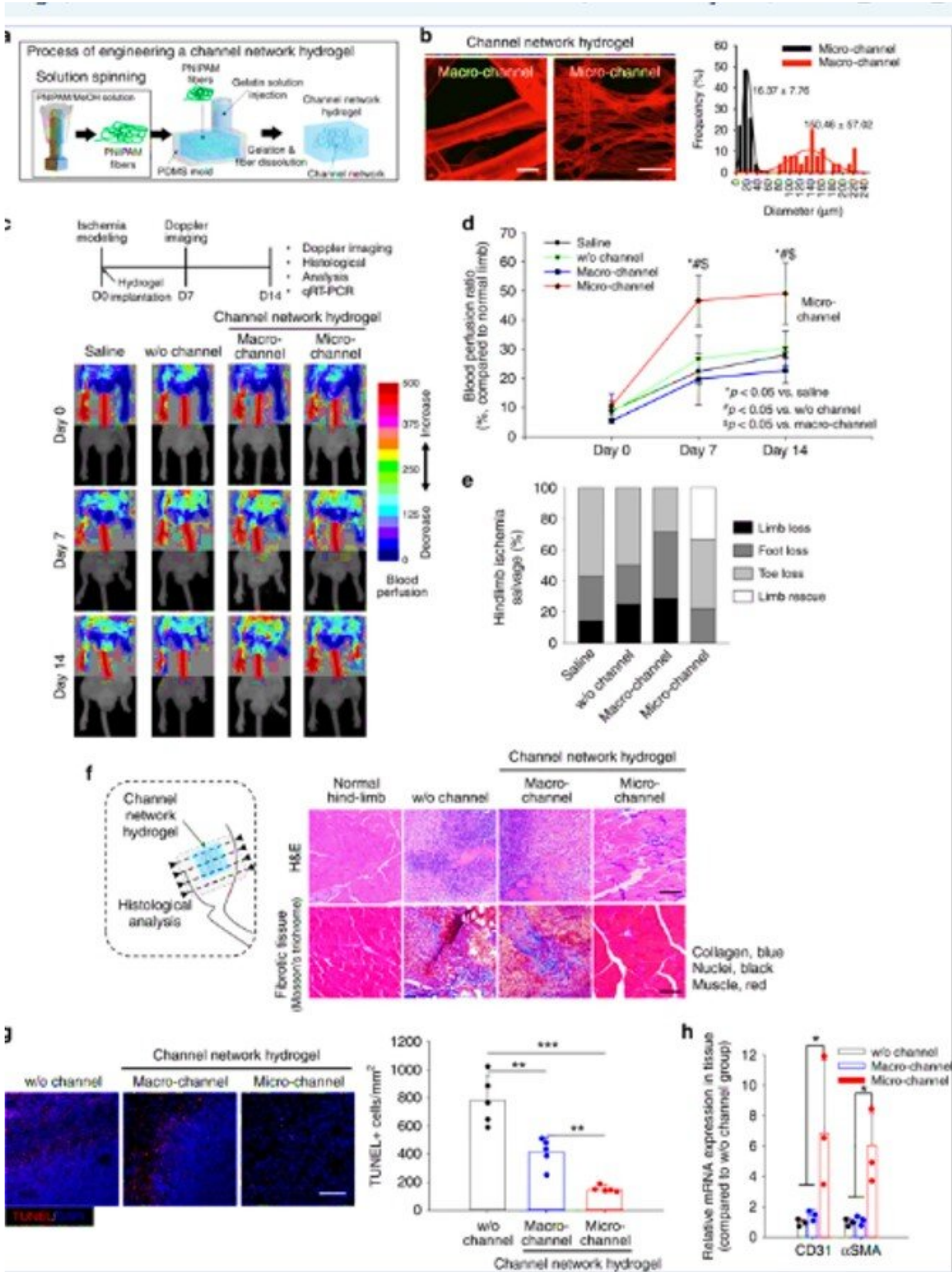


# **Microchannel network hydrogel-induced ischemic blood perfusion connection**

February 20 2020, by Thamarasee Jeewandara

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Implantation of microchannel network hydrogel in mouse ischemic hindlimb tissue. a Schematic illustration of the procedure to produce poly(N-isopropylacrylamide) (PNIPAM) fibers, then channel networks, in a hydrogel within a PDMS mold. b Confocal visualization of micro- or macrochannel networks in hydrogels with their channel diameter distribution. Channels were perfused with FluoSpheres (45 nm, red). Scale bar = 100  $\mu\text{m}$ . c Laser Doppler perfusion imaging (LDPI) of supine position in a mouse model of hindlimb ischemia with d quantification of the corresponding blood perfusion ratio, compared to that of normal hindlimb at days 0, 7, and 14 post-implantation (N = 5). Statistical significances are determined using one-way ANOVA with Tukey post-hoc pairwise comparisons; \*p

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