CHAPTER VIII

Biographical Sketches of Three Distinguished AES Members
Active in the Years 1940–1960

In order to lend emphasis to the substance of the ideals for which our Society stood (from 1945 on), I have deemed it essential to give brief biographical sketches of a few of the men who made the AES what it was, in that they contributed mightily to its mood, tone, and its activities.

Those men whom I have chosen are: Drs. J. S. Simmons, J. E. Smadel, and T. Francis, Jr., all of whom are recently deceased members. Of course, there were others, indeed many others, who might have been selected.

James Stevens Simmons

James Stevens Simmons (1890–1954) was born in Newton, NC, graduated from Davidson College and, after attending medical school at the University of North Carolina for 2 years, earned his medical degree at the University of Pennsylvania, in 1915 (Fig. 11). He managed to take some postgraduate training in bacteriology at the old Pepper Laboratory at this same institution. Following this, after a year of attendance at the Army Medical School he received his commission as first Lieutenant, M. C., in 1916, in the regular United States Army.

However, he was not the ordinary brand of young medical officer. This fact soon became evident in the years which followed World War I. Instead of pursuing the standard Army Medical Corps routine, which, if successful, usually led to the directorship of an Army hospital—or in any event to a desk job with administrative duties, in which incidentally one was occasionally harassed by thoughts of military promotion—Steven Simmons pursued an entirely different course. As a young medical officer he chose to busy himself with opportunities in the clinical laboratory in Army posts located at El Paso, TX, the Hawaiian Islands, the Philippines, and Panama. It was in such settings as these that he was to learn microbiology and epidemiology the exciting way, by a combination of bench and field work. As a substitute for his apparent lack of ongoing formal training in microbiology, and to keep pace with the growing medical sciences and preventive medical techniques, he found time to earn a Ph.D. degree in virology at George Washington University in 1934; and a Dr. P.H. from the Harvard School of Public Health, in 1939—truly a remarkable feat. What made it all the more extraordinary was that during the years after graduation from the Army Medical School he had also found time to do extensive research work, mostly on tropical diseases. This was performed both
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in the laboratory and local communities where he was stationed, i.e., the so-called "jungle-boot" variety of epidemiology. It was in Manila that he did his classic study on experimental dengue. He also became founder and president of an Army Medical Research Board in Panama, where, when he was a member of this group, the discovery was made that *Anopheles punctimacula* could be a vector of the malarial parasite. He also managed to do some exploratory work on viral encephalities at the time of the St. Louis epidemic in 1933.

During the course of these rewarding efforts to learn more about infectious disease—military, tropical, and otherwise—Steve Simmons made innumerable contacts with civilian leaders in the fields of microbiology and epidemiology. He possessed an able and inquiring mind, a warm and winning personality. In 1938, he was elected to membership in the "Association of American Physicians," a privilege which had been extended to very few military medical officers before his time. This gave him an assured place among his civilian medical colleagues and in the broad discipline of academic medicine, both curative and preventive.

In 1940, with United States embroilment in World War II imminent, he received the appointment in the Surgeon General's Office as Chief of its Preventive Medical Service. He was quick to realize the enormous opportunities offered by this assignment, opportunities which could be used to advantage by military and civilian medical scientists alike, provided the latter had the ability and a zest for this kind

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Fig. 11. James Stevens Simmons, M.D. (1890–1954). From an illustration in the Harvard Alumni Health Bull., 1954(1).
of endeavor. It was then that he had the vision to establish the Army Epidemiological Board (AEB), later to become the Armed Forces Epidemiological Board (AFEB). An assignment on this Board and its Commissions served to indoctrinate the chosen clinicians with the idea that if they were to become adept in controlling infectious disease in military personnel, they must first learn the rudiments, or indeed the principles, of epidemiology. The establishment of the AEB was thus a landmark in the history of epidemiology in this country. General Simmons was singularly successful in accomplishing his aims here, not only in the AEB, but also the OSRD. Among leaders in government, military and civilian medicine, and prominent lay citizens as well, he had hosts of friends which he made easily because of his rare discernment, charm and easy manner—everybody knew Steve Simmons.

General Simmons became a welcome and important member of the AES in 1942 and, during the war years and afterwards, his presence at the Society's meetings always gave the occasion a brighter look. He saw to it that many of the most significant findings of the Commissions of the AEB (during 1941–46) were given a place on the programs of the AES, as should have been the case—in war time.

I shall always remember when at a meeting of the AES in the late 1940s, General Simmons' inquiry to Dr. Alex Langmuir's suggestion that the Society should continue a plan of a staggered meeting, i.e., instead of having a single day devoted to its annual meeting, the scientific sessions should continue on the morning of the second day. Steve Simmons asked the question with a twinkle in his eye: "What is a staggered meeting"?

After World War II, General Simmons received a signal honor, even for a general medical officer, namely, that of being invited to become dean of the Harvard School of Public Health. In the 8 years of his deanship he strengthened and increased the capacities of this school to a remarkable degree. His capability and distinction won him many honors, among them no less than six honorary degrees, the last of which was bestowed by Harvard University.

Professionally, Steve Simmons had travelled far for someone who had started out in 1916 as a young lieutenant in the Medical Corps of the regular Army. He did this through the power of his own genius, his warm personality, and his uncanny ability to make the most of opportunities which lay in the direction where his adventuresome instincts had guided him. In the Army he had been accused by some colleagues of having ambitions to become an "empire builder"; it is my personal belief that his activities in this direction were to his infinite credit.

He died of a heart attack in 1954, to the sorrow of many who had looked forward to his continuing friendship, leadership, and wise counsel in the fields of epidemiology and public health. The AES certainly had suffered a sad blow.

*Joseph Edwin Smadel*

Joseph Edwin Smadel (1907–1963) was born in 1907 in Vincennes, IN, the son of a physician (Fig. 12). He attended medical school at the University of Pennsylvania but received his medical degree at Washington University School of Medicine, St. Louis, in 1931. Serving as a house officer at Barnes Hospital, he

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1 An earlier title was Board for the Investigation and Control of Influenza and other Epidemic Diseases in the Army. The title was soon shortened to the Army Epidemiological Board (AEB).

2 OSRD (Office for Scientific Research and Development) which was controlled by the National Research Council.
had his first interest in epidemics and virology aroused when he joined a team to investigate the epidemic of encephalitis which struck the city of St. Louis so forcibly in the summer of 1933. It is said that there were more than 1000 cases. Nothing like this had ever been described in the records of epidemics of encephalitis in America. The degree to which national attention was attracted was indicated by the interest displayed by senior members of the AES, namely, J. P. Leake, L. T. Webster, Charles Armstrong, and W. L. Aycock, who all hurried out to St. Louis to do their bit. No wonder the young and inquisitive Joe Smadel succumbed to an urge that he too might explore the mysteries of viral encephalities, what strange agent caused it, and the way in which the infection spread. Following up this new interest he soon found a berth at the Hospital of the Rockefeller Institute where he was to join with Dr. Thomas M. Rivers in work on vaccinia virus and other such agents. Although Tom Rivers was many years Smadel's senior, these two (teacher and apprentice) were eminently suited for each other—at least at first. Besides being inquisitive and industrious, both were breaking new ground in the field of virology; and both were honest, hard working, forthright, and courageous—not afraid to speak out in colorful language in the laboratory and at meetings.
During World War II, on leave from the Rockefeller Institute and having been turned down by the Navy because of inability to meet physical requirements, Joe Smadel joined the Army and for 2 years was Chief Virologist associated with the "First Medical General Laboratory in Europe." He was also active in the control of typhus in Egypt and southern Italy. Here it was that he had his appetite whetted in the whole broad field of rickettsial diseases—an interest which never left him; and here it was that he strengthened his friendship with Dr. (then Col. M.C.) Harry Plotz, who had been in North Africa and was currently a member of the USA Typhus Commission. Dr. Plotz had been a volunteer worker at the Pasteur Institute in Paris for many years and was well acquainted with the fields of rickettsial and virus infections in Europe, North Africa and elsewhere. He was also a friend and ardent admirer of Charles Nicolle. I have always felt that the urge for global exploration which Joe Smadel had, and which drove him to the ends of the earth to satisfy his curiosity about viruses and rickettsia, was initially stimulated by Harry Plotz. In any event, during the war years 1942–45, Dr. Plotz had the constant vision of establishing a global viral and rickettsial diagnostic laboratory in the United States Army. With the war over, this dream was realized when the Department of Virus and Rickettsial Diseases of the Army Medical School at the Walter Reed Army Institute of Research (WRAIR) was established with Dr. Smadel as director. Sadly, Harry Plotz was to die of a coronary within a few months of its founding.

During a period of expanding geographical horizons, Joe was quick to take advantage of opportunities that were offered by the extensive military facilities. In 1948, in Kuala Lumpur, Malaya, came one of the most satisfying and rewarding of his investigations when it was found that the antibiotic, chloramphenicol, could not only effectively suppress scrub typhus, but *mirabile dictu*—typhoid fever. Dr. Theodore E. Woodward, his close friend and associate, observed that a typhoid patient, thought initially to have scrub typhus fever, recovered from his illness in about 3 days. Reluctant at first, Joe agreed to a therapeutic trial of chloramphenicol in 10 typhoid patients, all of whom responded with striking improvement. Unlike many other clinical investigators, Joe Smadel did not capitalize on this discovery. The finding of a successful treatment for typhoid fever was but an incident in his busy career. He expected no reward but pursued his explorations in the field and laboratory because this was the pattern which conformed to his way of life and satisfied his needs. His attitude was—let others develop the discovery according to their talents and requirements. It was the drug companies who profited.

But, being a productive investigator and a good committee man were not the only gifts which Joe Smadel had to offer. His talent for training young men in the way they should go, deserves a very high place. During the years when he was in charge of the Virus and Rickettsial Laboratory at the Walter Reed Hospital (WRAIR), he had a part in the training of a host of young men who came to work with him for longer or shorter periods of time.³

Joe Smadel's activities fitted those of the Armed Forces Epidemiological Board

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³ According to Drs. Harry A. Feldman and E. L. Buescher, this list includes among others, the following: Drs. Edward L. Buescher, Robert M. Channock, Harry A. Feldman, William C. Gochenour, Maurice R. Hilleman, Henry Kempe, Herbert L. Ley, Jr., Richard P. Mason, Harry M. Meyer, Jr., Paul Parkman, Philip V. Patterson, A. F. Rasmussen, Jr., Frederick C. Robbins, Merrill J. Snyder, William J. Tigertt, Robert Traub, Joel Warren, and Charles L. Wisseman, Jr.
like a glove. Sequentially, he became associated with its Commission: on Immunization, Rickettsial Diseases, and Epidemic Hemorrhagic Fever. Of the last two named, he became the Director. During this period of greatest productivity he was a singularly active and articulate member of the American Epidemiological Society. Contemporaneously he was engaged in many trials of viral vaccines both inactivated and attenuated. His short colorful remarks had the ring of authority. It was not only the gist for these remarks but the way he said them that commanded attention. "For my money I'd do such and so.—What are you waiting for, for God's sake?"

In 1956, Joe forsook the Army laboratory to have a temporary fling at heavy administrative duties at the National Institutes of Health (NIH) under its director, James A. Shannon. But it was not for long. In a scant 4 years he was back at the bench as Chief of Virology and Rickettsiology in the Division of Biologic Standards, NIH. One of his last ventures began in 1960, when he opened a new chapter by focussing his attention on Asiatic cholera. Principally through his leadership and efforts, a laboratory was developed in Dacca, East Pakistan, under sponsorship of the South East Asia Treaty Organization and NIH. For more than a decade this laboratory has been productive in developing improved methods for treatment and control of cholera.

It was during the latter part of Joe's life that governmental agencies such as the National Academy of Sciences, and private agencies such as the National Foundation for Infantile Paralysis recognized that here was a person who could give sound advice in a telling manner. His services were in great demand by countless committees. He had worked desperately hard almost up to the end and he seemed to derive a fierce inner joy from his many accomplishments, as well he should. He died in 1963 at the age of 56 from widespread cancer.

The American Epidemiological Society can count itself singularly fortunate to have numbered Joe Smadel as one of its most colorful and forthright members. His tremendous activity on all sorts and varieties of subjects were a constant inspiration to many of the younger and older members alike. His interests in the things the Society stood for were patently evident and his friendly presence and advice were always welcome. His was no Pollyanna personality. He not only made good sense, but made short shrift of shallowness. In the arena of the AES, if an old idea was mistakenly presented as a new one or a false one, it would get a quick retort from Joe: "My advice to you—friend, is to read the literature."

Dr. Thomas Francis, Jr.

Dr. Thomas Francis, Jr. (1900–1969)\(^4\) was born in Indiana, educated at Allegheny College and Yale University School of Medicine (Fig. 13). He was a medical student at that fortunate period in history when a number of small medical schools had just made the transfer to the full-time system of clinical teaching, and Yale was one of them which had determined to make this system work.

The young Francis was keenly aware of the intimate attention that was being bestowed on the small group of medical students by the earnest faculty members, who besides being astute clinicians were inspiring and high-minded teachers, chosen

\(^4\) In the writing of this note, the author has drawn heavily on the Festschift volume in Dr. Francis' honor which was published as a special number of *Archives of Environmental Health*, Sept. 1970(3).
with great care. Dr. Francis G. Blake, the professor of medicine, was quick to see Francis’ ability and his grasp of what the school was supposed to do. As a result, a mutual respect developed which lasted throughout each of their lives. Dr. Blake recognized that this young colleague, having graduated in 1925, and fulfilled his post as house officer and instructor admirably, had also begun to show signs of promise as a clinical investigator. His early estimate of Francis’ talents was not far wrong—16 years later, Francis was to become the President of the American Society for Clinical Investigation; and some 25 years later, he also became President of the AES.

In 1927, Dr. Blake advised Francis to seek a period of training at the best institution available for this kind of instruction, at the time, the “Hospital of the Rockefeller Institute.” There he spent 10 years under Rufus Cole, the Director. Of all the men whom Dr. Francis respected and admired, and there were many, for during his full life he made innumerable contacts, these two clinical investigators, scientists and teachers, Francis Blake and Rufus Cole were his ideals.

Among the group which Dr. Cole had assembled on his Hospital staff at this time were: Drs. Thomas M. Rivers, William T. Tillet, Oswald T. Avery, Donald D. Van Slyke, Alfred E. Cohn, Homer T. Swift, and several others whose names were to rank high during the 1930s—an era which is considered by some as the
age of the flowering of American medicine. No wonder the personalities and the accomplishments of these men impressed the young Dr. Francis.

At the Hospital of the Rockefeller Institute, Francis performed his early clinical investigations on acute respiratory infections along lines on which Dr. Blake had started him. After some 5 or 6 years, however, his work concentrated solidly on the newly discovered influenza virus which Smith, Andrews, and Laidlaw had turned up in London, in 1933. He proceeded to make what was probably the first isolation of influenza virus on this side of the Atlantic—the PR-8 strain. Together with his colleague Dr. C. H. Stuart-Harris (later Sir Charles) from England, Francis and his team made a series of contributions in the field of experimental influenza. Indeed, this work precipitated him promptly into a position of authority on this disease in the United States—and, incidentally, drew him into the field of epidemiology.

Had Francis pursued his originally planned course of in-service clinical training to its obvious end, it would have led him straight down the path of an academic career in Internal Medicine, and eventually to a professorship at one of the full-time medical schools in this country. But, other career goals proved more attractive to him.

It was also during this period that the young Thomas Francis achieved the confidence that he had arrived as a person to be reckoned with in the field of experimental pathology and clinical investigation—and, indeed, in clinical medicine. He often told me that he must have been appreciated as "a doctor," for to him was assigned the care of a number of members of the Rockefeller family, and in this role for a time, he almost rated as their private physician.

Indeed, during the first half of his long and distinguished career, Francis did not relinquish the hope that he might be considered as a suitable candidate for a position as Chairman of the Department of Internal Medicine in one or another of the country's leading medical schools. This hope was not based on the fact that he possessed a knowledge of medicine which was of an encyclopedic nature, but he felt that the important thing was that he had acquired certain ideals from his family, and from his respected teachers, Drs. Blake and Cole, he had learned the principles and concepts of clinical medicine—and this was enough. The special talents which Dr. Francis had subsequently developed were those that had to do with experimental medicine applied to infectious disease, microbiology, and immunology. Perhaps this universality of interests was one feature that made him such a good epidemiologist.

Anyway, his qualifications were many and varied so that he could command a professorship in any one of the fields in which he had been active. When, in 1938, the chairmanship of the Bacteriology Department at New York University College of Medicine was offered to him, which carried a supplementary appointment, at his own request, as visiting physician at Bellevue and Willard Parker Hospitals, he accepted. He was only 38 years old at the time.

With World War II in the offing he was appointed by Dr. Blake as the first director of the Commission on Influenza of the Army Epidemiological Board (later the AFEB), a position which enabled him to meet with leaders both in governmental and civilian fields of medicine, and to conduct the most extensive field tests on different influenza vaccines the world had ever witnessed. He emerged from this responsible war-time assignment as the acknowledged American leader in the field of the control of influenza.
In the meantime, in 1941, he had made the move from New York University to the University of Michigan where he was to establish in its new School of Public Health a truly great Department of Epidemiology, which he led for 28 years. It is amazing how he did this while at the same time (from the early 1930s on) he was suffering from recurrent peptic ulcer disease which, on occasion, was more or less severe. It was a constant source of aggravation to him.

I will not dwell on the many other teaching assignments or the many honors that fell to him. He was easily one of the most distinguished medical scientists and interpreters of medical science of his age. He found time, heaven only knows how, to attend an astronomical number of time-consuming meetings in the fields of microbiology, clinical medicine, public health, and epidemiology.

In 1941, he became a member of the AES, serving as its president in 1954–55. Not only did he plunge into its activities with a zest, but he got tremendous pleasure out of this association. Many were the papers he and his colleagues delivered on influenza vaccine trials. He had a strong urge to philosophize about the subject of influenza and its viruses—a subject which never failed to fascinate him. He was both friendly and pugnacious at times, for he had been an amateur boxer during his college days and he had never gotten over the tendency to be combative when he thought the situation warranted it. But he never drove anyone of his senior or junior colleagues harder than he drove himself.

He was generous in the use of his talents and energies, but—most of all, courageous. He accepted scientific and governmental administrative tasks that would have stricken terror into the hearts of lesser men. He took on the directorship of the huge 1-year 1954 field trial of the Salk-type vaccine, which was supported by the National Foundation for Infantile Paralysis; he also participated in the design and followup of studies of the Atomic Bomb Casualty Commission sponsored by the Division of Medical Sciences of the National Research Council. His involvement in these important activities was a manifestation of the high scientific and administrative repute in which he was held in this country.

Everybody of importance in the field of medical sciences knew of Dr. Francis and few there were who did not like him. He was also a guiding spirit to the AES and in times of crisis he was more than willing to give the Society his sound, and sometimes harshly critical, advice. To say that the AES has treasured his membership—would be a gross understatement. In 1969, on his retirement from the Chairmanship of the Department of Epidemiology at the University of Michigan School of Public Health, the Thomas Francis, Jr. Lectureship was established at that institution in his honor. The lecturer is chosen each year by a committee composed of the five most recent presidents of the AES.

In addition to Simmons, Smadel, and Francis—however, many another member of the Society has been busy during the decades of the 1940s and '50s, etc., contributing to advances in their special areas of epidemiology. A few of them are: Dr. Albert Sabin, whose work on neurotropic virus infections, dengue, sandfly fever, and most of all, poliomyelitis, have been of such enormous importance; Dr. John Gordon, of Harvard, who has been active in a wide variety of fields: air pollution, cold injury in the troops in Korea, population problems in India, and in later years, nutritional problems; Dr. Harry Feldman of Syracuse, whose tremendous activities have been mostly in the field of infectious diseases, particularly streptococcus and meningococcus infections. Also, in later years, two members
have engaged in writing textbooks on epidemiology, i.e., John Fox of Seattle, WA, who has long been a major contributor to the epidemiology of viral infections (4); and, Brian MacMahon of Boston, whose work within the past decade has been concerned with juvenile leukemia (5).

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