



## Sambhu Nath De

*Full many a gem of purest ray serene  
The dark unfathomed caves of ocean bear  
Full many a flower is born to blush unseen  
And waste its sweetness on the desert air*

*Thomas Gray – Elegy Written in a Country Churchyard*

The search for excellence and relevance in our science has become the Holy Grail for India's Academies and our burgeoning scientific establishment. For the young (and not so young) contemplating careers in science, the absence of role models is often a handicap. Idealism after all, is frequently catalysed by example. This issue of *Current Science* honours an unsung hero, Sambhu Nath De of Calcutta. Working first at the Nilratan Sircar Medical College and later at the Department of Pathology, Calcutta Medical College, in extremely modest circumstances, De made seminal contributions to our understanding of cholera and related diarrheal diseases and indeed set the stage for the modern view of diseases caused by bacterial toxins. De's work constitutes a cornerstone of the edifice of cholera research and opened up the field of protein toxins. Cholera toxin and some of its fellow bacterial toxins have now become indispensable tools in the study of signal transduction and protein entry into cells – areas of great current interest in modern cellular and molecular biology. De's research was highly relevant to our surroundings and set the highest standards of excellence in experimental design and execution. It marks a high point of basic medical research in this country. De's impact on the international scene was undoubtedly great and has been quantitated in graphic fashion in a 1986 article by Eugene Garfield (reproduced in this issue). Yet, De died in 1985 unhonoured and unsung in India's scientific circles. That De received no major award in India during his lifetime and that our Academies did not see it fit to elect him to their Fellowship, must rank as one of the most glaring omissions of our time. Our pantheon of scientific heroes is limited sometimes by our modest achievements, at others by a collective myopia, which fails to distinguish men of straw from scientists of substance. De emerges, in retrospect, as a modest, self effacing scientist driven by inner compulsions to grapple with a major scientific problem of the time. His choice of cholera as his field of interest was remarkably appropriate to his setting. To this problem, De brought a wonderfully thoughtful approach, together with deep intuition, enabling him to make the long awaited breakthrough in the field. De's heroic story of persistence, dedication and achievement should serve as an inspiration to the many who are increasingly bewildered by the current fashion of mega projects, surrounded by fanfare and publicity and most often surprisingly little discernible scientific output.

In this issue, *Current Science* focusses attention on cholera research and provides an historical perspective to De's work, a small and belated tribute to a truly great scientist.

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