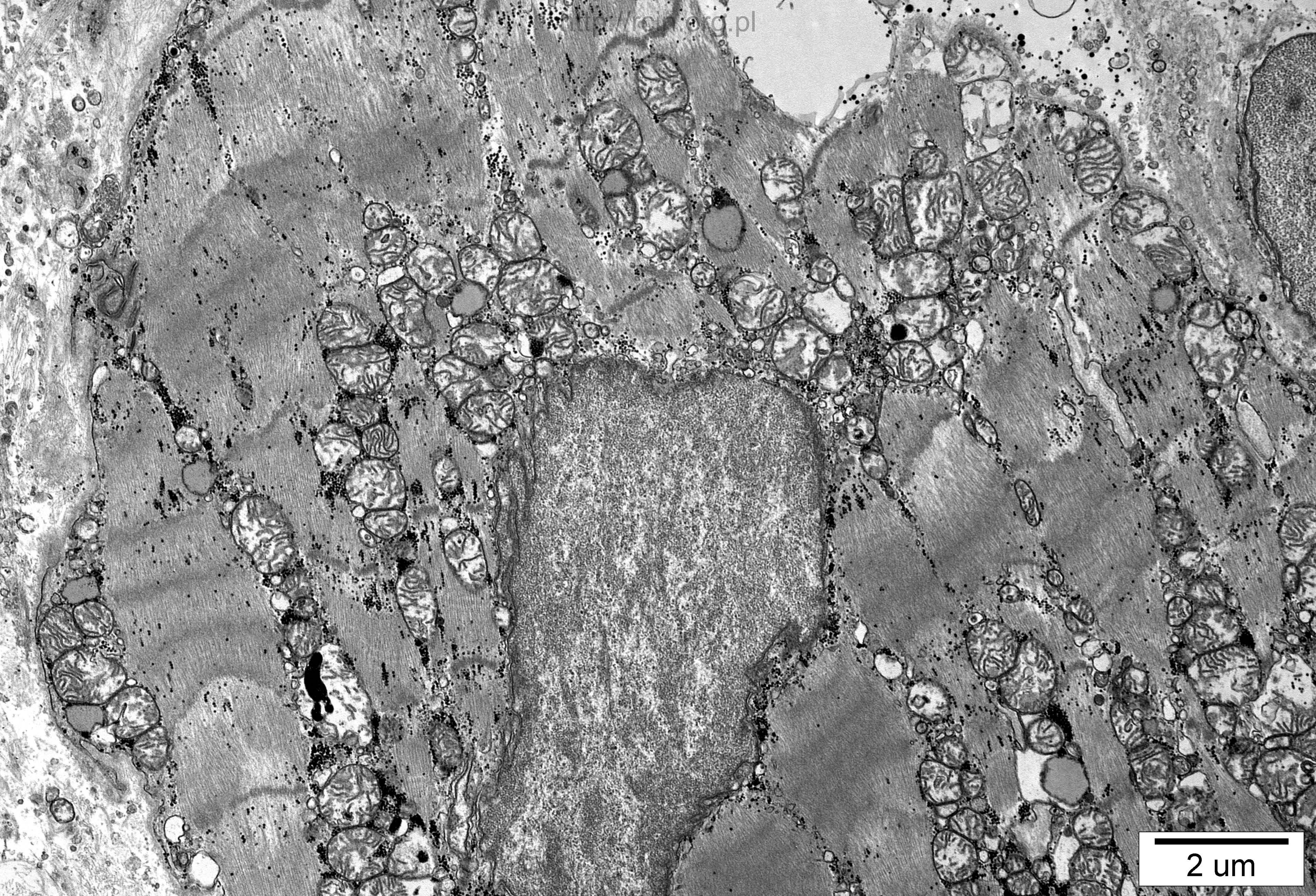
1 μm



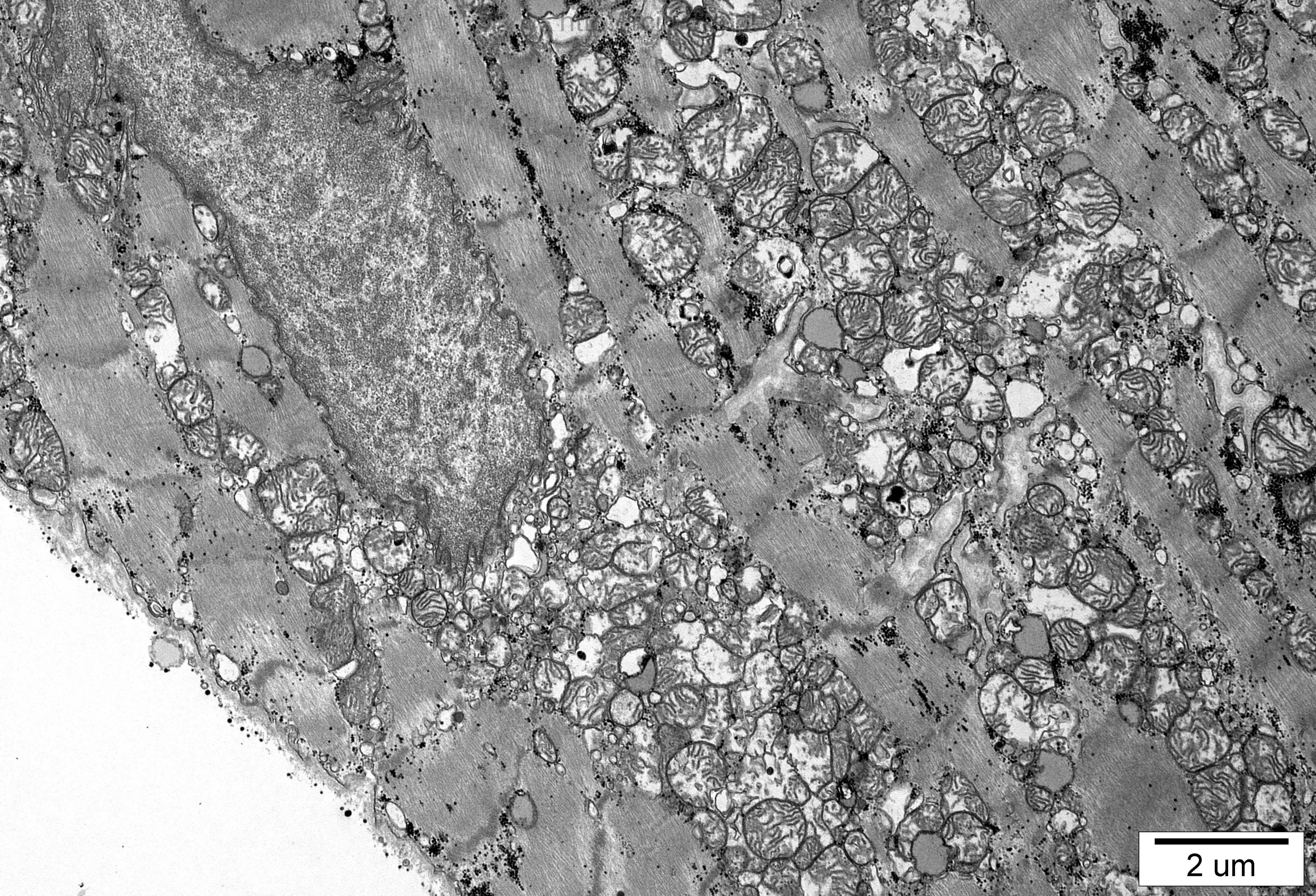
5 um



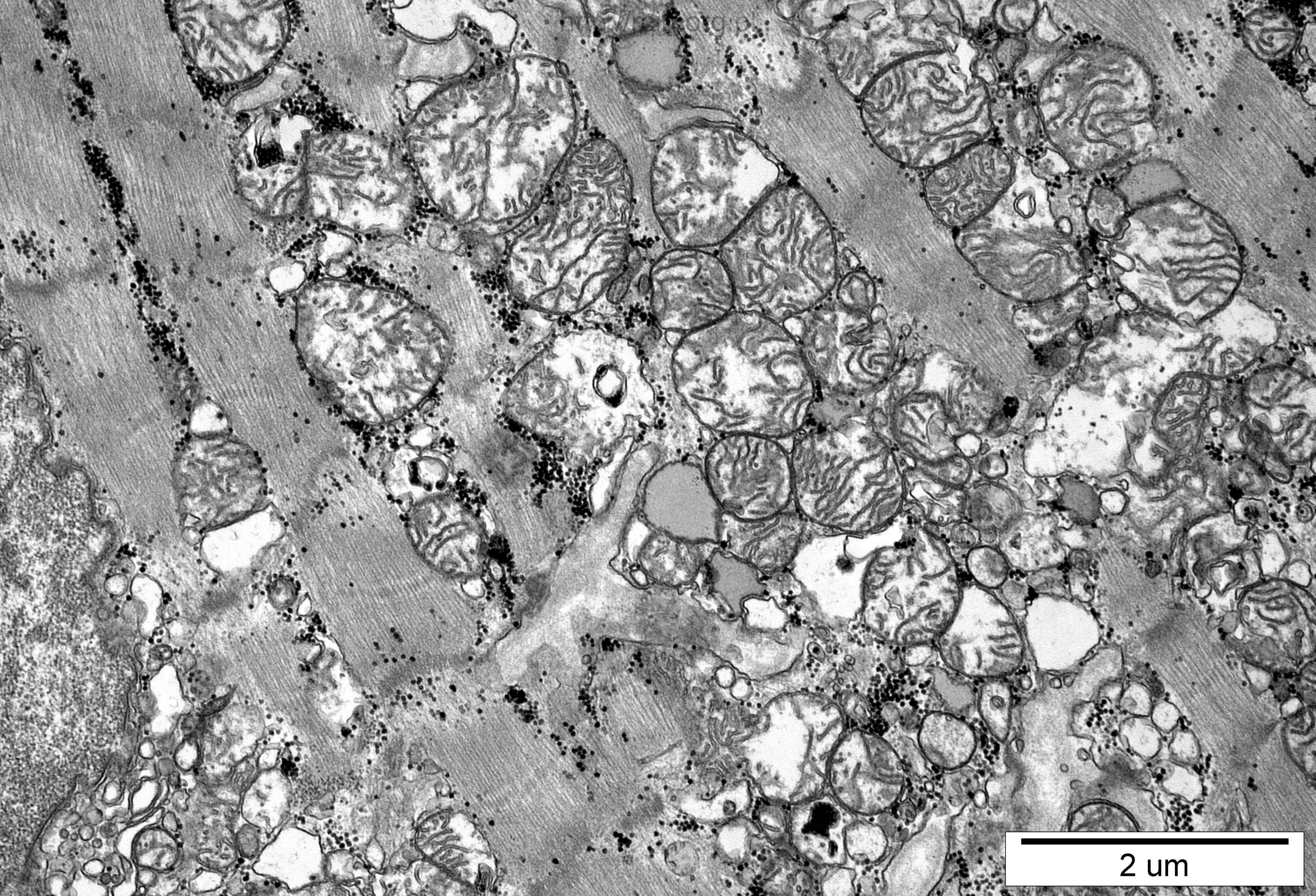
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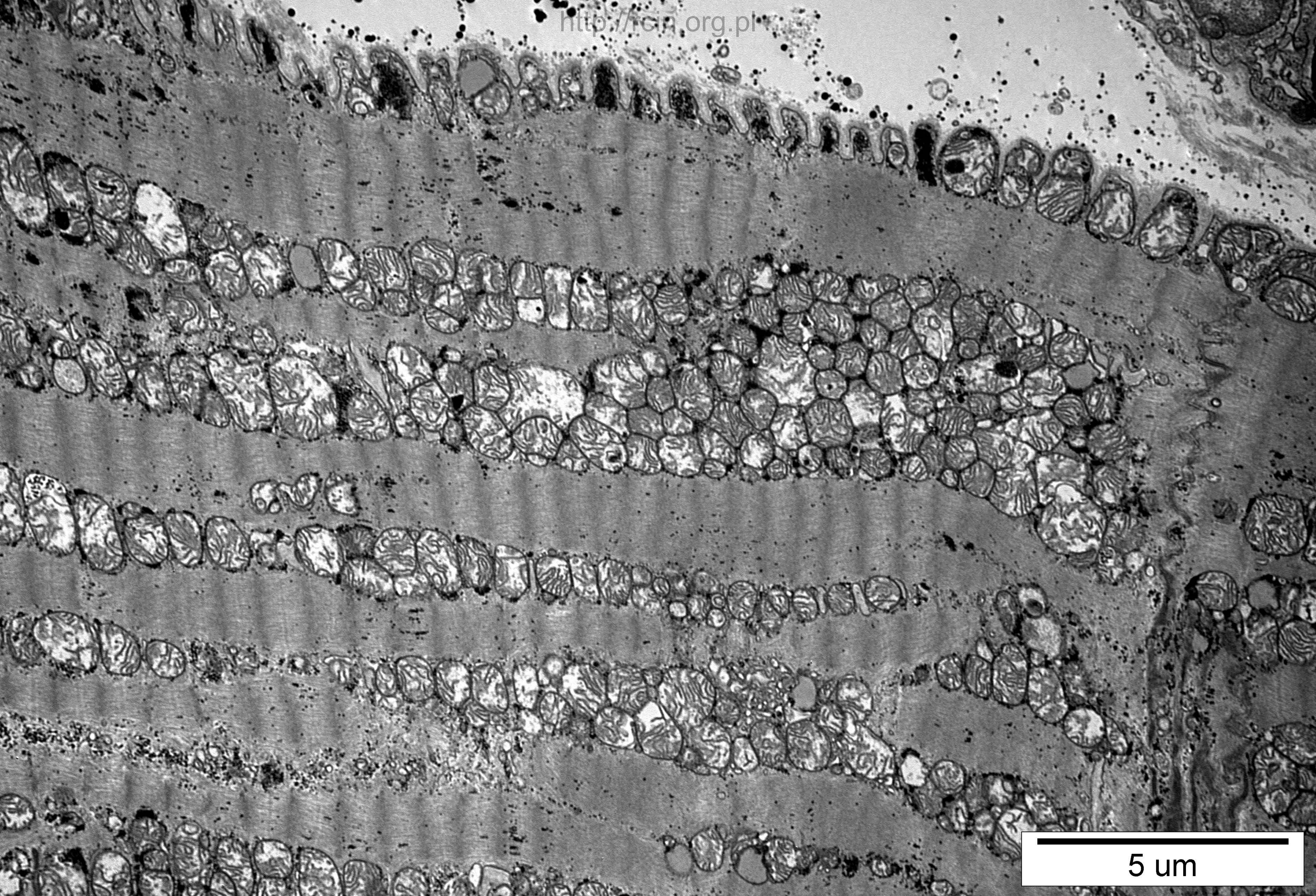
2 um



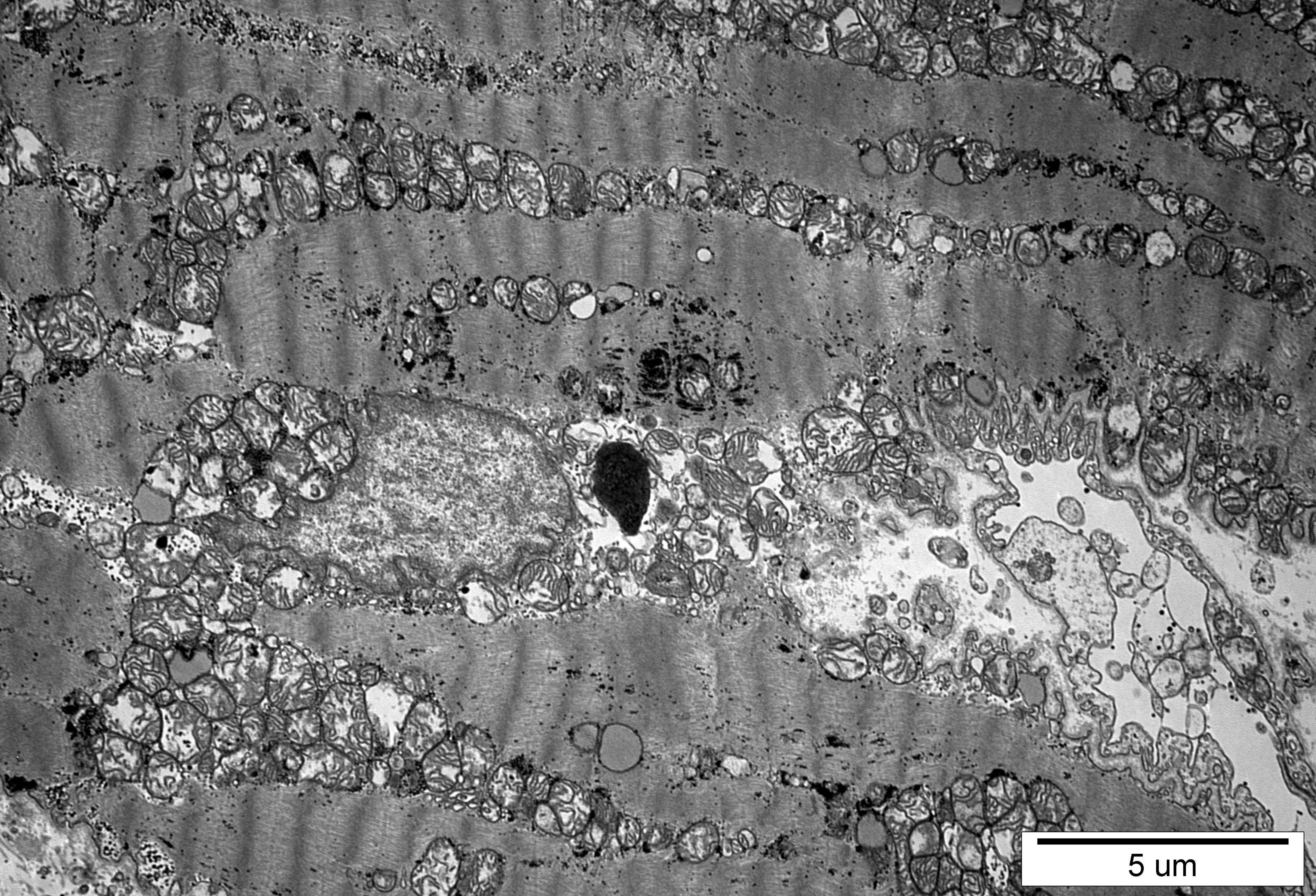
2 um



2 μm



5 um



5 μm

15s serce

Ocena ultrastrukturalna wykazała nieco zatarty wzór sarkomerów, ale miofibryle w przeważającej części biopsatu pozostawały nieuszkodzone (Fig. 15s-2, 9, 26, 27). Widoczne były wstawki (intercalated discs) o regularnym przebiegu (Fig. 15s-11, 12, 21). Obserwowano zmienione, obrzękłe mitochondria cechujące się nieprawidłowym przebiegiem grzebieni lub uszkodzeniach w obrębie grzebieni (Fig. 15s-4, 5, 24, 25). Obecne były również mitochondria o ciemnej elektronowo macierzy i/lub uszkodzonych grzebieniach mitochondrialnych oraz liczne krople tłuszczu (Fig. 15s-15, 16, 17, 18, 20). Jądra kardiomiocytów w większości nie wykazywały zmian ultrastrukturalnych (Fig. 15s-1, 3, 23). Miejscami obecna była lipofuscyna (Fig. 15s-2). W przestrzeni zewnątrzkomórkowej widoczna była bardzo obfita tkanka łączna (Fig. 15s-7, 13, 14) oraz naczynia o śródbłonku wykazującym cechy nekrozy (Fig. 15s-6, 10).

Ultrastructural evaluation showed a slightly blurred sarcomeres pattern but myofibrils in the major part of the analysed specimen remained intact (Figs. 15s-2,9,26,27). Intercalated discs were characterised by regular course (Figs. 15s-11,12,21). Altered, swollen mitochondria characterized by abnormal arrangement of mitochondrial cristae or lacking cristae were observed (Figs. 15s-4, 5,24,25). Mitochondria with electron-dark matrix and/or damaged mitochondrial cristae as well as numerous fat droplets were also present (Fig. 15s-15,16,17,18,20). Cardiomyocyte nuclei were mostly ultrastructurally unchanged (Fig. 15s-1,3,23). Lipofuscins were seen (Fig. 15s-2). Extracellular space was filled with very abundant connective tissue (Figs. 15s-7,13,14). Vessels with endothelium showing features of necrosis were observed (Figs. 15s-6,10).