

## Schwann Cells and *M. leprae*

TO THE EDITOR:

I congratulate Dr. Hamid Band and colleagues for their fascinating studies (<sup>1-3</sup>) on the interactions between Schwann cells and *Mycobacterium leprae*—a field of study which has thus far not received the attention it deserves from leprosy scientists.

As one with only a theoretical knowledge about the Schwann cell, might I make a comment? What is the hard evidence that Schwann cells internalize *M. leprae* by “phagocytosis” as the term is commonly

understood? Indeed, does not use of the term “phagocytosis” imply—surely unjustifiably—a passive role for the organism in the process when it is clear that the organism finds a safe haven in the peripheral nerves (witness the phenomenon of persisters, and the perfect harmony between Schwann cell and organism in lepromatous leprosy)?

As medical undergraduates, we were taught that Schwann cells display “phagocytic” properties in clearing myelin droplets and debris in Wallerian degeneration. But

several studies (<sup>4-6</sup>) show that specifically mobilized circulating macrophages perform this function.

Until such time as the details of Schwann cell-*M. leprae* interaction *in vivo* are elucidated, it might be prudent to apply the term "ingress" of bacilli rather than "phagocytosis."

What do the experts think?

—Dr. S. S. Pandya

*Research Officer*  
*Acworth Leprosy Hospital*  
*Society for Research,*  
*Rehabilitation & Education*  
*in Leprosy*  
*Acworth Leprosy Hospital*  
*Wadalla, Bombay 400031, India*

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