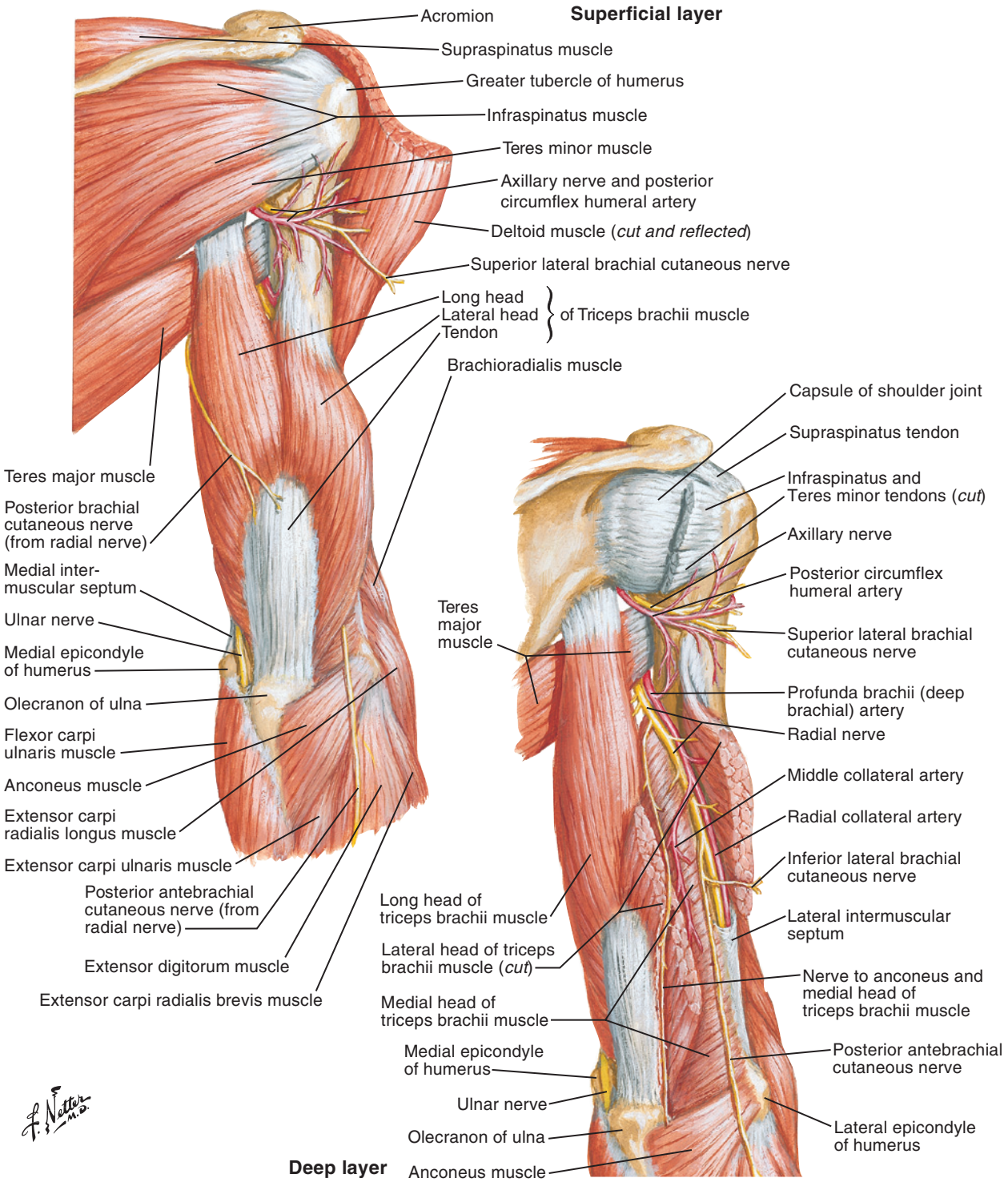

Figure 12.4 Posterior compartment of the arm. (Reprinted from Netter Anatomy Illustration Collection. ©Elsevier Inc. All Rights Reserved.)

to the medial epicondyle of the humerus where it can be reliably located, as it enters the forearm (Fig. 12.6).

The radial nerve lies posterior to the brachial artery in its proximal portion (Fig. 12.4) but rapidly heads in a much deeper and lateral direction. Along with the profunda brachii (deep brachial artery), it passes through the triangular interval between teres major, the long and lateral heads of triceps, to lie posterior to the humerus and away from the brachial artery for the remainder of its course in the arm (Fig. 12.3). After the radial nerve winds posteriorly around the humerus in the spiral groove, it pierces the lateral intermuscular septum leaving the posterior compartment, to enter the anterior compartment in the distal arm. From here, it enters the forearm anterolaterally between the brachioradialis and brachialis (Fig. 12.6), before dividing into its two terminal branches (Fig. 12.4).

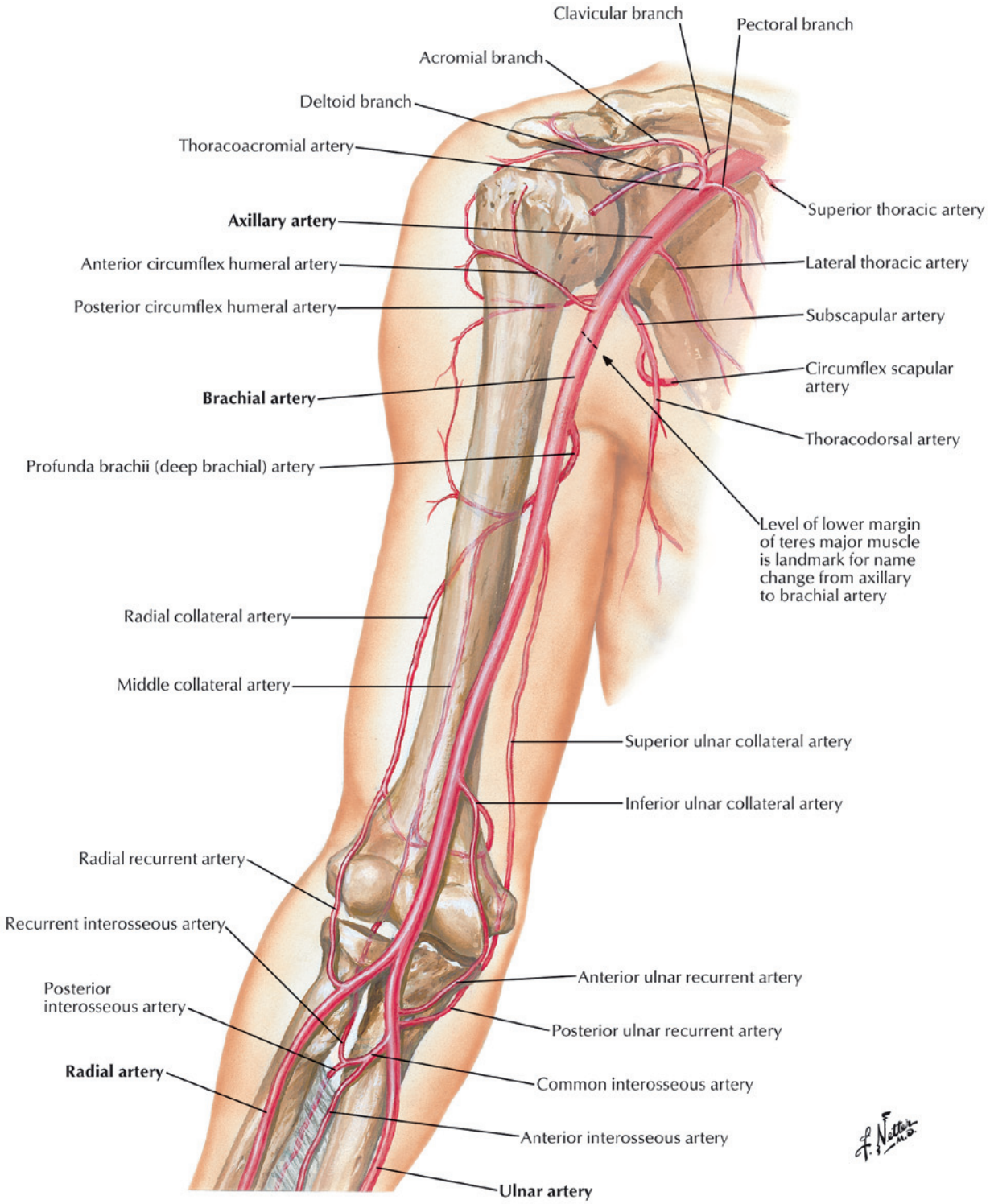

Figure 12.5

BRANCHES OF THE BRACHIAL ARTERY

The brachial artery gives rise to four important named branches in the arm (the profunda brachii, the nutrient artery to the humerus, and the superior and inferior collateral arteries) (Fig. 12.5).

The profunda brachii (the deep brachial artery) is the first and largest branch of the brachial artery arising just past the distal border of the teres major on the posteromedial aspect of the brachial artery. It eventually supplies the territory of the lateral arm flap via its radial collateral branch.

In its proximal portion the profunda brachii gives rise to a small branch that ascends between the long and lateral heads of the triceps (the ascending deltoid branch) that anastomoses with the posterior circumflex humeral artery.