Supplementary Material (ESI) for *Soft Matter*

Direct-Write Assembly of Biomimetic Microvascular Networks for Efficient Fluid Transport

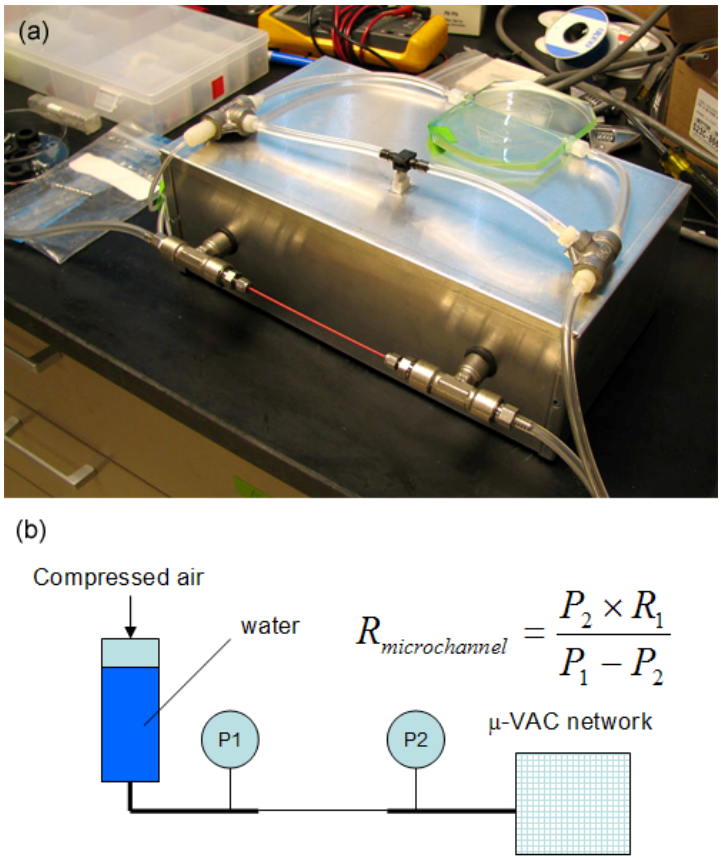
Supporting Information Table S1. Channel diameters for Y-structures.

$\Sigma r^3_{child} / \Sigma r^3_{parent}$	Order 1 (μm)	Order 2 (μm)
0.25	338	195
0.40	367	215
0.55	351	228
0.70	337	238
0.85	327	245
1.00	318	251
1.15	308	257
1.30	301	261
1.45	294	265
1.60	288	268
1.75	283	271

Supporting Information Table S2. Channel diameters for 4-order structures

$\Sigma r^3_{child} / \Sigma r^3_{parent}$	Order 1 (μm)	Order 2 (μm)	Order 3 (μm)	Order 4 (μm)	Order 5 (μm)
0.2	1108	514	239	111	51
0.3	991	526	280	149	79
0.4	889	520	304	178	104
0.5	800	504	317	200	126
0.6	723	484	324	217	145
0.7	656	463	326	230	162
0.8	598	441	325	239	176
0.9	548	420	322	247	189
1.0	504	400	317	252	200
1.1	465	381	312	256	210
1.2	431	364	307	259	218
1.3	401	348	301	261	226
1.4	374	332	295	262	233
1.5	350	318	289	263	239
1.6	329	305	283	263	244
1.7	310	293	278	263	249
1.8	292	282	272	263	254
1.9	276	272	267	262	258
2.0	262	262	262	262	262

*All channels have a length of 1 cm.



Supporting Information Figure 1 (a) Image of the high-pressure flow meter apparatus used in this study. (b) Schematic illustration of this high-pressure flow meter.