Stimulating Opportunities for Research in Diseases of the Chest*

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It is with great temerity that I shall attempt to discuss the topic which has been assigned to me, for many of you could present it with greater clarity and authority. It is only the realization of the great debt that we as physicians owe to our colleagues and predecessors who have advanced the knowledge of medicine through research that encourages me to undertake the present task. The term “research” may mean many things to different men. Webster defines research as a studious inquiry, usually with critical and exhaustive investigation and experimentation, having for its aim the revision of accepted conclusions in the light of newly discovered facts. To most of us it simply means “the search for truth.”

It is well to note that we live in an age of science, in fact, of adventure and science—an age when science is about to outstrip all other activities. We are fortunate indeed to be offered the privilege of joining in its pursuit. The search for truth is not granted with equal opportunity to physicians throughout the world. We in America live in a land and in a time of opportunity that we often appreciate all too little. We live in a land in which the medical profession is allowed and encouraged to investigate the unknown and bring to fruition the betterment of man, I would therefore begin with a note of gratitude and a hope that we may continue to deserve and cherish the privilege accorded us to attain these ends.

Each generation has a tendency to look with envy on the generation that has just passed as having lived in a period when opportunity was most abundant and success most easy to achieve. As a young man entering the medical arena at the end of World War I, it seemed discouraging to try to improve on the knowledge possessed by such giants of medicine and surgery as Osler, Virchow, Mayo, Pasteur and their illustrious confreres. Still, the 30 years that have elapsed since have brought forth advances in medicine and surgery that stagger the imagination. To this period the term “The Golden Age of Medicine” has justly been assigned. One need but recall the discovery of the antibiotics and chemotherapeutic agents which have conquered, in large measure, the infectious diseases, subjugated pulmonary tuberculosis and conquered syphilis, the scourge of man, to realize the truth of such a designation. The hope and courage that have been offered patients with diabetes, pernicious anemia and endocrine disorders by the contributions of investigators

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of the past decade are immeasurable. Many secrets of the heart, lungs and central nervous system which seemed bound in mystery have been successfully probed and dealt with.

Are we, then, faced with the prospect that there is nothing further to learn, and that the opportunities for research are limited? If we adopt only the opinions and thoughts of our forebears and contemporaries, we will indeed create or develop nothing new. Medicine, fortunately, is both a dynamic science and a vital art, and therefore cannot and must not rest on present laurels. It was Huxley who, in his address on education, so succinctly stated, “The rung of a ladder was not meant to rest upon, but only to hold a man’s foot long enough to enable him to put the other somewhat higher.” Having attained the position that has been described by many as the golden age of medicine, we must not become complacent and self-satisfied. We must and shall retain the resiliency of youth and continue the search for knowledge. Knowledge does not come easily but is the product of great labor and great sacrifice. It is only through the advance of ideas that progress is ultimately determined. It is important that we manifest a refreshing vigor for work and a persistent impatience with the unknown if we are to obtain the greatest satisfaction of all: to help the sick, be it either in body or in soul. Man’s greatest delight and satisfaction is in the production of something new: an idea, an ideal, or life itself. The medical profession and the world in general have come to appreciate the importance and significance of new ideas and new truths, and have seen fit to honor the investigator and searcher for truth in a manner he justly deserves. The researcher today occupies a place of special importance in the field of medicine.

Never in the history of man have those within the medical profession, and those without it, had a greater incentive to advance the frontiers of knowledge. The vista that presents itself to the searcher after truth is indeed a most inviting one. Today the investigator no longer must suffer the economic slavery of our forebears, for industry and our nation as a whole have come to realize the tremendous worth of those who probe the unknown. The American College of Chest Physicians takes special pride in encouraging those who have the urge and possess the traits of the investigator by moral stimulation and the sincere hope that ere long it may give financial assistance as well. The College has always accorded the investigator a place of great importance in the formation of its scientific programs.

The period ahead presents a most intriguing challenge and opportunity for research in the field of cardiorespiratory disease. The timid individual, who may fear that there is little new to explore, need only listen to the splendid papers that are being presented to us today to realize that we are but on the threshold of a period that may surpass in accomplishment that just passed. The present period has been ushered in by advances in the field of cardiac disease that have given mankind much encouragement. The advances being made in the field of pulmonary physiology are but a beginning of what lies ahead. The role of the endocrine glands
and the enzymes in the aging process of man as it involves the heart and lungs has hardly been touched upon and cries for clarification. The veil on the mysteries of cancer of the lung has been lifted but slightly and the problem is waiting for the investigator to reveal its secrets. With such a revelation will come the cure of one of man's greatest afflictions. Viral and fungous infections and their relationship to respiratory disease become of increasing importance with the ease of international travel. Industrial diseases as they affect the heart and lungs present an increasing challenge to the investigator. It is obvious that the opportunities for research, both clinical and laboratory, in cardiorespiratory disease are unlimited.

Time has demonstrated that it is not possible to predict when, where and by what individual a new thought will be evolved or a discovery made. Often the individual cluttered with too much information concerning the impossibilities of a situation is less likely to discover a solution than the one unaware of such discouraging factors. The well-informed investigator who possesses some knowledge of the literature pertaining to a given problem is more likely to be successful than the uninformed. It is not given to all men to discover something new, but the rediscovery of an old truth or fact can often be as significant or as important as the original presentation. One need but direct attention to the reintroduction of the drugs being used presently in the treatment of hypertension and the use of curare in the field of anesthesiology.

No discovery, even though of world-shattering significance, has the least value unless the information concerning the discovery is transmitted to others. It is the duty of the physician who has learned something new, or produced what was unknown before, either in research or from his own clinical or surgical experience, to publish this information clearly and concisely. Great care should always be exercised to review the literature pertaining to the problem, for nothing causes greater humiliation than to report a discovery as being original, only to find later that it has been reported previously by another. What is well written in a modest manner will receive greater attention than what is presented in a dry, uninteresting and verbose manner.

The opportunities for research in the field of pulmonary and cardiac disease are indeed most enticing. Research especially affords the physician a real opportunity to capture the pleasures of pure delight which are so essential in the development of medicine, and, by such delight, to improve the lot of mankind.