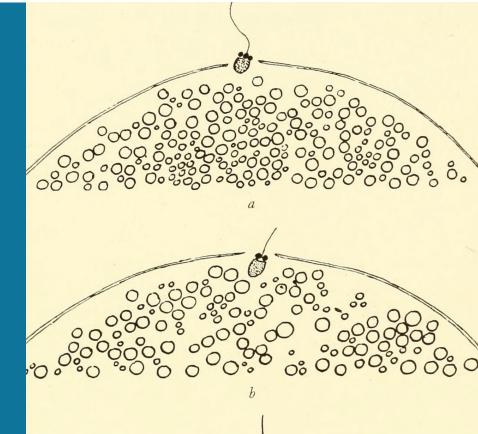
Ernest Everett Just

Ernest Everett Just was the first African American MBL student and then course instructor, then he remained an MBL investigator for decades. Just studied the processes by which sea urchin eggs are fertilized, working with the MBL's second director Frank Lillie to receive his PhD from the University of Chicago in 1916.

Just, 1939

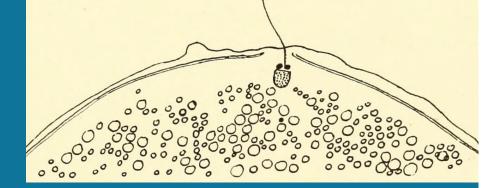
THE BIOLOGY OF CELL SURFACE ERNEST EVERETT JUST Natur hat meder Ker

Egg cells normally begin differentiating and dividing when fertilized by sperm. But how? Just joined MBL researchers Lillie and Jacques Loeb in exploring and arguing about their different ideas related to this question. Just closely studied the point at which

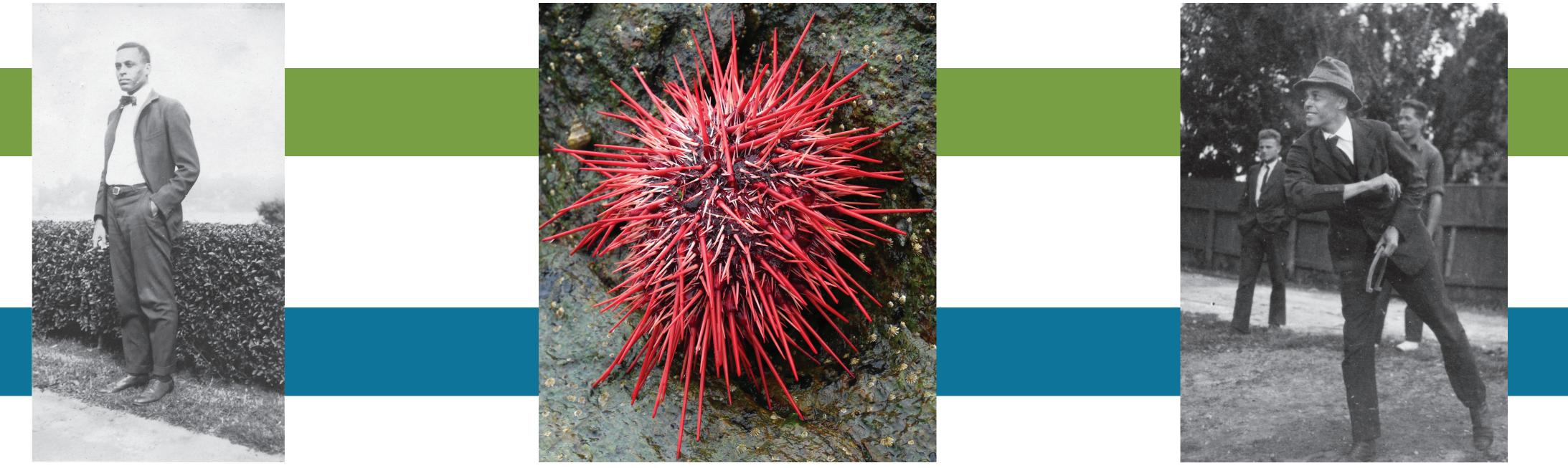




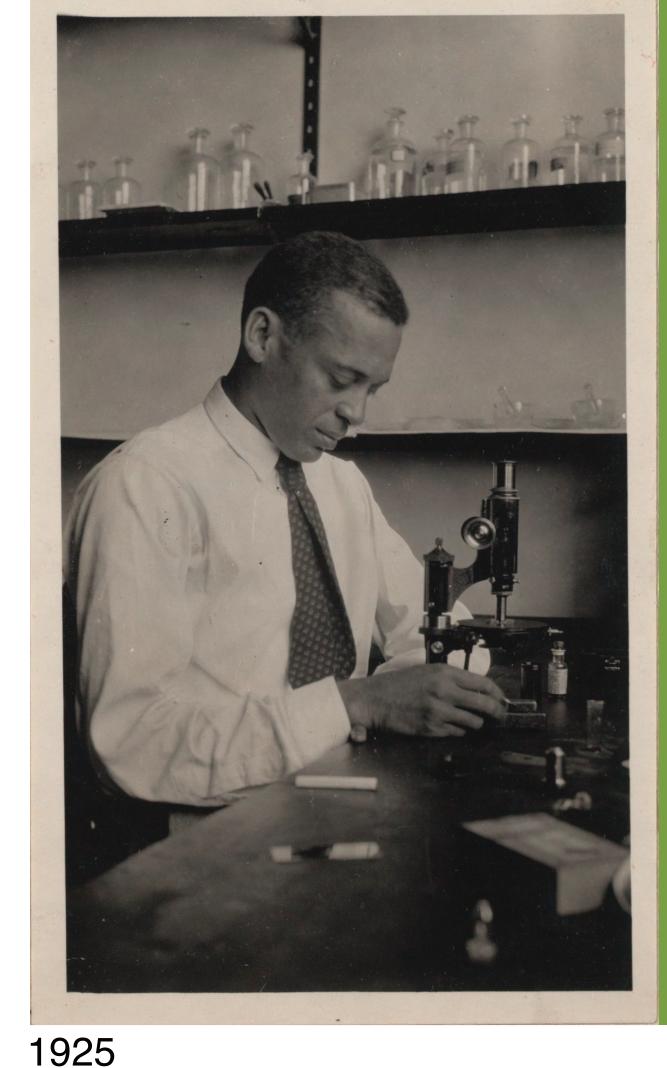
fertilization begins, when the sperm cell joins the egg. He built on his findings for his well-received 1939 book, The Biology of the Cell Surface.



Stages of sperm penetration



Sea urchin



Just enjoyed life at the MBL, but as the only African-American scientist, he faced considerable prejudice in the US academic world. Despite winning prestigious awards, he was not offered faculty or research positions commensurate with his abilities. With limited opportunities in the US, he traveled to Europe, where he felt more welcome at first, though WWII changed attitudes there and he returned to the US for a short time until his death in 1941.