

# John Murray Speaks

## ***From the preface of an unpublished manuscript entitled “Hold Your Breath”:***

My romance with the lungs did not really flourish until eight years after I started my medical career. I had met the lungs, of course, while I was a medical student, but I was indifferent to their magnificence. I became more intimately involved with them while I was a resident in internal medicine and research fellow, but, I confess, in those days I was more enamored of the heart, the organ that lay between the lungs, than of the lungs themselves. My present infatuation grew out of a fortuitous misconception at the University of California Los Angeles, an important turning point in my career I will tell you about, when I was informed that I had been hired to organize and head the pulmonary division within the Department of Medicine. Next, I was able to put it all together at the University of California San Francisco, where I still hold forth as professor emeritus of medicine.

One thing more: lungs really are important. Even though you may not have thought much about them, you want yours to be healthy. While you were reading these few paragraphs, your lungs quietly and efficiently transferred a pint of oxygen from the fresh air surrounding your body into your bloodstream: oxygen to keep your brain functioning and your heart pumping; oxygen to stoke the insatiable metabolic furnaces in every single cell in your body—furnishing the energy that keeps you alive. To carry out this marvelous act, your lungs expanded and contracted several times, but you shouldn't have noticed. Breathing is usually automatic and imperceptible, but it is also carefully regulated to keep your oxygen tanks full in order to satisfy your body's metabolic demands of the moment and keep a little in reserve for emergencies.

## **Intensive Care/ARDS**

### ***From “Hold Your Breath”:***

Two years later, I mustered the resources, chiefly nurses and equipment, to inaugurate a 6-bed “respiratory” intensive care unit, or RICU as it promptly became known, in some empty space I had inherited. This was an important addition to the chest service because it allowed us to accept critically ill patients with lung diseases, all of whom required careful nursing supervision and monitoring, and many of whom needed machine-assisted breathing. The unit opened for business during the heyday of the hippie movement in the Haight-Ashbury district of San Francisco, which had become the psychedelic welfare center for young escapists from all over America. We cared for hundreds of flower-children who regularly celebrated their freedom from parents and society by ingesting, smoking, snorting, or shooting-up any sort of upper or downer they could lay their hands on. In the process, we acquired tremendous experience in the treatment of drug-induced complications, something that has served us well ever since.

### ***From Intensive Care: A Doctor's Journal: University of California Press, 2000.***

Lives are indeed saved in the ICU; that is always the goal, and those of us who work there are good at achieving it. But the other side of the coin is that sometimes even highly sophisticated expert care doesn't work out as planned – patients die. One of the

lessons of this book is that death is an ever-present part of the ICU story. Despite our mastery of medical science and technology, ICU doctors do not always succeed. Another lesson is that death is not a correctable biological condition – it is everyone's ultimate destiny.

***From Murray JF. Editorial: The adult respiratory distress syndrome (may it rest in peace). Am Rev Respir Dis. 1975 Jun;111(6):716-8.***

If one is going to try to establish the role of corticosteroids in the treatment of patients with this disorder, it is much wiser to evaluate the effectiveness of therapy in the various specific entities within the ARDS category, not in ARDS patients as a group. I believe it is entirely possible, if not likely, that corticosteroids may be helpful in some disorders (e.g., direct chemical injuries of the lung) but not in others (e.g., shock lung). Examination of the group as a whole could easily obscure important therapeutic responses. Separating, not lumping, leads to more rational therapy. ·

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Our knowledge about these diseases is woefully incomplete at present but undoubtedly will increase in the future. Accordingly, the classification will also change as new information becomes available. A decade from now, we might be quibbling over how much further splitting is advisable. But we should start by putting the axe to the ARDS log before we worry about how many pieces of kindling it will make.

## **Tuberculosis**

***From Murray JF. The white plague: down and out, or up and coming? J. Burns Amberson lecture. Am Rev Respir Dis 1989; 140 (6): 1788-1795***

Finally, I hope I have convinced you that tuberculosis is not down and out; it has relocated from developed to developing countries where socioeconomic conditions favor its persistence. And, at least for the two decades of the 1980's and 1990's, tuberculosis is up and coming, especially where HIV is prevalent.

***From the book Tuberculosis and War: Lessons Learned from World War II. Editors JF Murray and R. Loddenkemper. Karger, 2018.***

TB and warfare are accidental partners, not kindred spirits. When they coexist, as in WWI and WWII and later conflicts, war seems to go its separate way: certainly, the destruction of industry, infrastructure, homes and property, and including casualties, both dead and wounded, have a *raison d'être* all their own. But then that inevitable 70,000 year-old microorganism, *M. tuberculosis*, sneaks in and profoundly worsens the human misery and grief associated with warfare. Vulnerable people already harboring latent TB infection, trapped by the debilitating effects of war-induced semi-starvation, suffering from mental and physical stress, and needing treatment for diabetes, heart disease and other illnesses are likely “to break down” and develop active TB. Every step in the chain of spread of TB – beginning with an innocent uninfected bystander to a victim of fatal disease – is greatly exacerbated by warfare.

***From “Hold Your Breath”:***

During my four years of medical training at SFGH and Kings County Hospital, two inner city institutions that provided care for poor people and society's dropouts, I saw tuberculosis practically every day. By contrast, during my nine years on the faculty at UCLA Medical Center, a tertiary referral center, tuberculosis was uncommon; whenever we picked up a case, it always attracted considerable attention and usually became the focus of a medical staff teaching conference. We had to exploit every opportunity to teach medical students and young doctors about one of the world's most important diseases. Tuberculosis is a fascinating infection, but, truthfully, my life was so filled with other fascinating diseases, I can't say I missed caring for tuberculars even though I had grown up with them. But I had to get back into the consumption business in a hurry when I transferred from the University of California Los Angeles to the University of California San Francisco, where I took over the Chest Service at SFGH, my favorite hospital.

## **Textbooks**

### ***From the Preface to the first edition of Murray & Nadel's Textbook of Respiratory Medicine, 1988.***

The rapid growth of knowledge of basic scientific principles and their application to respiratory medicine has resulted in a proliferation of monographs and texts dealing with selected aspects of pulmonary science and clinical medicine, but no single work has provided a comprehensive description of all that is currently known. This *Textbook of Respiratory Medicine* is an attempt to provide a well-balanced, authoritative, and fully documented book that integrates scientific principles with the practice of respiratory medicine.

The long gestation of this book is over, parturition is near, and it will soon begin a life of its own. Like all expectant parents, we are concerned about how our offspring will make its way in the real world. We hope people will like it and find it useful.

### ***From a video upon release of the 6<sup>th</sup> edition of Murray & Nadel's, 2016.***

The textbook field is changing. The way we started, with hardbacks and a lot of our old friends as I mentioned in the early days, now there is a new group of authors. And, the important change that I think we all helped to initiate about 5 years ago, was to emphasize the importance of the electronic version of the textbook which is something we are now putting as much effort and time into as we did in the old hardback, 30 years ago. Times are changing and rightly so.

## **Journals**

### ***From "Hold your Breath":***

I made lots of changes in the journal, including regular editorials, state-of-the-art reviews about various topics, summaries of NHLBI conferences and workshops, and Comroe's wonderful pieces on looking through his "Retrospectroscope." All but the latter are still featured attractions. More and more manuscripts were submitted, which allowed us to accept fewer and fewer, which, in turn, increased the quality of the articles

that were printed. Circulation and advertising increased, and to top it all off, the journal started to make money

I look back on my team's tenure with the *American Review* with great satisfaction. We established policies and introduced features that remain important today. Another thing I did that I am proud of was to spearhead the effort that culminated in the "Uniform requirements for manuscripts submitted to biomedical journals." Before then, each journal had its own requirements about how the text, figures, tables, and especially references should be prepared; no two were alike. This meant that if a manuscript were rejected by one journal, it had to be completely retyped to satisfy the style of a different journal; something secretaries hated and that often introduced errors into the manuscript. I got the idea at a meeting of editors of medical journals organized by the National Library of Medicine and it took hold. I wrote the first draft of the document, which was discussed and finally approved at a meeting I chaired in Vancouver, Canada, in 1978. But it wouldn't have happened without the strong support of many people; especially helpful were Ed Huth, editor of the *Annals of Internal Medicine*, Bud Relman, of the *New England Journal of Medicine*, and Stephen Lock, of the *British Medical Journal*. Our statement was published in 1979 (18), and was an instant success. Today, over 500 scientific journal are participating.

The subsequent availability of word-processing by computers eliminated the old secretarial problems with typing and retyping manuscripts, and references can now be revised by simply pushing a key. But the Vancouver Group I helped organize, now known as the International Committee of Medical Journal Editors, meets annually to periodically update the guidelines (19), and to tackle other concerns of biomedical publishing (20). One of my bosses at UCSF, Holly Smith (chapter 6), used to talk about the Peter Pan principle of academic medicine: most ideas Peter out; only a few Pan out. That meeting in Vancouver was one of my ideas that panned.

## Global Health

***From the conclusion of Murray JF. A thousand years of pulmonary medicine: good news and bad. The Millennial Lecture. Eur Respir J 2001; 17:558-565.***

It is hard to compress the events of one thousand years into a balanced and inclusive talk. But it is safe to conclude that not much progress was made during the first five centuries of the last millennium, but thereafter, there was astounding scientific and clinical progress in medicine, including pulmonary medicine, that changed the way every human being on earth lives today. In the year 1000, medical care was largely unavailable and what there was may well have done more harm than good. Now, precise diagnosis of most illnesses is possible and specific treatment is available for the majority of them. Immunization and antimicrobials have tamed many of the infectious plagues of the past and life expectancy has lengthened enormously. But as I have emphasized, this progress has favoured the lives of a small fraction of the world's population a great deal more than it has improved the lives of the much larger remainder. One of the challenges for the millennium that is just beginning, clearly, is to

correct this imbalance to ensure that all people share the benefits of contemporary medicine.

## **Training**

***From Murray JF. National pulmonary faculty training program. Am Rev Respir Dis 1975; 112:329-330.***

The NHLI and Dr. Lenfant and his staff in the Division of Lung Diseases are to be congratulated for their efforts. Here is a rare example of a good idea being rapidly transformed into a nationwide program that promises to help where help is needed most. Moreover, it should be recognized that the National Pulmonary Faculty Program has been developed and implemented within the NHLI at a time when federal support of clinically related activities is being reduced.

The origins and results of this program should be evaluated carefully by other Institutes of the National Institutes of Health. It may serve as a model of a means through which the supply and demand of faculty can be balanced. Instead of training many physicians and scientists who are then recruited for available jobs, only some of which are in academic institutions, persons are trained to fill documented vacancies in needed fields of specialization; moreover, the training of future faculty takes place in the best possible clinical and scientific environments.

The NHLI has done all it can. Now the Deans and Chairmen of Departments must respond to this unusual opportunity to improve teaching and research related to pulmonary disease in schools of medicine and osteopathy in the United States. It is up to the schools to select promising young physicians and scientists to be trained in pulmonary disease and then to serve as junior members of the faculty. The full benefits of the National Pulmonary Faculty Program will be realized only by the selection of outstanding persons to meet the demands and challenges of pulmonary disease in future years.

## **Professional Societies**

***From Murray JF. A thousand years of pulmonary medicine: good news and bad. The Millennial Lecture. Eur Respir J 2001; 17:558-565.***

The two leading causes of global pulmonary disease I chose to describe in some detail, tuberculosis and smoking, illustrate the prevailing disparity between rich and poor and how and why it is worsening. There are many other examples. These inequalities are not only shameful but morally unacceptable and need to be addressed by the people in this room and the organizations we belong to. And I believe there is something we can do about it. But to be maximally effective, we need to work together. I suggest we form a consortium of professional lung societies that are concerned with the preservation of World Lung Health. Imagine the collective clout that the ERS/ATS/APSR/IUATLD, the societies that are sponsoring this World Conference on Lung Health, would have if the brain-power of their 20,000 or more members were wired together through the internet and thoughtfully organized to achieve common objectives.

Owing to the widespread availability of email, this can easily be achieved. Table 5 lists just a few of the things this powerful band of pulmonary brothers and sisters, professionals from over 100 countries, rich and poor, could accomplish. Supporting the "Stop TB Initiative" and encouraging the formation of "Smoke-Free Environments," a key way to make smoking socially unacceptable, one of the threats the tobacco industry fears most, are top priority undertakings. In addition, you should know that the first negotiating meeting of the Framework Convention on Tobacco Control will be held soon to determine the contents of an international treaty aimed at regulating the international tactics of the tobacco industry. Such a treaty will provide enormous help to individual governments by allowing them to withstand political and economic pressure from the industry. It is obviously important for all organizations that represent global lung health, including our professional societies, to champion a strong treaty.

*Table 5. –Some activities that could be undertaken by a consortium of professional respiratory societies concerned*

with the preservation of world lung health

- Educate the public and politicians about lung health
- Educate health professionals about good medical practices
- Join with and participate in the "Stop TB Initiative"
- Encourage "Smoke-Free Environments"
- Undertake vigorous advocacy activities

## References

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