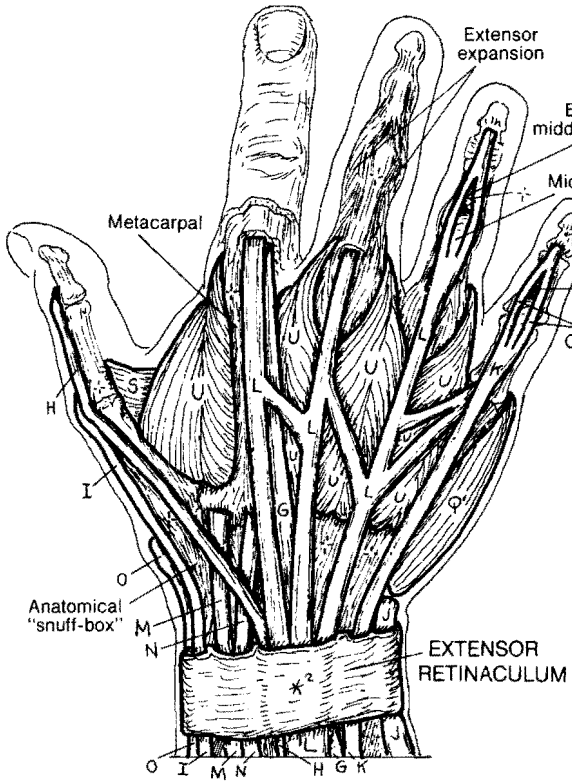
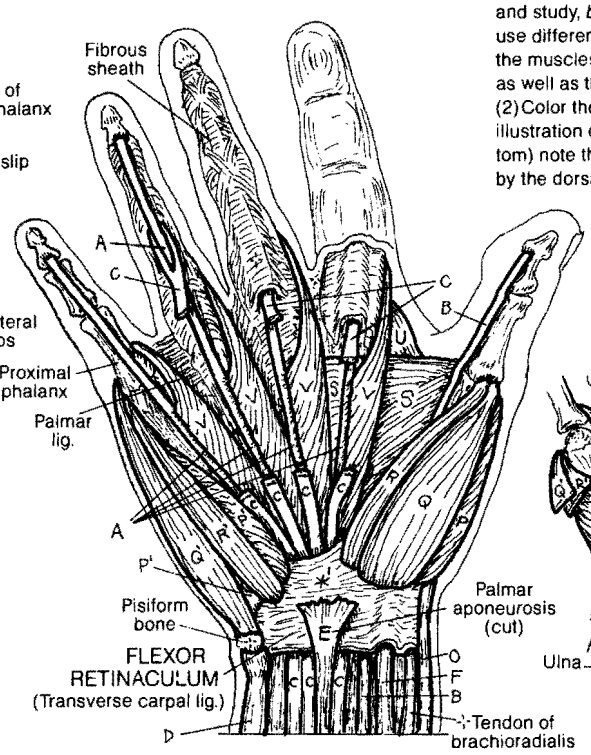
See 50

# MOVERS OF HAND JOINTS (INTRINSICS)

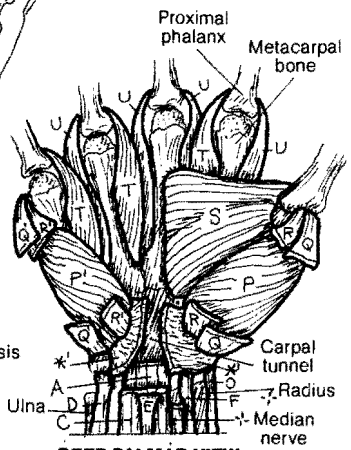
CN: The extrinsic muscles which move the wrist and finger joints were covered on Plate 50, and their tendons are shown in dark line and labeled here for identification and study, *but not for coloring.* If possible, use different colors on this plate. (1) Color the muscles of the two anterior views, as well as the flexor retinaculum (gray). (2) Color the posterior view. (3) In the illustration of finger abduction (at the bottom) note that the little finger is not moved by the dorsal interosseous (U).




POSTERIOR (DORSAL) VIEW

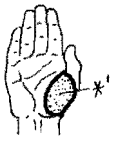



ANTERIOR (PALMAR) VIEW




DEEP PALMAR VIEW

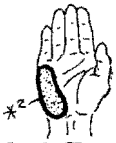
## THENAR EMINENCE *'



### OPPONENS POLLICIS P
### ABDUCTOR POLLICIS BREVIS Q
### FLEXOR POLLICIS BREVIS R

Note the palpable bulge of muscle (*thenar eminence*) just proximal to the thumb on your own hand. Integrated with the action of the other thumb movers, these three muscles make possible complex movements of the thumb. The thenar muscles arise/insert in the same general area as one another; however, their different orientation orders different functions.

## HYPOTHENAR EMINENCE *²



### OPPONENS DIGITI MINIMI P'
### ABDUCTOR DIGITI MINIMI Q'
### FLEXOR DIGITI MINIMI BREVIS R'

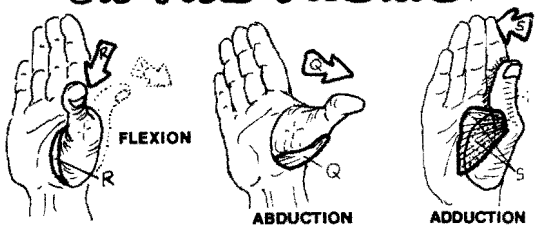
These muscles move the 5th digit; they are complementary to the thenar muscles in attachment and function. The function of opposition is basic to some of the complex grasping functions of the hand.

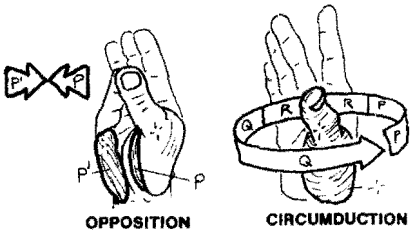
## DEEP MUSCLES: *

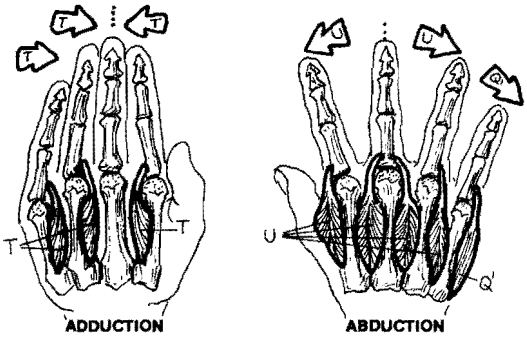
### ADDUCTOR POLLICIS S
### PALMAR INTEROSSEUS T
### DORSAL INTEROSSEUS U
### LUMBRICAL V

*Adductor pollicis*, in concert with the first dorsal interosseous muscle provides great strength in grasping an object between thumb and index finger . . . try it. The *interossei* and *lumbrical muscles* insert into expanded finger extensor tendons (extensor expansion; see posterior view) forming a complex mechanism for flexing the metacarpophalangeal joints and extending the interphalangeal joints. By their phalangeal insertions, the interossei abduct/adduct certain digits.

## ACTIONS OF INTRINSIC MUSCLES :/ ON THE THUMB *




## ON THE FINGERS *