

IMPORTANT NEWS 1

Southwick assignment solved. Two detectives came up with the same solution. Nancy Wang and David Ambler.

Guissou A. DABIRI*, JEAN M. SANGERT, DANIEL A. PORTNOY^t, AND FREDERICK S. SOUTHWICK*§ *Listeria monocytogenes* moves rapidly through the host-cell cytoplasm by inducing directional actin assembly Proc. Natl. Acad. Sci. USA Vol. 87, pp. 6068-6072, August 1990, 359 citations) Departments of *Medicine, Infectious Disease Section, 536 Johnson Pavilion, and Medicine, Philadelphia, PA 19104

Lewis G. Tilney* and Daniel A. Portnoy* Actin Filaments and the Growth, Movement, and Spread of the Intracellular Bacterial Parasite, *Listeria monocytogenes*

- Department of Biology, University of Pennsylvania, Philadelphia, Pennsylvania 19104-6018; and * Department of Microbiology, (October 1989, Journal of Cell Biology, 1353 citations).

They were both at Pennsylvania, and there is one joint author between them Daniel Portnoy. Southwick is Professor and director of patient care at the University of Florida hospital, though according to his LinkedIn he was a tenured associate professor at Upenn at the time of the paper Tilney was the senior author in the story and he's now a professor emeritus at UPenn. Portnoy was the junior author, and now he's at Berkeley and considered one of the world's leading experts on the bacterium (*Listeria*) .

Nancy notes: "Oddly enough though, Tilney was listed as first author on the seminal paper instead of Portnoy. Maybe this was a particularly special paper that he wanted to be first on."

She took cell biology and said "it seems like the Tilney paper is more holistic in that it traces the entire path of the bacteria from one cell to another. It also has Figure 23 (see attached), which is often used to teach about actin and *Listeria* in cell biology classes -- at least it was used in mine :). Southwick's paper is mostly focused on how actin helps the bacteria move, which makes sense since that was what he observed to begin with. So Tilney's paper is more fundamental/"better", but it definitely relies on Southwick's observation. Southwick probably could have written a more "holistic" paper as well, but at it would have been redundant given the Tilney paper."

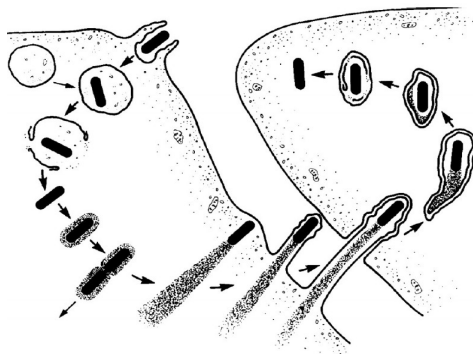


Figure 23. Stages in the entry, growth, movement, and spread of *Listeria* from one macrophage to another. Photographs illustrating all these intermediate stages have been presented in the figures.