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Cover picture: B lymphocyte entry into lymph nodes requires chemokine-mediated triggering of firm adhesion. The cover shows time-lapse intravital micrographs of superficial inguinal lymph node high endothelial venules (using a protocol developed by Ulrich von Andrian) of a mouse that had received 5- and 6-carboxyfluorescein diacetate succinimidyl ester (CFSE)-labeled B cells a few minutes before. The B cells had been treated with SDF1/CXCL12 and ELC/CCL19 prior to transfer to desensitize the CXCR4 and CCR7 receptors, respectively. The images show six B cells, labeled 1 to 6 in order of their appearance and B cells numbered 1–3 and 6 were observed to undergo rolling interactions on the endothelium. However, none of these chemokine-desensitized cells became firmly adherent. Transfer of CXCR4-deficient B cells to mice deficient in CCR7 ligands confirmed that, together, CXCR4 and CCR7 account for the principal chemokine-receptor requirements for B cell entry into lymph nodes. See related article by Okada et al., pp. 65–75, and also supplemental videos online at http://www.jem.org/cgi/content/full/jem.20020201/DC1.

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