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Comroe in Philadelphia

Before becoming director of the Cardiovascular Research Institute in San Francisco in the 1950s Julius Comroe was professor of physiology and pharmacology in the University of Pennsylvania. Although Comroe was not himself a clinician, he succeeded in attracting young chest physicians to Philadelphia from all corners of the world and physiological techniques developed in his department, such as body plethysmography and single breath measurements of ventilation and diffusion, have come into widespread clinical use.

In those days, Comroe was in his mid 40s, a small man with a slow drawling voice, a mischievous glint in his eye, and a wry sense of humour. I believe that the secret of his success with scientifically illiterate clinicians like myself was his unique ability to translate complex physiological concepts into simple terms. His classical monograph *The Lung* was a model of clarity, and in his famous "Retrospectroscope" series in the *American Review of Respiratory Diseases* he emphasised the fundamental simplicity of many of the great advances in respiratory medicine. He rejected technical jargon and, in this respect, was especially critical of his fellow physiologists. He told me how, in the last

war, the American forces used Navajo Indians as signallers because their obscure language was incomprehensible to the enemy. In the next war, said Comroe, they'll use respiratory physiologists. When one of his senior staff had given a 40 minute seminar on ventilation-perfusion relationships, covering the blackboard with a multitude of symbols and equations, Comroe rose from his seat, slowly cleared the blackboard, then handed back the chalk to the speaker with the words: "Now, let's have it in English." Comroe was intolerant of shoddy and careless presentations. When he was chairing a symposium one of the contributors, who had gone well over his time by showing an excessive number of indecipherable slides, was delaying matters still further by making the projectionist seek out a missing slide. Comroe stepped forward, drew a small package from his pocket, and held it out to the speaker saying: "I've got a slide. Will this do?"

The humour, the simplicity, and the wisdom of Comroe is well summarised in his now famous definition of a "normal subject." A normal subject, said Comroe, is one who has not been properly investigated.

COLIN M OGILVIE