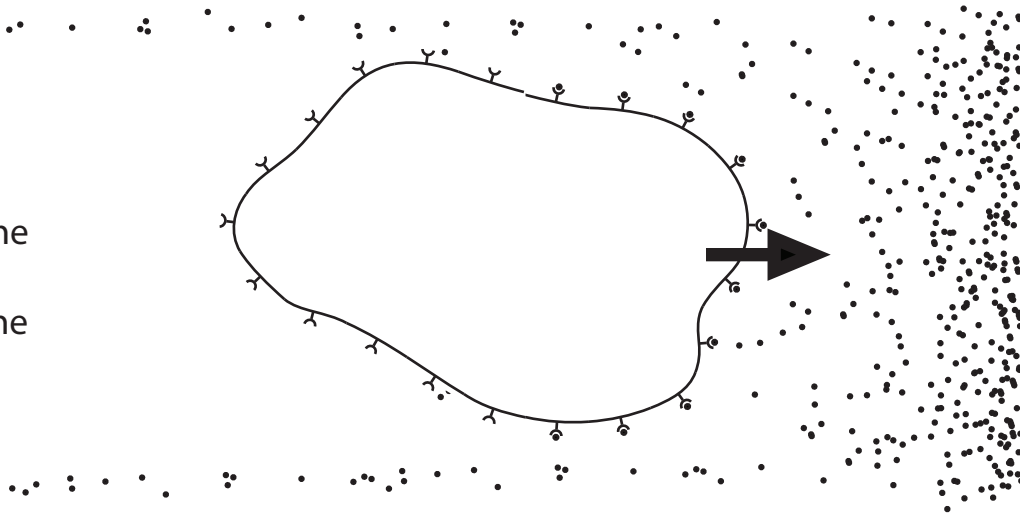
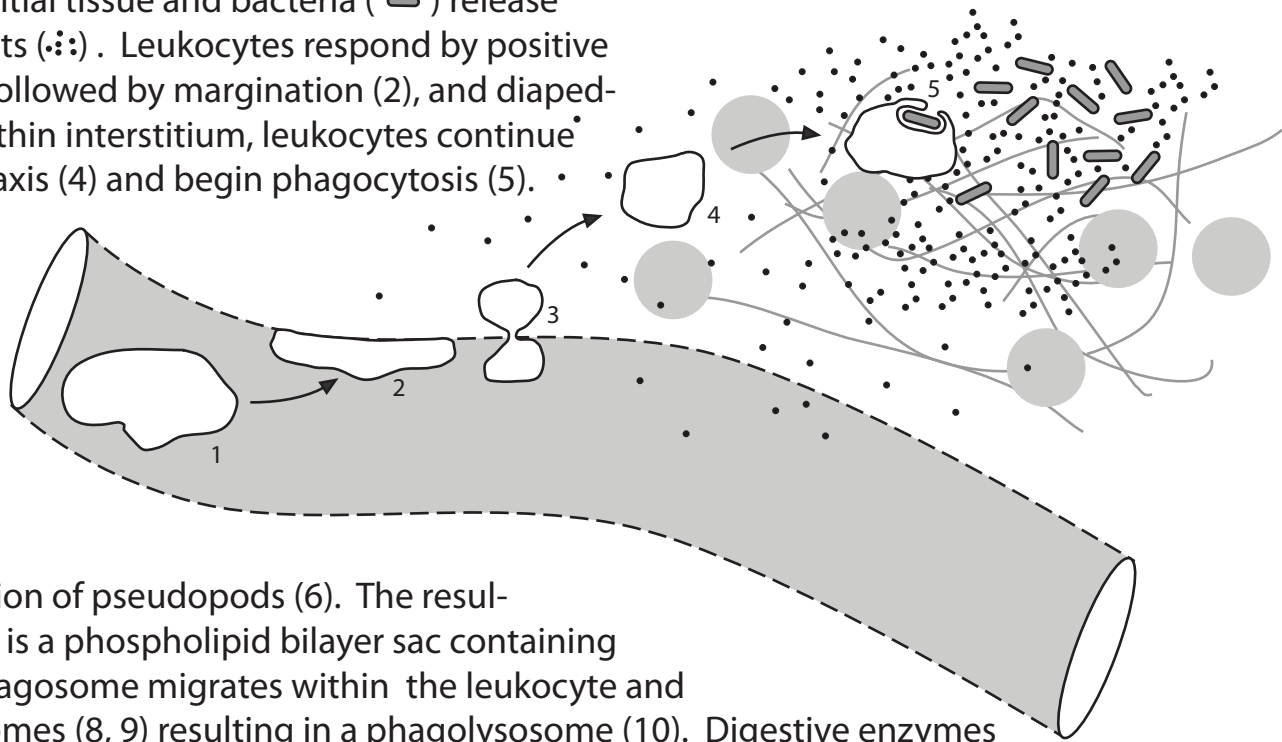


Leukocyte Activity

Leukocytes move by chemotaxis. Cell surface receptors (—Y—) may bind to a chemo-attractant (: :). When the complex forms (—Y—), the cell responds by moving. If the leukocyte moves towards the source of the chemo-attractant, the term positive chemotaxis is used. Negative chemotaxis would be moving away from the chemical.



Damaged interstitial tissue and bacteria (—) release chemo-attractants (: :). Leukocytes respond by positive chemotaxis (1), followed by margination (2), and diapedesis (3). Once within interstitium, leukocytes continue positive chemotaxis (4) and begin phagocytosis (5).



Phagocytosis

results in the fusion of pseudopods (6). The resultant phagosome is a phospholipid bilayer sac containing bacteria. The Phagosome migrates within the leukocyte and fuses with lysosomes (8, 9) resulting in a phagolysosome (10). Digestive enzymes

(such as lysozyme) digest bacteria (11), and this vesicle may now be considered a residual body. Elimination by exocytosis (12) of debris concludes the process.

