

## MY LIFE - UP TO NOW.

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### Earlier years and University of Texas

I was born (4 August 1910) in Atlanta, (Cass County) Texas and had most of my early schooling there. After a number of childhood diseases the one I remember most was diphtheria. Apparently I was so sick that the M.D. gave me antitoxin... actually 10,000 units (which I now calculate as the dose for an adult)... since he could not find a vein to put the AT in, he gave it to me in the hips. I remember well that the family all came in and stood around the bedside. I was then in about the first grade.

I was one of three children (one died in early infancy) of Joe B. McClung, his wife, Roxie. She was the only child of Thomas and Lou(ella?) Swint. Lou(ella) was a Johnson...of 15 children, one of whom had 16! And of that family three brothers married three sisters and the fourth was a likely go but failed. I remember my grandfather as he used to go to town, after an early breakfast by a Negro, Jack, and would come back by 10-11 o'clock and read the morning news from the Dallas paper. In the wintertime, he would peel apples, from a barrel he kept in the closet, and would peel the whole thing in one long swirl before offering it to us kids. He was a cotton buyer (buying early and selling late) and probably the President or other officer of the local bank.

My father was a Superintendent of schools, local, county and I think the state system. Later he worked for a farm journal and wrote many articles in a daily log type style. Mother was a good housewife, who after school would feed us fried (or scrambled) eggs. Since we lived across the street from the local school, she often helped take rings from fingers of girls who tried them on and could not get them off. My grandfather's house was just above the school and I'm sure that

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many times I would phone from one place or the other to find out what was being served! Both houses are now gone: my grandfather's to make way for a town hall, etc., and our place is now a Catholic (?) church. Our place was large (three bedrooms, a parlor, dining room, kitchen and bath, and a large center hall, and a large unfinished area above). There was enough land on either side of the house for a complete tennis court! Both places were quiet large.

Of my family, Esther, an older unmarried sister, was a teacher/librarian in Austin for many years but she died recently in Houston. The younger brother, Richard in Houston, has two children and is still living. On my father's side, his father, an M.D., volunteered in the Civil War, and was captured and sent to Erie (?) island in New York; his story of this is in the Lilly Library. He was married three times, and I met the latest, one time, but do not remember her. My father was one of several children although I'm sure that there were others in Cass County, my relatives (first and second cousins), could easily fill in any gaps!

On my grandmother's side, I remember going to Douglassville (20-30 miles) for family picnics. There would be about 100-200 people there out in a wooded grove with ample food for everyone. One cousin had a farm from which we got 100 lb. watermelons. His advice: eat only the heart and throw the rest to the pigs!

When I was in the 9th grade, the family moved to Austin, Texas. I recall that on going to summer school, I found that 9A History wasn't being taught, but 9B was, and I took that and some other things. The next year, the teacher in 9A would not let me talk as I had already had 9B History. Later we moved to 16th Street and that was not far from Stephen F. Austin High School where I finished in 1927 (I think I skipped a grade somewhere in the elementary school). Our particular high school class (there was some division even then) had University school evaluations every so often. I presume they were to show how we were doing. We got tired of the exams but we took them. I remember also that we did our algebra problems by telephone--a 2-3 way hook up system. Later when we entered the University of Texas (1927), a number of us from the same school got rather high ranking results and we felt that was because of the old exams...with

true/false and multiple choice answers, which we felt many schools did not have. After High School graduation I stayed at home for 2 or 3 days and then decided I might go to the 'Clipping Bureau' of U.T. and get a job. On the way over, I met Ms. Judy Conover who worked in the Main Library of U.T. She inquired "What was I on campus for?" I told her, and she said go to the Library and make application there. I found out later that the Librarian never took any one except sophomores and they had to have an almost straight A average the year before! Anyway with her help, I applied to Mr. Winkler, and he said to come back at 2:00 p.m. He then asked how I could work, 20-40 hours a week, etc? When I came back, he took me to the upstairs main desk and introduced me to Miss Baker by stating that I was the new page! It seems that he was so short of page help and since I could work 40 or so hours a week, he didn't need to have more help. At the end of the summer, I got a raise...from 30 cents per hour to 35 cents! I felt it was so much fun to work there and continued on through my junior year. By that time I had worked so long that at times I was shifted to the Reference Desk when the reference librarian was not available. One more thing...there was a Negro College south (?) of town and their students were allowed occasionally to come to the Main Library...but they could not take books out! I was surprised that some of my fellow pages would not pick up these slips (we had closed stacks then) but it seemed to me that if they wanted to study it was my job to let them!

For my Freshman year at U.T., I entered the College of Engineering and started to plan for a career as an Architectural Engineer. That year I was no good at drawing, etc., and in the summer I changed to College of Arts and Sciences, with a major in Geology (my sister had an A.B., M.A. in geology) and I had been out on field trips with her class. That summer (1928) I had a geology professor who read from the text book each day--even the pictures. So I decided to switch to Botany. When I met Dr. O.B. Williams, the advisor, he suggested that I start my major in Bacteriology as it was only taught once a year and if I decided I didn't like it, I could always switch to Botany (the Department was combined then) as that course was taught each semester! I never took anymore botany (except Plant Pathology). That spring (my junior year) I took Dr.

Williams course in Bacterial Diseases (or some such title) and when the other students found I was typing my notes, they asked if I would make stencils and let them have copies. I replied that I would not do so unless Dr. Williams knew of it. When I asked him, he not only approved, but said that will let me talk even faster! So, using the anticipated funds, I bought a new typewriter and sold copies, at about \$1.00 per set. I could even get today's copy (this was on exam next day) out at the date it was delivered as Dr. Williams would let me have his notes to make the stencils. The next year I retained the stencils and had them run off again and made a little more as the class was larger, and I even had the task that year of grading the exams!

The next year, my Senior year, I was offered an assistantship in Bacteriology and took the full complement of courses, including Dr. I.M. Lewis course, Bact. 76, which met at 12 o'clock on Saturday because his other course, Bact. 29, met at the same time Tuesday and Thursday! Both Eva Medaris, Jack English, and me had a time of preparing all media for the courses. Earlier in the summer I had been an assistant in Zoology for Dr. Lund's course in Introductory Zoology. I was reappointed to an assistantship. I remained at the University of Texas for the M.A. degree (1932) since Dr. Williams had a problem that he wanted to have some one work on. It seems that the Midwest Canning Industry was having so much spoilage of vegetables: sulphur stinker, acid without gas and a gaseous spoilage of vegetables. Others had been able to work on the later problem but could use only tubes of liver infusion topped by layer of agar. No colonies were available. I did this problem for the M.A. thesis but was unable to produce colonies.

During my years at the University of Texas, I published three papers. The first was on the change in pH of vegetable infusions. In the final year, I took a course with Dr. Jet Winters in the Department of Home Economics (something like Biochemistry but wasn't called that). For a research project, I had problems relating to vitamin A and D deficiency in rats. Later that year, the Governor of the State ("Pa" Ferguson) who didn't want U of T to have much money, stated "You know what they are doing? They are feeding rats!" He was later imprisoned, and his wife ("Ma" Ferguson) ran for the office stating that her first act would be to free her husband! She was

elected, and that's what she did!

During the year, Dr. Williams suggested that I apply for a fellowship at the University of Wisconsin. Although I had one remaining course to take for the freshman year for the M.D. program, I consented, probably due to the fact that a previous student had gone to Wisconsin. I applied and won a WARF (Wisconsin Alumni Research Fellowship) fellowship at Wisconsin. That summer (1932) I taught a course in "Water Bacteriology", but I remember little of it.

#### University of Wisconsin

As I flew up to Wisconsin (somewhat daring in those days), by American Airlines, I was puzzled that the stewardess would bring me first the stock market reports, and other such amenities. The plane was not very secure as you could see the ground from the seat between the body and the wings! After Memphis (?), she volunteered to sit by me and asked "Who are you related to"? This puzzled me, until she replied that I had the A.A. ring (it was my University of Texas ring!)...after that I got little service. Landing in Chicago (at the Stevens Hotel), I had planned to go by boat to Milwaukee and by train to Madison. When I found out that such service was no longer available, I flew on up to Madison on a plane which stopped at most points on the way up. Near the end of the flight, the pilot suggested that I move up to the front of by him, I think I was the only passenger then. When I replied that no cab would meet me, he radioed to ground and we could see the cab coming out to the airport!

I had wondered if Wisconsin landlords would keep the place warm during the winter, so I had applied to the dormitories. When I went out to the dormitory area, I was met by Mr. Norris Wentworth, who told me that I was a few days early but that he would take care of me...assigning me to Faville 207. Later I found that many friends in the undergraduate group, some of them I still recall, were unhappy with the dorm counselor (next door) and would often stop in my room when they had problems!

At Wisconsin in the department, there were Dr. E.B. Fred (my thesis advisor), Dr. Elizabeth McCoy (with whom I later did several problems), Dr. I.L. Baldwin (who taught me a lot

of bacterial physiology), Mr. Edwin G. Hastings (a really good chairman), and Dr. W.D. Frost. First off, Dr. Fred asked me to inventory all the stain bottles in the department, as there was no stockroom...this was a means of making me available to the entire staff.

In the first year at Wisconsin, although WARF fellows were not generally obligated to teach, I served in the second semester as teaching assistant to Dr. Perry W. Wilson (later President of SAB). Things went along well and one day Dr. Wilson came in and said "We can't have lab today"... "Why not", says I... "because you have to have a week old culture (to show spores of a Bacillus)". Since I had early training on what's up, I replied that's why I transferred the culture several days ago! I recall that I was asked to give a lecture or two (these were Engineering students required to take Bacteriology), and wondered if the traditional sky--boom would I get...sure enough, I got the signal.

In the second year, Mr. Hastings said I should be the assistant in Dr. Fred's class in Soil Microbiology. I told him that I was supposed to take the course, but with a bit of misgiving I served as the assistant. I was supposed to run each experiment ahead of the class...and did so for a few times but that got a bit old and so stopped. Dr. Fred had the habit of 'revising' the course each year, and it would be Thursday morning/afternoon when I got the Saturday (the only day the class met lab) schedule. That bothered the media woman, Ms. Minnie Fleckenstein, so what I did was to outguess Dr. Fred and have media made ahead and that usually worked...if you didn't use the media one day we would some other time!

It was suggested that I continue the M.A. problem for the Ph.D. The Committee on Future Progress (?) had suggested that I major in Bacteriology and minor in Biochemistry (General Biochemistry, Physical Chemistry, and Carbohydrate Chemistry). During the summer of 1943 I was then working on problems with Dr. McCoy. Dr. Fred said "I'll not get your committee (for the Ph.D. exam) together until the fall, OK?"...thinking it would be one year more, I said "yes". Later that day he came by and said "Your Committee will met Monday at 2:00 p.m., OK?" Neglecting to tell him that I had not started studying for the exam and had rabbits to bleed all day

Saturday and Sunday, I began to sweat. On Monday, as I was typing the forms required by the Graduate School (Dr. Fred's secretary forgot to get these done), a long lanky man came in, looking for the exam room. I replied, I'm it, and the exam will be next door. I recognized who he was...Dr. Paul F. Clark, of the Medical School Department. At the exam he asked for the first questioning indicating that he was to leave at 4:00 p.m....a tennis game, I suspect. He said at first: "You did not take our course in Medical Bacteriology?" "No", said I, and the Committee felt that I should not do this and his next question was "You did not take Dr. Holford's course in Immunology?" "No", said I, "the course at Texas in Serology/with laboratory was judged equivalent". Given permission, he started: "I want you to name an important research paper, a book, etc. on each of the following topics: Diphtheria." I replied, "Dr. Anna Williams book on diphtheria". "Good" says he, (I had not even seen the book, but he didn't ask that!). His next question was "What is the agent of typhus fever, not typhoid." I replied: "Rickettsia projeckii". (That was part of Dr. Williams course!)...he continued on this vein for several more questions, most of which I could answer. Others, Dr. McCoy and Dr. W.H. Peterson asked questions but Dr. Fred never asked any!

For the Ph.D. degree I went through many plating experiments (in those days were using phosphorus jar for the anaerobic technique) with hundreds of cultures. Luckily, one day I happened to use some old cultures for the inoculum. To my surprise when I opened the jar (with an adjacent pan of water to dunk the phosphorus), I found colonies on each plate of Gerber's baby food agar. Staining these colonies, I found spores! Thus the problem was solved and I later named the organism, Clostridium thermosaccharolyticum which has remained through the years. Since I had 12-15 strains, collected from various sources, I finished up the physiological experiments in a hurry.

In 1933, Dr. Fred was the SAB President. He and others stayed in the Michigan Union but most of the men graduate students were in a near by fraternity house. At intervals through the early part of the night, the students in turn would take a paper covered box (a block of ice) to the

upper floor of the Union. That is how I met Dr. H. Mansfield Clark--who was standing in the middle of the bed trying to get two wet glasses apart!

That year (now 1934) Dr. McCoy and I and others (using her Cord automobile) went to the Society of American Bacteriologists meeting in Philadelphia. We asked a number of prominent immunologists about the technique of using the recently reported O and H agglutinogens found by Felix and others for Proteus. To our astonishment, we were told that you can't use that technique, because the organisms you are using are anaerobic! This made little sense to us and when we returned to the laboratory we did a number of experiments (since my Ph.D. thesis was about over) using various clostridia as antigens. We were able to demonstrate the O and H systems and the next year we went to the SAB meeting with papers on Clostridium antigens.

Working with Dr. McCoy, we tried to detect how good the beef heart medium was, and designed a new medium--Corn liver medium which had starch and sufficient liver to make most organisms grow. Also I tried a new method for the anaerobic organisms. This is a vegetable tissue medium which grows even Clostridium tetani, one of the more exacting anaerobic types.

At the end of the year (1934), I graduated (Ph.D.) with one amusing incident occurring. Since I had been through two commencements before (finding that you merely follow the guy in front of you), I had neglected to read the commencement instructions. When I did read them in the Commencement line-up, I found that all candidates except the Nurses would wear dark pants, etc. Under my academic gown. I had on white pants, no coat since it was hot, and black and white shoes! It was too late to go back to the dorm and change so the nurses and I went through Commencement in white! In the previous semester I had found that Dr. Fred (who was being groomed to be the Dean of the Graduate School) difficult to find as after about 8 o'clock in the morning, he would disappear. I had two or three conferences with him--all before 5 o'clock in the morning! He, of course, was my escort during the Commencement exercises, and we were often stopped and "congratulated" as that morning the search for the new Dean of the Graduate School was announced.



I had planned to write my thesis with a good library there while I was on spring vacation at the University of Texas (since I didn't know where I would be after commencement). As you might expect, I found too many friends, etc. at home, so I left without the thesis. When I got on the Pullman, I asked for a table, etc. and wrote the thesis for the most part between Texas and Chicago! Although Dr. Fred thought it unwise to submit the thesis for publication, I did otherwise, and found Dr. C.-E.A Winslow, the editor of the Journal of Bacteriology, willing to accept the thesis in two parts.

#### The CANCO years

The American Can Company had known of my thesis problem and asked me in August 1934, to come to Maywood, IL for an interview. This I did and found that I had an offer for a job: Research Bacteriologist. Thinking it proper I suggested that I wait and discuss the matter with Dr. Fred. When I returned to Madison, this angered him somewhat as in those days jobs were not very available! Properly charigined, I replied that I would accept the position at CANCO. One of the cultures that we (Dr. McCoy and I) had been working on was Clostridium perfringens. During the first week at CANCO it was suggested that I tour the various departments prior to going to the Bacteriology House (because of the possibility that we would run into a culture of C. botulinum and the main plant was a can factory). By Thursday I had done the required visits and turned up at the Bacteriology House with Dr. Evan Wheaton in charge. He mentioned that the company had been working on an organism that was isolated from canned beef (from Argentina) and that the organism came from the beef before canning but not after it. When I looked at the microscope view of the organism, I detected that it would be C. perfringens and suggested that we try for this. We inoculated litmus milk and the next a.m. the milk was torn to shreds. Knowing that C. perfringens causes a characteristic death in guinea pigs (since it was Friday and CANCO does not work on Saturday) we arranged to be able to come in on Saturday, and as expected the disease condition was evident. Thus a big problem was solved.

I had forgotten that in the previous year at Wisconsin it had been suggested that I apply for

a Natural Research Council (?) fellowship year. Now about October in my first CANCO year, the news came through that I would get a fellowship. Dr. Irwin of the Genetics faculty of the Univ. of Wisconsin had been at the NRC center when the awards were made, and returning, he said I would not get a fellowship as my application had gone before the wrong panel! Since there were always a number of declines, I would get a fellowship as I was the first on the list! Thinking that perhaps Dr. Bill Vaughn (my section chief) in the main plant at CANCO should know of the fact, I scheduled an appointment with him. He first read the letter and suggested that I come back that afternoon as he wanted to discuss the offer with Dr. F.F. Fitzgerald--the CEO of the plant. Not knowing if I would be fired or not, I consented. When I went in to his office, he indicated, "We would like you to stay here--would \$1000 a year be sufficient?" I replied that it would, and when the first check under the new system came out, the program officer called and said that my check would be delayed, but come in the afternoon. At that time it was explained that the appointment had to go through the Chicago downtown office, then to the New York office, and when it hit the Treasurer the only thing they wanted to know was why (as appointments at that level need to be explained) was I getting \$1000 a month! Somebody had typed in the wrong figure...but finally I got the \$1000 a year increase.

Some official at CANCO wanted someone who had worked with Dr. K.F. Meyer (then of the Botulism Commission and involved with canning problems) and asked if I could do such a problem. "Sure", says I, "he has the world's outstanding collection of cultures of C. botulinum and I know how to do the O - H agglutinin system". Dr. Meyer was coming to Chicago and a week later we all met at the Athletic Club or some such. After the usual introductory comments, Dr. Meyer turned to me and said "You want to come and work with me?" (With his usual Swiss accent)... "Well, yes", says I, "offering the O-H agglutination work." His only question was "How do you do the toxicity problem". I replied, "the O agglutinin is heated before injection and the H can be formalized". OK, when? This was about the 21 or 22 of December and that meant I got to San Francisco by the 1st of January (by car). Not only did CANCO provide all media, expenses,

etc, my board and room (I think) in S.F. and left me free to work.

Contrary to opinion, Dr. Meyer was never a problem but instead asked me to chauffeur him to evening meetings (he had no car then) that we would attend. This I did and frequently we would stop at some Italian restaurant/bar after the meeting and he would offer whiskey until he decided that we should have some coffee and then perhaps go back to the whiskey routine again! Thus it was about the 1st of May when I decided I could leave S.F. and go back to Chicago, as by then the canning season was on and the Bacteriology lab would get spoiled cans from various places and I had all C. botulinum results. At the end of the next year (1936), an opportunity appeared on the Berkeley Campus of the University of California in the Department of Fruit Products and as Junior Bacteriologist. Since I had liked S.F. area so much, I accepted that.

#### Berkeley and San Francisco years.

The department Chairman was Dr. Wm. V. Cruess and I was to give a course in elementary bacteriology (or something like that) and sent to the field as the one who knew all about olives (and its fermentation), wines etc. Little did they know that usually I was the one to learn! I did get several of papers published that year. At the end of the year, an appointment came up in the fishery lab in Dr. Meyer's group and I transferred there and became an Instructor in Research Medicine.

I was quartered first by the front door of Hooper Foundation (the media kitchen was behind closed doors), so I got all the questions. One day, as I gazed out the window, Dr. Paul F. Clark (of Univ. of Wis.) came into my door and said "They are chasing me". Not knowing why, I looked out the window and two S.F. policemen were coming up the walk. Hastily, I told Dr. Clark to go into the room temperature room off my office. The policemen came in: "Where is he, etc.". Biding my time, I asked "Why was he wanted?" "Well, he ran into my horse!" I carefully explained that it was unfortunate, but since the horse had not complained, and the visitor was a very important person, would they agree to drop the charges! They did. Dr. Clark, the next evening, gave the SAB Presidential Address stating that in his opinion the room in the Fairmont

Hotel was equal to the room at the Palace of the Versailles. I knew that his address (Alice in Virusland) would be important and hoped that it would be OK with the audience. We had served wine...complements of local wineries...but the hotel charged us a fee equal to the price of the wine...possibly the first time that wine was ever served at an SAB affair. Dr. Meyer (the Master of Ceremonies) suggested that the majority of the visitors (who had mostly come by plane or car) would not have seen the "beauties at the West" and so he gave a 1.5 hour of monologue and slides (he was an expert photographer!). We were all tired at the end.

Later on, in about March, Dr. Meyer asked me to attend something I wasn't sure of but Dr. Meyer's request was usually granted! By the time the evening was over, Dr. Meyer was Chairman of the Public Health and Nutrition Section of the Fifth Pacific Science Congress and I was Secretary! It seems that the Fourth Congress held in Vancouver had a poor section on P.H. and N. and also the Congress had adjourned with the plan that the Fifth Congress should not be on the West Coast of America. Apparently someone in the National Academy of Sciences (?) had the idea that we should have the Congress that year in April. The Congress was convened about the 20th of August! Not enough time to plan an event but that we did by meeting at intervals. Dr. Meyer was well known at that time, would come by my office early (and I had to get up early in Berkeley as by then the ferries were not working and we went over by the S.F. Bay Bridge) as he would go by the mail office and get his mail and bring it in to me. I then had to write (as I had a Secretary for that purpose) letters to all sorts of people around the globe. Great Britain and France had colonies so they were eligible as well as Pacific countries for him to sign--when he would come by a night when he got through his Hooper business and the Department in Berkeley and in San Francisco (Chairman of both!). There was no foreign air mail service then, but I knew the shipping dates of all the liners leaving the West Coast. The total time allowed about one trip of saying "yes" and our getting the manuscript as we had announced that even if you are not coming,

your paper will be read for you. Thus, the incidence of various diseases in the Pacific Area was taken into account (and I felt that somebody in Washington had known what was going to happen!)

#### Boston year

Earlier in the year I had applied for a Guggenheim Foundation Fellowship. In 1939, Dr. Meyer said that Dr. Henry Allen Moe (Chief in charge of fellowships of Guggenheim) had come to Berkeley and was ill and was taken to the Hospital in Berkeley. "Since you live in Berkeley, please take his mail up to his room!" When Dr. Moe stated the fellowships have not been announced yet, but you will get your appointment but you can not go to Copenhagen as the first phase of the World War II was about to begin. Dr. Moe asked me "Do you know Dr. Zinsser". "No" said I, "but he is an important figure". Dr. Moe: "You go there as any young bacteriologist should get to know him". Little did he know that Harvard Medical School not the best place for my work. As I would need 40-50 animals, etc. I got eight! Could I buy some more? No, that is not done here! With Dr. Zinsser's help I was to stay in Vanderbilt Hall (across the boulevard from the Medical School). It was ideal but I often went to New York City where some friends lived! With Dr. Zinsser, Drs. Mueller, Fothergill, and Enders were the staff. I gave a couple of lectures on clostridia in the M.D. program.

My lab was on the second floor, and Dr. Z. would often link arms and walk around to the media room and back. Several times he asked if I was busy. "No", says I, "living across the blvd. from the Medical School". Then he would shut the door in his office in a way that the Secretary (who, as she informed me, could take his dictation in English and French) would know he was not to be disturbed! He would talk over his days at Stanford University. He had been one of the original bacteriologists there and about other things in S.F. I had written up the history of bacteriology in California (McClung, 1944). Dr. Zinsser was then a patient in terminal leukemia (which he diagnosed on himself) and there was never any mention of his illness among the staff. The Secretary would always say that he had a cold or something while we knew that he was down

in New York City having radiation. He would never tell us about his death but a sonnet he wrote in the last chapter is very good and I have appended this in an appendix.

It was ideal and Vanderbilt hall, you were charged for the meals that you ate, the room had a fireplace, and a stated amount for use of the room! Dr. Z. was most kind and Harry Plotz (?), Wm. A. Davis, William B. Wood were post docs and Miss Leah Seidman was an assistant. Dr. Zinsser died in the late summer of that year, but "since no one ever stays in Boston in the summer time", I went to Madison by way of the Library of Congress.

Although I postponed the work on Clostridium novyi, (and somebody else that beat me to the problem) I did get a great deal of work done on the listing of early publications in the U.S. In October we found newspaper accounts of a disease in herring gulls in the Boston airport. Dr. Davis, equipped with media for all sorts of viral diseases, and I, equipped for botulism. We did discover the disease to be aspergillosis.

#### At Indiana University

In the late spring of that year (1940) Dean Fernandus Payne came to Boston and asked to interview me. He then suggested that I come by Indiana University for interview on campus. This story has been told after I had been here for several years (McClung, 1980). At Indiana University, I became Assistant Professor of Bacteriology (1940-44) changing the name of the former Department of Botany to include Bacterology; Associate Professor (1944-48); Professor of Bacteriology (and chairman 1948-66); and Professor of Microbiology (1966-81); Emeritus Professor in 1980 to present. During the period of the organization of the departments to a Department of Biology (1965-68), I served as Assistant Director, Division of Biological Sciences.

Although the budgets of the two departments were separate from the beginning, it was little change to become Chairman in 1946 to 1966. Although I had been promised about a one-half time for research, the demands of the office were such that I rarely got to my research laboratory, which was being efficiently run by Larry Fleming.

During the first year, I gave a year long course for biology, chemistry, etc. majors and in

the spring semester course primarily for dietetics majors in the Home Economics department. In contrast to the expected 10-12 students in the long course, I had 36, and in the semester course I had 84. The latter course included a short laboratory, and I astounded the Dean (a Professor of Latin) when I had to put in a third section! That enabled me to ask for an instructor, which was granted the next year, and the appointment went to John Sylvester (who was finishing his Ph.D. at Wisconsin). In the next year, I appointed Dr. S.E. Luria, who had been Guggenheim Fellow at Princetown and Vanderbilt, as his first university appointment.

Originally we were housed in the Chemistry Building (as the old Biology Building had no space) but in 1946 we relocated in the attic of Kirkwood Hall. No elevator and 84 steps up, the faculty by that time included three professors, an instructor, and a reasonable number of graduate students. It was a glorious day, when we moved to Jordan Hall in 1955!

#### Societies

The original Society of American Bacteriologists changed its name to American Society for Microbiology in 1961. I was a member from 1932 (with dues at \$7.50 per year) to the present; and Honorary member in 1980. I served as Archivist and Chairman of the Archives Committee from 1953-82. Initially there was some confusion about the appointment until I wrote to Dr. John Hayes Bailey, then Secretary, to confirm the appointment. A little later Dr. C.W. Dodge, who was then leaving the Missouri Botanical Garden, sent a number of early reprints and some books. Later on, Dr. Robert Greene of Los Angeles, bought and gave to the Archives a number of books which I had listed in the early bacteriology books of the U.S. Later, on my retirement, I gave most of my collection to the Archives and much later, when the Biology Library of the Department had to absorb the Medical School Library, a very large number of books were sent on to the Archives (which has OCLC system).

I was a member of the Committee on Education from 1958-84 serving as Chairman, 1958-62. This also included a member of the Committee on Teacher Training Institutes and Conferences, 1961-65, and as a Representative of the AAAS Cooperative Committee, 1963-66.

As a member of Dr. H.J. Conn's Committee on Bacteriological Techniques, I wrote material for Leaflet III (Anaerobic Methods).

I served as a member of the Editorial Board, Journal of Bacteriology (1952-57) and Bacteriological Proceedings (1950-51). Also, I served as Councilor-at-Large and member of the Council Policy Committee (1943-50). I was a member of the Committee on Convention Problems, 1952, and served as Chairman of Committee on Membership, 1951-52. I served as Vice-Chairman of the Program Committee, 1941-42, and as Chairman, 1943-48. In those early days, with low budgets, the chairman of the committee, received all papers, made the program, and did all the work! I remember for the 1945 meeting in New York I was advised by the Council to order only 500 programs (as it was assumed that the attendees would be mostly local members) but since I figured it would cost only a few dollars more to print 750 copies (and if necessary I would pay from my own pocket). When the convention came about, we had approximately 800-900 members present.

At the Hotel Statler, Dr. Baldwin (then the President) and I had two bedrooms and a sitting room (so far as I know this was the first time the Society ever had any complimentary rooms for the convention). Just before the Presidential dinner (when most members were in tuxedos in addition to the head table), Dr. Baldwin came through the sitting room and asked "Did I have any extra studs"... "Sure", says I, "peeling them off my own shirt"! Of course, I didn't have any extra, and when (I was in the receiving line at the dinner) people asked about the paper clips on my shirt, I referred them to the President, down the line. Dr. Baldwin had been a very good friend as earlier, when the program came out, Drs. Thom and Waksman, were quite angry that they had been listed at the afternoon! Dr. Baldwin assured them that to change the program would mean that many who came just to hear them would miss them! This was one of the least of my worries, as I was informed that the program (then published in JB) would have to have censorship clearance! I asked the man I thought would know, and after a merry mixup, I got two copies (in the same mail) of the list of censors of all topics in U.S. customs (one in an open envelope and one



American  
Society for Microbiology

Honorary Member

**G**

he highest recognition within the power of  
the Council and members is conferred  
on

Leland S. McClung

As an eminent scientist who has made  
great contribution to microbiology



1 January 1981

*Albert Belmont*  
President

*J. Michael Joseph*  
Secretary

in the sealed--don't dare tell anybody! type). Since the French were then publishing on penicillin, I decided that the material could be released for over seas. Now, the Program Committee meets in Washington, and does a good job of arranging the program.

I was Chairman of the Publicity Committee, 1941-42, and a member of Dr. Waksman's Postwar Committee on Problems of Policy, 1943-46.

For the Indiana Branch of the SAB-ASM, I served as a member 1940-42, and as Secretary-Treasurer, 1943-44, President, 1947-48, receiving the Behrens Award, 1950-51 and Distinguished Service Award, 1981. For the Maryland Branch of ASM, I received the Barnett Cohen Award, 1984. This pleased me very much as Barney and had been a good friend (he was the first Archivist), and I showed some early pictures of him during the award ceremony.

I was a member of the Association of Midwest College Teachers, 1962-80. I am a member of the History of Sciences Society, 1963 to date, and a member of the Indiana Academy of Science, 1945-80 and Emeritus Member, 1980 to present.

For the American Academy of Microbiology, I was a Charter Fellow, 1956, and a member of the Board of Govenors, 1961-67, 1973-76. I am a member of the American Association for Advancement of Science, 1932-80, elected Fellow in 1940. I also served as a member of the Cooperatives Committee for Teaching of Science and Mathematics, 1962-66. I was a member of American Association of Immunologists, 1940-80, and a member of American Association of University Professors (National and Indiana University Chapters), 1952-80. I served as a member of the American Chemical Society (National and Indiana University Chapters), 1942-80. As a member of the American Institute of Biological Sciences, 1956-60, serving as member of the Committee on Education, 1958-65, on the Panel for Biology Films Series, 1959-62, and a member of the Board of Govenors, 1967-70.

For the Institute of Food Technologists, I was a Charter Member, 1938-80, Fellow, 1940, Associate Editor, Food Technonogy, 1946-50 and the Editorial Committee, 1942-45. As a Charter Member, I was given a medallion, at a ceremony in the Chicago Statler, for the 50th year of the

IFT. A very impressive ceremony with several other serving as Charter Members.

For the National Association of Biology Teachers, 1959-69, and Life member, 1969-present. I was vice-President, 1963, President-Elect, 1964, and President, 1965. I was a member of the National Science Teachers Association, 1960-80.

For the NABT organization, I was co-editor of the special issue (1960) of The American Biology Teacher, called "Microbiology in Introductory Biology". I had published in Turttox News, etc. a note in the previous year and found that there was great demand for material on bacteriology. The Secretary (John Hayes Bailey) called Difco and found they would arrange for the price of the entire edition (which later we found that there were about 40,000 copies sent on direct application and through certain NSF supported institutes.

I was a member of the National Science Teachers Association, 1960-80. I was a member of the New York Academy of Science and Fellow, 1943-58. Also I was member of the Oral History Association, 1970-80.

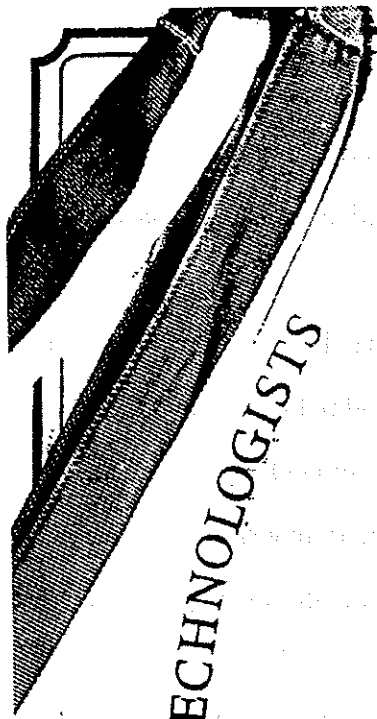
For Sigma XI, I was elected full member in 1932 at the University of Texas (because I had published three papers), and later was President of the Indiana University Chapter. My address at the close of that year is now at the ASM Archives. For the Society for Experimental Biology and Medicine, I was a member, 1940-80, member of the Council, 1949-50, and Secretary, 1948-49 of the local chapter, and President 1949-50. I was a member of the Society for General Microbiology (Great Britain), 1950-70.

For the Society for Industrial Microbiology, I was Vice-President, 1958, and member of Board of Directors, 1960-63. For the Society of American Archivist, I was on the Committee on Archives of Science, 1970-73.

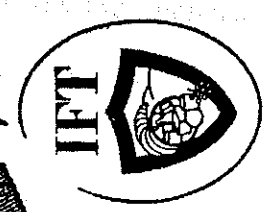
It does sound like I spent a great deal of time on committees!

#### International Activities

Probably in 1964, J.E. O'Connell, an officer in the NSF Foreign Division, was in my room at an AIBS meeting. He inquired "Why don't we applications from the Biology group...we get



D TECHNOLOGISTS



Presented to

**Leland S. McClung**

IN RECOGNITION OF

**50**

**years MEMBERSHIP**

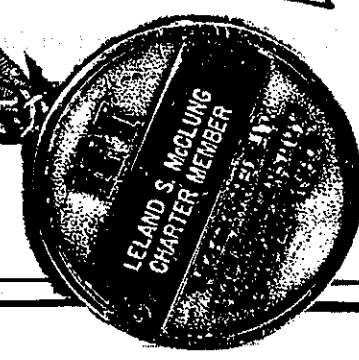
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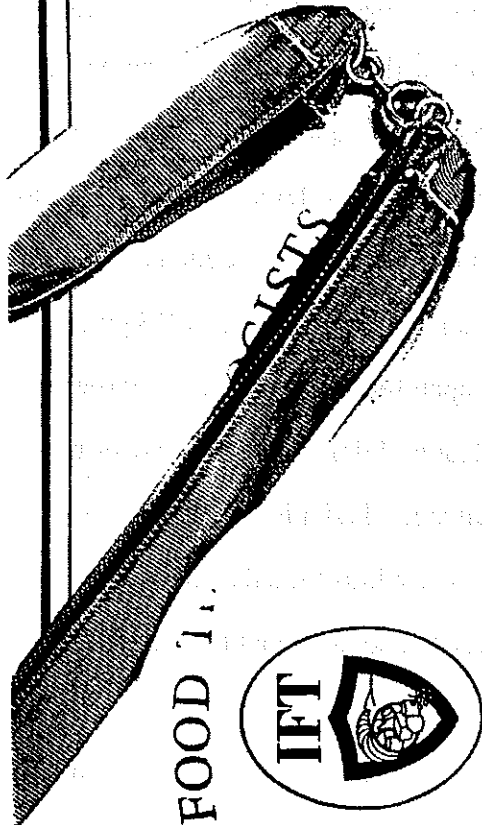
INSTITUTE OF FOOD TECHNOLOGISTS

1989

*J.P. Lajoie*  
President

*Howard W. Maston*  
Executive Director





Presented to

**Weland S. McClung**

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**50** years **MEMBERSHIP**

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1989

*J.P. [Signature]*  
President

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Executive Director



applications from Physics and Chemistry". I replied, "Next year, you will!" This was a case of using PL480 funds (money in foreign country that we couldn't take out) for U.S.-Foreign binational discussions of science problems, etc. Soon after, with aid from Roger Porter (Iowa) and others, we designed an elaborate proposal for a conference in Japan on some topic. When the proposal went to the Japanese, they replied "We don't want it...we prefer a proposal on Biological Education". Although we had prepared a proposal with much strength, we replied and simply substituted our names and other changes for the U.S. personnel along with CUEBS personnel. This was accepted and 10 of the U.S. personnel went to Japan for the conference. Earlier Roger had called me and asked "Why don't we go on to Hong Kong...I don't think we'll ever get there." I consented, so we spent a couple of days there and in Taiwan. I had a former student on the staff at National Taiwan University, and felt that I must get by to see him for a day or so.

The party at Tokyo was a big success but I must relate one item about it. It seems that there were two Biological Associations in Tokyo, and we didn't know which favored the conference. The previous year, I had invited Dr. \_\_\_\_\_ of Japan for a program on International Education at Amherst, Massachusetts. He informed me that he would deliver his address in Japanese, and would I please provide an interpreter! That was the day I left Bloomington, my wife took my single hotel in Amherst (they could not make a double) and I stayed in the dorm. On the way back, I 'curbed' a young Japanese man and asked him to come on Tuesday afternoon to interpret. He never showed up. Dr. \_\_\_\_\_ had a young man from Sony who did his interpretation. Although since neither the man nor his wife spoke (so they said) any English, I did invite them to the hotel. Later, the next year, I was invited to have dinner with them in Japan and it was advised that we would first go 'home' and then out; they reversed the situation and we went first to a sesame bar. For some years I had been taking Antivert (for Meniere's Disease), and found I had not taken my usual dose earlier. So at the bar, I hastily got out my pill case and took two Antiverts. I found that that was not enough, and so excused myself and started for the open room near the bar. As I got there, I fainted dead away and when I looked up I saw, Mama-san,

and Papa-san, and all the restaurant personnel! I had my strawberries in the open room! Then, we went home. While there, after some introductions, he asked his son (who had been at the dinner with the English teacher also), to go, in Japanese, and get something. It turned out that it was a gallon of saké! They had been at the airport when we came from Taiwan but there was plane delay and we landed in Kobe and thus they missed me. I hoped that they would not come to the airport before I left Japan and they did not, but I had kept the saké since it would not go into my suitcase nor brief case! The next a.m. in San Francisco, I assured the Customs Man that I didn't even want the saké, but he waved me on, and eventually I gave it to a fellow colleague who had done some Japanese translations for me.

We were all asked to spend as much as two weeks visiting with Japanese colleagues. Since the time was short before our take off from the U.S. I had asked the Japanese NSF office to route me to places where I had received correspondence. They did including a trip to Sapparo in addition to many other places in Japan. In Sapparo I lectured to the medical students, and others and later that night after a sumptuous dinner at the Sapparo Park Hotel, I was taken to a 'night club' for entertainment. The streets were icy and I hoped that I would arrive safely at my hotel! At the conference, Dr. Porter (the President of AIBS) was the Chief of Party, and several others from the U.S. were in the delegation. We gave a party at the China House at the close of the meeting as the Japanese had entertained us at the New Otani Hotel.

The previous summer, (1966) I was asked to speak to the International Food Group (or some such) in Moscow, which was a week before the International Microbiological Congress. My wife and I went to Moscow on an SAS flight (picture in ASM Archives) and two weeks after the Congress were to fly back from Copenhagen. Although we had some trouble with the people who arranged the congress, we wanted to go to Helsinki as long as we were in the region. We left early, had a nice visit in Helsinki, and were glad to get to Stockholm when we would join the Congress group. It turned out no where could we find the group and so went to Oslo where Dr. Kenneth Walls (an IU student and wife) were to stay, with their recently brought Volkswagen.

With them, we toured Denmark, and left Copenhagen for New York.

In October 1967, I was a participant in the International Workshop on Anaerobic Bacteria, where I met, among others, Dr. Henryk Miesel, that I was later to see in Warsaw.

#### India Experiences

In 1968, I was invited to go to India but my office schedule would not allow it. I had been conducting an annual NSF supported Institute on Bacteriology for several years and the NSF wanted me to do the same in India. In 1969, I was invited again and spent about 5 weeks touring different places in India. The NSF staff in Delhi, had said there is too little Bacteriology taught here (except in the Medical Schools) and would I rather than stay in a single place for the period, would I please go to different places during my visit? I liked the idea as it would give me more chance to see the country and went that year to Institutes in Cochin, Poona, et al.

The next year, (1970) I was invited to repeat the process and went to Bombay, Chandigar, Bhubaneswar, Saugur Patel, etc. But first, I went to Taiwan, as a special lecturer, and went to National Taiwan University, and several other places, where mostly I gave the same lectures.

On the India program, I have several experiences to relate. At Ranchi, I was introduced to the first day of the program to 35 men and one woman. On the 2nd day at my usual 8:00 o'clock session, I was surprised that only the woman appeared, and no men. After several minutes, the Director came to me and asked "What is the problem?" "None" says I, "except that all the men have not come". About that time a messenger arrived, with the note for the Director. Finally it was discovered that the hostel manager had been feeding 21 extra people on the food for 35 men.

At Cochin, when the list of ingredients (I had sent it ahead) for the program was displayed, I found only 8.5 petri plates (I had asked for 25 per person) were available. Dr. Costlow (Duke Marine Station) and I went to the New Zealand Station, some what near, and got 100 pre-World War I plates wrapped in tissue paper. I helped wash the plates for sterilization. The special films I had bought which take only a push in machine and it starts running, had not been given to the Participants but were kept by the Director. Also, on Saturday morning the Director had said, we



go to wedding. Well the NSF staff had said do what is required, so we did go to wedding...about #3 and 4 in line but we did have chairs for the ceremony. Afterwards with 200 or so guests, we were seated on stage (and the curtain was lowered) and had forks, etc. for our meal...the 200... guests had no forks, and ate with their fingers.

Thus at Poona, we had a plane strike. There I was quartered next door to the Army Barracks and at 4:00 a.m. the bugler sounded forth actively. At the end of my stay, I arrived at the airport at 7:00 a.m. for the plane back to Bombay-New Delhi. No plane! This was a Saturday and the strike was called for Sunday but Bombay had not sent out a plane on Friday (Bombay-Poona flight). So the Director took me to the train station stating that I could get the Madras (?) Express. When it came, the post-doc who was with us disappeared (and leave taking is about as good as Japanese) when I got to my coach, I found the post-doc in my seat! For, as he said, it's yours if you get their first! After I got back to Bombay, I asked the hotel man to see if India Air (the international group) had scheduled a flight to New Delhi. He suggested that I better go and ask...this I did for the India Air office was not too far away. The attendant assured me that there was a flight, and I could get a seat, and then asked "You eat everything"...meaning I'm non-vegetarian. Remembering the meals of a few days previously, I said "yes".

The NSF staff in New Delhi decided that I was really OK as I had managed these and other interruptions! I should mention that Dr. Yvonne Freitas in Bombay and with her and her students I felt very welcome. One of their men in the second year, served for a time as my teaching assistant. There is a tale with each station but the above is for comment.

I did get one day to visit the Taj Mahal and on each of two visits, I spent 'Memorial Day' in Nepal...ostensibly to see Mount Everest, but the day was cloudy but I saw lots of other things!

At the end of the period there was discussion of a Binational Conference on Education and Research in the Life Sciences, and I was pleased that the Indian group had me listed as one of the conferees. We did go to Bangalore, where Dr. Detlev Bronk was the Chief of Party. Though Dr. John Costlow of the party and I invited an evening session, with drinks, for several of the Indians.

Though we thought that Dr. Bronk would not come, he came, not only the first night but each night there after! The word of our parties got around and we were surprised that one day one of the men came and asked could we ask the Minister of War (?) to come to the party as they (the Indians) didn't feel that they could entertain him! We did, and he and Dr. Bronk had a good time.

#### Other Countries

The next year, Dr. Costlow invited me to come with him on a Smithsonian Program to tour Yugoslavia and Poland. Eventually the trip was planned and from Dullis we took off for Zagreb, Yugoslavia. After a variety of ceremonies there and in Lubljana, we went on to Rijeka to "officially" open a yacht that had been converted to a marine vessel. Rijeka has an airport open only during the week. I suggested to Dr. Costlow that we should go back up to Zagreb and even to Beograd as we had no visa yet for Poland. We took a train back to Zagreb and stayed the night. We then started to Beograd. We were told that the train would be one hour late and to go to track III. Later in the early afternoon we found that many were going to a different train, and we found our compartment there, and relaxed: Much to our amazement, the train started off in the wrong direction! Fortunately, it went to a round table and then came back to the same station where it took off for Beograd one hour late! At Beograd we inquired at the U.S. embassy, and found no visa. Later I suggested that we go to the Polish embassy and, after some hesitation, we found a girl who could speak English that promised we could get our visa at 11:00 a.m. Thus we could go to Poland.

In Warsaw, Poland, I had a section of "Hotels of Europe" open and found that we could not get a hotel room for the night at two hotels, so we went to the U.S. Embassy. They were full, but suggested that we go by train (and what a night that was!) on the way to Gdansk, which is where Dr. Costlow wanted to go. We eventually got there and after Dr. Pulitz (?) phoned the hotel, explaining that he was an Academician, we went to a suburb and I talked with Dr.

\_\_\_\_\_, and then to the hotel. We were told there to wait for a bit and we explained that we wanted to go upstairs to the restaurant as it was then past lunch time. When we got back, the girl at

the desk directed us to go to room 106 which was two beds, with French furniture, etc. (and later we discovered some one else had been kicked out of the room to make way for us!). For the first night, John wanted to sleep; but I went back to hotel desk to inquire "What is the rate, etc.". Behind the desk, was a poster listing Boris Gudanov. When I asked if that was for tonight she replied yes and got tickets for us. The scenery was "summer stock" but the music and singers were excellent. I bought a book about the opera back for the School of Music library. A very pleasant evening out at the marine station (with a bit of a brisk ride out in "their" marine vessel, which they had kept for us to see, we came back in and had open faced sandwiches, and a lot of wine!

In 1977 I sent a paper concerning the ASM for the History of Science Society which would be held in Edinburgh, Scotland. My wife and I visited briefly in London before taking the flight for the lower part of Scotland. I had trouble driving the rent car but my wife responded and did all the driving. I wanted to visit briefly Dr. Geoffrey Hobbs at the Torry Research Station in Aberdeen. After a brief visit there, we went over the hill to the top of Scotland (by Balmoral but the Queen was coming so no visit there), and on to Loch Lomond and then to Edinburgh. We stayed at the dormitory and found Edinburgh very interesting (in addition to the Congress) by visiting the old castle, etc. One of the nights of the Congress was a military tattoo for an evening performance. Our planned return to England was halted by an air strike, so we quickly came back to the U.S.

#### At Indiana University

At IU, especially in the early years, I tried to learn a little about the early history of bacteriology and also consulted with Dr. H.G. Day (who was appointed as Biochemist the same day that I was appointed) and others regarding a variety of problems. I joined Dr. H.J. Conn's group on the Pure Culture Study of Bacteria and at the same time with Dr. Paul Weatherwax (Botany) tried to examine antibiotics from plants. With Ruth Toabe we perfected the egg yolk medium which later was used widely in medical and professional laboratories. With Dr. E.D.

Weinberg (Bacteriology) we tried to use the new microtechniques for species identification.

In the beginning, I did a manual (which went through three editions). I was told by the salesman that it was the most popular manual in print and I am sorry that other things prevented other editions.

About the early part of 1955, I got introduced to film making with Dr. H.J. Brodie (Botany) and Dr. Shelby Gerking (Zoology) by producing four films in introductory biology. That led to additional other films, with Dr. W.A. Konetzka, in the production of films on bacteriology. All of these were used widely throughout the U.S. as we learned from the IU Audio-Visual Department. One, particularly the one on "Career" was shown at the introductory meeting of the annual ASM and we sent the others also to the ASM for general use. A large grant from Dr. Ted Carski of BBL laboratories was extremely helpful for the "Career" film.

In the late 1950's I had become involved in explaining bacteria for high school students. At first I gave Turtox News, etc. information and asked teachers to write to me. Very quickly, I ran up a bill of \$800 or more and that led to producing a special issue of The American Biology Teacher. Fortunately, the Difco Company gave considerable support to the latter, and eventually at least 40,000 copies were sent to high schools. Through the support of Paul Klinge and others I was elected President of the NABT.

With the heavy production of time I devoted to high school teachers, I developed NSF programs for special Institutes in Microbiology for about 13 years. Soon after that, the NSF people in India (and Taiwan) for two years (1968, 1969) and then an U.S.-India program for education was developed in Bangalore.

During my years at I.U., I have tried to direct new graduate students to other faculty in the department. I did, however, have three Ph.D. students and some 27 other students for the M.A. I am listing their names in the Appendix.

The absence of research papers in the 1980-91 period is due to the fact that I was heavily engaged in working up the final series of bibliographic books published by Marcel Dekker in

1982. Unfortunately the publisher let that edition go out of print with about only 400 copies sold. Thus, I did not get any royalties for the edition which I was supposed to get after 1000 copies had been sold! Even better than the earlier editions, I tried to do as much work as possible including all the review agencies (Chemical Abstracts, Biological Abstracts, etc.). This involved many hours of work, including the references in the Biology Library, The Medical and Dental Libraries, the National Library of Medicine, the United States Agricultural Library, Crerar Library, etc. To be certain that we were getting all the Russian literature, I had pulled all the Russian articles from the file, and after some rather thorough checking I found that the Bulletin Signalitique had used a different initial letter on many articles from that used by Chem. and Biol. Abstracts. Even with this elimination and others, we found 40,000 entries for original works on anaerobic bacteria in 1940-1975. Although this work was very interesting, it did get a bit boring as too many cases of "another case of tetanus in an elephant..or horses, etc". The volume was well reviewed in many journals and I liked particularly the review of Dr. Trevor Willis (British Medical Journal). Dr. L.G. Ljungdahl (SIM News), and a German one by Taubeneck (Ztschr. für Allgemeine Mikrobiologie).

Jordan Hall was given an addition (5-6 story and an atrium) in the 1980's. For the dedication, the ceremony was held in the Atrium (where we have departmental parties now) and the audience filling the Atrium seated there. Vice-President Gros Louis spoke and used some of my information in his speech. A couple of honorary degrees were awarded, and dinner was held in the Union.

One of the advantages of living in Bloomington, with good sports and an excellent Music School, is that we are close to Brown County--long known as an Artist's colony with beautiful hills and valleys. The town of Nashville, originally a nice rustic spot has now been ruined by over development. The first year that I taught at IU, one of the students convinced me to go to Nashville and see Matterhorn. This is a large hill estate where several thousand daffodils have been planted and the house remodeled to look like a Swiss chalet. Three boys now inherit the

place and I know best, Milton Matter, Jr., who eventually came to IU and to the Medical School for his M.D. He is now retired, a Brigadier General from the Air Force, and is living in Berkeley, CA but makes frequent trips to Nashville. At one time, on a gold mining expedition, if I'm not mistaken, he made a trip to Ecuador and came back (with gold?) with a beautiful wife, Leah. They have three children now and recently we had a very enjoyable out door wedding there of their eldest daughter.

One of the other big advantages of living at IU, is the fact that I came in under a very excellent President--Herman B Wells. In the various universities with which I have been associated and known, I do not know of a better person to be President at the particular time that he was here. He is now Chancellor (at age 94) and has written a very interesting book called "Being Lucky" published by the IU Press. He has built one of the most beautiful campuses that I have seen and has made this campus a great university.

#### Retirement Dinner at 1323 East University

There were 22 people to be eulogized at the retirement banquet in the University--and that was one too many for me. Although the date was changed, it was an April evening and the stars were out--eventually. Ruth had fixed plenty of hot things for drinks, two large casseroles, an enormous bowl of salad, and lemon and chocolate tarts, etc. We had two boys (drinks) from the department, or that I had known, and two girls in the kitchen. About 30-40 people came at 6:00 p.m. and some stayed till about 2:30 a.m. A Vice-President and wife from Chemistry, Con Sterling from PA, Pat and Bill Exner (Wheaton), JessieLou Blakeslee (Phoenix), Helen Michael, Helen and Russ Arthur, the Joe Highway, Jr. (Lionsville), the Torrey's, the Brenemans, the Rhoades, Mrs. Julia King, Robert Stone (Indianapolis) the Sputh's (Indianapolis), the McBurney's (Indianapolis), the Putnam's, the Rieger's, and maybe a few more. E.D. Weinberg and W.A. Konetzka came early and left. Herman B Wells couldn't come on account of leaving for

Mississippi in the early a.m. The Long's came after the party in the Union. In contrast to the dreary affair in the Union, we had a great party. Pat Exner had decorated the house with flowers, the daffodils were out and other things. The next a.m. we had Con for breakfast.

A

**PARTY**

**CELEBRATING**

**AN ASSOCIATION**

**IU - LSM**

**1940 - 1981**

1323 East University Avenue, Bloomington, IN

7 April 1981, 6:00 p.m. - ????

(This was available to guests)



Old favorites MENU

6:00 Smoked turkey Mac

Texas pecans - California almonds

Mushroom dip Indiana

Cheese dip Wisconsin

Asparagus toasts California

7:30 Turkey casserole Ruth

Carrots Illinois

California spinach salad with cauliflower, mushrooms, almonds

Sunset lemon and chocolate tarts

Coffee (Irish or ...), Chinese tea, or your choice

8:30 Assorted liquides - your choice

12:00 Goodnight



Grants for research and Educational Activities, 1940-80

\$904,281

Invitational International Activities:

- Jan. 1966: member of U.S. Delegation for Binational-  
Conference on Biological Education, Tokyo, Japan
- Aug. 1966: opening address in section of botulism for Fifth International  
Symposium on Food Microbiology, Moscow, Russia
- Oct. 1967: Participant in International Workshop on Anaerobic Bacteria,  
Montreal, Canada
- May-June 1969: Special lecturer, NSF-UGC Summer Institutes, several  
locations, India
- May-June 1970: Special lecturer, NSF-UGC Summer Institutes,  
several locations, India
- May-1976: Special lecturer, NSF U.S.-China Program, various  
institutions, Taiwan
- June 1971: member of U.S. Delegation for Binational Conference  
on Education and Research in the Life Sciences,  
Bangalore, India
- May 1972: consultant, various marine laboratories, Yugoslavia  
and Poland

Publications: (innacurate count)

Research papers	66
Abstracts	26
Educational articles	10
Reviews	6
Book reviews	9
Films	8
Books - laboratory manual	3 eds.
- Index to literature on anaerobic bacteria,	2 vols. 1939
	, Sup. 1941
- In press, literature from 1940-69.	7 volumes

Congratulations & best wishes!

## Retiring with honors

Don Carmony

Indianapolis News, April 21, 1981

It is a happier event to bestow accolades upon a man while he is living than to wait until after his death.

The time of retirement is a propitious time for such a bestowal, and that is why we now call attention to the distinguished accomplishments of Prof. Leland McClung at Indiana University. As a member of the faculty, he has won worldwide attention as an authority on the microbiology of foods. What brought him this recognition was the fact that he was the first man to identify a kind of bacterium that poisons foods. It is known scientifically as the bacterium *Clostridium perfringens*.

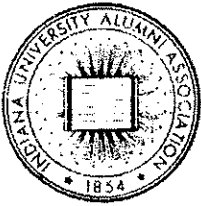
While a young faculty member in the Botany Department he had the responsibility of creating a department of bacteriology and then administering it. His responsibility was discharged so well that he became highly esteemed in research, administration and teaching. Just how well was indicated when Prof. McClung became one of fewer than 100 men who have been made an honorary member of the 33,000-member

American Society for Microbiology in that organization's 80-year history.

His judgment of people and his knowledge of his subject each has been outstanding and the researchers he has brought to Bloomington have won high honors, two becoming Nobel Laureates.

His work in training high school biology teachers at a summer institute supported by the National Science Foundation has been so notable that the foundation sent him to act as a consultant in Taiwan and India.

Other honors have come to him, and now that retirement is here he plans to publish a multi-volume survey of world literature on anaerobic bacteria in nature and disease to add to his already extensive output. We congratulate him as he steps down from an honored career that has done much to advance the knowledge of microbiology and to inspire biology teachers and students alike. His dedication and scientific acumen have added to the prestige of Indiana University.



## Indiana University Alumni Association

AREA CODE 812 / 337-1711

INDIANA MEMORIAL UNION / BLOOMINGTON, INDIANA 47405

May 12, 1981

Professor Leland S. McClung  
1323 East University  
Bloomington, IN 47401

Dear Professor McClung:

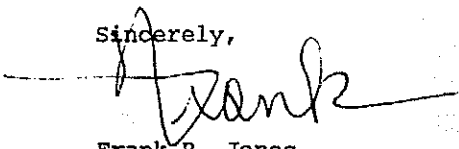
It is the pleasure of the Indiana University Alumni Association to invite you to attend the Annual Alumni Awards Banquet to be held in Alumni Hall, Indiana Memorial Union, Sunday, June 14, 12:30 p.m.

The purpose of this affair is to bestow upon you the honor of induction into the Emeritus Club. The Emeritus Club was established several years ago, and is an organization composed of graduates of Indiana University who have been alumni for at least 50 years. In addition to this membership, each year we invite the retiring faculty of Indiana University into the Emeritus Club as recognition of their loyal service to the University. On June 14, if you so desire, you will be recognized and presented an engraved certificate and an Emeritus Club pin by President John W. Ryan.

Two tickets will be available for you when you register at the Alumni Headquarters, Biddle Continuation Center, Indiana Memorial Union. Please feel free to bring a guest.

We sincerely hope to have you present at this prestigious event, and encourage you to return the enclosed card at your earliest convenience.

Sincerely,

  
Frank B. Jones  
Alumni Secretary

FBJ: jrw  
enclosure

*Winner of four national Alumni Administration awards for comprehensive excellence in alumni programming*

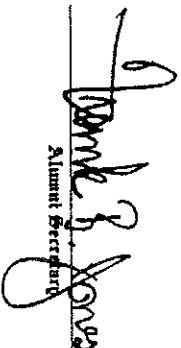
# Indiana University

Honors

Professor **Irland S. McClung**

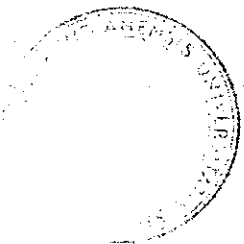
with Membership in the Emeritus Club

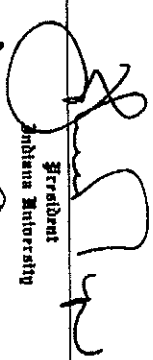
The Indiana University Emeritus Club membership consists of all those loyal Alumni who have been graduated from, and faithfully served, their Alma Mater fifty years or more, and all those members of the Faculty who have retired after long and outstanding service.

  
Alumni Secretary

June 14, 1981

Bar



  
President  
Indiana University Alumni Association

### The Sterling Scholarships

At the time of his retirement (as Vice-chairman of West Company), Cornelius F. Sterling, the first A.B. graduate in Bacteriology (1942) came to IU and with the IU Foundation set up a fund for scholarships in Microbiology. Although I thought it should be called the Sterling Fellowships, he declined and they are now the L.S. McClung Scholarships and usually \$2000/year for two Microbiology majors (Indiana residents, with a 3.0 GPA in courses required for the major). The accrued interest only is used and we have had excellent candidates; for example, one year a candidate had applied to Medical School and to the Lilly Company (Indianapolis). When the announcement was made, he decided to go Lilly's and now with their aid in completing his Ph.D. In Microbiology. This is now IU Foundation Account 29-AS05-12-8.

With the above in mind, my wife and I have funded, with help from many friends and former students, a summer program which allows a Microbiology major to work full time with a professor in the department. Again, only the interest is used for the stipends. This is now IU Foundation Account 37-AS05-11-6.

### Kidney Stones, et al.

Some years ago in time early 1940's or 1950's, I began to have kidney stones. After occasionally passing a few at Methodist Hospital (Indianapolis) I went in for surgery to remove a large stone. Later I was put on Citrolith (two daily) to alkalinize the urine, and now I take Antivert, quite frequently at first and now about one per day. Some years ago, we were invited by Dr. and Mrs. I.T. Rieger (who had purchased a home on Tidy Island, Tampa Bay) to come down at Christmas as they would be in Bloomington and Colorado Springs. A very nice party the evening we arrived, but the next a.m. I was unable to talk clearly, etc. We returned to Bloomington immediately, and though it was diagnosed a "stroke" there are no obvious physical effects, as I have regained speech, etc.

Then in October of 1994, I began to have trouble walking up stairs (one flight and I had to rest), etc. Fortunately, unfortunately not early enough, we went to Emergency Room at

Bloomington Hospital and there I found that I had hemoglobin of 6! So, in to the hospital I went, with a couple of pints of blood and with iron compounds, I'm back to normal--but slower than usual!

#### Gourmet Club

Some years ago, probably early 1950, a group of us decided to have a Gourmet Club. We would meet once a month (though not in the summer) at each persons home and have a gourmet dinner. In the group were Dr. and Mrs. I.T. Rieger, Mr. and Mrs. Asa Marshall, Mr. And Mrs. C.E. Rockwood, Dr. and Mrs. C.R. McIntire, and us. When the Marshalls went to Florida, Mr. & Mrs. "Fuzz" Wampler joined the group. Other groups with other persons with various names came later. At first we started to have "theme" dinners but later it was a just a supergorgous dinner. To have a night out somewhere we started by putting \$5.00 per couple in the "pot" but later that changed to \$40. Then with every one's consent, at least two of the members brought stock (Texas Instruments when it was low) and on selling later on, added that, to the "pot". Following discussion, later on in the 1960's, we decided to go to Portugal, Spain and North Africa. By this time we had at least \$2400/couple and the "pot" paid for all air fare, all hotels, etc., unless some one decided to do something different. Thus, we had a good time in Lisbon, Southern Spain (and back to Madrid) and two couples (Rieger and McClung) did go to Tangiers. A few years ago, after about 185 dinners together, we withdrew and as a result the Club folded.

After Mrs. Marshall died (in Florida) and he remarried, they came to Bloomington in the summer. Mrs. Marshall then said I'm going to Hong Kong in December and why don't you come down and house sit. This we did at Holmes Beach on the west coast for two years. The second year, boarding the plane for Hong Kong, Mrs. M. forgot her passport. When she called me, I used a tool to open the file drawer, found the passport and sent it on to her the next day. This was about 1986 and 1987.

#### Marriage

On the 25 December 1944, I married Ruth W. Exner (at a church in Oak Park, IL) who had



been a Navy nurse here at Bloomington but who when the "ship" here was closed, she had moved on to Norfolk. Navy nurses are not supposed to be married; so she resigned. The reason for the date is that one of her brothers, Carl, was in the U.S. Army at Memphis and had been offered choice of two dates: 25 December and 31 December. His wife, Dorothy, was maid of honor and my choice of best man was C. John Alley (a Navy officer) who couldn't make it and I substituted Richard Hartwell from Chicago. The florist house had burned before the ceremony but he was able to get three white orchids which my wife had wanted for the bouquet (and they froze between church and car as the temperature was zero or thereabouts). Some 50 years later, I had some problems getting the three white orchids (we were to be in Bloomington rather than Chicago-Wheaton) but fortunately a colleague's wife could provide them. We spent the night at the Palmer House and then later came on to Turkey Run Park for a couple of days, and then on to 521 North Fess Avenue. Originally, I had secured the apartment--one of the best in town--when I came to IU in 1940. Ruth's brother, Carl, has two children (Carl Jr. and Kathleen) and her other brother, William, has two children, Scott and Mark. The father and sons and others now have a profitable Medical Supply Company in West Chicago. Some time later (1950), we moved from the apartment to 509 North Park Avenue and eventually (1971) to 1323 East University Ave. Where the small lawn and big flower gardens keep me busy!

#### What's next?

In the course of packing up soil/mud samples throughout the U.S. and in some foreign countries, I have isolated a number of chromogenic clostridia (McClung, 1943). Although some are C. felsineum, I have yet to describe: a butyl type that is bright orange which goes black in a few days, and butyrics at least two different red pigmented types (one of which may have been described), a bright blue (mentioned but not identified), which loses color immediately on being removed from anaerobic jar, some purple ones, and others. I hope to publish each of these types so that they can be included in the newest Bergey's Manual, but I'll not be able to do all the DNA, etc. that should be covered.

Also, I have 35 individuals that were Charter Members of the SAB/ASM. A few of them became President (of the old SAB) but information should be available for the others, since I have the story. And, since IU has build a great Student Recreational Center that is a marvel to see, we plan to go there after the 1st of July and enroll in some type of exercise. That ought to take us through the remainder of this century. There might be another book or two?

30 June 1996

Appendix 1

## INDIANA UNIVERSITY THESIS

## I. Ph.D. Dissertation:

- 1950 ROESSLER, WILLIAM GEORGE, Clostridium sporogenes and related proteolytic anaerobic bacteria, Ph.D., 103 p., June 1950
- 1956 SAMES, RICHARD WILLIAM, Studies on the bacteriophages of Clostridium perfringens, 97 p., June 1956
- 1963 ESCOBAR, MARIO RENE, Serological studies of the genus Serratia, 89 p., June 1963

## II. Master's thesis:

- 1943 DOETSCH, RAYMOND NICHOLAS, Antibiotic activity of certain strains of Serratia indica and Serratia marcescens, 40 p., August 1943
- SAUNDERS, ALLEN PERRY, Solvent production in various substrates by two groups of pigmented anaerobes, 1943
- 1944 PHILLIPS, HERBERT WILLIAM, The use of benzidine blood agar as agar differential medium for Clostridium novyi, 44 p., August 1944
- TOABE, RUTH, The problem of atoxic strains of Clostridium tetani, 59 p., December 1944
- 1945 DOWNING, JEAN FERRIS, Studies on the ergosterol content of various fungi, 53 p., June 1945
- HEIDENREICH, PHYLLIS, The identification of Clostridium novyi by the Nagler reaction, 96 p., August 1945
- 1946 MICHAEL, HELEN MAE, A study of the serological relationships of Clostridium sordelli and Clostridium bifermentans, 63 p. August 1946
- O'LOUGHLIN, ROBERT MICHAEL, A preliminary study of a new antibiotic

- substance which shows some inhibition of gram negative forms, 80 p.,  
Sept. 1946
- 1947 BARD, RAYMOND C., Contributions to the biochemistry of Clostridium novyi  
toxins, 99 p., October 1947
- MARINELARENA, RAFAEL, Studies on strains of Clostridium perfringens  
associated with food poisoning, 58 p., June 1947
- MASON, EARL JAMES, Studies on organisms antagonistic to mycobacteria, 87  
p., August 1947
- 1949 KULL, FREDERICK C., Hyaluronidase production by Clostridium welchii, 83  
p., June 1949
- MORAN, DANIEL JOSEPH, The toxin of Clostridium hemolyticum, 30 p.,  
February 1949
- RHULAND, LIONEL E., Intermediates in the tryptophane synthesis by  
Lactobacillus arabinosus, 36 p., June 1949
- ROBERTS, MARTHA, A survey of antibiotic producing actinomycetes isolated  
from Indiana soils, 44 p., June 1949
- 1950 GARY, NORMAN D., A taxonomic study of the genus Flavobacterium Bergey, 38  
p., June 1950
- KOVACHEVICH, RUDY, Production of alpha toxin by Clostridium perfringens,  
23 p., June 1950
- 1952 BAIN, WILLIAM MURRAY, Preliminary studies on vitamin B<sub>12</sub> production by  
microorganisms, 61 p., October 1952
- 1953 PARKS, LEO WILBURN, A preliminary search for organisms producing  
antibiotic substances under anaerobic conditions, 42 p., August 1953
- 1954 SAMES, RICHARD WILLIAM, Preliminary studies on the bacteriophagy of  
Clostridium perfringens, 34 p., February 1954

- 1957 HAMILSON, RODNEY DEVON, A critical study of the genus Serratia, 69 p.,  
June 1957
- 1958 GERMANY, WILLIAM WALTER (JR.), Preliminary studies on pectin fermenting  
clostridia, 82 p., September 1958
- 1959 COSTAS, JOHN GEORGE, Preliminary studies on the bacteriophagy of  
Clostridium acetobutylicum, 47 p., August 1959
- 1961 BECHTOLD, DAVID LEE, Phage-typing of the genus Serratia, 44 p. August 1961
- 1962 ARBUCKLE, RONALD ERLE, The influence of temperature on the growth of  
Clostridium perfringens, 38 p., June 1962
- 1963 BUCKLEY, ANN THOMPSON, Bacteriophage typing of the genus Aeromonas  
and related organisms, 58 p., 1963
- 1965 STEENBERGEN, JAMES FRANKLIN, Serological studies on certain clostridia  
producing butyl alcohol, 41 p., June 1965

Appendix 2

Now is death merciful. He calls me hence  
Gently, with friendly soothing of my fears  
Of ugly age and feeble impotence  
And cruel disintegration of slow years.  
Nor does he leap upon me unaware  
Like some wild beast that hungers for its prey,  
But gives me kindly warning to prepare:  
Before I go, to kiss your tears away.

How sweet the summer! And the autumn shone  
Late warmth within our hearts as in the sky,  
Ripening rich harvests that our love had sown.  
How good that 'ere the winter comes, I die!  
Then, ageless, in your heart I'll come to rest  
Serene and proud, as when you loved me best.

Cited from p. 441, As I Remember Him,  
The Biography of R.S., by Hans Zinsser,  
1940. Boston: Little, Brown and Co.

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