



- Fagozitosian barneko mintz-sistema implikaktuta dago: endosoma eta lisosomak beharrezkoak dira fagosoma eraikitze eta bakterioen digestioa modu egokian gertatzeko. Prozesu hori hurrengo bideoan aztertzen da. Ikus ezazu arretaz bideoa eta, bideoaren transkripzioa irakurri ondoren, erantzun ondoko galderak.

Bideoa: **Phagocytosis**. [CIL:7654](#)

Source: **The Cell. An Image Library**

Credit: **Margaret Clarke, Lucinda Maddera. Clarke et al., PLoS ONE 5:e8585 (2010)**



Description (modified from the original)

A movie of phagocytosis of bacteria by *Dictyostelium discoideum* amoebae. These *Dictyostelium* cells are expressing GFP (Green Fluorescent protein), which binds to phosphatidylinositol 3-phosphate [PI(3)P]. The bacteria are *E. coli* that had been incubated with an inhibitor of cytokinesis, producing elongated forms. Phosphoinositides help to confer specific identities to compartments along the endocytic pathway. PI(3)P identifies early endosomes. It associates with phagosomes ~1 minute after uptake and persists as acidification occurs and digestion begins. Note that the long bacteria do not bind the green PI(3)P marker until after they have been fully internalized. The changing morphology of the long bacteria within the labeled phagosomes reveals the action of digestive enzymes. Three successive time series of 100 frames were collected (). The frames are separated by 3.94 seconds. There was a space of 6 seconds between the first two time series and a space of 9 seconds between the second and third time series. (). The movie spans 20 minutes; it plays at 7.5 fps, 30 times actual speed.

1) Zer zelula mota da fagozittoa eta zein da fagozituriko bakterioa?

2) Bakterioak manipulatu egin dira ezohiko luzerako bakterioak sortzeko. Zer metodo erabili da hori lortzeko?

3) Zer mikroskopia mota erabili dute bideoaren esperimntuan eta zer molekula zelular identifikatzen du tindagaiak?

4) Zein konpartimentu zitoplasmiko identifikatzen du PI(3)P fosfolipidoak?

5) Zelularen barruan bakterioen morfologia aldatzen da, zein aldaketa gertatu dira eta nola interpretatzen dira?

6) "Bideoan ikusten den fagozitosi prozesuak 20 minutu inguru irauten du". Ados al zaude baieztapen honekin? Azaldu zure erantzuna.